## STRUCTURAL EQUATION MODELING: PREDICTORS OF VERBAL ABUSE OF REGISTERED NURSES

#### A DISSERTATION

# SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY IN THE GRADUATE SCHOOL OF THE TEXAS WOMAN'S UNIVERSITY

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To the Dean of the Graduate School:

I am submitting herewith a dissertation written by Michael J. Groves entitled "Structural Equation Modeling: Predictors of Verbal Abuse of Registered Nurses". I have examined this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy with a major in Nursing Science.

Rebecca Krepper, Ph.D. Major Professor

We have read this dissertation and recommend its acceptance:

Associate Dean College of Nursing

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#### **ABSTRACT**

#### MICHAEL J. GROVES

## STRUCTURAL EQUATION MODELING: PREDICTORS OF VERBAL ABUSE OF REGISTERED NURSES

#### DECEMBER 2011

Nurses experience verbal abuse as a nearly daily occurrence in the workplace. Sources of this abuse include patients and their families, visitors, physicians, managers and peers. A non-experimental, correlational study was undertaken to examine the contribution of latent constructs, individual characteristics and organizational characteristics, to the frequency with which registered nurses experience verbal abuse in the workplace. Several observed variables were identified to represent the latent constructs. Year in practice and position within the organization were the observed variables for the individual characteristics construct. Workplace aggression tolerance and violence prevention climate were the observed variables for the organizational characteristics construct. ANCC Magnet® status was an observed variable shared by both latent constructs.

The sample was composed of 256 registered nurses from the states of Maryland, Virginia and West Virginia. Participants were recruited through mailing lists from state

Boards of Nursing and were asked to complete an anonymous survey. IRB approval was obtained for the study.

Findings of the study indicated:

- A statistically significant, moderately strong effect for the organizational characteristics construct and a non-significant weak effect for the individual characteristics construct on the outcome variable of verbal abuse frequency.
- 2. The four observed variables: years in practice; organizational position; workplace aggression tolerance; and violence prevention climate behaved as predicted and had moderately strong effects for the latent constructs.
- 3. ANCC Magnet® status did not behave as predicted and was not significantly related to either latent construct.

The findings of the study indicated that verbal abuse of registered nurses may most effectively be reduced through attention to the characteristics or culture of the organization versus attempts to intervene with individual nurses.

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#### CHAPTER I

#### INTRODUCTION

An elephant is sitting in the middle of the lobbies of our hospitals. The elephant is the verbal abuse of nurses by a variety of perpetrators in healthcare organizations. Casual conversation with nearly any nurse in any hospital will elicit a common history of verbal abuse by patients, family members, other nurses, supervisors and physicians. Many authors have documented alarming rates of verbal abuse of nurses, ranging from 78% to 94% (Braun, Christle, Walker, & Tiwanak, 1991; Cox, 1987; Diaz & McMillin, 1991; Manderino & Berkey, 1997; Oztunc, 2006; Sofield & Salmond, 2003). Hadley (1990) defines abusive behavior as "...that which humiliates, degrades, or otherwise indicates a lack of respect for the dignity and worth of an individual" (p.6). Similarly, Cox (1991a) defines verbal abuse as "any communication a nurse perceives to be a harsh, condemnatory attack upon herself or himself, professionally or personally" (p. 32). Diaz and McMillin (1991) define abusive behavior as "...behavior of one person which, through words, tone, manner, or other nonverbal cues, uses the power of a dominant position inappropriately toward an actual or perceived subordinate" (p. 98). Fuller (2003) notes that abuse only occurs when there is, "an underlying difference in rank signifying power" (p. 2).

Sadly, the evidence would also suggest that the elephant is being ignored to a great extent. In a recent study by the Institute for Safe Medication Practices 61% of

respondents reported that their organizations did not deal effectively with intimidating behaviors (Anonymous, 2008b). In Sofield and Salmond's (2003) study respondents reported frustration with a lack of intervention on the part of hospital administration and that this lack of action results in nurses leaving the organization..

#### **Problem of Study**

Various authors have proposed differing theories or conceptual frameworks seeking to explain the relationship between antecedent as well as contextual variables on abusive behavior in the workplace (Allcorn, 1994; Cook, Green, & Topp, 2001; Cox, 1991a; Fuller, 2003; Hutchinson, Vickers, Jackson, & Wilkes, 2006; Pejic, 2005). Researchers have examined multiple factors associated with verbal abuse in healthcare organizations. Some of these factors are inherent in the people involved in the abusive episodes and some of these factors are inherent in the organizations in which the abuse occurs (Braun, et al., 1991; Cox, 1987; McKenna, Smith, Poole, & Coverdale, 2003; Oztunc, 2006; Rosenstein & O'Daniel, 2005; Skjorshammer, 2003; Sofield & Salmond, 2003). Perhaps the more likely actuality is that both organizational and personal factors are at play in the verbal abuse of nurses. Not readily apparent in the literature is an assessment of the relative contribution of these various organizational and personal factors to the likelihood or frequency with which an individual nurse experiences verbal abuse. The problem of study for this dissertation was to test a theoretical model that includes both individual and organizational characteristics associated with verbal abuse using structural equation modeling (SEM).

#### Rationale for the Study

The verbal abuse of nurses has significant negative consequences and understanding and eliminating or reducing this behavior in healthcare organizations is essential to both patient safety and to the economic health of these organizations. Among these negative consequences are excessive nurse turnover, greater intent to leave the organization, reductions in productivity and threats to patient safety.

Increased turnover has long been recognized as an outcome of verbal abuse of nurses. Cox (1987) reported that among the agencies represented in her study, 18% to 42% of turnover by nursing directors and 16% to 18% of staff nurse turnover could be attributed to verbal abuse. A follow up study by Cox (1991b) indicated that 88.3% of participants thought that verbal abuse increased turnover whether the source of the abuse was physicians or nursing supervisors. Similarly, another 1991 study demonstrated that 79% of participants believed that verbal abuse contributed to turnover and 87% of the nurses responding to this survey believed that verbal abuse increases the shortage of nurses (Braun, et al., 1991). A more recent study determined that 62.2% of participants believed that verbal abuse increases turnover and that 67% thought that verbal abuse worsens the nursing shortage (Sofield & Salmond, 2003). In this same study 13.6% of the respondents stated that they had left a nursing position due to verbal abuse experienced in that position. Additionally in this study, 11.9% of the nurses stated that they would be looking for another job within one year and 33.4% stated that they would consider resigning from their positions due to verbal abuse. Sofield and Salmond (2003) also indicated that written comments by some participants in this study indicated that they had changed their hours of work from full time to part time in order to reduce their exposure to verbal abuse.

More recently authors have focused some attention on the detrimental effect of verbal abuse on the safety of patients. In a study examining the effect of disruptive behavior on clinical outcomes, 94% of respondents thought that disruptive behavior could potentially have a negative impact on patient outcomes (Rosenstein & O'Daniel, 2005). Seventeen percent of participants in this study reported knowledge of an actual adverse patient outcome that was the result of disruptive behavior and of those 249 participants, 78% (n=195) thought the adverse outcome could have been prevented. A survey by the Institute for Safe Medication Practices (Anonymous, 2008b) evaluated the effect of intimidating behaviors on practices of nurses and pharmacists related to medication orders. In this study 38% of the nurse respondents and 57% of the pharmacists indicated that they had either sometimes or often asked a colleague to help them interpret an order or validate the safety of the order so that they did not have to interact with a particular prescriber. Additionally, 25% of the pharmacists and 10% of the nurses simply assumed that a medication order was correct and safe rather than interact with the prescriber. Furthermore, 28% of the pharmacists and 16% of the nurses felt pressured to accept an order, or to dispense or administer a medication despite concerns about the safety of the order. Finally, 10% of the pharmacists and 7% of the nurses had been personally

involved in a medication error in the past year in which intimidation played a role in the error.

Other negative consequences of verbal abuse are also apparent in the literature. In a small study of pediatric nurses the following reactions to verbal abuse were among those reported: reluctance to go to work (66.7%); decreased ability to engage in critical thinking (57.6%); inability to concentrate on the task at hand (66.7%); hating your job (63.6%) and a negative effect on job performance (57.6%) (Pejic, 2005). In their study, Sofield and Salmond (2003) identified the following negative consequences from verbal abuse: decrease morale (67%); decreased productivity (41%); decreased delivery of nursing care (36%) increased workload (17%); and increased errors (51%).

Economic consequences for healthcare organizations accrue from costs associated with nursing turnover. A 2007 analysis concluded that the cost of replacing a single registered nurse will range between \$82,000 and \$88,000 depending on the experience of the newly hired nurse (Jones, 2008). Additionally, average nurse turnover rates are reported to be between 8% and 14% (Rosseter, 2008). Assuming a moderate size hospital with 250 nurses, a turnover rate of 11%, replacement cost of \$85,000 and Cox's conservative 16% of turnover attributable to verbal abuse, the annual turnover cost attributable to verbal abuse for such a hospital would be \$425,000. Given that many hospitals operate on very small operating margins of 1% to 3%, \$425,000 could be the difference between a profitable year and a loss.

A report by the National Academy of Sciences indicates that 1.5 million preventable adverse drug events occur each year in the United States (Aspden, Wolcott, Bootman, & Cronenwett, 2007). It is well beyond the scope of this study to determine medication error rates based on verbal abuse. However, given that 10% of pharmacists and 7% of nurses in the above mentioned study were involved in a medication error in which intimidation played a role, it is reasonable to assume that eliminating verbal abuse and intimidation as factors in the medication process would potentially eliminate a substantial number of adverse events.

The evidence is growing that verbal abuse within hospitals has negative consequences, not only for the victim on a personal and professional level, but also for the patient related to perhaps even surviving their hospital experience, and for the organization in terms of financial health and survivability. This study adds to the body of knowledge regarding the prevention of verbal abuse of nurses.

#### **Conceptual Framework**

A variety of conceptual and theoretical frameworks have been used to attempt to understand the phenomenon of verbal abuse or workplace aggression in nursing. The multiplicity of these frameworks and the inconsistencies in study findings would suggest that these frameworks have been less than explanatory (Allcorn, 1994; Clark, 2008; Fuller, 2003; Hutchinson, Vickers, Jackson, & Wilkes, 2005; Hutchinson, et al., 2006; Sofield & Salmond, 2003). This study tested a model suggesting that the presence of verbal abuse within an organization is mediated by a number of individual and

organizational factors (Figure 1). It was hypothesized that the frequency with which an individual nurse experiences verbal abuse is based on the variability of these factors.

The model contains the two latent variables, or constructs, organizational characteristics and individual characteristics. The latent variables are defined by the presence of six observed variables. Two of these variables, the violence prevention climate and workplace aggression tolerance, measure the organizational characteristics construct. Three variables measure the individual characteristic construct: gender, organizational position and years in practice. One observed variable, designation by the American Nurses' Credentialing Center as a Magnet® facility, measures both constructs to some extent.

The model infers that the interaction of the organizational characteristics and individual characteristics determines the frequency of verbal abuse episodes experienced by the nurse.

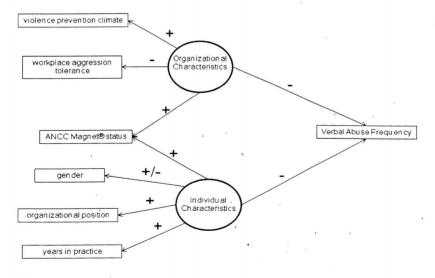


Figure 1. Predicted direction of path coefficients

#### **Organizational Characteristics Construct**

In order for workplace aggression and verbal abuse to thrive, the environment must at the very least tolerate, if not promote, aggressive behavior. It has been proposed that organizations have differing climates related to violence prevention and differing levels of tolerance for aggressive behavior (Coombs & Holladay, 2004; Kessler, Spector, Chang, & Parr, 2008).

#### **Violence Prevention Climate**

The violence prevention climate as suggested by Kessler et al. (2008) assesses the extent to which the management of an organization takes steps to prevent the exposure of employees to workplace violence. The notion of a violence prevention climate has been proposed as a way of understanding and measuring the perception of employees related to the commitment of management to prevent workplace violence (Spector, Coulter, Stockwell, & Matz, 2007). The violence climate construct was developed by Spector et al. (2007) as a variation on the construct of the safety climate within organizations. In a high climate of safety, organizational management provides substantial resources toward the promotion of safety and the prevention of accidents. This management behavior is observed by employees and fosters behavior on the part of those employees that results in greater safety and fewer accidents (Spector et al., 2007). The violence climate is postulated as a corollary to the safety climate and similar behavioral outcomes are suggested by these authors. If employees observe that management has directed resources and given priority to the prevention of and response to workplace violence,

employees will adopt behaviors consistent with those management priorities. Within a positive violence prevention climate organization, employees would be given tools (education, training and policy support) to recognize, possibly diffuse or de-escalate and effectively report episodes of workplace violence. Absent these tools employees feel less constrained against acting in an aggressive manner.

Spector et al. (2007) developed a unidimensional 7-item measure of the perceived violence climate. The items on this initial scale explored only the dimension of management intervention directed toward prevention or reporting of workplace violence. The initial study using this scale demonstrated a negative relationship between the perceived violence climate and both physical and verbal aggression. As the perceived violence climate improved workplace violence diminished (Spector et al., 2007).

The work of Spector et al. was continued in a 2008 study (Kessler, Spector, Chang, et al., 2008). In this new study, the authors sought to expand the earlier work and developed a three dimensional measure of the violence climate. The dimensions in this expanded model are policies and procedures, practices and pressure for unsafe practices. The policies dimension is concerned with the extent to which employees are aware of the formal policies and procedures aimed at prevention workplace aggression. The practices dimension evaluates the adherence by management to the policies and procedures put in place within the organization and management's response to violence incidents. The pressure for unsafe practices dimension was added as this dimension is frequently assessed in measures of the safety climate. Employees may feel pressure to ignore

violence prevention policies and procedures to achieve some other goal. This pressure can come from management when productivity is valued more than the prevention of violence. This pressure can also come from peers. Pressure may be exerted to conform to behavioral norms in organizations where violence prevention policies and procedures are widely ignored by employees (Kessler, et al., 2008).

#### **Workplace Aggression Tolerance**

Workplace aggression includes a broad spectrum of behaviors from basic rudeness or incivility at one end to physical violence at the other (Coombs & Holladay, 2004). These aggressive behaviors are tolerated in some organizations and by some employees to a greater or lesser extent. The construct of workplace aggression tolerance as developed by Coombs and Holladay (2004) is grounded in the notion that most employees will find some forms of aggressive behavior, generally those at the lower end of the spectrum, acceptable based on a given situation. These authors also suggest that the development of stricter policies and procedures related to workplace aggression can have the unintended consequence of driving employees toward more covert forms of aggressive behavior. Covert behavior may shield the aggressor from consequences by one of two ways. The aggressor is protected in that the source of the aggressive behavior remains unknown to the victim. Protection may also derive from the behavior itself being sufficiently ambiguous that the aggressor can claim that no harm was intended or that the behavior was misinterpreted by the victim (Coombs & Holladay, 2004).

#### **Individual Characteristics Construct**

In order for verbal abuse or workplace aggression to occur, there must be a power gradient between the perpetrator and victim sufficiently steep that the perpetrator feels a level of safety in engaging in aggressive behavior. Central to the Individual Characteristics Construct of the model is Fuller's notion of rankism. Fuller (2003) posits that rank is a naturally occurring consequence of the human condition. Rank is the relative position and power of different persons based on a number of personal and organizational traits. Rankism is the abuse or exploitation of rank for personal gain and results in the denigration of those with less rank (Fuller, 2003). Individual characteristics explored in the model include organizational position, gender and years in practice. These observed variables indicate the personal power that an individual may hold. These factors have some prior research support for their effect on the experience of workplace aggression or verbal abuse in healthcare settings; although as with most of the research in this area the findings are inconsistent.

#### **Organizational Position**

The proposed model included organizational status or position as a factor potentially contributing to verbal abuse of nurses. A United Kingdom study of bullying behavior failed to demonstrate an overall effect of organizational status on the bullying experience in terms of bullying prevalence. There were however differences in types of bullying behavior experienced by those in different occupational positions (Hoel, Cooper, & Faragher, 2001). This study included a sample of 5,288 participants across 70

organizations in public, private and voluntary industries. Curtis, Ball, and Kirkham (2006) in a study on why nurse midwives leave their positions found that clinical grade among other factors increased the vulnerability of less senior nurses, leaving them more likely to be bullied than their colleagues in more senior levels. Baron and Neuman (1998a) found that workers were much more likely to be the recipient of aggression from supervisors than they were to display aggression toward supervisors. This finding did however offer only partial support for their hypothesis that the above would be the case. They also found that the same relationship held if the aggression was received from coworkers or subordinates. Essentially, workers were more likely to perceive themselves to be the victim of aggression from any source than they were to perceive themselves to be the aggressor (Baron & Newman, 1998a). These studies do suggest that there is some relationship between organizational position or power and the experience of verbal abuse or workplace aggression.

#### Gender

There is some difficulty in adequately addressing differences in the experience of nurses related to verbal abuse or workplace aggression based on gender. Given that the overwhelming majority of nurses are female, some studies contain samples with no male nurses or gender is not reported as a demographic statistic. Sources outside the realm of nursing and healthcare therefore, must be considered in evaluating the effect of gender on workplace aggression and verbal abuse. Furthermore, as suggested by one author, abuse stems ultimately from a misuse of power. Frequently power and gender differences

coexist creating an unclear dynamic (Bruder, 2001). Another limitation in assessing the effect of gender on verbal abuse is that much of the work outside of nursing that evaluates the effect of gender is done from a perpetrator-focused perspective. These studies examine factors increasing the likelihood of engaging in aggressive behavior rather than being the victim of such behavior. Even given this perpetrator-focused approach, results remain inconclusive. A comprehensive review of much of the workplace aggression literature was conducted in an attempt to predict such aggression (Barling, Dupre, & Kelloway, 2009). This review found little consistency in the results of studies reviewed. In some studies men were more aggressive while in others women demonstrated more aggression than males. Given this inconsistency of results, gender was included in the proposed model for exploratory purposes. Literature supporting the inclusion of gender as a personal factor in the proposed model is reviewed below.

In addition to their findings related to organizational status discussed above, Hoel, Cooper, and Faragher (2001) explored the relationship of gender and bullying. As indicated previously, non-significant differences were found in prevalence of bullying based solely on organizational status. However when gender was considered along with position, several differences were noted. Males were more likely to be bullied at the worker and supervisor levels while females were more likely the victims of bullying at the middle and senior management ranks.

Lim and Cortina (2005) examined the relationships between a variety of mistreatments in the workplace with two separate samples of women. Attempting to

study the relationship between general incivility and sexual harassment, the authors did discover a statistically significant relationship between these two constructs. These authors propose a three factor model in which gender harassment serves as a bridge between incivility and sexualized harassment. Gender harassment is defined as, "experiences of disparaging conduct not intended to elicit sexual cooperation; rather, these are crude, verbal, physical and symbolic behaviors that convey hostile and offensive attitudes about members of one gender – typically women" (Lim & Cortina, 2005, p. 483). Two or all three of these behaviors co-occurred. Gender harassment and sexualized harassment rarely occurred alone (3% and 1% respectively in sample 1 and less than 1% for each behavior in sample 2). Incivility did occur without the presence of the other behaviors (23% incivility alone in sample 1 and 40% incivility alone in sample 2). A significant number of women however experienced both incivility and gender harassment (22% in sample 1 and 16% in sample 2). While males were excluded from these studies, the interplay of non-sexualized and sexualized aggressive behavior would seem to suggest that women may be more likely to experience workplace aggression overall.

An Australian study did find significant gender-related differences in rates of victimization by aggressive behavior (Farrell, Bobrowski, & Bobrowski, 2006). In this study males were overall more likely to be the victims of both verbal and physical abuse. When age was controlled and younger ( $\leq$  40 years) males and females compared, there was no significant difference in rates of verbal abuse; however, males were more likely to

be physically abused. When older (41 years or greater) males and females were compared, males continued to be more likely victims of physical abuse (Farrell, et al., 2006). The authors did not offer any rationale for this difference.

#### Years in Practice

There is some suggestion in the literature that professional tenure, usually measured as years in practice, has some effect on the experience of verbal abuse or workplace aggression. In a study assessing the vulnerability of nurses to workplace violence episodes, 67 nurses were cohorted based on their self-reported childhood experience of abuse. Generally, both groups experienced their "most bothersome" episode of workplace violence earlier in their careers rather than later. Of those with a history of abuse, 58.3% experienced this event within the first 6 years of practice compared with only 5% experiencing this event after 20 years in practice. Among those participants without a history of abuse 37.5% experienced the most bothersome event in the first 6 years compared with 17.8% after 20 years in practice (Anderson, 2002).

New nurses were found to experience substantial horizontal violence during their first year in practice in a study from New Zealand (McKenna, et al., 2003). In this sample of 551 nurses, 58% reported being made to feel undervalued, 46% reported a lack of appropriate supervision, 38% reported feeling distressed about conflict and 34% each reported having their learning blocked and experiencing emotional neglect. Additionally, age was a factor in this study. Those nurses under 30 years old were more likely to experience being undervalued, perceive having too much responsibility with inadequate

support and be verbally humiliated compared with nurses over 30 years old (McKenna, et al., 2003).

#### **ANCC Magnet® Status**

Verbal abuse and other aggressive behaviors are directed at nurses from a variety of sources. Most studies identify physicians as one source of this abuse and several studies have identified physicians as the most frequent source of abuse (Braun, et al., 1991; Cox, 1987; Hilton, Kottke, & Pfahler, 1994; Sofield & Salmond, 2003). Magnet® status is included in the proposed model due to literature support indicating that there are differences in nurse/physician relationships in Magnet® versus non-Magnet® facilities. Additionally, some work has been done, generally using Kanter's structural empowerment theory, indicating that nurses in Magnet® facilities are generally more empowered than nurses in non-Magnet® facilities.

The American Nurses' Credentialing Center implemented the Magnet® program in 1991 based on research conducted in the early 1980's that resulted in the identification of 41 magnet facilities (Kramer & Schmalenberg, 2004a). Kramer and Schmalenberg (2004a) also identify the quality of nurse/physician relationships as being essential to a work environment consistent with the principles of the Magnet® program. These authors identify a six level taxonomy of types of nurse/physician relationships. At the high end of this scale are collegial relationships while at the low end of the scale are hostile/adversarial relationships. In their study, nurses in Magnet® designated hospitals reported much higher levels of collegial relationships compared to non-designated

hospitals (86% versus 55% respectively). Additionally, Magnet® designated hospital nurses reported much lower instances of hostile/adversarial relationships compared to non-designated hospitals (13% versus 34% respectively) (Kramer & Schmalenberg, 2004a).

Evidence also exists that nurses within Magnet® facilities perceive themselves to be more autonomous than nurses in other facilities. In individual interviews nurses identified several characteristics of autonomous practice: being held accountable for practice in constructive ways, the recognition that there are overlapping spheres of practice within the organization and organizational sanction of autonomous practice. Nurses in Magnet® facilities report that these factors were present in higher percentages than non-Magnet® facilities (Kramer & Schmalenberg, 2004b). Eighty-five percent of nurses in Magnet® facilities reported that accountability was managed constructively compared with 50% of nurses in non-Magnet® facilities. Recognition of overlapping spheres of practice were reported by 83% of nurses in Magnet® facilities versus being reported by 65% of nurses in non-Magnet® facilities. Finally, 78% of Magnet® facility nurses reported organizational support for autonomous practice compared with only 35% of nurses in non-Magnet® organizations (Kramer & Schmalenberg, 2004b).

Greater levels of workplace power and empowerment have been linked to Magnet® hospitals (Upenieks, 2003). Nurses in Magnet® hospitals reported greater levels of both power and empowerment compared to nurses in non-Magnet® hospitals. On a measure of power, Magnet® hospital nurses scored significantly higher than non-

Magnet® hospital nurses (M = 3.16, SD = .895 versus M = 2.70, SD = .951, p < .001). Likewise, Magnet® hospital nurses reported higher levels of power when compared to non-Magnet® hospital nurses (M = 3.55, SD = .960 versus M = 2.63, SD = .999, p < .001) (Upenieks, 2003). This designation by the ANCC is clearly an organizational attribute and not an individual one. There is, however no basis upon which to determine if the greater effect from Magnet® status would be on the culture (potentially reduced tolerance of aggression) or the individual (greater empowerment of individual nurses). Magnet® status is, therefore included in the model as both an organizational and individual characteristic.

#### **Research Questions**

The following research questions were derived from the proposed conceptual model.

- 1. To what extent do the proposed organizational and personal factors explain the variance in reported frequency of verbal abuse experienced by registered nurses?
- 2. What is the relationship, if any, between the selected organizational characteristics and reported frequency of verbal abuse experienced by registered nurses?
- 3. What is the relationship, if any, between the selected individual characteristics and reported frequency of verbal abuse experienced by registered nurses?

#### **Definition of Terms**

The proposed model included two latent variables or constructs; organizational characteristics and individual characteristics. These latent constructs cannot be directly measured and so are represented by several variables that more readily lend themselves to objective measurement.

#### **Organizational Characteristics Construct**

The organizational factors construct is defined as a continuum that mitigates or supports aggressive behavior in the workplace. The interaction of various organizational attributes establishes a level of cultural acceptance of, and permission to engage in, aggressive behavior. While there are many organizational factors that could potentially affect the level of aggression, the proposed model uses three measures of this tendency.

- Magnet® hospital Any acute care hospital currently designated by the American Nurses Credentialing Center (ANCC) as a Magnet® hospital. The status must be current and unexpired.
- 2. Violence Prevention Climate (VPC) Perception of staff of the emphasis placed on prevention or control of physical or verbal aggression by the management of an organization. VPC is operationally defined as the score on the VPC scale within the survey instrument.
- 3. Workplace Aggression Tolerance The extent to which an individual finds aggressive behaviors acceptable in response to workplace stressors. Workplace

aggression tolerance is operationally defined as the score on the Workplace Aggression Tolerance Questionnaire (WATQ) portion of the survey instrument.

#### **Individual Characteristics Construct**

Similarly to the organizational characteristics construct, the individual characteristics construct also suggests a continuum that increases or decreases the likelihood of verbal abuse victimization. The individual characteristics construct is a continuum of greater or lesser personal power. Any number of individual characteristics may have an effect on one's level of power within the organization and it is not possible to include all of these factors in a single study. Four factors were considered as representative measures of the individual characteristics construct. Three of these characteristics are further defined below. The fourth characteristic, Magnet® status, is defined under the organizational characteristics construct above.

- Gender Sex identity as reported by the participant. Gender is operationally defined as female or male.
- 2. Years in Practice The number of whole years a participant has been a practicing registered nurse. For the purposes of descriptive statistical analysis, years in practice are operationally placed in the following brackets: less than 1 year, 1 to 5 years, 6 to 10 years, 11 to 15 years, 16 to 20 years, 21 to 25 years, and 26 or more years. For the structural equation modeling analysis, years in practice is a continuous variable.

3. Organizational status – The formal position in which a participant works within an organization. Organizational status categories are: staff nurse, charge nurse, assistant nurse manager, nurse manager, director, advanced practice nurse, educator, faculty member, school nurse, coordinator, and other.

#### Verbal Abuse

Verbal abuse was conceptually defined according to Hadley (1990), who defined verbal abuse as verbal behavior designed to humiliate, degrade, or otherwise demonstrate a lack of respect for the dignity and worth of another individual. Verbal abuse will be operationally defined as the self reported frequency of verbal abuse episodes, by source, over the 30 days prior to the participant completing the survey.

#### **Population**

The defined population for this study was currently employed registered nurses licensed in three Mid-Atlantic States: Maryland; Virginia; and West Virginia.

Maryland and Virginia are members of the multi-state licensing compact while West Virginia is not. Nurses may legally hold licenses in more than one jurisdiction, or may work in more than one state when holding a license with multi-state privileges. Therefore, the location of the nurses' employment was not used as either an inclusionary or exclusionary criterion.

#### Limitations

Several limitations to the generalizability of the findings of this study were identified. Among these limitations are the following:

- The sample used in this study was drawn from nurses employed in Maryland,
   Virginia and West Virginia and therefore may not be representative of the entire
   population of nurses. The localization of the sample to the mid-Atlantic region of
   the United States limits the generalizability of these results to other areas of the
   United States or to other countries.
- 2. Participants were recruited through the use of mailing lists provided by the State Boards of Nursing in the respective states represented in the study. Therefore, specific organizations in which participants were employed could not be identified. Additionally, while it can be reasonably assumed that more than one response was received from the nurses employed at any given organization, it was not possible to cohort these responses into aggregate organizational scores on any of the measures.

#### **Summary**

Verbal abuse in healthcare organizations constitutes an immediate threat to patient safety, nurse retention and recruitment, nurse satisfaction and quality patient care outcomes. Verbal abuse causes nurses to leave organizations necessitating their replacement. Verbal abuse distracts nurses, thus making patients more vulnerable to errors. Verbal abuse also reduces productivity by causing nurses to focus on

interpersonal relationships rather than patient care issues. Since improvements in all of the above factors are in the best interests of the healthcare organization, it is incumbent on the leaders of these organizations to take steps to reduce the level of verbal abuse of nurses as well as other employees. The proposed model was thought to provide a useful framework to guide this research. Understanding the relative contribution of organizational and individual characteristics contributing to verbal abuse will assist healthcare leaders in focusing efforts to reduce this form or workplace aggression.

#### CHAPTER II

#### REVIEW OF THE LITERATURE

Nurses have experienced and attempted to cope with abusive behavior from a variety of sources for many years. Research on these behaviors traverse the continuum from low intensity, more recently explored as the concept of incivility, to the highest intensity of physical violence. Reported perpetrators of this abusive behavior include patients and their families, supervisory staff, physicians and other nurses (Braun, 1991; Cox, 1987; Cox, 1991a). The earlier literature regarding verbal abuse focused on understanding the depth and breadth of the abuse experienced by the nurse. One frequently used instrument, the Verbal Abuse Survey developed by Cox (1987), seeks to understand the frequency of abuse in terms of the percentage of nurses having experienced such behavior as well as how often the nurse experiences an abusive event. Additionally, Cox's instrument gathers information about the perceived psychological impact of abusive behavior, asking the participant to indicate how the abuse made the nurse feel by selecting from a list of emotional reactions. Building upon this work, various researchers have attempted to understand the effect of verbal abuse on a multitude of factors such as nurse turnover and intent to leave (Sofield & Salmond, 2003), productivity (Braun, 1991), patient safety and clinical outcomes (Rosenstein & O'Daniel, 2005). Few studies were found that focused on the assessment of strategies

designed to reduce the incidence or effect of verbal abuse and minimal work has been done to address the "why" of verbal abuse. Verbal abuse has been studied principally from the viewpoint of the victim of the abuse, not from the viewpoint of the perpetrator of the abusive behavior. Logically, it would be understandable that verbal abuse perpetrators would be reluctant to discuss why this behavior occurs. Unfortunately, however, this has tended to place the responsibility for effectively responding to verbal abuse in the hands of the victim. While few mitigation strategies have been studied, the tendency is to focus on changing the behavior of the nurse (victim) to respond more effectively to the perpetrator. Alternatively, a mitigation strategy frequently recommended is the adoption by organizations of a "zero tolerance" policy. With this strategy the organization, in essence, comes to the aid of the abused nurse by forbidding abusive behavior and, theoretically, ascribing consequences for those who continue to engage in abusive behavior. While certainly superior to expecting the nurse to respond unaided to abusive behavior, zero tolerance has several weaknesses. Among these are the reluctance of the organization to impose sanctions on those upon whom the organization is dependent for revenue (physicians), and the difficulty of applying these policies to patients and their families. Additionally, zero tolerance policies simply ban abusive behavior. What these policies may fail to recognize is that abusive behavior, while never acceptable, is often triggered by legitimate frustration and anger at system failures (Allcorn, 1994). If the zero tolerance approach is not coupled with process redesign that

focuses on reducing the failures that often trigger abusive behavior, the frustration and anger in the perpetrator are not reduced and will likely exhibit themselves in other ways.

This review of the literature will initially distinguish verbal abuse from other forms of workplace violence and then systematically explore relevant research regarding verbally abusive behavior. The sources of verbal abuse will be described, defining the points along a continuum including incivility, verbal abuse and disruptive behavior. The varied perpetrators of verbal abuse will be discussed. The literature does not indicate a consistent picture of the source of abuse. The most frequent perpetrator differs from study to study and these differences will be presented and explored. Other sections of this chapter will explore the work done regarding the consequences of verbal abuse as well as studies regarding mitigation strategies.

The search for information for this review included several electronic databases: CINAHL; PsycINFO; PubMed; ProQuest; and SCOPUS. Search terms included: verbal abuse; incivility; bullying; horizontal violence; workplace violence; workplace aggression; workplace abuse; workplace intimidation; workplace anger; predicting violence; occupational aggression; nurse abuse; verbal aggression; violence against nurses; healthcare organizations and aggression; oppressed group behavior; workplace violence mitigation; and organizational violence. The bibliographies of retrieved sources were used to identify antecedent references. Citations or sources for additional materials were also forwarded by professional colleagues.

Several theoretical frameworks have been utilized in the verbal abuse literature to attempt to either predict or explain the results of the various studies. This review will describe those frameworks and explore how they have been used by the authors.

Central to the current study is the line of reasoning that states that verbal abuse exists in the presence of a significant power gradient between the perpetrator and the victim, that this power gradient is reduced when the nurse feels empowered within the organization and that nurses are more empowered in hospitals that have achieved recognition through the Magnet® Nursing Program of the American Nurses

Credentialing Center. So that this line of reasoning may be better understood, the Magnet® Nursing Program will be described as well as a growing body of research comparing various aspects of "Magnet®" and "non-Magnet®" hospitals.

# Workplace Violence Continuum

Inherent in any study of verbal abuse is the necessity of an appreciation for the place of verbal abuse in the constellation of behaviors associated with the more general concept of workplace violence. Even a cursory review of the verbal abuse/workplace violence literature will readily demonstrate the lack of consistency in definitions, both conceptual and operational, for terms used to describe abusive behavior.

Several authors note a lack of clarity and consistency in defining acts of violent behavior in the workplace (Baron & Neuman, 1998b; Griffin & Lopez, 2005; Johnson, 2009; St-Pierre & Holmes, 2008). These acts are generally distinguished from one another by level of intensity, physicality, and intent to harm. The lowest intensity

behavior on the continuum is incivility, while the term workplace violence is generally reserved for a range of behaviors including physical attacks.

### Workplace Violence

A somewhat global term used in the literature is workplace violence. This term generally is used to include all forms of aggressive behavior in work settings ranging from incivility to physical violence (Baron & Neuman, 1998b; Jacobson, 2007; Schat, 2004). Baron and Neuman (1998a) suggest that the term workplace violence be limited to acts of serious physical violence. These authors make the point that the majority of media attention to acts of workplace violence is focused on incidents involving homicide in the workplace. While tragic, workplace homicides account for only 1 in 650 acts of workplace violence (Baron & Neuman, 1998a).

Sofield and Salmond (2003) provide two definitions for workplace violence.

These authors offer the definition of workplace violence proposed by the American

Nurses Association which is a range of behavior from verbal abuse, threats and unwanted sexual advances to physical assault and at the extreme, homicide. They further cite the definition provided by the National Institute of Occupational Safety and Health which defines workplace violence as any physical assault, threatening behavior or verbal abuse occurring in the work setting.

### Workplace Aggression

Workplace aggression has been used in the literature as another general term that can include acts across a broad spectrum of severity. Baron and Neuman (1998b) defined

workplace aggression as, "efforts by individuals to harm others with whom they work, or have worked, or the organizations in which they are presently, or were previously employed" (p.395). Two factors are indicated as being important in this definition. First is the intent to harm. The individual engaging in the aggressive behavior means to cause harm to either an individual or to the organization. Secondly, in the healthcare arena, this definition would exclude all aggressive behavior perpetrated by patients, family members or visitors to the organization. Aggressive acts occurring due to the nature or location of work and perpetrated by outsiders to the organization are defined as acts of occupational violence and not workplace aggression (Baron & Neuman, 1998b). Similarly, for different authors, occupational violence included acts perpetrated by patients, patients' relatives or professional colleagues (Alexander & Fraser, 2004). As indicated above Baron and Neuman (1998a) define workplace violence as including only the most extreme acts of physical violence such as actual or threatened physical attack or theft or destruction of property. These authors include workplace violence as a subset of . behaviors associated with the more general term, workplace aggression. In addition to the category of workplace violence, aggression is further divided into categories of verbal aggression and obstructionism (Baron & Neuman, 1998a). In a later study exploring the impact of perceived injustice and possession of a Type A personality on workplace aggression, 40 forms of workplace aggression were classified into three factors: Expressions of Hostility, Obstructionism and Overt Aggression (Baron, Neuman, &

Geddes, 1999). The behaviors formerly classified by Baron and Neuman (1998a) as workplace violence were now categorized as overt aggression (Baron, et al., 1999).

In an attempt to bring clarity to the definitional morass associated with these terms, Griffin and Lopez (2005) offer a typology for "bad behavior" in organizations. Their typology lists five categories of bad behaviors: dysfunctional behavior, workplace deviance, workplace aggression, workplace violence, and antisocial behavior. Workplace aggression is defined as "highly assertive, non-physical behavior directed toward a person or object" (2005, p. 1001). This definition differs from Baron and Neuman (1998b) as it does not include aggression toward the organization and does not include physical acts which are included under the definition of workplace violence (Griffin & Lopez, 2005).

There are also instances where the term workplace aggression is used but the authors fail to provide a clear definition of the term's use in their studies. One such example is a study conducted by Farrell, Bobrowski, and Bobrowski (2006) investigating workplace aggression in Tasmania. In the abstract the authors allude to the term workplace aggression including both verbal and physical abuse. The authors indicate however that the term workplace aggression was not defined for the participants in the study. Their questionnaire provided participants with definitions of both verbal abuse and physical abuse but appears not to have combined the terms for participants as workplace aggression.

#### Verbal Abuse

A first step in understanding the phenomenon of verbal abuse and its perpetrators is to define what is meant by verbal abuse. As previously stated, verbal abuse can be seen to constitute a point on a continuum of interpersonal behaviors. These behaviors have one or more negative consequences for the victim of the behavior. Throughout the literature a broad range of terms have been used in studies involving verbal interactions generally regarded as being unacceptable interpersonal behaviors.

The above discussion demonstrates the cluttered landscape of terminology related to inappropriate interpersonal behavior within the healthcare setting. Terminology and definitions differ and no standard definition has been established for these unacceptable behaviors.

Several authors have offered definitions of the term verbal abuse. Researchers Diaz and McMillin (1991) provided operational definitions for the four measures used in their study: Verbal Abuse, Sexual Abuse, Threatened Harm and Physical Abuse. This study specifically focused on abusive behavior toward nurses by physicians. Verbal abuse was defined as whether or not a physician had ever "verbally insulted you" or "yelled at you".

Helen Cox conducted several of the earlier studies on the topic of verbal abuse.

While no clear definition for the term verbal abuse can be found in the report of her original 1987 study, a follow up study in 1991 did include a definition for verbal abuse.

Verbal abuse was defined as any communication a nurse perceives to be a harsh.

condemnatory attack upon herself or himself, professionally or personally (Cox, 1991a). Verbal abuse has also been defined as overt or subtle verbalizations ranging from profanity and openly hostile remarks about competency to double-edged comments, gossip and rumors (Cooper, Saxe-Braithwaite, & Anthony, 1996). Manderino and Berkey (1997) and Cook, Green, and Topp (2001) both used a definition they attribute to Hadley, which defined verbal abuse as verbal behavior designed to humiliate, degrade, or otherwise demonstrate a lack of respect for the dignity and worth of another individual.

Bruder (2001), in an article examining verbal abuse and gender, defines verbal abuse based on the relationship between the perpetrator and the victim. The nurse-perpetrator relationship can be either vertical or horizontal. In vertical abusive episodes the perpetrator would typically be a physician or someone in a supervisory relationship to the nurse. Horizontal abuse occurs between nurses. Bruder (2001) defines these verbal abuse events as behavior that nurses direct towards each other that would be totally inappropriate if they directed that same behavior, action, work, tone, attitude, judgment, towards a patient. Continuing with the construct of horizontal violence, an Australian study defines horizontal violence as a form of psychological harassment and that this harassment involves verbal abuse, threats, intimidation, humiliation, excessive criticism, innuendo, exclusion, denial of access to opportunity, disinterest, discouragement and the withholding of information (McKenna, et al., 2003).

A large Canadian study of 8,780 nurses provided operational definitions for two terms related to verbal abuse (Duncan et al., 2001). Emotional abuse was defined as

hurtful attitudes or remarks, insults, gestures, humiliation before the work team, or coercion. Verbal sexual harassment was defined as repeated, unwanted intimate questions or remarks of a sexual nature.

### **Disruptive Behavior**

Another term used in defining actions similar to those described above is disruptive behavior and this conduct was the topic of two studies by Rosenstein. The first of these studies specifically addressed the issue of disruptive physician behavior and its impact on nurse satisfaction and retention. For the purpose of this study Rosenstein defined disruptive physician behavior as any, "inappropriate behavior, confrontation, or conflict, ranging from verbal abuse to physical and sexual harassment" (Rosenstein, 2002, p. 27). Another study several years later addressed the effect of disruptive behavior on clinical outcomes (Rosenstein & O'Daniel, 2005). This study evaluated disruptive behavior by both nurses and physicians. The authors used the same definition but changed the term they were defining from disruptive physician behavior to simply disruptive behavior. As stated earlier, some definitions of disruptive behavior cite the organization as the victim instead of the direct target of the behavior. One such definition is provided in an article by Porto and Lauve (2006). These authors define disruptive behavior as "anything a clinician does that interferes with the orderly conduct of hospital business, from patient care to committee work. This includes behavior that interferes with the ability of others to effectively carry out their duties or that undermines the

patient's confidence in the hospital or another member of the healthcare team" (Porto & Lauve, 2006, p. 2).

### Incivility

Workplace incivility was first described in 1999 by Andersson and Pearson as "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" (Andersson & Pearson, 1999, p. 457). These authors cited many examples of workplace incivility including: discourteous answering of the telephone, screening calls with voicemail, leaving trash behind for others to clean up, standing over someone who is working and having loud personal telephone conversations at work.

# Horizontal Violence and Bullying

The terms horizontal violence and bullying do not describe different behaviors than those discussed earlier under the headings of verbal abuse, incivility, workplace aggression and disruptive behavior. Horizontal violence and bullying generally describe the relationship between the perpetrator and the victim of the aggressive behavior rather than the form of the aggressive behavior itself. Several authors seem to use the terms horizontal violence and bullying interchangeably (Corney, 2008; Curtis, et al., 2006; Johnson, 2009; McKenna, et al., 2003). While horizontal violence and bullying ostensibly occur between peers, several authors suggest that the victim is less powerful than the perpetrator and therefore unable to engage in protective behaviors (Hutchinson,

et al., 2006; Johnson, 2009; Namie, 2003; Zapf & Einarsen, 2001). A number of authors do recognize one difference between bullying/horizontal violence when compared to incivility or verbal abuse. Bullying and horizontal violence are frequently characterized by their repetitive nature. A hallmark of bullying is that the victim endures repeated assaults over an extended period of time. Lutgen-Sandvik, Tracy, and Alberts (2007) combine elements of repetition, duration and relative powerlessness defining bullying as the experience of, "at least two negative acts, weekly or more often, for six or more months in situations where targets find it difficult to defend against and stop abuse (p. 841). One author also indicates that the duration of bullying is on average a duration of 22 months (Namie, 2003).

The above section discusses the varied points on the workplace violence continuum. What should be clear from this review is that this continuum is not linear in nature. There is significant overlap of the behaviors connected to the terms used to describe this phenomenon and little agreement on definitions and uses of these terms. The above information is summarized in Appendix A.

A note should be made regarding the topic of sexual abuse or sexual harassment in the workplace. At any point upon the workplace violence continuum, the abusive behavior of the perpetrator can be either sexualized or not. Sexual abuse and/or harassment may fall at several different points on the continuum, including incivility, verbal abuse and physical violence. Therefore sexual harassment and sexual abuse are not included as separate forms of violence along the continuum but rather, may be a

component of any form of abuse. Since the literature well supports the use of sexual abuse or sexual harassment as an expression of power rather than of sexual desire, the basic goal of dominance remains unchanged in sexualized versus non-sexualized abuse.

#### Sources of Verbal Abuse

Nurses receive verbal abuse from a variety of sources. Among these sources are patients and their families, physicians, managers or supervisors, and other nurses.

In a 1985 survey, nurses in north Texas were asked who was the most frequent source of abuse (Cox, 1987). The survey used a mailing list from the Texas Tech University Health Sciences Center and randomly selected 1000 names from this list of 10,200. The return rate for this survey was 42.1%. Surveys were sent to both staff nurses and directors of nursing. Eighty-two percent of the staff nurses had experienced verbal abuse in their practice. The nursing directors had a similar rate, 81%, when they considered their entire nursing careers. When only their experience as directors was considered, 77% of this group reported that they had experienced verbal abuse while in a director role. Both groups reported that physicians were the most frequent source of verbal abuse. Seventy-eight percent of the staff nurses and 84% of the directors reported physicians as the most frequent abuse source. Both groups also reported that the next most frequent source of abuse were patients' family members. The staff nurses then reported that patients were the third most frequent source of abuse while immediate supervisors held the third position for the director. The fourth most frequent source of abuse for staff nurses were immediate supervisors while peers held the fourth position for the nursing directors. Frequency percentages were only reported for the most frequent abusers for both groups.

A brief summary of a 1994 study reported similar results to the study by Cox (Hilton, et al., 1994). In this study, surveys were distributed to non-supervisory nurses at a 1000-bed hospital in southern California. Eighty-nine percent of these participants reported experiencing verbal abuse in their practice. Again physicians were reported as the most frequent source of abuse, followed by patients and then patients' families. This study also provides information regarding the frequency of verbally abusive episodes. The participants were asked to indicate the number of abusive statements they received in a one-month period. Forty-seven percent reported one or two statements and 30% reported three to five abusive statements.

Physicians are not always reported as the most frequent source of abuse. A study reported in 1991 surveyed both registered nurses and non-registered nurses at a large medical center in Hawaii (Braun, et al., 1991). All registered nurses working at the medical center were invited to participate. Of the 696 employed nurses 327 responded for a response rate of 47%. The non-registered nurse participants came from a sample of 125 employees of whom 67 agreed to participate in the study. It should be noted that the nurse and non-nurse participants were surveyed two months apart and did not complete the same survey. The non-nurse survey was developed by one of the researchers and it was described as a generic version of the survey. The nurses were surveyed using the Verbal Abuse Survey developed by Cox. This study reports a higher rate of nurses who

have experienced verbal abuse with 96% of the nurse participants reporting verbal abuse. Conversely, only 69% of the non-nurse participants indicated that they had experienced verbal abuse at work. The nurses in this study reported that patients were the most common source of abuse with 36% of the nurses listing patients as the most frequent source. Physicians were cited as the most frequent source of abuse by 28% of participants, followed by the patient's family (13%) and another staff nurse (12%). In the nurse sample, 25% of the participants reported greater than 6 abuse episodes per month and 24% reported that they had resigned from a previous job due to abuse. The study demonstrated that while patients and physicians are frequent sources of abuse, they are not necessarily the abusers leading to nurse turnover. Only 5% of the nurses reported that their immediate supervisor was the most frequent source of abuse; however, for those nurses who reported resigning from a job due to abuse, 34% of those participants indicated that the resignation-inducing source of abuse was their immediate supervisor.

Two studies conducted in Turkey and one in New York State yielded similar results indicating that the most frequent source of abuse was the patient. The first study was conducted at the largest (bed capacity) hospital in the Turkish town of Adana (Oztunc, 2006). Four hundred fifty nurses were employed at the hospital at the time of the study and all were invited to participate in the study. Of the total population, 290 nurses completed the survey for a response rate of 64.4%. Of the respondents, 80.3% reported having experienced verbal abuse in the last year. In this study it was the patients' relatives who were cited as the most frequent source of abuse (57.2%) followed

by patients (37.9%) and physicians (29.0%). Coworkers were only cited as the most frequent source of abuse by 6.9% of the respondents and the head nurse or nurse administrator was the most frequent abuser cited by 5.9% of participants. The second Turkish study was a multi-hospital survey involving three public hospitals in East Anatolia (Uzun, 2003). The sample in this study consisted of 467 nurses which was a response rate of 69%. The overall sample reported that 86.7% of the nurses had experienced verbal abuse in the preceding 12 months and that 60.6% had been verbally abused in the last month before the survey. Rates for abuse within the last year were reported for the three hospitals of 91.3%, 88.9% and 83.8%. No statistically significant difference was found among the rates of the three hospitals. As in the previous study, patients' relatives were the most frequent source of abuse with 59.8% of respondents listing relatives most frequently. Patients' relatives were followed by patients themselves (22.7%) and physicians (6.8%). Unlike other researchers, Uzun reported the gender of the abuser who was male by a wide margin (71.9%). In the study in New York State again the patient was identified as the most frequency source of abuse at more than twice the rate of the next most frequent abuse source (Zigrossi, 1991). Staff nurses in this study experienced a mean number of 3.6 verbal abuse events from patients over a one month period. The next most frequent source of abuse was patient's family at 1.4 events in the same timeframe.

Researchers in Canada used data from a large multination study to explore violence in hospitals in Alberta and British Columbia (Duncan, et al., 2001). The original

data set included responses from 8,780 nurses from 210 hospitals. Duncan, et al., (2001) used the terms emotional abuse and verbal sexual harassment as the operational definitions of events most related to verbal abuse. Participants were asked to report five different types of violent episodes: physical assault; threat of assault; emotional abuse; verbal sexual harassment; and sexual harassment. The research team used a very short timeframe when asking about recent experiences with the various types of violence. Nurses were asked to report whether or not they had experienced any of the five types of violent acts within the last 5 shifts that they worked. In the overall sample, 46% of nurses reported at least one of the five types of violence with the last 5 shifts worked. The most frequently cited form of violence was emotional abuse. The rates reported for these events were 38.0% in Alberta and 36.6% in British Columbia. Similar rates of violent acts were found in the two provinces for emotional abuse, verbal sexual harassment and sexual harassment. Statistically significant differences were found between the two provinces in both physical assault and threat of assault with British Columbia nurses experiencing these acts at a higher rate. Across all types of violent acts in both provinces, patients were the most frequent source of abuse. Patients were reported as the source of emotional abuse by 35.4% of the nurses in Alberta and by 34.3% of the nurses in British Columbia. Frequency of abuse was evenly distributed among the remaining sources of abuse with physicians listed second in both provinces (13.5% in Alberta, 19.6% in British Columbia), nursing coworkers third (13.0% in

Alberta, 13.3% in British Columbia) and patients' family or visitors fourth (11.6% in Alberta, 12.2% in British Columbia).

Pediatric nurses were the subject of a study conducted in eastern Ontario (Pejic, 2005). While the sample of nurses in this study is small (N=35), the study was conducted across six hospitals. The small sample size was related to the complex inclusion criteria for the study. The researcher focused specifically on the pediatric nurse population and established inclusion criteria for their study that required participants be registered nurses in Ontario, have two or more years experience in acute care pediatrics, and have a demonstrated commitment to pediatric nursing, be employed either full or part time and be fluent at reading and writing English. The researcher used a self-developed survey modified from an instrument by Manderino and Banton that has been in use since approximately 1994. Participants were asked if they had experienced verbal abuse within the last three months and 94.3% indicated that they had been abused in that period. Participants were given four choices regarding the perpetrator of verbal abuse: patients, parent/visitor, physician, other staff members. Verbal abuse was limited to one source for 21.9% of respondents. Two sources of abuse were reported by 37.5%, three sources of abuse by 25.0% and 15.6% of respondents reported being abused by individuals in all four categories within the three month period. Physicians were reported as the most frequent abusers at 31.3%, but only slightly more than the 28.1% rate for both patients and family or visitors.

Sofield and Salmond (2003) report the findings of a survey conducted at a three-hospital system in the northeast United States. A shortened version of the Cox Verbal Abuse Survey was sent to a randomized list of 1000 nurses from the three hospitals. A final usable sample of 461 surveys was returned for an overall response rate of 46.1%. Return rates were similar for the three hospitals (31%, 37%, and 37%). Ninety-one percent of participants reported at least one episode of verbal abuse in the month prior to taking the survey. The majority of nurses (67%) reported between 1 and 5 events. Participants were asked to report all sources of verbal abuse within the last six months. Physicians were reported as the most frequent source of abuse by greater than 60% of the study participants. Following physicians as the most common source of abuse were patients, patients' families, peers, supervisors, and subordinates.

Researchers in Queensland Australia report the results of a 2004 study of workplace violence in which they compare their results to an earlier 2001 study to assess changes in the nature of workplace violence over time (Hegney, Eley, Plank, Buikstra, & Parker, 2006). Surveys were sent to 3,000 healthcare workers in Queensland. The sample was divided into three strata representing the private, public, and aged care sectors of the healthcare industry. One thousand surveys were mailed to workers in each sector. Surveys were returned by 1,349 workers for an overall response rate of 45%. Of the total number of usable surveys, 913 were completed by registered nurses. Only the responses of the registered nurse participants are reported by the authors. Participants were asked if they had experienced some form of workplace violence within the three

months prior to the survey. Greater than 40% of respondents in each of the three sectors reported that they had been the victim of workplace violence. In all three sectors the rate reported in 2004 was higher than the rate in 2001. Sources of workplace violence in this study closely mirror the source of abuse in the other studies cited above. Across all sectors and both years, clients/patients are most frequently listed as the source of workplace violence. Significant increases from 2001 to 2004 in workplace violence rates were reported for visitors/relatives in all three sectors, and in other nurses in the aged care and public sectors. Workplace violence incidents also increased in all three sectors from 2001 to 2004 where nursing management was cited as the source of the abuse. Overall rates of abuse by medical practitioners did not increase significantly from 2001 to 2004. There is however, in both years, a significant difference in abuse rates by medical practitioners between the three sectors, with abuse rates being much higher in the private sector.

The preceding studies all sought information regarding the source of abuse. The respondents were asked to indicate who the perpetrators of abuse were and with what frequency the abuse occurred. Following are several studies that specifically target a particular group of perpetrators. These include studies focused on the physician as the abuser as well as studies focused on the topic of horizontal violence or bullying in which other nurses are the targeted source of abusive behavior for the study. As the perpetrator in these studies is predefined by the researcher, the studies will only be mentioned in this section. The intent of most of these studies it to determine the effect and impact of verbal

abuse from the identified perpetrator and so this body of work will be explored more fully in the following section on the consequences of verbal abuse.

Manderino and Berkey (1997) surveyed 300 Missouri nurses to explore verbal abuse by physicians. Of the 300 nurses invited to participate, 130 returned surveys netting a response rate of 43%. The authors used the Verbal Abuse Scale developed by Manderino and Banton in 1994. Their research questions included frequency of abuse as well as the nurses' reactions to abuse and the coping behaviors used by the nurse in responding to the abuse.

A study exploring physician abuse of nurses in the perioperative setting was conducted using members of a single AORN local chapter located in Toledo, Ohio (Cook, et al., 2001). Two hundred members of this professional association were invited to participate. The final sample consisted of 78 complete surveys for a response rate of 39%. This study also used the Verbal Abuse Scale by Manderino and Banton. These researchers used Roy's Adaptation Model as the theoretical framework for their study and so addressed frequency of abuse as well as coping mechanisms used by the nurse. At least one episode of verbal abuse by a physician had been experienced in the preceding year by 91% of the nurses in this study. In terms of the frequency of abuse, 45% of participants reported experiencing verbal abuse several times per year while 22.5% reported verbal abuse episodes occurring several times per week and 4.2% of participants reported being verbally abused on a daily basis (Cook, et al., 2001).

Diaz and McMillin (1991) surveyed 500 nurses residing in a single California county and received 175 complete and usable surveys. Eighteen surveys collected earlier as part of an exploratory survey were merged into the main survey data yielding 193 participants. Unique to this study is that the researchers used the literature regarding battered women to guide their research. Therefore, the researchers excluded male nurses from their analysis leaving a final sample of 164 surveys. This survey also only considered abuse toward the nurse by physicians. Respondents were asked the frequency of various types of abuse including verbal abuse, sexual abuse, threat of physical abuse and actual physical abuse. Ninety-four percent of nurses reported being verbally abused at least once in the preceding 12 months. Sixty-four percent reported that verbal abuse occurred at least once every 2 to 3 months. Sexual abuse was reported as occurring at least once by 53% of the participants. As noted earlier sexual abuse in this study was operationally defined as positive answers to the questions asking if a physician has ever. "sexually propositioned you", "sexually insulted you", or "suggestively touched you". Two of these three questions can be categorized as both sexual harassment and sexually related forms of verbal abuse.

Another type of abusive behavior is referred to as either horizontal violence or bullying although a distinction should be drawn between these two related concepts.

Horizontal violence specifically refers to abusive behavior among members of the same group, i.e. nurses who are at the same level in the organization (Hutchinson, et al., 2006).

Bullying is often used synonymously with the term horizontal violence. Bullying

however, can include upward and downward abusive behavior as well as occurring across organizational lines. Several authors have suggested that behavior escalates along a continuum from incivility to bullying. Namie (2003) places abusive behavior on a 10-point scale. Incivility scores range from 1 to 3, bullying from 4 to 9 with a score of 10 indicated for battery and homicide. Without necessarily specifically referencing bullying in their 1999 work defining incivility, Andersson and Pearson (1999) describe an incivility spiral of escalating behaviors between actors that eventually crosses the boundary between the ambiguous intent to harm of incivility and enters the area that they term coercive behavior.

A New Zealand study focused on the experience of horizontal violence of nurses in their first year of practice (McKenna, et al., 2003). Surveys were mailed to all nurses registering for the first time in the year before the study. Of the 1,169 surveys mailed, 551 complete surveys were returned for a response rate of 47%. Abusive behaviors were divided between covert interpersonal conflict and overt interpersonal conflict. The covert category included behaviors such as being undervalued, having learning experiences blocked, being neglected emotionally, lack of supervision or support and threats of repercussions for speaking out. Fifty-eight percent reported being undervalued while 46% reported being given too much responsibility without adequate supervision. In terms of overt behaviors, 34% of respondents reported verbally abusive statements being made that included statements that were rude, humiliating or involved unjust criticism.

All of the studies presented thus far have used nurses as the research participants.

Two studies are now presented that surveyed both nurses and physicians and two additional studies are discussed that included nurses, physicians and hospital administrators among respondents.

In addition to including both nurses and physicians, a study conducted at a 650bed community hospital in Canada is also one of the few experimental studies found regarding verbal abuse (Cooper, et al., 1996). Sixty physicians and 60 nurses were randomly selected from a staff of 246 physicians and 730 nurses. Of the total sample of 120, 34 nurses and 4 physicians agreed to participate and met the inclusion criteria for the study. The researcher administered three surveys to participants, the Tennessee Self Concept Scale developed by Fitts, the Verbal Abuse Survey developed by Cox and the Nurse-Physician Relationship Survey developed by one of the authors. Participants were randomly assigned to the experimental and control groups. The authors do not state that. groups were equal in size although it does appear that the groups held a mixture of both nurses and physicians. Both groups completed the two questionnaires and attended two educational sessions. The experimental group received education about verbal abuse and self-esteem while the control group received education about stress management. Participants completed all three surveys before and after the intervention was applied. Data collection occurred over a six month period. Physicians were reported as the most frequent source of abuse at 38.2% of reported incidents. Physicians were followed by

patients' relatives (27.6%) and patients (23.7%). Registered nurses and immediate supervisors were responsible for 5.3% of incidents each.

A Norwegian researcher studied anger behavior between nurses and physicians (Skjorshammer, 2003). Anger behavior was defined as an expression of strained interpersonal relationship where contextual factors serve to lower the threshold for keeping such feelings private. The study used an ethnographic design and triangulated data from the interviews, observations and a review of hospital documents. Fifty-six nurses and physicians were interviewed and 101 separate stories were recorded. Of the 101 stories 49 were directly related to either expressions of irritation or frustration or included descriptions of anger behaviors such as yelling, swearing or blaming. Focus groups were also conducted as part of the data collection. Physicians were the principal actors in 33 of the 49 stories. While the physicians did express anger toward each other, most of their anger was directed at nurses. Nurses perceived anger behaviors as a negative stressor while physicians believed that expressing anger was an important way of relieving pressure to which they were entitled. Anger behaviors were categorized as strong verbal expressions, weaker verbal expressions, non-verbal expressions or personal behavioral style. Female physicians expressed anger more similarly to male physicians than female nurses. In this study both groups found that some anger expressions were understandable and some incomprehensible. Generally understandable expressions of anger are perceived by the target as commensurate with the work situation while incomprehensible expressions of anger are those the target perceives to be an

overreaction to the actual situation, are intentionally harmful or place unjustifiable blame on the target. It was generally perceived that there is greater acceptance of anger behavior by physicians than by nurses. One nurse director commented, "Rude and rebukeable behavior on the part of nurses leads to dismissal. However, there is much more tolerance for such behavior on the part of doctors" (Skjorshammer, 2003, p. 283).

Two studies by Rosenstein and others examine the impact of disruptive behavior on nurse satisfaction and retention as well as clinical patient outcomes (Rosenstein, 2002; Rosenstein & O'Daniel, 2005). The 2002 study included 1,200 participants from 84 hospital or medical groups that are part of the VHA West Coast network. The sample consisted of 720 nurses, 173 physicians, and 26 administrative executives. Additionally, 281 respondents did not list their job titles. Surveys without job titles were included in aggregate measures but excluded from subgroup responses. The purpose of the study was to examine five specific content areas: overall atmosphere and significance of nurse-physician relationships at the hospital; physician awareness of the importance of nurse-physician relations; physicians' value of and respect for nurse input and collaboration; disruptive physician behavior; and support for resolution of conflicts between nurses and physicians. One additional open-ended question was added asking for recommendations for improvement of nurse-physician relations.

Regarding overall atmosphere and significance of nurse-physician relations, nurses viewed the nurse-physician relationship as less positive than did physicians.

Physicians viewed the nurse-physician relationship as less significant than did the nurses.

Nurses rated physician awareness of the importance of the nurse-physician relationship much lower than did either physicians or executives and this item received the lowest mean score of all subscales in the survey (5.12 on a scale of 10, 10 being the most positive). The mean rating for the physician value and respect of nursing subscale was 6.15 (10-point scale) with physician rating the item higher than both of the other groups. A large majority of participants reported having witnessed disruptive behavior by physicians (92.5%). The most frequently cited behaviors were yelling, disrespect, condescension, berating colleagues and patients and the use of abusive language. Participants were also asked what percentage of the medical staff exhibited disruptive behavior and 67.8% reported that less than 5% of the medical staff displayed this behavior. When asked how frequently disruptive behavior occurs, 28% of respondents indicated that this behavior occurs once or twice monthly and 26% indicated that they observed this behavior weekly.

The 2005 study by Rosenstein and O'Daniel used the same VHA network as the 2002 study to obtain participants (Rosenstein & O'Daniel). The same survey was administered with some additional items that measured the disruptive behavior of nurses, influence of gender on the expression of disruptive behavior and the perceived impact of disruptive behavior on psychological and behavioral variables and on clinical outcomes. In the total sample, which again included respondents who did not identify their job titles, 74% of respondents had witnessed disruptive behavior by physicians while 68% had witnessed this behavior by nurses. Forty-seven percent of respondents indicated that

gender influenced the tendency to exhibit disruptive behavior. Fifty-seven percent reported a greater tendency toward disruptive behavior in male physicians and 40% reported this tendency in female nurses. No perceived difference in tendency was reported by 41% regarding physicians and 53% regarding the tendencies of nurses. A strong perception emerged of the effect of disruptive behavior on the behavioral and psychological factors studied. These factors included stress, frustration, loss of concentration, reduced team collaboration, reduced information transfer, reduced communication and impaired nurse-physician relationships. Between 83% and 94% of respondents indicated that disruptive behavior has a significant impact on these factors. Regarding disruptive behavior and clinical outcomes, 94% of respondents believed that disruptive behavior could have a negative impact on clinical outcomes. Sixty percent of respondents were aware of potential adverse patient outcomes that may have occurred due to disruptive behavior, 17% were aware of a specific adverse event that did occur due to disruptive behavior and 78% believed that the particular event could have been prevented.

As the above discussion demonstrates, verbal abuse is both an endemic and pandemic experience of registered nurses. The experience of verbal abuse crosses time, geography and practice setting and source. Studies have been presented from the United States, Turkey, Norway and several countries from the United Kingdom, and have spanned more than 25 years. Nearly every person with whom a nurse would have contact during the workday has been implicated as a source of abuse by one or more researchers:

physicians; patients and their families; visitors; management staff; and other nurses. Interestingly, the focus of the literature appears to have changed across the many years the phenomenon of verbal abuse has been documented. Earlier studies focused almost exclusively on the physician as the source of abuse and mostly limited the study of the effect of abuse on the direct victim, the nurse. More recent literature has paid more attention to horizontal abuse, or abuse that occurs between nurses, and has broadened the examination of the effect of abuse to include people tangentially placed in harm's way by the effect of abuse on the nurse. It is not possible to discern whether this change in focus represents a change in the nature of the source of abuse or simply a change in the focus of the researchers investigating this topic.

# **Consequences of Verbal Abuse**

The consequences of verbal abuse can best be described in terms of the effect of these behaviors on the victims, the healthcare organization and the patient. It should be noted that similarities in the reported effects of verbal abuse will occur dependent on the survey used to elicit the data.

Two primary surveys have been mentioned in the previous section: the Verbal Abuse Survey developed by Cox (1987) and the Verbal Abuse Scale developed by Manderino and Banton as reported by Manderino and Berkey (1997). Both of these surveys ask the respondents to indicate whether or not they had experienced psychological or physical reactions to verbal abuse from a pre-selected list. By the nature of this design, respondents are limited to a yes or no answer to the items on the list only.

It should also be noted that very few authors have used these surveys as they were originally designed by Cox or Manderino. Most authors have modified their selected survey to fit the particular needs of their study. Some authors report an attempt at assessing content validity of their instrument by submitting the survey to an expert panel; however, testing of reliability and validity of these surveys, particularly as they have been modified, have not been reported.

In the prior section five studies were reported using the Cox survey instrument, including the survey conducted by Cox herself (Braun, et al., 1991; Cooper, et al., 1996; Cox, 1991a, 1991b; Sofield & Salmond, 2003; Uzun, 2003). The study by Sofield and Salmond compares the results of their own study with the 1989 study by Cox and the 1991 study by Braun. On the issue of morale, 81% of the respondents in the Cox survey reported decreased morale compared with 74% in the Braun study and 67% in the Sofield study. Seventy-one percent of nurses in the Cox study reported decreased productivity compared with 59% and 41% in the Braun and Sofield studies, respectively. Among the three studies 54% (Cox), 45% (Braun) and 36% (Sofield) of respondents reported that verbal abuse resulted in the delivery of less nursing care to patients; and 87% (Cox), 81% (Braun) and 51% (Sofield) of participants believed that verbal abuse resulted in increase errors in nursing care. Increased workload resulting from verbal abuse was not reported in the Braun study; however, 24% of nurses in the Cox study and 17% of nurses in the Sofield study reported increased workload resulting from verbal abuse.

The Verbal Abuse Survey also addresses the issue of nursing turnover or intent to leave the organization. Sofield reported that 13.6% of her participants had left a position due to verbal abuse and that 62.2% of nurses believe that verbal abuse contributes to increased turnover. Written comments on surveys in the Sofield study also indicated that nurses had changed from full to part time employment to reduce their exposure to verbal abuse. Cox demonstrated that nursing turnover was also related to verbal abuse. The Cox study surveyed 1000 nurses from a variety of organizations in the north Texas area. The effect of verbal abuse on turnover was calculated for each agency. Eighteen to 48% of turnover in nursing directors was related to verbal abuse and 16% to 18% of staff nurse turnover could be attributed to verbal abuse.

Cooper (1996) and Uzun (2003) report the emotional responses of nurses included in the Cox survey. Among these responses are anger, frustration, anxiety, helplessness, resentment, embarrassment, powerlessness, fear and hostility. Anger was the most frequent response reported in both of these studies. Results of the Cooper study also indicate that verbal abuse has an effect on later relations with the perpetrator of the abuse. Among these responses are avoiding the perpetrator, confronting the individual, becoming antagonistic or refusing to work with the abuser.

Three studies used variations of the Verbal Abuse Scale developed by Manderino and Banton to collect data (Cook, et al., 2001; Manderino & Berkey, 1997; Pejic, 2005). The Verbal Abuse Scale lists categories of abusive behaviors and asks the participants to indicate the frequency with which they have experienced that behavior. Among these

behaviors are abusive anger, ignoring, condescension, blocking or diverting, trivializing, abuse disguised as a joke, blaming, criticizing, sexual harassment, discounting and threatening. The original study by Manderino and Berkey as well as the Cook et al. study ranked these behaviors using the same methodology. The participants are asked to indicate the frequency with which each type of behavior occurs on a zero to six scale (0 =never, 1 = 1-6 times this year, 2 = once a month or less, 3 = 2-3 times/month, 4 = once a week, 5 = several times a week and 6 = every day). In the Manderino and Berkey study "ignoring" received the highest mean score of 1.46, while in the Cook et al. study "abusive anger" was rated highest with a score of 1.97. The Pejic (2005) study altered the original scale but used a similar classification of behaviors. In this study being spoken to in a condescending manner was the most frequent form of abuse. Cook et al. and Manderino and Berkey also reported similar emotional responses to verbal abuse by their participants. In both studies the top five reported reactions were anger, frustration, disgust, embarrassment and sadness or hurt. The only difference was that anger and frustration reversed order between the two studies. Anger was the top rated response in the Manderino and Berkey study and was second in the Cook et al. study.

Several other studies used other data collection instruments. The New Zealand study cited earlier used a data collection instrument originally designed to collect information about interpersonal conflict by patients addressed toward trainee physicians (McKenna, et al., 2003). Information about the consequences of horizontal violence in this study was collected by means of an open-ended question. Several participants

indicated that these events had reduced their confidence and self-esteem. Other psychological reactions mentioned included fear, anxiety, sadness, depression, frustration and mistrust. These responses on an open-ended question bear much resemblance to the pre-selected lists from the earlier cited studies. Similar emotional responses were also reported in the Oztunc study in Turkey (Oztunc, 2006). Feeling angry after being verbally abused was reported by 50.6% of the participants in this study. Additionally nurses in this study indicated that verbal abuse caused decreased morale (87.6%), emotional exhaustion (91%), reductions in productivity (68.3%) and negative effects on their nursing care (63.1%).

Diaz and McMillin (1991) developed their own survey and most of the data concerning the consequences of verbal abuse were found in free text comments written by the participants. Forty-eight percent of the respondents made additional comments and 37% of these comments indicated that verbal abuse has a negative effect on patient care. Reactions indicated in these comments included reluctance to call the physician when it was warranted by the patient's condition, unwillingness to suggest patient care improvements and refusing to care for an abusive physician's patients.

# **Verbal Abuse Mitigation Strategies**

So far it has been demonstrated that verbal abuse, in all its forms, is pervasive throughout the nursing profession and that it has substantial negative consequences for both the nurse and the patient. It is important therefore, to review those strategies tested

or suggested by various authors to reduce or eliminate verbally abusive behavior from organizations.

Sofield and Salmond (2003) offer several suggestions for organizational responses to verbal abuse. Among these suggestions are establishment of verbal abuse and workplace violence policies, development of policies and procedures mandating zero tolerance for abusive behavior, training sessions for all staff regarding identification and intervention in crisis situations, developing tracking and trending mechanisms and establishing nurse/physician collaborative practice committees. Recommendations in the study by Braun et al. (1991) include education about verbal abuse and its effects, training in assertiveness and conflict resolution and dealing effectively with anger, participative management and improved communication. McKenna and associates suggest the necessity of effective incident reporting system in order that staff will feel safe reporting verbal abuse (McKenna, et al., 2003). Additionally, this study suggests that employers need to provide supportive services for staff experiencing horizontal violence and that emphasis should be placed on primary prevention of these incidents beginning with education and training. The Cook study cited earlier indicates the need for a policy approach to verbal abuse.

Regarding reduction of disruptive behavior, Rosenstein and O'Daniel (2005) suggested that organizations conduct a self assessment and increase staff awareness of the nature and severity of disruptive behavior. These authors also suggested opening lines of communication and providing opportunities for collaboration between physicians and

nurses. Also suggested is the implementation of policies and procedures that reinforce acceptable codes of behavior.

The study by Cooper and associates was experimental in nature, testing the effect of an educational intervention on the reduction of verbal abuse incidents and increasing the effectiveness of staff responses to abuse (Cooper, et al., 1996). Unfortunately due to the small sample size and the limitation of the study being conducted in a single organization, the results of this study cannot be generalized to a larger population. Additionally, while the experimental group in this study did experience less abuse after the intervention and did increase the use of more proactive mitigation strategies such as assertive approaches and conflict management, neither the experimental or control group thought they handled verbal abuse episodes well.

Griffin (2004) conducted a study in which cognitive rehearsal was used to aid new nurses in confronting lateral violence. During the first week of general nursing orientation the 26 nurses that consented to participate in the study were given an educational offering on lateral violence. The program consisted on one hour of didactic lecture followed by one hour of interactive work in which appropriate responses to lateral violence were practiced. The participants were then interviewed approximately one year later regarding their experiences with lateral violence and the outcome of their attempts of respond. Virtually all of the participants (96.1%) reported that they had witnessed lateral violence during the study period and 46% indicated that the lateral violence they witnessed was directed at them. All of the participants confronted the perpetrators of the

violence and in 100% of the cases the participants reported that the lateral violence ceased after they confronted the perpetrator.

More recently several authors conducted a pilot study of an intervention designed to assist mental health nurses deal with verbal aggression by patients. The intervention consisted of pre- and post test focus groups surrounding the utilization of a self-study book on the topic of verbal aggression. The results of this pilot study are encouraging. Post intervention the nurses were able to identify more factors contributing to verbal aggression than they were able to before the intervention. The mean number of verbally aggressive events fell to 2 events post intervention compared with 6 pre-intervention. The participant's rating of the problematic nature of verbal aggression improved from a mean of 8 to a mean of 5 on a 10 point scale (McLaughlin, Bonner, Mboche, & Fairlie, 2010).

Common among many of the suggestions listed above is the lack of an evidence-based approach to determining effective mitigation strategies. While a few articles have been reviewed testing the efficacy and effectiveness of interventions designed to reduce verbal abuse or disruptive behavior, this research remains limited.

### **Theoretical Frameworks**

A variety of theoretical or conceptual frameworks have been applied by verbal abuse researchers to guide their work. This collection of theoretical approaches seeks to explain why verbal abuse of nurses occurs and why the victims respond to verbal abuse

as they do. The majority of the models tend to address a single cause and effect relationship.

# **Oppressed Group Behavior**

Among the earliest theoretical frameworks aimed at explaining why nurses respond to verbal abuse as they typically do is the framework of oppressed group behavior. Cox (1991a) describes the downward spiral of a group as it begins to adopt oppressed group behaviors. This spiral begins with the dominant group determining the correct values and norms in the society. The dominant group uses their power to enforce these norms. As the dominant group becomes more powerful, the other groups lose value. Some members of the subordinate groups adopt behaviors characteristic of the dominant group in an attempt to be accepted. Now a member of neither group these members are marginalized by both dominant and subordinate groups. The subordinate group loses self-esteem, assertiveness, initiative and control and conflict grows within the subordinate group. Sofield and Salmond (2005) suggest that one outcome of oppressed group behavior by nurses is an increase in horizontal violence as nurses turn their frustration inward.

The works of Cox (1991a) and Sofield and Salmond (2005) both suggest the physician or organizational leadership as the oppressor group. Tinsley and France (2004) used a phenomenological approach to study the nurses' experience of oppression. In this study the oppressor group was found to be other nurses. This study was focused on the

research question of why nurses left the active practice of nursing. Through their analysis Tinsley and France identified three essential structures:

- "I loved it..." All participants in the study identified passionately why they chose to enter the nursing profession, recalling specific patients and families.
- "Suffering" Participant used strong terms such as; "destroy", "hate", "angry" to describe the work as registered nurses. The authors settled on the essential structure of suffering using the definition of suffering as "the state of severe distress associated with events that threaten the intactness of person" (Cassell, 1991, p. 33). The authors further identify three substructures to the essential structure of suffering.
  - Nurse Abuse abuse was the term frequently used by participants to describe behavior of other nurses that was generally perceived as a lack of mutual support among nurses.
  - Burnout Participants used the terms burnout and stressed out to describe this middle substructure.
  - Searching to recapture what once (I) loved This searching process
     preceded the decision to leave the profession of nursing and was an
     attempt to find again the feeling that the nurses had upon entering nursing.

The suffering substructures occur sequentially and lead to the final essential structure (Tinsley & France, 2004).

 The Exodus – All of the participants left nursing practice and each experienced a final event that created the decision to leave nursing.

The authors describe the synthesis of unity as oppression and the oppressors in this case are other nurses, both peers and nurse leaders (Tinsley & France, 2004).

### **Clegg's Circuits of Power**

Hutchinson et al. (2006) suggested that there are limitations to the use of oppressed group behavior as a construct to fully explain bullying behavior in nursing. As indicated above, the use of the oppressed group framework leads to the conclusion that bullying occurs because oppressed nurses turn their aggressive behavior toward other nurses. Using the oppressed group framework ignores the reality that bullying occurs vertically as well as horizontally and that not all bullying in healthcare organizations occurs between nurses (Hutchinson, et al., 2006). Bullying may be perpetuated by intrinsic factors in the organization outside the control of nurses. Hutchinson et al. (2006) suggests that a different approach to understanding the functioning of power within organization with lead to a greater understanding of how bullying occurs and is perpetuated.

Clegg (1993) proposed a model in which power flows thorough organizations in circuits like electricity or a force field. In this model there are three power circuits; agency, social integration and system integration. Agency power operates in an episodic manner and gets people to do what they would not normally do. While agency acts episodically, Clegg, Courpasson and Phillips (2006) noted that these episodic acts of

agency do not occur in isolation. Individual power acts occur constantly in organizations and these acts in total have an impact on social and system integration. Social integration focuses on rules of membership and rules of practice, and system integration focuses on influencing behavior through discipline and production (Clegg, 1993). Clegg describes social and system integration as facilitative powers as opposed to the more direct agency. Furthermore, social integration tends to reinforce existing relationships while system integration tends to foster innovation based on the presence of competition and the need for efficiency (Clegg, 1993).

A 2005 study demonstrates the use of Clegg's circuits of power, particularly social integration, in an abusive manner (Hutchinson, et al., 2005). This qualitative study consisted of semi-structured interviews with 26 nurses. The participants in this study reported multiple episodes of bullying done under the cover of implementing organizational change. Historically, this bullying behavior as part of organizational change has been considered an unintended consequence. This study however, demonstrated that the bullying behavior by the perpetrators, using the guise of implementing changes to justify the bullying was intentional and purposeful and was carried out over a number of years (Hutchinson et al., 2005).

Applying Clegg's framework to bullying in their later work, Hutchinson et al. (2006) offered the example of a junior nurse being bullied by a more senior nurse. Under the power of social integration the bullying behavior by the senior nurse may be seen by the organization as the senior nurse enforcing the rules with a newer member of the staff.

Resistance to the bullying by the junior nurse will be seen by the organization as resistance to the rules and different circuits of power deployed to overcome the resistance. The system integration circuit focuses on techniques of discipline. This circuit focuses attention on the source of the resistance, the junior nurse, who is then seen as the problem versus a view of the bullying senior nurse as the problem. Power within the system integration circuit increases until the junior nurse's resistance is overcome and she comes to either tolerate the bullying behavior or alter her own behavior to conform to the established group norms.

## **Anger Theory**

Allcorn (1994) offers a model in which anger and aggression cascade as a series of events precipitated by the experience of feelings of threat, humiliation, injustice or frustration. In this model these four feelings, threat, humiliation, injustice and frustration are considered to be primary emotions. The individual does not choose to experience primary emotions but rather, their advent is mediated by an unconscious, autonomic response. Secondary emotions conversely are selected by the individual and are responses to primary emotions. As a secondary emotion then, anger is understood to be a self-selected response to perceived feelings of being treated differently than one expects to be treated. The experience or perception of threat, humiliation, injustice or frustration leads to a lowered sense of safety and self-esteem. The individual then experiences increasing anxiety and enters a state of physiological and psychological arousal.

Allcorn (1994) suggests that there are four possible responses to anxiety. In the typical "fight" response the individual desires to change the anxiety-provoking situation. The person becomes consciously angry and prepares for an active response. The person may also elect to avoid anxiety through the use of one or more psychological responses such as denial, rationalization, repression, suppression, relaxation or physical activity. In this case anger will still be present but will be an unconscious experience. The third strategy is to avoid anxiety by reducing or changing expectations. Finally the subject may choose to avoid anxiety by exiting the situation or relationship, the typical "flight" response.

The choice of anger response is mediated by the individual's beliefs as to whether or not the perception and/or expression of anger is acceptable or unacceptable in the given situation. If feeling anger in the current circumstances is acceptable, more positive responses to anger are selected. Anger may be displaced into activities designed to alter the situation. Anger may also be redirected into balancing activities such as sports or hobbies. Finally, acceptable anger may be directly communicated with the intent of resolving the conflict or making expectations more clear.

Allcorn also suggests that three possible scenarios may occur if the expression of anger is unacceptable. If the person does not acknowledge the anger, a variety of psychological defense mechanisms such as denial and repression will be used to keep the anger at an unconscious level. This tactic may result in either the covert expression of anger or the development of psychosomatic disorders. Reaction formation is also a

possible outcome where the angry individual openly acts "nice", perhaps overly so, in an attempt to disguise anger. Response to the situation will be covert communication and actions.

If communication of anger does not adequately resolve the feelings of threat, humiliation, injustice or frustration, then the individual moves toward a state of aggression (Allcorn, 1994). The expression of anger fails to resolve the primary issues of threat, humiliation, injustice or frustration. As anxiety continues to build the actor begins to contemplate aggressive action. The consideration of aggressive action is however another source of anxiety that results from the presence of societal taboos against aggressive behavior. For a variable period of time, fear of negative sanctions will hold the aggressive action in check until increasing anger overwhelms the actor's concern over sanctions. When anger overcomes the anxiety, aggression is acted out. This aggression may present itself either covertly or overtly.

Overt aggression can include direct physical or verbal attacks including hitting, throwing objects, credible threats of violence and verbal abuse. Aggression may also be expressed covertly in three ways as passive aggressive actions, covert gamesmanship or displaced aggression.

#### Rankism

Robert Fuller, in his 2003 work *Somebodies and Nobodies: Overcoming the Abuse of Rank*, describes his concept of rankism and its relationship to the notion of rank in our society. In its broadest terms rank is a relative position within some structured

society such as a nation, an organization, a military service or a family. According to Fuller, "...rank indicates position in a hierarchy and it is expressed in a title. Our title signals our authority. It is as a signifier of power that rank acquires the extraordinary importance we attach to it" (Fuller, 2003, p. 13). Rank and power are attached to positions within organizations. The nursing assistant has less rank, and therefore less power, than the registered nurse, who in turn has less rank and power than the physician. In addition to organizational rank, one also holds a social rank that is indicated by and affected by such factors as wealth, talent, physical appearance, schools attended and similar external and internal traits. Fuller indicates that it is normal when people meet for them to begin a process of determining the rank of the other through such questions as: what do you do; where do you work; where do you live; or where did you go to school (Fuller, 2003, p. 14). The answers to these questions assists in determining the social or organizational rank of the other and gives guidance as to the level of deference to be paid to that individual.

Fuller suggests that rank is often earned, at least initially, through demonstrations of excellence. For this reason rank, in Fuller's conceptualization, is not intrinsically bad, but rather is a necessary part of organizing the human endeavor.

Fuller further indicates that another key facet of rank is that it changes as individuals move from one role to another during the course of one's life and even during a single day. Simultaneously an individual may hold the roles of hospital vice president, spouse, sibling, student, teacher, and parent. The rank associated with each of these roles

is different. In the role as the vice president the individual would have high rank in the organization with its attendant power. In the sibling role, this person may be the youngest child and therefore have lesser rank within the family. As a spouse the person may share equal power and rank with the partner. Consequently, according to Fuller, virtually everyone shares experiences of having both high and low rank and often experience both states at the same time.

Rank is seen by Fuller as having several legitimate purposes. Among these purposes are time management, quality control, organizational productivity and personal satisfaction. People rank things as well as other people to determine relative importance and the amount of time and attention to be paid to these things or other people. The quality of different brands of automobiles or refrigerators is ranked to determine which models will be purchased. Employees are ranked through such mechanisms as annual evaluations to determine individual competence. These evaluations can be used to recognize and reward excellence and distribute power based on expertise. More time is given to another vice president than to a housekeeper. The importance or urgency of assigned tasks is ranked to determine the amount of time we will allot these tasks. Finally people gain personal satisfaction for the acknowledgement and affirmation that the attainment of rank and power signifies.

For Fuller, rank is a legitimate and useful societal trait which is contrasted with rankism which is the abuse of those legitimate purposes. Fuller (2003) compares rankism with other forms of discrimination such as those based on race, gender or sexual

orientation. Rather than being similar to these other forms of discrimination, Fuller asserts that rankism is at the heart of all of these other discriminations. Race, gender and sexual orientation are simply characteristics that society assigns a rank. Historically Caucasians were ranked higher than African-Americans, men higher than women and heterosexuals higher than homosexuals. Laws, customs and societal norms arose that supported and reinforced these rankings and legitimized, or at least ignored, discriminatory actions based on these characteristics.

Rankism is differentiated from other "isms", such as racism and sexism. by the reality that rank and power are changeable. Personal characteristics such as race and gender are not subject to change; however, rank and power can be acquired and lost. A powerful individual of high rank can be fired and lose power. An individual can be very powerful at work but not powerful at home. This characteristic of mutable rank and power is at the center of the reason rankism is as accepted as it often appears to be (Fuller, 2003). People tolerate the abuses of others for two reasons. First, most people aspire to reach the level of rank and power that others hold. Often in organizations it is the people engaging in the abusive behavior that are the gatekeepers to higher levels of rank for those beneath them. Resistance or retaliation for the abuse of those in power can effectively block one from moving up in the organization. Therefore, the abuse of those with higher rank is accepted, because one is able to abuse those of lower rank. Fuller sums this idea up with the following thought: "The relativity of rank means that although everybody is a nobody to someone, everybody is also a somebody to someone else"

(Fuller, 2003, p. 21). Fuller refers to this phenomenon of descending abuse as "kicking the dog", the notion that, regardless of the rank held in life, there is always someone lower in rank to be abused. It would appear that there is some congruence between kicking Fuller's dog and the thought that nursing's status as an oppressed group is a causative factor in horizontal violence between nurses.

Little work has been presented in the literature utilizing Fuller's concept of rankism to frame research. However, the concept of rankism was shown to be useful in understanding the dynamic of verbally abusive interactions within educational institutions. In a dissertation study, Clark (2006) explored student perceptions of uncivil behavior by faculty. In her dissertation and in a later article Clark used the concept of rankism to structure understanding of the abusive behavior of faculty members toward students (Clark, 2008). Reported behaviors by faculty included demeaning and belittling students, unfair and subjective treatment of students and the imposition of unreasonable demands by faculty. In all cases the students felt powerless to confront the faculty members. Clark noted that one of the responses of the students to this faculty rankism was to become argumentative with family and friends (Clark 2006). Additionally the students in this study experienced the desire to retaliate and seek vengeance for the abusive behavior of the faculty but felt the consequences of doing so outweighed the benefits to be derived.

## Organizational Tolerance for Violence

Coombs and Holladay (2004) developed the Workplace Aggression Tolerance Questionnaire (WATQ) as a measure of the extent to which employees in an organization believe it is appropriate to display aggressive behavior in response to an external stimulus. These authors suggested that institutional workplace aggression policies focus on more overt types of aggression, physical violence and face-to-face verbal threats. In response to these policies employees may shift their behavior toward more covert behaviors not specifically covered in the policies. These "lesser" forms of workplace aggression may be seen as appropriate responses to stressful situations.

## Roy's Adaptation Model

Two authors cited this model as the framework for their studies (Cook, et al., 2001; Pejic, 2005). In this model the nurse is viewed as an adaptive system who responds to environmental stimuli through the regulator and cognator subsystems. The regulator subsystem is automatic and unconscious involving the neural, chemical and endocrine systems. The cognator subsystems aids adaptation though information processing memory and selective attention (Pejic, 2005, p. 272). Roy's model describes a focal stimuli which is the stimulus immediately confronting the individual. Additional stimuli include contextual and residual stimuli that may have additional effect on the behavior of the adaptive system. Both authors use Roy's model to provide explanation for the nurses' response to verbal abuse but do not tie the model back to the finding of their particular study.

#### **Interaction Models**

A number of authors have suggested that the presence of aggressive behavior in organizations is due to the presence of, or interaction of, several factors. These studies often are perpetrator-centric, seeking to understand factors that lead people in organizations to behave in an aggressive manner. This approach is contrasted with the approach taken in the current study which assesses factors that increase the likelihood of being victimized by aggressive acts of others.

One such study evaluated the effect of both individual and situational factors on aggressive behavior (Hershcovis et al., 2007). Taken from the perspective of the aggressor and using meta-analysis as their methodology, the authors evaluated the effect of several individual characteristics and situational factors on both interpersonal and organizational aggression. Individual characteristics included trait anger, negative affectivity and sex. Trait anger is the propensity to react in a hostel manner to events. Negativity affectivity relates to the frequency with which individuals experience negative emotions. Individuals with high negative affectivity experience negative emotions more frequently that those with low negative affectivity. The authors theorized that those with high negative affectivity engage more often in aggressive behavior because people are more aggressive when they feel bad, such as when feeling fearful or anxious. Situational factors included interpersonal conflict, distributive justice, procedural justice, job satisfaction and situational constraints. Interpersonal conflict is a disagreement or perception of incompatibility between individuals. Procedural injustice is the perception

that procedures used to make decisions in the organization are unfair, while distributive injustice is the perception that the outcomes of decisions are unfair. Job dissatisfaction is a measure of whether or not one likes one's job. Situational constraints are those factors that impede the ability to accomplish our goals within the organization. This study evaluated the likelihood of aggressive behavior in the presence of the individual and situational factors; and whether these factors contributed to interpersonal aggression or organizational aggression. Interpersonal aggression is targeted toward an individual within the organization while organizational aggression targets the workplace in general.

Interpersonal conflict, trait anger and sex were found to be significant predictors of interpersonal aggression, while trait anger, sex, job dissatisfaction and situational constraints significantly impacted organizational aggression (Hershcovis, et al., 2007).

# The Magnet® Recognition Program

In 1983 the American Academy of Nursing conducted a study of 163 hospitals (Anonymous, 2008a). This study sought to identify factors in the nursing environment that allowed organizations to attract and retain nurses and promoted professional nursing practice. Forty-one of the hospitals in the study were termed "Magnet® hospitals" based on their ability to attract and retain nurses (Anonymous, 2008a). In 1990 the American Nurses Credentialing Center was created and in December of that year the initial proposal for the Magnet® Nursing Recognition program was developed. In 1994 the University of Washington Medical Center in Seattle was named as the first Magnet® hospital. Today 386 healthcare organizations in 45 of the United States and one organization in Australia

and New Zealand are recognized as Magnet® hospitals (Anonymous, 2011). In this section research related to Magnet® hospital is reviewed with particular focus on nurse-physician relationships and nurse empowerment.

In an effort to better understand the nature of nurse-physician relationships. researchers interviewed 279 staff nurses and 146 nurse managers in 14 Magnet® hospitals (Kramer & Schmalenberg, 2003). The outcome of this study was the development of a 5-step taxonomy describing relationships between nurses and physicians. Five types of nurse-physician relationships are identified in this schema: collegial; collaborative; student-teacher; neutral; and negative (Kramer & Schmalenberg, 2003). The interviews with the participants identified that power was the defining characteristic of the various types of relationships (Kramer & Schmalenberg, 2003). In collegial relationships there is equal power held by the nurse and physician. Each discipline recognizes the unique contribution of the other. Collaborative relations are characterized by mutual respect between nurse and physician as well as trust and cooperation. The physician in these relationships however, still is seen as having greater power than the nurse. Student-teacher relationships continue to be positive and friendly. The physician willingly educates nurses. The power in these relationships is clearly held by the physician; however, the outcomes of the relationship continue to be positive. In neutral relationships there is little emotional involvement of the parties. Necessary information is exchanged; however, the physician may fail to acknowledge receipt of the information leaving the nurse feeling ignored. Negative relationships are characterized

by frustration and hostility. Physicians hold most of the power in these situations and may respond to nurses with verbal abuse (Kramer & Schmalenberg, 2003).

In a later study the same researchers expanded their taxonomy to six relationships: collegial; collaborative; student-teacher (physician as teacher); student-teacher (nurse as teacher); friendly stranger; and hostile/adversarial (Kramer & Schmalenberg, 2004a). In this follow up study the student-teacher relationship was expanded to include instances where either the physician or nurse acted as the teacher. The teacher in the relationship was seen to hold a greater degree of power and these types of relationships were considered precursors to collaborative and collegial relationships (Kramer & Schmalenberg, 2004a). The sample for this study consisted of 3,602 staff nurses split among 16 Magnet® hospitals, 8 Magnet®-aspiring hospitals and 6 hospitals that were not seeking Magnet® status at the time of the survey. The criterion for being considered Magnet®-aspiring was the appointment by the hospital of a Magnet® coordinator. The survey consisted of 65 items designed as a 4-point Likert-type scale (Kramer & \* Schmalenberg, 2004b). Reliability and validity data for the items are not reported; however, it is noted that the items were tested in a pilot study with 392 nurses in 7 Magnet® hospitals (Kramer & Schmalenberg, 2004a). Differences were found among the three types of hospitals regarding the types of nurse-physician relationships found. Nurses in Magnet® hospitals more frequently reported the presence of collegial relationships (86%) than did either Magnet®-aspiring (67%) or other hospitals (55%). Conversely, only 13% of Magnet® hospital nurses reported hostile/adversarial

relationships versus 23% in Magnet®-aspiring hospitals and 34% reporting these types of relationships in other hospitals. Magnet® hospital nurses in fact, reported higher percentages for all relationships in the continuum until the level of the friendly stranger relationship. The other hospital nurses reported higher frequency of the less positive relationships, friendly stranger (63%) and the 34% hostile relationships reported earlier (Kramer & Schmalenberg, 2004a). Statistical analysis of the significance of the difference in these scores is not reported. According to these researchers the nurses' role in their relationships with physicians is a matter of the structural empowerment of the nurse. The physician is more and more dependent on the information and knowledge held by the nurse for the physician to be effective. Therefore, as physicians come to recognize their need for the unique knowledge that only the nurse is able to provide there will be more of a tendency for collegial relationships to develop (Kramer & Schmalenberg, 2004a).

Kanter's theory of structural empowerment served as the framework for a study comparing aspects of workplace empowerment with the characteristics of Magnet® hospitals (Laschinger, Almost, & Tuer-Hodes, 2003). These researchers conducted a secondary analysis of three studies all conducted in the Canadian province of Ontario. The sample for study 1 was 237 randomly selected staff nurses working in urban tertiary hospitals. Study 2 participants consisted of 531 nurses in a network of 8 rural community hospitals in western Ontario and study 3 had a sample of 63 acute care nurse practitioners. All three studies administered the same measures for structural

empowerment and for Magnet® hospital characteristics. Structural empowerment was measured with three instruments, the Conditions for Work Effectiveness Questionnaire II (CWFQ-II), the Job Activities Scale II (JAS-II) and the Organizational Relationships Scale II (ORS-II) (Laschinger, et al., 2003). The CWFQ-II measures the participant's perception of access to the four empowering structures in organizations: opportunity; information; support; and resources. The JAS-II evaluates the concept of formal power and the ORS-II measures informal power. Magnet® hospital characteristics were measured using the Nursing Work Index (NWI-R). The index was revised to include the items the authors reported as most frequently used in other studies. The 15 selected items in the NWI-R included the three subscales measuring nurse autonomy, control over practice and nurse-physician relations (Laschinger, et al., 2003). Cronbach reliability coefficients were reported for all scales and subscales for each study. These scores ranges from a low of 0.57 for the ORS-II in study 3 to a high of 0.90 for the information subscale of the CWEQ-II in study 3 (Laschinger, et al., 2003).

Findings from study 1 indicated that these nurses rated their work environments as moderately empowering with moderate levels of Magnet® characteristics. All empowerment structures were significantly related to the overall NWI-R score and the total empowerment score was significantly related to the total NWI-R score (r = .55, P = .0001). Study 2 showed similar results with the nurses indicating moderately empowering work environments and moderate Magnet® characteristics. Similarly in study 2 the total empowerment score was significantly related to the total NWI-R score (r)

= .49, P < .0001). Study 3 involved the acute care nurse practitioners and these participants reported higher work empowerment scores as well as Magnet® hospital characteristic scores than the staff nurses in the other two studies. Again however, total empowerment scores were significantly related to the total NWI-R scores (r = .57, P = .0001) (Laschinger, et al., 2003).

In summarizing the finding of their analysis of these three studies, the authors made several observations. The authors found that greater access to empowerment structures resulted in higher perceptions of autonomy, increased control over practice and positive nurse-physician relationships (Laschinger, et al., 2003). Additionally, empowerment structures were an important influence on the measures of Magnet® hospital characteristics. Access to resources and support had the greatest influence on control over practice and autonomy while informal power had the greatest influence on nurse-physician relationships (Laschinger, et al., 2003).

The above studies demonstrate a positive link between the characteristics of Magnet® hospitals and nurse empowerment as well as between Magnet® status and more positive nurse-physician relationships. Combined with the finding of the studies discussed earlier gaps in the research related to verbal abuse of nurse will be considered.

### Research Gaps

This review of the literature has demonstrated that nurses experience verbal abuse regularly in their practice and that this abuse has significant negative consequences for the nurse in terms of emotional distress, the patient in terms of diminished safety, and the

healthcare organization in the guise of higher turnover and reduced nurse productivity.

Several strategies aimed at mitigating the impact of verbal abuse have been considered.

This review also explored the ANCC's Magnet® Recognition Program and the effect of Magnet® recognition of nurse empowerment and nurse-physician relationships.

Theoretical frameworks have been presented that address power within organizations, individual responses to frustration and anger as well as the effects of the abuse of rank and power. This review also points to a large amount of work on the topic of verbal abuse being done in the late 1980's and early 1990's, followed by a period of a relative lack of work with a resurgence of interest in this topic in the early 2000's. In considering this body of research several gaps become apparent.

Little to no research has been conducted from the point of view of the perpetrator of abuse. Only one study was discussed in this review that included interviews of physicians in which they acknowledged that they acted in a manner that would be considered verbal abuse. The research studies regarding horizontal violence or bullying present data collected from the victims of abuse but not the perpetrators. It may be difficult to eliminate this behavior if the "why" of these actions are not understood from the perspective of the abuser in addition to that of the victim.

Little research has been done testing the efficacy of various interventions aimed at reducing verbal abuse. Those studies presented that were interventional in nature provided educational opportunities for the nurse (victim) to improve the ability of the nurse to respond to verbal abuse episodes. No studies were found suggesting or

implementing interventions with the perpetrators of verbal abuse. Finally studies were not found that simultaneously addressed the interactions of both individual and organizational factors as they relate to verbal abuse. It is this gap that this study addressed.

#### CHAPTER III

#### PROCEDURE FOR COLLECTION AND TREATMENT OF DATA

The purpose of this study was to test a model, developed by the researcher, consisting of factors related to the incidence of verbal abuse. The model seeks to predict the effect of two latent variables, organizational characteristics and individual characteristics, on the frequency with which registered nurses experience verbal abuse.

A descriptive, non-experimental study design using structural equation modeling (SEM) was conducted in order to explore the extent to which a number of organizational and individual characteristics contributed to the verbal abuse of registered nurses in the workplace. In SEM the latent variables are not directly observed or measured, but are inferred by the measurement of a number of observed or manifest variables. Surveys or other instruments are employed to measure the observed variables and then SEM is employed to determine the extent to which data from the sample supports the theoretical model (Schumacker & Lomax, 2010).

This chapter will define the setting in which the study was conducted and identify the population of interest. Procedures for collection of data and the protection of the study participants are discussed as well as the statistical analyses that were performed.

### Setting

Participants for the study were registered nurses recruited using address lists obtained from state boards of nursing for Maryland, Virginia and West Virginia.

Maryland and Virginia are members of the multistate licensure compact while West Virginia is not a member of the compact. The Nurse Licensure Compact (NLC) allows nurses licensed and residing in one state to practice in other states that are members of the NLC (NCSBN, 2010). This means that participants in this study who live and are licensed in either Maryland or Virginia may actually be employed in another state. Even in the case of nurses working in non-NLC states, there is no prohibition to having more than one active registered nurse license at the same time. Therefore it is also possible that nurses asked to participate in this study based on a West Virginia license may also have a license and practice in another state. Registered nurse licenses are renewed annually in Maryland and West Virginia and biannually in Virginia (MBON, 2010; Nursing, 2010; WVBNERPN, 2010).

Postcards were sent via the United States Postal Service providing potential participants with the URL for the survey. The survey was completed online via the webbased survey management site, Survey Monkey. Participants completed the survey in a location that was convenient for each participant. The researcher had no knowledge of the location used by any individual participant who completed the survey.

## **Population and Sample**

The population of interest for this study was defined as Registered Nurses licensed in Maryland, Virginia and West Virginia. Data drawn from the website of the United States Bureau of Labor Statistics indicates that there were 127,730 registered nurses employed in these three states as of May, 2008 (Statistics, 2010). The breakdown of nurses by state is as follows: Maryland (50780, 39.8%), Virginia (60040, 47.0%), and West Virginia (16910, 13.2%).

The sample for this study was randomly selected from among the population indicated above. Address lists for all licensed registered nurses from Maryland, Virginia and West Virginia were obtained from the state boards of nursing. These lists were requested in spreadsheet form. The sample was stratified by state so as to improve the representativeness of the sample to the population. Within each state the list was sorted electronically by license number. Sorting on license number improved the randomness of the sample by minimizing the impact of sorting on address, zip code, or name. Nurses were selected from the spreadsheet through the use of random number generator. The random integer generator available through www.random.org was used to generate a table of random numbers. This table was then used to select nurses to receive postcards inviting them to participate in the study. Postcards were mailed to participants in each of the three states in the same proportion in which the states are represented in the population (47% Virginia, 40% Maryland and 13% West Virginia).

Several methods were used to determine and validate the sample size for the proposed study. First, a general rule-of-thumb approach was taken. The rule-of-thumb approach suggests that a set number of cases or participants per parameter will lead to an adequate sample size. The suggested case to parameter ratio however varies widely from as few as 5 cases per parameter to as many as 50 cases per parameter (Muthen & Muthen, 2002). Fifteen cases per parameter has also been suggested as a reasonable rule-of-thumb (Buhi, Goodson, & Neilands, 2007). The proposed model contains 14 estimated parameters. A sample size of 250 participants gives a ratio of approximately 18 participants per parameter, thereby meeting the requirements of a rule-of-thumb approach. Secondly, a Monte Carlo simulation was conducted to determine the sample size for this study. A Monte Carlo simulation uses hypothesized parameter data and a large number of repetitions to examine parameter estimate bias, standard error bias and coverage. The results of the simulation then allow for the adjustment of sample size to arrive at an acceptable level of statistical power (Muthen & Muthen, 2002). Lacking research support to the contrary, small effect sizes were assumed in running the Monte Carlo simulation. The simulation consisted of 10,000 hypothetical samples using effect sizes of 0.5 for measurement path estimates, 0.25 for structural path estimates and 0.36 for error variances. The simulation indicates that a sample of a minimum of 250 participates will result in a power > 0.80. Sample size was also evaluated by testing the null hypothesis of poor model fit using the root mean square error of approximation. (RMSEA) fit index. RMSEA fit index results in the range of 0.5 to 0.8 indicate a good fit

between the data and the model (MacCallum, Browne, & Sugawara, 1996). The results of this test indicate a power of 0.82 to assess model fit with a sample of 250 participants.

Nulty (2008) reported wide variation in response rates to online surveys ranging between 20% and 47%. This study used a two step method of contact with participants. First the participant received a postcard with a request to participate in the survey. The participant then had to navigate to the Survey Monkey website and complete the survey or contact the researcher to obtain a paper survey. To ensure an adequate sample with this two step process, a return rate of 10% was anticipated. In order to achieve a final sample of N = 250, the initial solicitation was to be 2500 postcards. The actual response rate to the initial mailing was 5% or less for each of the three states. Therefore, it was necessary to draw two additional samples, one of 2500 and one of 1000, to receive the appropriate number of responses (N = 256).

# **Protection of Human Subjects**

Approval for this study was sought from the Texas Woman's University IRB committee. This study met the criteria for an exempt review by the IRB because the study uses a survey or questionnaire that poses minimal risk to the participants, does not involve a sensitive topic, does not involve minors and does not collect individually identifiable information from the participants (Research and sponsored programs:

Determining level of IRB review, 2010).

The study consisted of the completion of a single online or paper survey.

Minimal risk was associated with this study given the design of a single survey completed online privately outside observation by anyone.

Participants were solicited via postcard and the survey was completed anonymously at the Survey Monkey website. Reminder postcards were used to increase the response rate to the survey. Since it was not possible to determine which participants had completed the survey, reminder cards were sent to all participants.

Information about risks and benefits of the survey can be found in Appendix B and were provided to the participants at the beginning of the electronic survey.

Participants were informed that the submission of the survey implied their consent to participate. The initial and follow up postcards are located in Appendix C. Access to the survey website was password protected and only the researcher knows the user ID and password to gain access to the survey results.

#### **Instruments**

There were three survey instruments included in this research. They consisted of the Violence Prevention Climate Survey (VPCS) (Appendix D), the Workplace Aggression Tolerance Questionnaire (WATQ) (Appendix E), and a third instrument which consisted of questions developed by the researcher that addresses additional possible predictors of verbal abuse, demographic information, and the frequency with which the participant has experienced verbal abuse from a number of different sources (Appendix F).

In the VPCS the participants are asked to respond to a list of 18 questions using a 6-point Likert scale: "disagree very much"; "disagree moderately"; "disagree slightly"; "agree slightly"; "agree moderately"; "agree very much". The mean score is calculated from all items and this mean is the violence prevention climate score for that participant. The violence climate consists of three factors: policies and procedures, practices and response and pressure for unsafe practices. On the VPCS items 1 through 6 constitute the policies and procedures subscale, items 7 through 12 are the practices and response subscale, and items 13 through 18 are the pressure for unsafe practices subscale. Items 13 through 18 are reverse scored (Kessler, Spector, & Chang, 2008). The final 18-item list began from a set of 49 items thought by the researchers to be indicative of a violence prevention climate. The list was subjected to exploratory factor analysis which resulted in 20, 8 and 6 items on the policies and procedures, practices and response and pressure for unsafe practices subscales respectively. In order to develop a final instrument of reasonable length, the authors performed an item analysis on the first two subscales to reduce the number of items on those subscales. The six items on each subscale with the highest item-remainder coefficients were retained. Final coefficient alphas for the three subscales were: policies and procedures coefficient alpha = .95, practices and response coefficient alpha = .90 and pressure for unsafe practices coefficient alpha = .90 (Kessler, Spector, Chang, et al., 2008).

The WATQ is a 28-item questionnaire exploring the respondent's tolerance for aggressive behavior. The participant is asked to read a short scenario in which a manager

presents an inaccurate performance evaluation to an employee. Despite the employee pointing out the inaccuracies in the evaluation the manager refuses to make any corrections to the evaluation. The participant is then asked to rate the appropriateness of engaging in 28 different aggressive behaviors on a 5-point Likert scale ranging from "very inappropriate" to "very appropriate". The reliability of the instrument was tested and obtained a Cronbach's alpha of .95 (Coombs & Holladay, 2004).

The researcher-developed items consisted of Magnet® status of the participants' place of employment, gender, organizational position and years in practice. Magnet® status was a yes/no response. In order to respond "yes" to this question, the organization where the participant is employed must have held current status as a Magnet® facility at the time of the survey. Gender was coded as either male or female. Organizational position was coded as "staff nurse", "charge nurse", "assistant nurse manager", "nurse manager", and "director". Based on responses received, participants were further cohorted into additional positions of "advanced practice nurse", "coordinator", "school nurse", "facility-based educator", "nursing school faculty" and, "other". Years in practice was coded as a continuous variable.

Magnet® status, gender, organizational position and years in practice can be said to hold face and content validity based on previous verbal abuse research exploring these factors. The validity of these measures lies in how well they serve as indicators of the latent variable of individual characteristics. Nurses working in Magnet® facilities have been shown to have a greater perception of autonomy as well as greater levels of power

and empowerment when compared to nurses in non-Magnet® facilities (Kramer & Schmalenberg, 2004b; Upenieks, 2003). The effect of gender on patterns of verbal abuse has not been consistent in the literature although it does appear clear that gender does have some role. Gender differences in relation to bullying were demonstrated in a study by Hoel, Cooper and Faragher (2001) and appeared to also be tied to organizational level. Males in this study were more frequently abused at the worker and supervisory levels while females were more frequently abused at the middle and upper management levels (Hoel, et al., 2001). In addition to the position-related differences found in the Hoel et al. study, Curtis, Ball, and Kirkham (2006) found differences in the bullying of nurse midwives based on their clinical level. Years in practice appears also to be related to the experience of verbal abuse with newer nurses reporting significant abuse within the first several years of practice (Anderson, 2002; McKenna, et al., 2003). While it is unlikely that the factors above represent an exhaustive list of indicators of the latent variables they appear to be strongly supported enough to warrant inclusion in the model.

Finally additional demographic data were collected to allow for the provision of descriptive statistical information about the sample and survey participants. This demographic data consisted of hospital bed size, facility type (not-for-profit, for-profit, governmental, academic medical center, community setting, school of nursing, office setting), geographic setting (rural, suburban, urban), state of primary employment, age, ethnicity, initial nursing educational preparation and highest educational preparation.

#### **Data Collection**

The survey instrument was developed by the researcher using the web application Survey Monkey. Potential participants were contacted via postcard using demographic data provided by the State Boards of Nursing in the identified states. The postcard described the study and provided the URL for the participant to use to access the survey instrument. If the participant preferred to take the survey offline using a paper instrument, the postcard indicated that the participant could contact the researcher by telephone or electronic mail and request a paper copy of the survey instrument. Paper copies of the survey received were entered into Survey Monkey by the researcher to facilitate electronic analysis of the complete data set by Survey Monkey. The researcher provided the participant a postage-paid return envelope to facilitate submission of a paper survey.

Anticipating a return rate of approximately 20%, postcards were initially mailed to a sample of 2500 nurses via the United States Postal Service. Reminder postcards were mailed three weeks after the first mailing. This first mailing resulted in a return of only 147 surveys. An additional sample of 2500 nurses was drawn from the mailing lists and both initial and reminder postcards were sent. This second sample increased the number of returns to 227. A final sample of 1000 nurses was drawn and postcards mailed. A sufficient number of surveys (N=256) were returned so that sending reminder postcards to this third group was not necessary.

#### Treatment of Data

Descriptive statistics were calculated, including means and standard deviations where appropriate, for all data elements. The proposed model was tested through the use of structural equation modeling (SEM).

SEM is a multivariate statistical method in which sample data is used to validate, or to test the fit of, a model developed by the researcher (Schumacker & Lomax, 2010). The proposed model hypothesized that the interaction of two latent variables, organizational characteristics and individual characteristics, determines the frequency with which a registered nurse will experience verbal abuse. Latent variables constitute constructs that cannot be measured directly but are measured through the use of observed variables. Observed variables for the construct of the organizational characteristics consisted of the violence prevention climate and the tolerance of workplace aggression. Observed variables for the individual characteristics construct included gender, organizational position and years in practice. Both constructs share the observed variable of Magnet® status.

Kline (2005) suggests six steps to SEM, noting that the steps may be iterative rather than merely sequential as difficulties along the steps may require looping back to an earlier stage.

1. The model is expressed as either a diagram using standardized symbols or as a series of equations. The diagrammatic representation of the proposed model for this study can be found in figure 1 in Chapter 1.

2. Ensure that the model meets requirements for identification. In SEM, identification refers to the theoretical possibility that a unique estimate can be determined for every model parameter. Models can be said to be underidentified, just-identified or overidentified. A just- or over- identified model is identified while an underidentified model cannot be said to be identified (Schumacker & Lomax, 2010). One factor is determining that the model is identified is ensuring that the number of data points exceeds the number of parameters to be estimated (Hatcher, 1994). The number of data points is determined by the formula where p = the number of observed variables.

Number of data points = 
$$(p (p + 1)) / 2$$

In the proposed model there are six observed variables giving:

Number of data points = 
$$(6 (6+1)) / 2 = 21$$

The number of parameters to be estimated is determined by totaling the number of path coefficients, variances and covariances to be calculated which in the proposed model equals ten. Given that 21 > 10 the proposed model meets one of the criterion for being identified.

3. Choose measures for the observed variables. Collection, preparation and screening of the data are also included in this step. Measures for the observed variables have been previously described in this chapter.

- 4. Conduct the analysis of the data including evaluating the model fit, interpreting parameter estimates and consideration of equivalent models. This step and the final two steps will be completed after data collection is completed.
- 5. If necessary reformulate and retest the model.
- 6. Describe the analysis of the model.

Kline (2005) also suggests two additional steps to optimize the SEM process that include replication of the results and the implementation of the findings. He notes however that the performance of these last two steps by practitioners of SEM is rare.

Data analysis proceeded in three steps. First the nature of the distribution of the sample was assessed for normalcy. The second stage of analysis evaluated model fit using several fit statistics. The model chi-square was calculated. The desired result is a non-statistically significant result (p > 0.05). Chi-square is however sensitive to both normalcy and sample size and will often yield a significant result especially with large sample sizes (N>200) (Schumacker & Lomax, 2010). The RMSEA was calculated with a result of <0.05 indicating a good fit, 0.08 a reasonable fit and 0.10 or more indicated an unacceptable fit (MacCallum, et al., 1996). The comparative fit index (CFI) was also calculated. The CFI measures the improvement of fit of the researcher's model compared to a baseline or independence model. A result  $\geq$ .90 indicates a good fit (Kline, 2005). In the final stage of statistical analysis actual parameter estimates were calculated and their significance assessed through the use of the t-statistic (Schumacker & Lomax, 2010).

### **CHAPTER IV**

#### ANALYSIS OF DATA

A correlational study design was used to evaluate the relationship between two latent variables or constructs (individual characteristics and organizational characteristics) and the frequency with which nurses experienced verbal abuse. Participants completed a survey that included demographic information and data about the frequency and sources of verbal abuse. The survey instrument also included two tools; the Workplace Aggression Tolerance Questionnaire (WATQ) and the Violence Prevention Culture Survey (VPCS). Descriptive statistics were calculated on demographic characteristics of the participants and correlation coefficients were determined between various demographic factors and survey results regarding WATQ scores, VPCS scores and verbal abuse frequency. The correlation between WATQ and VPCS scores was also evaluated. Structural Equation Modeling was then utilized to measure the relationship between the latent variables and the frequency of abuse. Data were analyzed using LISREL 8.80.

# **Sample Characteristics**

Study participants were recruited through the use of postcards mailed to a randomly selected sample of 6000 registered nurses licensed in Virginia, Maryland and West Virginia. Corresponding to the percentages of the registered nurse population in

these three states, 40% of the postcards were mailed to nurses in Maryland, 47% to nurses in Virginia and 13% to nurses in West Virginia. It was anticipated that some nurses residing in these states might be employed outside of their state of residence and that this would not be an exclusionary condition. Reminder postcards were mailed between two weeks and one month after the first mailing. The postcards referred participants to the Survey Monkey website where the survey was completed electronically. Participants were offered the option of requesting a paper survey in lieu of the electronic survey. The paper surveys were entered into the Survey Monkey by the researcher. Surveys were returned by 333 participants for an initial return rate of 5.55%. Of the 333 returned surveys, 77 were incomplete resulting in a final return of 256 usable surveys, a return rate of 4.27%. The sample includes 107 (42.0%) nurses from Maryland, 98 (38.4%) nurses from Virginia and 39 (15.3%) nurses from West Virginia. Eleven respondents (4.3%) reported being employed in other states (6 from the District of Columbia, 1 from Ohio and 2 each from Delaware and North Carolina). Response rates for Maryland, Virginia and West Virginia, excluding those employed in other states, were 4.50%, 3.48% and 5.00% respectively.

The final sample consisted of 255 participants for the descriptive statistical analysis and 249 participants for the structural equation modeling. Structural equation modeling (SEM) assumes the presence of a normal distribution and a linear relationship among the variables. Some confirmatory evidence is necessary to validate this assumption. Prior to conducting the SEM, Mardia's coefficient was calculated to assess

multivariate normality and indicated a value of 5.06. Case number 063 was identified as the data contributing most significantly to the nonnormality of the distribution and so this case was eliminated from the sample. An additional 6 participants with incomplete surveys were excluded from the SEM as this statistical method does not allow for the inclusion of cases with missing data elements.

## **Individual Participant Demographics**

Nurses participating in this study were largely Caucasian, non-Hispanic (87.8%) females (94.5%), in their mid-50's (*mean* 52 years, *median* 55 years), having practiced nursing for more than 25 years (*mean* 26.1 years, *median* 30.0 years). Educationally, the participants were prepared at the baccalaureate level both in terms of their initial preparation (41.6%) and highest level of education (32.2%). Overwhelmingly, the participants worked in staff nurse positions with 122 (47.8%) participants working in these positions. The second largest group of participants were advanced practice nurses who comprised 10.2% of the sample (n = 26). Demographic statistics of the participants are summarized in Table 1.

Table 1

Participant Demographic Statistics

|                   | n   | %    | Mean | SD   | Median | Range |
|-------------------|-----|------|------|------|--------|-------|
| Age               |     |      | 52.0 | 11.5 | 55.0   | 24-79 |
| Years in Practice |     |      | 26.1 | 13.1 | 30.0   | 1-57  |
| Female            | 24  | 94.5 |      |      |        |       |
| Male              | 14  | 5.5  |      |      |        |       |
| Race              |     |      |      |      |        |       |
| Caucasian-non-    | 224 | 87.8 |      |      |        |       |
| Hispanic          |     |      |      |      |        |       |
| Hispanic          | 3   | 1.2  |      |      |        |       |
| Black             | 20  | 7.8  |      |      |        |       |
| Asian             | 3   | 1.2  |      |      |        |       |
| Mixed             | 3   | 1.2  |      | ,    |        |       |
| Missing           | 2   | 0.8  | -    |      |        |       |
| Initial Education |     |      |      |      |        |       |
| Diploma           | 67  | 26.3 |      |      |        |       |
| Associate         | 79  | 31.0 |      | •    |        |       |
| Bachelor          | 106 | 41.6 |      |      |        |       |
| Missing           | 3   | 1.2  |      |      |        |       |
| Highest Education |     | 1    | * *  |      |        | •     |
| Diploma           | 34  | 13.3 | •    |      |        |       |
| Associate/Nursing | 34  | 13.3 |      | u S  |        |       |
| Associate/Other   | 2   | 0.8  |      |      |        |       |
| Bachelor/Nursing  | 82  | 32.2 |      |      |        |       |
| Bachelor/Other    | 19  | 7.5  |      | ,    | •      |       |
| Master/Nursing    | 51  | 20.0 |      |      |        |       |
| Master/Other      | 20  | 7.8  |      |      |        |       |
| Doctorate/Nursing | 6   | 2.4  |      |      |        |       |
| Doctorate/Other   | 6   | 2.4  |      |      | *      |       |
| Missing           | 1   | 0.4  | ,    |      |        |       |

# **Organizational Demographics**

Participants reported working in a variety of settings. Acute care hospitals were the most frequently reported worksite (180, 70.3 %). Nearly half of the participants working in hospitals reported that those facilities were not-for-profit (41.0%). The

remaining hospital nurses were almost evenly divided between for-profit, governmental and academic medical center settings. Non-hospital settings included community settings (28, 10.9%), schools of nursing (10, 3.9%) and office settings (32, 12.5%) The majority of participants reported working in non-Magnet® facilities (71.4%) and most worked in either urban (40.0%) or suburban (41.2%) setting. Hospital bed size varied by both type of organization and geographic location. Organizational demographics are summarized in Table 2.

Table 2

Organizational Demographics

| Hospitals                | n   | %    | Beds | Beds  |
|--------------------------|-----|------|------|-------|
|                          |     |      | Mean | SD    |
| Not-for-Profit Hospitals | 104 | 40.8 | 335  | 291.5 |
| For-Profit Hospitals     | 35  | 13.7 | 263  | 200.0 |
| Governmental Hospitals   | 12  | 4.7  | 242  | 214.5 |
| Academic Medical Centers | 28  | 11.0 | 687  | 244.2 |
| Total for Hospitals      | 179 | 70.2 |      | 8     |
| Other Settings           |     |      |      | 196   |
| Community Setting        | 28  | 11.0 |      |       |
| School of Nursing        | 10  | 3.9  |      |       |
| Office Setting           | 32  | 12.5 |      |       |
| Missing                  | 6   | 2.4  |      |       |
| Total for all Settings   | 255 | 100  |      |       |
| Geographic Density (all  |     |      |      |       |
| practice settings)       |     |      |      |       |
| Rural                    | 46  | 18.0 | 192  | 197.1 |
| Suburban                 | 105 | 41.2 | 321  | 198.7 |
| Urban                    | 102 | 40.0 | 484  | 353.4 |
| Missing                  | 2   |      |      |       |
| Total for all Settings   | 255 |      |      |       |

## **Verbal Abuse Episode Frequency**

Participants provided the number of verbal abuse episodes occurring in the 30 days prior to taking the survey from a variety of sources. The mean number of abuse episodes from all sources was 4.80. The range for abuse from all sources was zero to 53 episodes in 30 days. For all participants taken as a single group, the most frequent source of abuse was the patient or patient's family with a mean number of events of 2.15 over the 30 day period. Patients and families accounted for nearly half of all reported abuse episodes and more than twice as many events than other nurses which was the next most frequent source of abuse.

Verbal Abuse Episodes by Source of Abuse

Table 3

|      | Nurse | Physician | Manager. | Patient/Family | Other | Total- |
|------|-------|-----------|----------|----------------|-------|--------|
| Mean | 0.96  | 0.72      | 0.86     | 2.15           | 0.11  | 4.80   |
| SD   | 2.95  | 1.62      | 3.34     | 4.23           | 0.68  | 7.98   |

The frequency of verbal abuse episodes varied widely among participants however substantially more participants reported a number of verbal abuse episodes at the lower end of the range of zero to 53 episodes. Eighty-seven participants reported zero verbal abuse episodes in the 30 days prior to survey and an additional 99 participants reported 1 to 5 verbal abuse events. Reports of twenty or fewer verbal abuse events accounted for 96.9% (248) of participants. The remaining 2.7% (7) of participants reported greater than 20 verbal abuse episodes in the 30 days prior to taking the survey.

Verbal Abuse Episodes by Frequency of Events

Table 4

| Event Frequency | Count | Percent | Cumulative Percent |
|-----------------|-------|---------|--------------------|
| 0               | . 87  | 34.1%   | 34.1%              |
| 1-5             | 99    | 38.8%   | 72.9%              |
| 6-10            | 36    | 14.1%   | 87.1%              |
| 11-15           | 13    | 5.1%    | 92.2%              |
| 16-20           | 13    | 5.1%    | 97.3%              |
| >20             | 7     | 2.7%    | 100%               |

By a substantial margin, charge nurses reported a higher number of abuse episodes than all other positions with a mean frequency of 8.16 events in 30 days. The four positions following charge nurse in verbal abuse frequency were directors, coordinators, nurse managers and staff nurses. All four of these groups had frequencies between 6.09 and 5.32. After these participants, the frequency of abuse diminished quickly with two groups, school nurses and assistant nurse managers reporting zero incidents of verbal abuse.

Mean frequency of abuse episodes by organizational position was further explored based on mean rates by source of abuse. For 6 of the 9 positions reporting verbal abuse (charge nurses, coordinators, staff nurses, faculty, advanced practice nurses and other) the patient was the most frequent source of abuse. Managers were the most frequent source of abuse for nurse managers and facility-based educators. Nurses were the most frequent source of abuse for directors. No organizational grouping listed physicians as the most frequent source of abuse.

Table 5
Frequency of Verbal Abuse Episodes by Position and Source

|               | Nurses | Physicians | Managers | Patient | Other | Total |
|---------------|--------|------------|----------|---------|-------|-------|
| Charge Nurse  | 1.32   | 0.64       | 0.32     | 5.72    | 0.16  | 8.16  |
| Director      | 2.82   | 1.00       | 1.27     | 1.00    | 0.00  | 6.09  |
| Coordinator   | 1.21   | 1.21       | 0.71     | 2.43    | 0.14  | 5.71  |
| Nurse Manager | 0.91   | 0.83       | 1.83     | 1.52    | 0.30  | 5.39  |
| Staff Nurse   | 1.11   | 0.73       | 1.04     | 2.37    | 0.08  | 5.32  |
| Faculty       | 0.67   | 0.83       | 0.50     | 1.17    | 0.00  | 3.17  |
| Educator      | 0.71   | 0.86       | 1.00     | 0.14    | 0.29  | 3.00  |
| Other         | 0.19   | 0.43       | 0.33     | 0.81    | 0.24  | 2.00  |
| APN           | 0.00   | 0.58       | 0.27     | 0.88    | 0.00  | 1.73  |
| School Nurse  | 0.00   | 0.00       | 0.00     | 0.00    | 0.00  | 0.00  |
| Asst. NM      | 0.00   | 0.00       | 0.00     | 0.00    | 0.00  | 0.00  |

### **Violence Prevention Climate Survey**

The Violence Prevention Climate Survey (VPCS) is an 18-item Likert-scale scored instrument with potential scores ranging from one to six. The mean VPCS score for all participants was 4.47 with a standard deviation of 1.15. The median VPCS score was 4.72 and the range of individual scores was from 1.50 to 6.00

VPCS scores demonstrated some variability based on the type of organization in which the participants works. The highest score was found in office settings with a score of 5.02 while the lowest score, 4.13 was found in for-profit hospitals. The mean VPCS score for all participants working in hospitals was 4.34.

Table 6

VPCS Scores by Organizational Type

| Organizational Type      | Mean | SD   |
|--------------------------|------|------|
| All hospitals            | 4.34 | 1.18 |
| Not-for-profit hospitals | 4.34 | 1.22 |
| For-profit hospitals     | 4.13 | 1.22 |
| Governmental hospitals   | 4.52 | 1.33 |
| Academic Medical Centers | 4.51 | 0.90 |
| Community settings       | 4.57 | 1.24 |
| Schools of nursing       | 4.91 | 0.74 |
| Office settings          | 5.02 | 0.79 |
| Missing data             | 4.19 | 1.43 |

The lowest VPCS score, when considered by organizational position, was reported by advanced practice nurses (4.15) and the highest score was reported by school nurses (5.39). Other organizational groups in descending order of mean scores were; assistant nurse managers (5.36), other organizational positions (5.10), directors (5.06), nurse managers (4.94), coordinators (4.79), faculty (4.76), educators (4.48), charge nurses (4.28), and staff nurses (4.21).

Table 7

Mean VPCS Scores by Organizational Position

| Organizational Position | Mean | SD   |
|-------------------------|------|------|
| School Nurse            | 5.39 | 0.74 |
| Assistant Nurse Manager | 5.36 | 0.67 |
| Other                   | 5.10 | 0.88 |
| Director                | 5.06 | 0.80 |
| Nurse Manager           | 4.94 | 0.96 |
| Coordinator             | 4.79 | 1.00 |
| Faculty                 | 4.76 | 0.92 |
| Educator                | 4.48 | 1.30 |
| Charge Nurse            | 4.28 | 1.41 |
| Staff Nurse             | 4.21 | 1.19 |
| Advanced Practice Nurse | 4.15 | 0.87 |

When cohorted by either organizational position or organizational type VPCS scores appear to have a limited range. Scores range only 0.89 points by organization type and only 1.24 points by organizational position.

# Workplace Aggression Tolerance Questionnaire

The Workplace Aggression Tolerance Questionnaire (WATQ) is a 28-item 5-point Likert-type instrument. Participants indicate the "appropriateness" of actions of varied aggressiveness based on their reaction to a stimulus scenario. Higher scores indicate a greater tolerance for aggression. The overall mean WATQ score was 1.26 with a standard deviation of 0.31. The highest score for a single action, or the action deemed most appropriate by most participants was leaving when the manager enters the area (1.72). The action with the lowest mean score, or the action considered the least appropriate action by most participants, was hitting or kicking the manager (1.02).

The organizational type with the lowest WATQ mean score was the office setting (1.16), while the setting with the highest score was schools of nursing (1.33). Little variation was noted among different hospital settings. Academic medical centers had a mean WATQ score of 1.25, not-for-profit hospitals 1.26, for-profit hospitals 1.29 and governmental hospitals 1.31. The mean WATQ score for all hospital settings was 1.27. Table 8

Mean WATQ scores by Organizational Type

| Organizational Type      | Mean | SD   |
|--------------------------|------|------|
| All hospitals            | 1.27 | 0.30 |
| Not-for-profit hospitals | 1.26 | 0.29 |
| For-profit hospitals     | 1.29 | 0.27 |
| Governmental hospitals   | 1.31 | 0.44 |
| Academic Medical Centers | 1.25 | 0.30 |
| Community settings       | 1.28 | 0.40 |
| Schools of nursing       | 1,33 | 0.43 |
| Office settings          | 1.16 | 0.23 |
| Missing data             | 1.29 | 0.39 |

Mean WATQ scores by organizational position ranges from 1.00 to 1.48. School nurses demonstrated the greatest tolerance for workplace aggression with a mean WATQ score of 1.48. School nurses were followed by nursing school faculty (1.38), staff nurses (1.31), nurse managers (1.28), advanced practice nurses (1.22), directors and charge nurses (1.19), coordinators (1.18), others (1.14) and facility-based educators (1.09). Assistant nurse managers reported the least tolerance for workplace aggression with a mean WATQ score of 1.00.

Table 9

Mean WATQ Scores by Organizational Position

| Organizational Position | Mean | $\overline{SD}$ | 9 |
|-------------------------|------|-----------------|---|
| School Nurse            | 1.48 | 0.56            |   |
| Faculty                 | 1.38 | 0.41            |   |
| Staff Nurse             | 1.31 | 0.35            |   |
| Nurse Manager           | 1.28 | 0.28            |   |
| Advanced Practice Nurse | 1.22 | 0.30            |   |
| Director                | 1.19 | 0.23            |   |
| Charge Nurse            | 1.19 | 0.22            |   |
| Coordinator             | 1.18 | 0.25            |   |
| Other                   | 1.14 | 0.22            |   |
| Educator                | 1.09 | 0.13            |   |
| Assistant Nurse Manager | 1.00 | 0.00            |   |

An evaluation was also made to determine the relationship, if any, between individual participant scores on the VPCS and the WATQ. A correlation coefficient was calculated for these data a moderately strong negative correlation was found between these two sets of data (r = -0.34). This negative correlation indicates that as the violence prevention climate improves and organizational tolerance for aggression falls.

## **Structural Equation Model Analysis**

Structural equation modeling (SEM) assumes the normalcy of data distribution. The sample included in the SEM was adjusted by the exclusion of one severe outlier so that the assumption of normality remained intact. The final sample size of 249 resulted in a statistical power rating of 0.8154. The SEM analysis was completed using LISREL 8.8.

Goodness of fit was assessed for the proposed model and initially did not demonstrate an acceptable fit between the model and the data. Analysis indicated that the

individual characteristic "gender" was the factor resulting in this poor fit. The model was reformulated, removing gender as a contributing individual factor and goodness of fit was reevaluated. There being no one generally accepted standard for assessing goodness of fit, three different measures of goodness of fit were calculated: chi-square; comparative fit index (CFI); and root mean square error of approximation (RMSEA). Acceptable results for these measures indicating an acceptable fit are a non-significant chi-square result (> 0.15), a CFI  $\geq$  0.95 and an RMSEA < 0.05. All three measures employed demonstrated a good fit between the model and this data set. The chi-square statistic was not significant (Chi-squared=6.14, df=6, p=0.40724). The CFI was 1.00 and the RMSEA was 0.0098. All three of these results are consistent with at least an acceptable goodness of fit.

Using confirmatory factor analysis (CFA), maximum likelihood estimates for the model were obtained. These estimates included loading of the observed variables on the latent constructs as well as path coefficients from the latent variables to the outcome variable. Statistically significant regression coefficients were measured between the latent construct of individual characteristics and both years in practice (r = 0.41) and organizational position (r = 0.51). Statistically significant regression coefficients were measured between the latent construct of organizational characteristics and both the Violence Prevention Climate Survey (r = 0.81) and the Workplace Aggression Tolerance Questionnaire (r = -0.42). Magnet® status was not significantly correlated to either individual characteristic (r = 0.22) or organizational characteristics (r = -0.17). One path

coefficient, from organizational characteristics to the outcome variable, frequency of abuse was found to be statistically significant (r = -0.43).

Magnet® designation can only be achieved by hospitals. The majority of participants, 179 of 255 (70.2%), reported working in hospitals. However, since the nonhospital employed participants would have had no option but to respond "no" to the Magnet® status question, the possibility existed that this may have affected the data in some manner. The SEM was also conducted using only the hospital-employed participants. Analysis concluded that the inclusion of non-hospital employed nurses did not substantially alter the outcome of the model. The path coefficient from the latent variable of organizational characteristics to the outcome variable was unchanged with a result of r = -0.43 for both samples. The path coefficient from the individual characteristics variable to the outcome variable dropped from r = -0.06 in the original sample to r = -0.04 in the sample containing only hospital based nurses. In the hospital nurse only sample, the regression coefficient for Magnet® status to Individual. Characteristics was r = -0.01 compared to r = 0.22 in the whole sample. The coefficient for Magnet® status to Organizational Characteristics was r = -.18 in the nurse only sample, essentially unchanged from the result in the whole sample (r = -0.17). Both reformulated models with path coefficients are presented in Figures 2 and 3 below. The path analysis demonstrates that both individual and organizational characteristics have a reducing effect on the frequency of abuse but that the effect is much stronger for organizational versus individual characteristics.

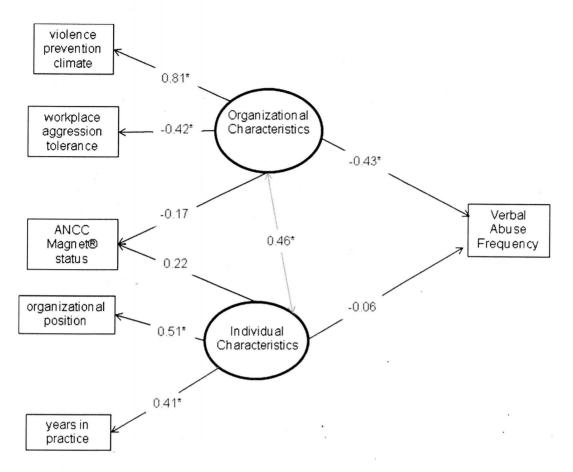


Figure 2. Reformulated model with path coefficients – original sample

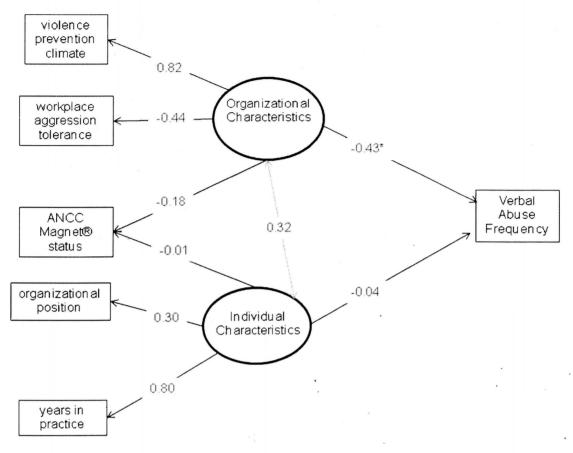


Figure 3. Reformulated model with path coefficients – hospital nurses only

## **Summary**

The participants in this study, both in terms of their demographic characteristics and their experience with verbal abuse, are statistically consistent with the participants in the other studies presented. The sample is predominantly female, Caucasian and middle-aged. As in other studies, the majority of participants experienced verbal abuse on regular basis. Two-thirds of the participants in this study reported having been verbally

abused within the 30 days prior to the study, with more than 27% citing more than 5 verbal abuse events within that timeframe. The most frequent sources of verbal abuse for the participants were patients their families followed by abuse from other nurses. Excluding the category "other", physicians were the least frequency source of abuse for this sample of nurses.

Analysis of both the Violence Prevention Climate Survey and the Workplace Aggression Tolerance Questionnaire demonstrated little variation in scores either by type of organization or the participants' position. The limited use of these instruments in other studies makes comparisons difficult. The participants in the current study, however, would seem to perceive a reasonable effort by management to prevent violence given scores consistently in the top one-third of the range of 1 to 6 for the VPCS. Similarly, the participants would appear to have little tolerance for aggressive behavior overall, given mean scores no greater than 1.48 on a 1 to 5 scale.

The model presented in this study acted as predicted with some exceptions.

Gender, perhaps because of the overwhelming disparity in numbers of males versus females, caused a poor fit of the data to the model. Gender therefore, was excluded as not representative of the individual characteristic construct. Nurses from Magnet® hospitals were adequately represented, if not overrepresented, in this sample. More than 28% of the sample reported working in Magnet® facilities, while such facilities represent less than 10% of U.S. hospitals. Despite this level of representation, however, Magnet® designation did not have an appreciable effect on either latent construct. Of all of the

observed variables, Magnet® designation was the only variable found to be non-significantly related to the latent constructs. The remaining observed variables (years in practice, organizational position, VPCS and WATQ) were all significantly related to the latent constructs and behaved as the model predicted. Years in practice and organizational position were both positively related to the individual characteristics construct. The VPCS was positively related and the WATQ negatively related to the organizational characteristics construct. The outcome variable, frequency of verbal abuse, was negatively related to both latent constructs although the effect was much weaker and non-significant for the individual characteristics construct. These relationships would indicated that as either the individual characteristics or organizational characteristics are strengthened, the frequency of verbal abuse is reduced.

#### CHAPTER V

### SUMMARY OF THE STUDY

Verbal abuse is a nearly universal experience for working nurses. Regardless of setting, geography or time, nurses have withstood verbal abuse at the hands of physicians. patients and their families, their leaders, and perhaps most destructively, each other. Nursing research addressing verbal abuse can be traced back, at least, to the early 1980's and the topic remains a frequent subject in the nursing literature over 30 years later. Verbal abuse leads to patient injury, costly nurse turnover, a host of negative emotional reactions from victims, and causes nurses to leave the profession at a time of continuing nurse shortages. Early interventions to reduce verbal abuse were aimed at the individual level. Attempts were made to increase the "assertiveness" of nurses, enabling them to more appropriately respond to attacks (Braun et al., 2003). While seemingly an empowering strategy, educating nurses to respond differently to verbal abuse had the perhaps unintended consequence of blaming the victim. The answer to the nurses being verbally abused was to change the nurse, not to change the perpetrator or the organizational milieu in which the abuse occurred. Another recommendation for controlling verbal abuse, or more widely workplace aggression/violence, focused on "zero tolerance" policies in which all episodes of aggression/violence are treated with equal negative organizational consequences (Sofield & Salmond, 2003). While this approach changes the nexus of the problem from the victim to the organizational

response to the event, the impact of these policies are likely blunted by the realization that most aggressive/abusive behavior in organizations is covert in nature. Coombs and Holladay (2004) found that policies addressing overt forms of workplace aggression caused employees to shift tactics to more covert aggressive actions. By definition, these covert behaviors are subjective in nature and can often be explained away by the perpetrator as an overreaction or misinterpretation on the part of the victim.

Over the course of the last 30 years the focus of the literature seems to have shifted. Earlier work took an open approach regarding the source of the abuse. Participants were asked to identify the source of the abuse and the results varied. In some studies, physicians were identified as the primary source or were the target group of the study (Cox, 1987; Diaz & McMillin, 1991; Hilton et al., 1994). More recent authors have been concerned with the more frequent and protracted abuse dealt to nurses by their professional peers (Corney, 2008; Johnson, 2009; McKenna, 2003). The term bullying has been appropriately applied to this horizontal form of violence with its connotation of abuse that is conducted, much like a military campaign, over a significant period of time (Namie, 2003). Bullying further has the connotation of a campaign conducted by more than one perpetrator. A scenario where the "new kid on the block" is victimized by the "old guard" is not an unusual one in the nursing culture of many organizations.

The problem addressed by the current study proceeds from this long history of inquiry into the verbal abuse of nurses. The study sought to find those factors that most significantly influence the frequency with which nurses experience verbal abuse. By

understanding the relative influence of culture and individual power on this experience, it was hoped that a clearer direction toward the reduction or elimination of these events could be provided.

### **Summary**

The current study used the testing of a model of verbal abuse as a way of increasing understanding of this phenomenon as it is experienced by registered nurses. The model proposed that two constructs determine the frequency with which a nurse will experience verbal abuse. These constructs are characteristics related to the individual and characteristics of the organization itself. Several individual and organizational characteristics have been studied for their relationship to verbal abuse, workplace violence or their effect on interpersonal relationships. Individual characteristics studied have included: rank, as expressed by organizational position (faculty versus student) (Clark, 2006); trait anger, negative affectivity and gender (Hershcovis et al., 2007); formal and informal power (Laschinger et al., 2003); organizational position (Baron & Neuman, 1998a; Curtis, Ball & Kirkham, 2006; Hoel, Cooper & Faragher, 2001); gender (Bruder, 2001; Farrell, Bobrowski, & Bobrowski, 2006; Hoel, Cooper & Faragher, 2001); years in practice (Anderson, 2002; McKenna, et al., 2003); workplace power and empowerment (Kramer & Schmalenberg, 2004b; Upenieks, 2003). Organizational characteristics studied include: violence prevention climate (Kessler, Spector & Chang et al., 2008; Spector, et al. 2007); tolerance for workplace aggression (Coombs & Holladay, 2004); and Magnet® status (Kramer & Schmalenberg, 2004). This prior work suggests

that both individual and organizational factors potentially affect the frequency of verbal abuse. The current study therefore serves as an extension of previous research that focused on either the individual or the organization. Pairing these two constructs in a single model and subjecting the model to structural equation modeling analysis demonstrates the relative contribution of each construct to the frequency of abuse. This information can then be used to focus efforts by individuals, organizations and the nursing profession toward the elimination of this continual pattern of abuse.

Given the broad geographic experience of verbal abuse identified earlier, a multistate sample of 255 registered nurses was drawn from the mid-Atlantic region of the United States. This sample gives the findings of the study a wider application than would have been achieved with a sample from a single state or organization.

# Discussion of the Findings

The findings of the current study are presented by, first, a discussion of the frequency and sources of verbal abuse. Attention is then given to the findings related to the latent constructs of Individual Characteristics and Organizational Characteristics. The discussion of the findings then concludes with some particular consideration of the data related to Magnet® status.

# Verbal Abuse Frequency

A principle measure of the current study was the frequency with which nurses experienced verbal abuse within the 30 days prior to completing the survey. Of the 255 participants, 168 (65.9%) reported at least one episode within the study timeframe of 30

days. The range of events was from zero to 53 verbal abuse episodes. Although it is difficult to compare frequencies across studies because of differing timeframes, the frequency of abuse reported in the current study is within the range reported by other authors. Reported frequencies include: 34.0% (McKenna et al., 2003); 80.3% (Oztunc, 2006); 82.0% (Cox, 1987); 89.0% (Hilton et al., 1994); and 96.0% (Braun et al., 1991). Three authors reported a timeframe similar to the current study. In one study, 86.7% of nurses reported being verbally abused within the 12 months preceding the survey while 60.6% reported verbal abuse within one month of the survey (Uzun, 2003). In the second study, Sofield and Salmond (2003) reported that 91% of participants reported at least one event in the month prior to the survey. In the third study 89.3% of nursing staff and 91.5% of supervisors reported experiencing verbal abuse within the one month prior to the survey (Zigrossi, 1991).

The largest group of participants in the current study (99 nurses, 38.8%) reported between 1 and 5 incidents of verbal abuse. Sofield and Salmond (2003) indicate that 67% of their sample reported abuse episodes in the 1-5 events range. Cook et al. (2001) indicated that 22.5% of the nurses in their sample were verbally abused several times per week while 4.2% reported abuse on a daily basis. Diaz and McMillin (1991) reported that 64% of their participants experienced at least one episode of verbal abuse every 2 to 3 months.

#### Sources of Verbal Abuse

Participants reported a total mean number of 4.80 abuse episodes from a variety of sources in the 30 day period before taking the survey. Nurses reported mean numbers of events of 2.15 from patients and family members, 0.96 events from other nurses, 0.86 events from managers, 0.72 events from physicians and 0.11 events from other sources. These data are consistent with the findings from other studies that nurses are verbally abused from a variety of sources. Physicians have been identified as the most frequent source of abuse in some studies (Cox, 1987; Hilton et al., 1994; Pejic, 2005; Sofield & Salmond, 2003). Other studies have identified the patient or patient's family as the most frequent source of abuse (Braun et al., 1991; Duncan et al., 2001; Oztunc, 2006; Uzun, 2003). It is interesting to note that of the four studies identifying the patient/family as the most frequent source of abuse, three of the studies were done outside the United States: one study in Canada and the other two in Turkey. Conversely, only one of the four studies identifying physicians as the most frequent source of abuse was done outside the United States. There are several studies where a specific perpetrator was studied by the researcher and did not seek to identify sources other than the target group.

#### **Individual Characteristics**

Two individual characteristics, years in practice and organizational position, were included in the final model. The study sample (N=255) had a mean of 26.1 years in practice (SD=13.1 years) with a range of 1 year to 57 years. There were differences found in the mean number of verbal abuse events based on the number of years in

practice. For purposes of exploring these differences, participants were divided into 5 year bands and the mean number of events calculated for the group. The highest number of mean events were experienced by nurses with 21-25 years in practice (Mean = 9.23events, n=13). The lowest number of mean events were reported by nurses with 16 to 20 vears of practice (mean = 3.59 event, n=22). Nurses with five or less years experienced the second highest number of events (mean = 8.26, n=27), followed by nurses with 11 to 15 years (mean = 4.24, n=21), 6 to 10 years (mean = 4.17, n=18) and finally, nurses with greater than 25 years (mean = 4.15, n=154). In the 21 to 25 year cohort there is a single outlier with 51 verbal abuse events reported. This cohort also coincidentally had the smallest number of participants. This high number of events with a small "n" may be skewing the mean events for this group. Revising the cohorts to include only two groups, 20 years and less experience versus greater than 20 years, balances the number of participants in the two groups and reduces the effect of the outlier. In the larger cohorts the nurses with 20 or less years in practice reported a mean of 5.30 events (n=88) compared with a mean of 4.54 events for the group with greater than 20 years in practice (n=154). These results are consistent with those found by Anderson (2002) where the preponderance of nurses experienced their most bothersome workplace violence event in their first 6 years of practice.

The second observed variable representing the latent construct of individual characteristics was organizational position. Participants in the study were grouped in eleven organizational cohorts: charge nurse; director; coordinator; nurse manager;

assistant nurse manager; staff nurse; nursing school faculty; educator; advanced practice nurse; school nurse; and other. The greatest mean number of verbal abuse episodes was experienced by charge nurses (8.16). Charge nurses were followed by: directors (6.09); coordinators (5.71); nurse managers (5.39); staff nurses (5.32); nursing school faculty (3.17); educators (3.00); other (2.00); and advanced practice nurses (1.73). Two occupational groups, school nurses and assistant nurse mangers, reported zero verbal abuse events. Two groups with the greatest amount of line authority within organizations, directors and nurse managers, are in the top 4 of the 11 occupational groups in terms of verbal abuse frequency. The directors reported that their most frequent source of abuse was other nurses and the second highest abusers were mangers. These data would seem to contradict the finding by Baron and Neuman (1998a) that workers are more likely to be the victim of aggression by supervisors. This difference in the current study is further supported by the finding that staff nurses reported managers as only the third highest source of abuse after patients and other nurses. These data do however support Baron and Neuman's (1998a) contention that workers tend to perceive themselves to be victims rather than aggressors. Table 5 (p. 101) contains the data regarding frequency of verbal abuse by organizational position and source of abuse. A review of these data would seem to reveal that everyone abuses everyone. This notion is very consistent with Fuller's (2003) work on rankism. Fuller envisions rank as a very mutable concept where a single individual can experience significant changes in rank over a single day. The data showing that, with two notable exceptions, all occupational

groups are abused by people from multiple source groups would support Fuller's analogy described earlier of kicking the dog (Fuller, 2003).

The structural equation modeling demonstrated a significant, moderate relationship between the observed variables of organizational position and years in practice and the latent construct of individual characteristics. Of the two variables, organizational position showed the stronger relationship (r = 0.51). The second variable, years in practice, demonstrated a weaker, although still significant, moderate relationship (r = 0.41). Both of the above relationships are positive indicating that as one either moves higher in the organizational structure or has more years in practice, the individual characteristics can be said to be stronger. The data however, demonstrate a very weak, non-significant, relationship between the latent construct of individual characteristics and the outcome variable of verbal abuse frequency. The direction of this relationship is negative as was predicted. The negative direction would indicate that as individual characteristics strengthen (as indicated by increasing years in practice or higher organizational position) the frequency of verbal abuse decreases. The strength of this relationship is however, so weak that no inference about the effect of individual characteristics on verbal abuse frequency can reasonably be made. In their meta-analysis of research on predicting workplace aggression, Barling et al. (2009) found that the relevant research does not support the notion that most workplace aggression occurs between supervisors and subordinates. Additionally, these researchers found that neither age nor socioeconomic status was predictive of workplace aggression (Barling et al.,

2009). The Barling analysis does not directly address organizational position or years in practice. However, it is reasonable to infer that increasing age is related to increasing years in practice and that increasing socioeconomic status might be associated with higher organizational position. The inconsistency of research findings described by Barling may help to explain the insignificant relationship between individual characteristics and verbal abuse frequency.

# **Organizational Characteristics**

Two observed variables were used to measure the organizational characteristics construct. The mean scores on the Workplace Aggression Tolerance Questionnaire and the Violence Prevention Climate Survey both demonstrated significant relationships to the latent construct of organizational characteristics. The VPCS showed a strong positive relationship (r = 0.81) while the WATQ showed a moderation negative relationship (r = 0.42). This pairing of results suggests that as scores on the VPCS go higher, scores on the WATQ decrease. This directional relationship would imply that the perception of a more positive bias for action by management in reducing workplace aggression results in a workplace that is less tolerant of aggressive behavior. These two observed variables behaved as predicted and so demonstrate support for the utilization of these variables as representative of the aggressiveness aspect of organizational characteristics. Coombs and Holladay (2004) suggest that increasing punishment of workplace aggression creates a shift of employee behavior toward more covert or passive forms of aggression. It cannot be determined from the results of the current study if the reduced tolerance for aggression

(lower WATQ scores) seen with increasing management attention to the issue (higher VPCS scores) is a reduction in aggression tolerance or the shift suggested by these authors. In their work developing the VPCS Kessler et al. (2008) found that increased attention of management of violence prevention practices as well as policies and procedures was related to reduction in physical and verbal aggression. The findings of the current study would support the original outcome as increasing VPCS scores are associated with decreasing frequency of verbal abuse.

Little continuing research has yet to be conducted on either the VPCS or the WATQ since the development of these instruments. It is therefore not yet possible to relate the findings of the current study to research beyond that done in the development of the instruments themselves.

# **ANCC Magnet® Status**

One observed variable was used as an indicator of both latent constructs.

Magnet® status of the participants' workplace was predicted to have a positive relationship to both individual characteristics and to organizational characteristics. The direction of the relationship between Magnet® status and individual characteristics was positive as predicted. The relationship between Magnet® status and organizational characteristics was a negative one, which was the opposite of the predicted positive relationship. The relationship of Magnet® status to neither latent construct was found to be significant. Magnet® status was included as an observed variable for both latent constructs because it could not clearly be discerned from the research literature whether

the greater effect of the increased empowerment of nurse would be on the individual or organizational characteristics.

The effect of Magnet® status on interpersonal relationships in hospitals has been mostly centered on nurse/physician relationships (Kramer & Schmalenberg, 2004a).

These researchers found that nurses in Magnet® hospitals tended to report more collegial relationships and less abusive relationships with physicians than nurses in non-Magnet® hospitals. In evaluating the effect of Magnet® designation on frequency of verbal abuse, the current study found that nurses in Magnet® hospitals experienced higher rates of verbal abuse from other nurses and physicians when compared to nurses in non-Magnet® facilities. Nurses in Magnet® facilities reported lower rates of verbal abuse from managers and patients compared to nurses in non-Magnet® facilities and also reported a lower overall rate of verbal abuse. These data suggest that the effect of Magnet® designation on interpersonal relationship and verbal abuse remains an open question.

Further reflection on these results also led to the consideration that the effect of Magnet® status may have been skewed by the inclusion of nurses from work settings other than hospitals. Since Magnet® recognition can only be achieved by hospitals, all of the non-hospital nurses would have had to respond "no" to the Magnet® status question. To assess the effect of this issue, the model was rerun using only those participants who reported hospitals as their practice setting. Several differences were noted between the sample containing all participant responses and the sample containing only the responses from hospital-based nurses. The strongest path, from the observed variables of VPCS

and WATQ to the latent construct Organizational Characteristics and from Organizational Characteristics to the outcome variable of Verbal Abuse Frequency, was virtually unchanged. In the revised sample Organizational Position weakened as a measure of the Individual Characteristics construct while Years in Practice strengthened substantially as an indicator of this construct. The change in results along the path from observed variables to latent constructs may provide a useful avenue for future research however; these changes did not alter the strengths of the essential paths from the latent constructs to the outcome variable.

### **Conclusions and Implications**

From the data collected and analyzed for this study, several conclusions and implications are evident.

#### **Conclusions**

- 1. The results indicate that the four observed variables: workplace aggression tolerance; violence prevention climate; years in practice; and organizational position are valid indicators of the latent construct as all four variables were significantly related to the constructs.
- 2. Magnet® status was not strongly related to either construct even when controlled for hospital employment. The data do not support any conclusions regarding the meaning of this finding.
- 3. The latent constructs also behaved within the model as predicated. Both stronger individual characteristics of the nurse and an improved state of organizational

- characteristics resulted in decreased verbal abuse of nurses. The effect of individual characteristics, while positive, was however, non-significant.
- 4. Given the statistical significance of the path from organizational characteristics to verbal abuse frequency, organizational characteristics have a much stronger effect on the frequency of verbal abuse than do individual characteristics.
- 5. WATQ scores were generally low indicating a relative intolerance for aggression in this sample. The action with the highest mean score (1.72 on a scale of 6) was leaving the area when the manager enters. Passive aggressive acts scored higher than active aggression indicating that, while overall tolerance for aggression was low, passive aggression was seen to be more appropriate than more active actions.
- 6. Of the two observed variables comprising the organizational characteristics construct, the violence prevention climate had a much stronger effect than workplace aggression tolerance. This may indicate that aggression tolerance is reduced in a strong violence prevention climate. This conclusion is supported by the negative correlation found between the WATQ and the VPCS scores.

## **Implications**

- 1. Nursing leaders should adopt an organizational approach to the issue of verbal abuse rather than an approach that focuses on the individual victim or perpetrator of such abuse.
- 2. The stronger effect of violence prevention over aggression tolerance suggests that actions taken by management staff are likely to have the greatest effect on verbal

- abuse frequency. The negative correlation between these two variables may indicate that greater management attention to violence prevention has a suppressive effect on aggression tolerance.
- 3. Given that passive forms of aggression are more tolerated than active forms, aggressive behavior is likely to be subtle and difficult to identify objectively. It may require additional training of staff to identify these more subtle forms or aggression.
- 4. The strength of the effect of the VPCS on the organizational characteristics construct would suggest that leadership behavior must set the example. Leaders within the organization must take the lead in demonstrating appropriate patterns of behavior and in responding to inappropriate behavior in others.
- 5. Nurse executives should establish open channels of communication regarding verbal abuse with both other senior leaders in the organization as well as medical staff leadership. The medical staff leadership in most organizations is just as aware of the physicians tending toward verbal abuse as the nursing staff leadership is. Most often these verbally abusive physicians are no less abusive toward their peers than they are to the nursing staff. Opening these channels prior to an actual event allows for the leaders of the organization to address the issues in a less confrontational manner.

### **Recommendations for Further Study**

As is always the case, no single study can adequately explore a phenomenon as complex and multifactorial as the verbal abuse of nurses. Therefore, several opportunities for further study are evident from the current results.

- Replication of the study in other geographic locations. While previous research
  supports the notion that the experience of verbal abuse by nurses across the
  United States, the localization of the current study to a single region does limit the
  generalizability of the results. Additional replications of the study could be
  conducted in other countries to test the broader applicability and stability of the
  proposed model
- 2. Conduct the study within several organizations. One limitation of the current study is that results could not be aggregated by organization. The potential exists that stronger or different relationships between the variables may arise if the study were done in a manner that allowed responses to be aggregated by organization. This approach would allow organizations with similar aggression profiles to be compared in relation to the relative effect of individual power when culture is held relatively constant. Conversely, organizations with similar levels of verbal abuse frequency could be compared in terms of the aggressiveness and individual power profiles.
- 3. Use of different observed variables. The measurement variables used in the current study to not constitute the entire universe of possible variables that could

be used to measure either individual power or the aggression-related culture.

Testing the model with different observed variables could further strengthen the support for the model lending greater confidence in the implementation of strategies extending from its findings.

- 4. Conduct a longitudinal study to determine if changes, particularly in WATQ and VPCS scores would result in corresponding changes in the frequency of verbal abuse.
- 5. Investigate further the relationship between Magnet® status and verbal abuse both among nurses and between nurses and other occupational/professional groups.

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# Appendix A

Characteristics of Terms Related to Workplace Aggression

Appendix A

Characteristics of Terms Related to Workplace Aggression

| Behavior                               | Characteristics  | Intent   | Target   |
|--|--|--|--|
| Incivility                             | Rude, thoughtless behaviors  | Ambiguous intent to harm   | Individual                                     |
| Verbal Abuse                           | Wide variety of behaviors including yelling, screaming, being rude, ignoring, demeaning, minimizing contributions.   | Humiliate,<br>embarrass,<br>control  | Individual                                     |
| Disruptive<br>Behavior                 | Verbally abusive behaviors as above plus, interrupting meetings, intentionally arriving late to meetings, withholding information, intentionally introducing controversial topic or comments into meetings, non-responsiveness (to calls, pages) | Control and manipulate   | Individual or organization                     |
| Bullying and<br>Horizontal<br>Violence | May include all of the above behaviors. Most authors use these terms interchangeably. Bullying is frequently directed at new people in the organization and has three key hallmarks, duration, repetition and victim powerlessness               | Indoctrinate, control, and discourage behavior inconsistent with the status quo. | Individual or group                            |
| Rankism                                | Abuse of rank by more powerful person directed at less powerful person   | Control  | Individual                                     |
| Workplace<br>Aggression                | Generally used as an umbrella term including all of the behaviors listed above. Some authors exclude physical violence from this term, some include physical violence.   | Varies with specific behavior  | Individual,<br>group or<br>organization        |
| Workplace<br>Violence                  | Some authors use this term as umbrella term to include all behaviors listed above. Others limit the use of this term to physical violence.   | Control,<br>physically harm,<br>or kill  | Individual,<br>may be<br>targeted or<br>random |

Appendix B

Study Information and Informed Consent

#### Appendix B

### Study Information and Informed Consent

The following information provided to participants at the beginning of the electronic version of the survey.

Texas Woman's University

Consent to Participate in Research

Investigator - Michael J. Groves

migroves93@gmail.com

(304) 263-6854

Advisor - Rebecca Krepper, PhD, RN

rkrepper@mail.twu.edu

(713)794-2106

#### EXPLANATION AND PURPOSE OF THE RESEARCH

You are being asked to participate in a research study for Mr. Michael J. Groves' doctoral dissertation at Texas Woman's University. The purpose of this research is to test the validity of a model that evaluates the effect of a number of organizational and personal factors on the frequency with which registered nurses experience verbal abuse. You have been asked to participate in this research because you are a registered nurse licensed in one of the states selected for inclusion in this study.

#### DESCRIPTION OF PROCEDURES

Your participation in this study will consist of answering questions in this single online

survey. Most of the questions ask you to select among several choices. If you wish to complete the survey on paper, you may print a copy of the survey and mail the completed survey to:

Michael J. Groves

Assistant Professor of Nursing

Mountain State University

214 Viking Way Suite 200

Martinsburg, WV 25401

You may email the researcher at <u>mjgroves93@gmail.com</u> and you will be sent a postagepaid envelope in which to return the paper survey at no cost to you.

#### POTENTIAL RISKS

There are minimal to no risks associated with participation in this survey. Since the survey requires you to think about past episodes of verbal abuse, it is possible that you will become uncomfortable with some questions. If discomfort does occur you have the option to stop answering the questions and end the survey at any time.

Another potential risk is the loss of confidentiality. The researcher has taken several steps to protect your confidentiality. The survey does not ask for you to identify yourself unless you wish to have results of the survey mailed to you. The postcard you were sent inviting you to participate in the study has a code number on it. The survey requires that you enter the code number. This number can only be used to identify the state from which you are responding to the survey. The researcher has not created a list that matches the code

number to any particular individual so you cannot be identified in any way other than the request for survey results.

While no problems are anticipated with your participation in the survey, you should contact either the investigator (M. Groves) or his advisor (R. Krepper) should you have any problems you wish to discuss. Their telephone numbers and email addresses are listed above.

#### PARTICIPATION AND BENEFITS

Your participation in this study is completely voluntary. There are no direct benefits to you for your participation. If you would like to know the results of the study, the results can be mailed to you.

### QUESTIONS REGARDING THE STUDY

If you have any questions about the study you may contact either the investigator or his advisor at the numbers listed above. If you have questions about your rights as a study participant or regarding how this study has been conducted, you may contact the Texas Woman's University Office of Research at (713) 794-2480 or through email at IRB@twu.edu

# CONSENT TO PARTICIPATE IN THE STUDY

Completing the survey will indicate that you understand the information above and consent to participate in this study. You will also be asked to indicate at the end of this information that you are consenting to participation in this research.

# OBTAINING THE RESULTS OF THE STUDY

If you would like to know the results of this research, please provide either a street address, PO Box or email address in the box below. You will be mailed a copy of the results of the study when it is complete.

Appendix C
Initial and Follow Up Postcards

### Appendix C

## Initial and Follow up Postcards

#### **Initial Postcard**

Dear Nursing Colleague:

My name is Michael Groves and I am currently working on my doctoral dissertation at Texas Woman's University in Houston Texas. I am conducting a survey of registered nurses licensed in Maryland, Virginia and West Virginia regarding the topic of verbal abuse of nurses. Your completion of this survey will help provide information important to all nurses regarding this issue. I invite you to complete the survey electronically at the Survey Monkey website by entering the link below into your web browser.

http://www.surveymonkey.com/s/8W2B3N7

If you would prefer to complete a paper version of the survey you may email me at:

<u>Mjgroves93@gmail.com</u> and provide your name and address. I will mail you a survey to complete along with a postage paid return envelope.

Thank you in advance for your assistance with this project. If you have any questions about this research that you would like answered before participating you may email me at the above address.

## Follow-up Postcard

Dear Nursing Colleague:

Several weeks ago I sent you a postcard inviting you to participate in my research about verbal abuse of nurses. If you have already completed the survey, THANK YOU! I just wanted to send you a reminder that it is not too late to complete the survey if you have not yet had the opportunity to do so. The link to follow to the survey is:

<a href="http://www.surveymonkey.com/s/8W2B3N7">http://www.surveymonkey.com/s/8W2B3N7</a>

Your answers are very important and I appreciate you taking time to participate in this research.

Appendix D

Violence Prevention Climate Survey

# Appendix D

# Violence Prevention Climate Survey

Copyright Stacey R. Kessler, Paul E. Spector and Chu-Hsiang Chang, All rights reserved.

| Used with Permission.  To what extent do you agree or disagree with each of the following statements?  Use the following scale:  1 = Disagree very much  2 = Disagree moderately  3 = Disagree slightly  4 = Agree slightly  5 = Agree moderately  6 = Agree very much  1. Management in this organization quickly responds to episodes of violence  1  |            |             |          |          |           | 2008    |            |              |             |         |
|---|------------|-------------|----------|----------|-----------|---------|------------|--------------|-------------|---------|
| Use the following scale:  1 = Disagree very much  2 = Disagree moderately  3 = Disagree slightly  4 = Agree slightly  5 = Agree moderately  6 = Agree very much  1. Management in this organization quickly responds to episodes of violence  1 2 3 4 5 6  2. Management in this organization requires each manager to help reduce violence in his/her department.  1 2 3 4 5 6  3. Management encourages employees to report physical violence.  1 2 3 4 5 6 |            |             |          | Ţ        | Used wit  | th Perm | nission.   |              |             |         |
| 1 = Disagree very much 2 = Disagree moderately 3 = Disagree slightly 4 = Agree slightly 5 = Agree moderately 6 = Agree very much 1. Management in this organization quickly responds to episodes of violence 1 2 3 4 5 6 2. Management in this organization requires each manager to help reduce violence in his/her department.  1 2 3 4 5 6 3. Management encourages employees to report physical violence.  1 2 3 4 5 6                                    | To what e  | xtent do y  | ou agre  | e or dis | sagree w  | ith eac | h of the   | following s  | tatements?  |         |
| 2 = Disagree moderately 3 = Disagree slightly 4 = Agree slightly 5 = Agree moderately 6 = Agree very much 1. Management in this organization quickly responds to episodes of violence  1 2 3 4 5 6  2. Management in this organization requires each manager to help reduce violence in his/her department.  1 2 3 4 5 6  3. Management encourages employees to report physical violence.  1 2 3 4 5 6  | Use the fo | ollowing so | cale:    |          |           |         |            |              |             |         |
| 3 = Disagree slightly 4 = Agree slightly 5 = Agree moderately 6 = Agree very much 1. Management in this organization quickly responds to episodes of violence 1 2 3 4 5 6 2. Management in this organization requires each manager to help reduce violence in his/her department. 1 2 3 4 5 6 3. Management encourages employees to report physical violence. 1 2 3 4 5 6   | 1 = Disag  | ree very n  | nuch     |          |           |         |            |              |             |         |
| 4 = Agree slightly  5 = Agree moderately  6 = Agree very much  1. Management in this organization quickly responds to episodes of violence  1 2 3 4 5 6  2. Management in this organization requires each manager to help reduce violence in his/her department.  1 2 3 4 5 6  3. Management encourages employees to report physical violence.  1 2 3 4 5 6   | 2 = Disag  | ree moder   | ately    |          |           |         |            |              |             |         |
| 5 = Agree moderately 6 = Agree very much 1. Management in this organization quickly responds to episodes of violence  1 2 3 4 5 6 2. Management in this organization requires each manager to help reduce violence in his/her department.  1 2 3 4 5 6 3. Management encourages employees to report physical violence.  1 2 3 4 5 6   | 3 = Disagn | ree slightl | y        |          |           |         |            |              |             |         |
| 6 = Agree very much  1. Management in this organization quickly responds to episodes of violence  1 2 3 4 5 6  2. Management in this organization requires each manager to help reduce violence in his/her department.  1 2 3 4 5 6  3. Management encourages employees to report physical violence.  1 2 3 4 5 6   | 4 = Agree  | slightly    |          |          |           |         |            |              |             |         |
| <ol> <li>Management in this organization quickly responds to episodes of violence</li> <li>2 3 4 5 6</li> <li>Management in this organization requires each manager to help reduce violence in his/her department.</li> <li>1 2 3 4 5 6</li> <li>Management encourages employees to report physical violence.</li> <li>2 3 4 5 6</li> </ol>   | 5 = Agree  | moderate    | ly       |          |           | 1,      |            |              |             |         |
| 1 2 3 4 5 6  2. Management in this organization requires each manager to help reduce violence in his/her department.  1 2 3 4 5 6  3. Management encourages employees to report physical violence.  1 2 3 4 5 6   | 6 = Agree  | very muc    | h        |          |           |         |            | *            |             |         |
| <ul> <li>2. Management in this organization requires each manager to help reduce violence in his/her department.</li> <li>1 2 3 4 5 6</li> <li>3. Management encourages employees to report physical violence.</li> <li>1 2 3 4 5 6</li> </ul>  | 1. Manage  | ement in th | nis orga | nizatio  | n quickl  | y respo | onds to ep | pisodes of v | violence    |         |
| his/her department.  1 2 3 4 5 6  3. Management encourages employees to report physical violence.  1 2 3 4 5 6  |            | 1           | 2        | 3        | 4         | 5,      | 6          |              |             |         |
| 1 2 3 4 5 6  3. Management encourages employees to report physical violence.  1 2 3 4 5 6   | 2. Manage  | ement in th | nis orga | nizatio  | n require | es each | manage     | r to help re | duce violen | ice in  |
| 3. Management encourages employees to report physical violence.  1 2 3 4 5 6  | his/her de | partment.   |          |          |           |         |            |              |             |         |
| 1 2 3 4 5 6   |            | 1           | 2        | 3        | 4         | 5       | 6          |              |             |         |
|   | 3. Manage  | ement ence  | ourages  | emplo    | yees to r | eport p | hysical    | violence.    |             | *       |
| 4. Management encourages employees to report verbal abuse.  |            | 1           | 2        | 3        | 4         | 5       | . 6        |              |             | · · · · |
|   | 4. Manage  | ement enco  | ourages  | emplo    | yees to r | eport v | erbal ab   | use.         |             |         |

|  | 1         | 2         | 3         | 4         | 3        | 6                                    |
|--|-----------|-----------|-----------|-----------|----------|--------------------------------------|
| 5. Reports of  | workpla   | ace viol  | ence fro  | om othe   | r emplo  | yees are taken seriously by          |
| management.  |           |           |           |           |          |                                      |
|  | 1,        | 2         | 3         | 4         | 5        | 6                                    |
| 6. Abusive be  | havior    | is not to | olerated  | at work   |          |                                      |
|  | 1         | 2         | 3         | 4         | 5        | 6                                    |
| 7. My employ   | er prov   | ides ad   | equate a  | assault/v | iolence  | prevention training.                 |
|  | 1         | 2         | 3         | 4         | 5        | 6                                    |
| 8. My employ   | er prov   | ides ad   | equate a  | assault/v | iolence  | e prevention procedures.             |
|  | 1         | 2         | 3         | 4         | 5        | 6                                    |
| 9. In my unit,   | violenc   | e preve   | ention p  | rocedure  | es are d | etailed.                             |
|  | 1         | 2         | 3         | 4         | 5        | 6                                    |
| 10. In my unit, employees are informed about potential violence hazards. |           |           |           |           |          |                                      |
|  | 1         | 2         | 3         | 4         | 5        | 6                                    |
| 11. In my uni  | t, there  | is traini | ng on v   | iolence   | prevent  | tion policies and procedures.        |
|  | 1         | 2         | 3         | 4         | 5        | 6                                    |
| 12. In my uni  | t, inforn | nation a  | about vi  | olence p  | oreventi | on is distributed regularly.         |
|  | 1         | 2         | 3         | 4         | 5        | 6                                    |
| 13. In my unit   | t, in ord | er to ge  | et the wo | ork done  | e, one n | nust ignore some violence prevention |
| policies.  |           |           |           |           |          |                                      |
|  | 1         | 2         | 3         | 4         | 5        | 6                                    |
|  |           | ,         |           |           |          |                                      |

| possible, ever | if that   | means o  | compro   | mising v | violence | e prevention. |                       |
|----------------|-----------|----------|----------|----------|----------|---------------|-----------------------|
|                | 1         | 2        | 3        | 4        | 5        | 6             |                       |
| 15. In my uni  | t, huma   | n resoui | ces sho  | rtage ur | ndermin  | es violence   | prevention standards. |
|                | 1         | 2        | 3        | 4        | 5        | 6             |                       |
| 16. In my unit | t, violen | ice prev | ention p | oolicies | and pro  | cedures are   | ignored.              |
|                | 1         | 2        | 3        | 4        | 5        | 6             |                       |
| 17. In my unit | t, violen | ice prev | ention p | oolicies | and pro  | cedures are   | nothing more than a   |
| cover-up for l | awsuits   |          |          |          |          |               |                       |
|                | 1         | 2        | 3        | 4        | 5        | 6 .           |                       |
| 18. In my unit |           |          |          |          |          |               | otable.               |
|                | 1         | 2        | 3        | 4        | 5        | 6             | *                     |
|                |           |          |          |          |          |               |                       |

14. In my unit, whenever pressure builds up, the preference is to do the job as fast as

# Appendix E

Workplace Aggression Tolerance Questionnaire

# Appendix E

# Workplace Aggression Tolerance Questionnaire

## W. Timothy Coombs & Sherry J. Holladay

## Used with Permission

Please read the following situation then respond to the statements which follow the story.

Use the following scale:

- 5 = Very appropriate
- 4 = Appropriate
- 3 = Neither appropriate nor inappropriate
- 2 = Inappropriate
- 1 = Very inappropriate

| 1. Failed to return phone call | 1    | 2 | 3 | 4 | 5  |
|--------------------------------|------|---|---|---|----|
| 2. Say bad things              | 1    | 2 | 3 | 4 | 5  |
| 3. Purposefully work slow      | 1    | 2 | 3 | 4 | 5  |
| 4. Hit or kick                 | 1    | 2 | 3 | 4 | 5  |
| 5. Refuse to talk to           | 1    | 2 | 3 | 4 | 5  |
| 6. Yell at                     | . 1. | 2 | 3 | 4 | 5  |
| 7. Leave when enters area      | 1    | 2 | 3 | 4 | 5  |
| 8. Give dirty looks            | 1    | 2 | 3 | 4 | 5. |
| 9. Refuse requests             | 1    | 2 | 3 | 4 | 5  |
| 10 Interrupt when speaking     | 1    | 2 | 3 | 4 | 5  |

| 11. Obscene gestures                    | 1   | 2  | 3   | 4 | 5   |
|---|-----|----|-----|---|-----|
| 12. Fail to send needed information     | 1   | 2  | 3   | 4 | 5   |
| 13. Spread nasty rumors                 | 1   | 2  | 3   | 4 | 5   |
| 14. Show up late for meetings           | 1   | 2  | 3   | 4 | 5   |
| 15. Deface company property             | 1   | 2, | 3   | 4 | 5   |
| 16. Fail to warn about problems         | 1   | 2  | 3   | 4 | 5   |
| 17. Say bad things about opinions       | 1   | 2  | 3   | 4 | 5   |
| 18. Delay work to make other look bad   | 1   | 2  | 3   | 4 | 5   |
| 19. Waste needed resources              | 1   | 2  | 3   | 4 | 5   |
| 20. Fail to deny false rumors           | 1   | 2  | . 3 | 4 | 5   |
| 21. Hide needed resources               | 1   | 2  | 3   | 4 | 5   |
| 22. Sabotage the workplace              | 1   | 2  | 3   | 4 | 5   |
| 23. Steal from the workplace            | 1   | 2  | 3   | 4 | 5   |
| 24. Interrupt when other tries to speak | 1   | 2  | 3   | 4 | 5   |
| 25. Use insults                         | 1   | 2  | 3   | 4 | 5   |
| 26. Use obscene language                | 1   | 2  | 3   | 4 | . 5 |
| 27. Mistreat other's friends            | . 1 | 2  | 3   | 4 | 5   |
| 28. Verbally threaten                   | 1   | 2  | 3   | 4 | 5   |

# Appendix F

Individual Characteristic, Abuse Frequency, and Demographics

### Appendix F

Individual Characteristic, Abuse Frequency, and Demographics

Please answer the following questions related to your recent experience with verbal abuse. For the purposes of this survey, verbal abuse is defined as: verbal behavior designed to humiliate, degrade, or otherwise demonstrate a lack of respect for the dignity and worth of another individual. Please be as accurate as possible regarding the number of verbal abuse episodes.

- 1. How many separate episodes of verbal abuse have you experienced from a physician in the past 30 days?
- 2. How many separate episodes of verbal abuse have you experienced from another nurse in the past 30 days?
- 3. How many separate episodes of verbal abuse have you experienced from a manager, supervisor, director or executive in the past 30 days?
- 4. How many separate episodes of verbal abuse have you experienced from a patient or patient's family in the past 30 days?
- 5. How many separate episodes of verbal abuse have you experienced from a person other than those in questions 1 through 4 in the past 30 days?

Please provide answers to the following questions:

1. What is your gender?

Male Female

| 2. Is the organization you consider to be your primary place of employment a Magneton |
|---|
| designated facility?  |
| Yes No  |
| 3. Select the term below that best describes your current position with your primary  |
| employer.   |
| Staff Nurse   |
| Charge Nurse  |
| Assistant Nurse Manager   |
| Nurse Manager   |
| Director  |
| 4. Please indicate how long you have been in practice as a registered nurse.          |
| Less than 1 year  |
| 1 year to 5 years   |
| 6 years to 10 years   |
| 11 years to 15 years  |
| 16 years to 20 years  |
| 21 to 25 years  |
| 26 years or more  |
| 5. What is your age?  |
| 18 years to 25 years  |
| 26 years to 30 years  |

| 31 years to 35 years  |
|---|
| 36 years to 40 years  |
| 41 years to 45 years  |
| 46 years to 50 years  |
| 51 years to 55 years  |
| 56 years to 60 years  |
| 61 years to 65 years  |
| 66 years or older   |
| 6. Please select the ethnic group with which you identify yourself? |
| Caucasian, non-Hispanic   |
| Hispanic  |
| Asian   |
| Black   |
| Native American   |
| Mixed   |
| 6. What is your initial nursing educational preparation?            |
| Diploma in Nursing  |
| Associate Degree  |
| Baccalaureate Degree  |
| . What is your highest level of education?                          |
| Diploma in Nursing  |

Associate Degree

Baccalaureate degree in nursing

Baccalaureate degree in a non-nursing field

Master degree in Nursing

Master degree in a non-nursing field

Doctoral degree in nursing

Doctoral degree in a non-nursing field

8. What is the bed size of the hospital where you are primarily employed?

Less than 50 beds

51 to 100 beds

101 to 150 beds

151 to 200 beds

201 to 250 beds

251 to 300 beds

301 to 350 beds

351 to 400 beds

401 to 450 beds

451 to 500 beds

501 or more beds

9. Please indicate the term that best describes the type of hospital where you are primarily employed.

Not-for-Profit hospital

For-Profit hospital

Governmental hospital

10. What term best describes the location of your place of primary employment?

Rural

Suburban

Urban

11. In what state are you primarily employed as a registered nurse?