Nurse-to-Nurse Hostility, Confrontational Anxiety, and Emotional Intelligence: An Integral, Descriptive Pilot Study
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Nurse-to-nurse hostility (NNH) is an emotional challenge within a group and has a negative impact on performance, nurse satisfaction/retention, health, and patient safety. The purpose of this study was to explore confrontational anxiety scores (CAS) of acute care nurses, including perianesthesia nurses, resulting from NNH by asking: In combined groups, will high levels of individual emotional intelligence (EI) and group emotional competence (GEC) be associated with low CAS and will there be a difference in CAS between military and civilian nurses? Data were gathered from two valid and reliable self-report questionnaires. Participants rated confrontational anxiety from 1 to 5, yielding the CAS. The hypotheses were tested via t test with alpha set at 0.05 and 0.9 powered for combined groups testing. The study was underpowered for individual groups. Statistical significance (P = .02) was found in subscales "Regulation of Emotion," "Norms for Confronting Members," and "Team Self-evaluation." No statistically significant difference in CAS was found between the two populations. The results support the need to improve EI and GEC to achieve constructive and appropriate member behavior during interactions (ie, reduce anxiety and occurrence of NNH) to preserve group trust, effectiveness, and collaboration, therefore positively impacting performance, nurse satisfaction/retention, health, and patient safety.

Keywords: nurse-to-nurse hostility, emotional intelligence, group emotional competence, confrontational anxiety, norms.
(or group) that creates a risk to health and/or safety. Bartholomew states that NNH is rooted in oppression (powerlessness) and leads to poor self-esteem. Researchers who have studied emotional intelligence (EI) have demonstrated that feelings of powerlessness are related to negative emotional states such as fear. Bartholomew's storytelling (subjective scenarios) research revealed nurses' fear of confronting inappropriate behaviors consistent with NNH. Nurses reported hesitancy in addressing an "out-of-line" coworker for fear of receiving negative responses such as anger, the silent treatment, gossip, or career sabotage. In other words, the nurses who spoke up were subject to retaliation and therefore feared confrontation. The fear of confrontation is known as confrontational anxiety in this pilot study.

According to Mayer and Salovey, EI is an ability subject to individual variance, involving several skills: (1) The ability to accurately perceive, appraise, and express emotion; (2) the ability to access and generate feelings to facilitate cognition; (3) the ability to understand and make use of emotion; and (4) the ability to promote emotional and intellectual growth and well-being by regulating emotion. In theory, people with high EI have better control over their lives, negative emotions, and their interactions with others. Effective teams have shared values or emotionally competent norms guiding team members in the constructive management of emotional challenges.

NNH is an inappropriate interaction and creates an emotional challenge within a group. Hostility is frequently rooted in conflict avoidance (purposely ignoring inappropriate behavior). Based on research by Druskat et al, hostile or inappropriate group member behavior can be moderated by the group's emotional competency; therefore, conflict avoidance is an indicator of incompetent group norms. Emotionally competent groups empower group members with shared beliefs or norms that enable group members to speak up and confront out-of-line behavior (NNH) in a constructive manner. Confronting inappropriate behavior in a caring, constructive manner builds trust and safety while also promoting predictable, appropriate member behavior.

Confrontational anxiety is a negative emotional state and can be moderated by individual and group level EI according to the research by Wong and Law and Druskat et al. Through education, nurses can achieve greater competency in individual and group emotional intelligence, therefore improving group interactions by constructively managing emotion at two levels—individual and group.

The purpose of this study was to measure confrontational anxiety within the context of NNH and to measure effects of two known moderators, individual EI and group emotional competence on confrontational anxiety.

**Methods**

This was a survey study of nursing personnel in a 204-bed military teaching facility in the Pacific Northwest. The survey was open to medical center employees able to read and write English, regardless of gender, active duty, or civilian status. Both RNs and LPNs between the ages of 18 and 65 years were eligible to participate. An integral, descriptive design was chosen to accomplish study aims.

**Hypotheses**

H (1): There will be lower confrontational anxiety levels in individuals with higher EI.

H (2): There will be lower confrontational anxiety levels associated with high group emotional competence levels.

H (3): There will be a difference between active duty military and civilian confrontational anxiety levels.

**Procedure**

The research protocol received Institutional Review Board approval before initiation. Questionnaires with explanatory cover letters and self-addressed stamped envelopes were concealed and secured in unmarked manila envelopes. Consent was assumed by a returned survey. Surveys were distributed by placing the envelopes on nursing units in work and break rooms every 2 weeks as a measure to avoid investigator bias and maintain participant anonymity. Participants were given the option to withdraw from the study at
any time simply by not returning the questionnaire. Each participant was requested to complete the research instrument and return it to the primary investigator in the provided self-addressed stamped envelope. The research instrument consisted of:

- **Demographics**: Gender, age, initial level of education, advanced degree(s), certifications held, years in the profession, and area of current and past nursing employment. Identifiers were not collected because of participant vulnerability related to the subject matter.

- **Storytelling**: Participants were asked to "describe your experience of negative peer interaction within the nursing culture (nurse-to-nurse hostility)." Story compositions were perused for thematic analysis.

- **Short Answer Exploration**: Participants were asked to answer 11 questions such as: "Why do you think the negative behavior occurred?" "Can you articulate why you behaved in a negative manner?" and "What factors contribute to job satisfaction?" The answers provided data for thematic analysis.

- **5-point Confrontational Anxiety Scale (CAS)**: The CAS was generated from a specific question: "How anxious are you made by directly confronting your offender?" Participants scored their anxiety on a scale of 1-5, with 1 being not anxious at all and 5 being the most anxious possible.

- **Wong and Law Emotional Intelligence Scale (WLEIS)**: The WLEIS was chosen for this research because of its reliability and validity in measuring the four abilities of individual EI. Comparable to the values reported by Wong and Law and confirming reliability and content validity, Ng et al. reported coefficient alphas for the entire WLEIS = 0.91 and its subscales: Self Emotions Appraisal = 0.84; Other Emotions Appraisal = 0.84; Use Of Emotion = 0.85; Regulation Of Emotion = 0.87. The WLEIS asks a series of questions measuring the four abilities/subscales of EM. Participants used a 7-point scale to measure their level of agreement to a statement (1 = completely disagree, 4 = neutral, 7 = completely agree). Table 1 summarizes the four abilities measured by the WLEIS.

- **The Group Emotional Competence Questionnaire (GECQ)** was chosen to measure group competency norms/subscales because of its reliability and validity. During development of the GECQ, coefficient alphas more than 0.8 were achieved for 10 reliable subscales (from the original 13). Convergent and divergent validity emerged. Five of six dimensions proposed were confirmed: group regulation of members, group self-awareness, group self-regulation, group social awareness, and group social skills. Participants used a 7-point scale to measure their level of agreement to a statement (1 = completely disagree, 4 = neutral, 7 = completely agree). The GECQ is composed of nine subscales (emotionally competent group norms). These norms or subscales measure competency at three levels: Individual (group awareness of and regulation of members); group (group self-awareness and group self-regulation); and outside the group or cross-boundary (group social awareness and group social skills). Table 2 summarizes the emotional competencies measured by the GECQ.

Forty-one surveys were collected between October 2007 and June 2008. The primary investigator then reviewed the returned questionnaires. Two RNs were dropped because of language barrier concerns and cross-referencing workplace data. The LPNs (n = 5) were dropped because of lack of participation. One participant did not complete the demographics or the WLEIS and was therefore dropped from the study. The remaining participants (n = 33) were separated into either the active duty or civilian group and were given participant identifiers such as ADR1 and CR14. BS and BSN degrees and MS and MSN degrees were grouped together to avoid participant identification. Names, birth dates, rank, or other specific identifiers...
were not collected. The nominal data were entered into a spreadsheet and double- and triple-checked for accuracy. Because of the small sample size, the initial power analysis was null and void. Therefore, a retro power analysis was performed. Hypotheses were tested via t test with alpha set at 0.05 and 0.9 powered for combined groups testing of hypotheses (1) and (2). The study was underpowered for individual groups (ie, Active Duty and Civilian), hypothesis (3).

Thematic analysis included four themes: confronting, self-awareness, other-awareness, and teamwork. Short-answer question responses and stories were examined for themes compatible with or reflective of the four themes. Narrative responses, compatible with the four themes, were divided into active duty and civilian responses. The narratives were then entered into appropriate theme spreadsheets.

**Findings**

Participants (n = 33) included: Active duty (n = 15) and civilian (n = 18) RNs. Twenty-five RNs held BS/BSN degrees and seven held MS/MSN degrees. Years in the profession ranged from 3 months to 39 years, with active duty mean years in the profession of 6.15 years and civilian mean of 17.9 years. Ages in years ranged from 23 to 62. Male active duty (n = 4) mean age was 42 and male civilian (n = 3) mean age was 44. Active duty female (n = 11) mean age was 30 compared with civilian female (n = 15) mean age of 44.

Hypothesis testing via t test found statistical significance in three subscales’ effects on confrontational anxiety scores. Nurses with high confrontational anxiety scores scored significantly lower
for regulation of emotion, confronting members who break norms, and team self-evaluation.

**Hypothesis 1**

Regulation of Emotion is a subscale of the WLEIS. As a personal competence, it is focused on EI at the individual level. Participant scores could vary from 4 to 28. Actual participant scores ranged from 15 to 28, with a mean score of 22.2. Mean confrontational anxiety score for low ability to regulate emotion was 4. High ability to regulate emotion had a mean confrontational anxiety score of 3.06. Effect of regulation of emotion on confrontational anxiety scores showed statistical significance (pooled SD = 1.17, t = 2.30, P = .02). Table 3 provides statistics for total EI and the subscales.

**Hypothesis 2**

Confronting members who break norms is an emotionally competent group norm focused on individuals of the group. This subscale of the GECQ measures competency of group member regulation. Participant scores for this subscale could range from 6 to 42. Actual scores ranged from 8 to 36, with a mean score of 22.9. Mean confrontational anxiety scores for low ability in this competence norm was 4.0 and 3.06 for high ability. Effect of confronting members who break norms on confrontational anxiety scores showed statistical significance (pooled SD = 1.17, t = 2.3, P = .02). Table 3 provides statistics for total EI and the nine subscales.

**Hypothesis 3**

No statistical significance was found in the difference between active duty RN and civilian RN CAS. The study was underpowered for testing Hypothesis 3. Confrontational anxiety scores ranged from 1 to 5, with 1 being the least amount of anxiety and 5 being the greatest amount of anxiety. Forty-six percent of civilian RNs reported the highest possible anxiety, CAS 5, compared with 29% of

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*EI, Emotional intelligence; GEC, group emotional competence; M, mean; SD, standard deviation; t, two-tailed t test. *P value < .05.
active duty RNs. Two percent of both active duty and civilian RNs reported a CAS of 1. Four percent of active duty RNs and 16% of civilian RNs reported CAS 2. Percentages of RNs reporting CAS 3 were active duty 34% and civilian 5%. Last, 31% of active duty RNs and 31% of civilian RNs reported CAS 4.

**Thematic Analysis**

Four themes were analyzed: confronting, self-awareness, others-awareness, and teamwork. Analyzing the theme “confronting” revealed three most common tactics used when faced with NNH: Confront (n = 16: 7 AD, 9 CIV), Ignore (n = 6: 1 AD, 5 CIV), and Avoid (n = 10: 7 AD, 3 CIV). Themes of “self-awareness” and “others-awareness” yielded 14 of 33 participants (8 AD, 6 CIV) who ennobled their own acts of NNH, whereas 22 (9 AD, 13 CIV) assigned negative motive or intent to others’ acts of NNH. All participants valued teamwork, the fourth theme. Common statements describing the value of teamwork included: “Teams grow stronger when teaching and mentoring are embraced” and “Supportive coworkers who put differences aside contribute to job satisfaction.” All participants valued teamwork, the fourth theme. Common statements describing the value of teamwork included: “Teams grow stronger when teaching and mentoring are embraced” and “Supportive coworkers who put differences aside contribute to job satisfaction.”

**Discussion**

Fear of confrontation (emotional challenge) has been linked to NNH, an inappropriate group interaction (emotional challenge). Researchers have shown that competent EI (expressed at individual and group levels) improves control over negative emotions (such as fear and anxiety) and interactions with others. The primary interest of this study was to add a quantitative value to the qualitative behavioral variable (confrontational anxiety) subject to influence by EI.

This pilot study has shown a trend toward an association of three moderating variables with intensity of confrontational anxiety experienced. This study found that nurses with high confrontational anxiety scores scored significantly lower in the ability to regulate emotion; they worked in teams with lower self-awareness (team self-evaluation) and lower ability to regulate team member behavior (confronting members who break norms).

Regulation of emotion is a personal competency of EI and is concerned with measuring an individual’s ability to regulate his/her emotion. Study findings showed a trend toward higher confrontational anxiety scores in participants reporting low scores in the ability to regulate their emotion. The ability to regulate emotion promotes well-being and emotional and intellectual growth. Individuals competent in regulating emotion have better control over their negative states (confrontational anxiety); therefore, theoretically, they experience less confrontational anxiety than individuals with an incompetent emotion regulation ability.

Confronting members who break norms and team self-evaluation are subscales of the GECQ. Confronting members who break norms measures shared values (norms) within the group that promote proactive, constructive confrontation of inappropriate member behavior (NNH). Bartholomew’s research found that nurses fear confrontation and therefore hesitate when faced with conflict. Conflict avoidance has been shown to lead to hostility. Thematic analysis revealed that 16 of 33 nurses attempted to reconcile NNH by avoiding or ignoring inappropriate behavior. Conflict avoidance is an indicator of incompetent rules of conduct governing confrontation of inappropriate member behavior. By improving constructive rules of conduct, the group can learn to confront NNH in a competent manner. Confrontation competency promotes group trust, safety, and appropriate interactions. In theory, competency in this norm places NNH in a more proportionate status of emotional challenge that can be dealt with in a caring and constructive manner rather than becoming a destructive cycle.

Team self-evaluation measures the ability of team members to evaluate themselves within the context of the group. When a group is competent in this norm, several factors, stemming from the safe environment, are exemplified. Team self-evaluation encourages behavior that evaluates and promotes awareness of strengths and weaknesses, needs, preferences, and resources. This norm allows for evaluation of habits and behaviors that may be counterproductive. NNH is an example of counterproductive behavior within a group. When
groups lack competency in this norm, members do not feel safe to question or evaluate counterproductive behavior (NNH).

This study showed an important trend. It was found that nurses reporting a work environment lacking norms to address inappropriate behavior at two levels—group member regulation and group self-awareness—had statistically significant higher confrontational anxiety scores. The groups not only lacked rules of conduct to confront inappropriate behavior, but also lacked rules governing evaluation of group habits and behavior. In other words, NNH was avoided on two levels. It was not safe to evaluate (promote awareness) NNH or confront (regulate) it. Confrontational anxiety associated with these incompetent norms was high.

The study was underpowered to answer the third question: “Will there be a difference between active duty and civilian confrontational anxiety scores?” Although there was an indication of a trend toward civilian RNs having higher confrontational anxiety scores, it remains inconclusive.

**Implications**

The study showed a trend toward participants reporting high confrontational anxiety to also report low scores in three subscales—ability to regulate their emotion, incompetent rules to confront inappropriate behavior, and a decreased ability to evaluate counterproductive habits and behaviors. Study trends implied a need to develop individual and group EI to encourage competent regulation of emotion at the individual level, competent regulation of group member behavior through constructive confrontation, and competent group self-awareness through evaluation of group effectiveness, habits, and behaviors.

Regulation of emotion is a personal competency of EI. Mastery over this ability, achieving competence, improves control over negative states such as anger and in theory leads to improved interactions with others. Confronting members who break norms and team self-evaluation are norms of group member regulation and awareness. Groups mastering competency in these abilities have in place norms for improving the open discussion of problem behaviors and confronting them in a caring and constructive manner. In theory, improving these two norms will lead to decreased conflict avoidance and therefore will decrease NNH through conflict resolution (appropriate evaluation and confrontation).

Table 4 shows the critical impact individual and group EI exert upon the stress response. The stress response begins with a stimulus (A), in this case a verbal outburst. The recipient becomes aware of the outburst (B) and as the input is integrated, anxiety occurs (C). EI (X and Y) influences awareness (perception), integration, and action taken (D). The action taken then adds to the group’s shared beliefs/behavioral norms (E). These shared norms contribute to the emotional competency of the group (Y). This is a cycle of emotion and action. Implementing methods to increase emotional intelligence and group emotional competence will improve constructive influence at this critical time (B, C, and D) and theoretically reduce confrontational anxiety and modify/redirection the action taken, securing a more positive, constructive outcome (reduce NNH).

**Limitations**

During the course of this pilot study, from protocol development through data analysis, some limitations were exposed. Participant education level was representative of some but not all nursing work cultures and therefore posed a limiting factor for the study. Other limitations of the study included vulnerability of participants (retaliation), vulnerability of the nursing profession (use of the results to disparage the profession), small sample size, insufficient perianesthesia nurse participants, length of questionnaire, and failure to perceive the unique vulnerability of the LPNs.

**Future Research**

Based on the findings and limitations of this study, suggestions to expand and improve the current NNH body of knowledge, through web-based data collection, include: (1) Replicate the study with an increased sample size, (2) increase the sample size by including additional military and civilian hospitals to determine generalizability, (3) conduct a nationwide survey of perianesthesia nurses exclusively, (4) conduct a nationwide study using only the WLEIS, GECQ, and the CAS to
increase the quantitative data analysis, (5) analyze unit-specific differences, (6) analyze gender differences, (7) conduct a study to examine the effect of “others-awareness” on peer review as a valid performance evaluation tool, and (8) conduct an outcomes study to examine the effects of social and emotional learning programs on regulation of emotion, confronting members who break norms, and team self-evaluation in the reduction of NNH.

Conclusion

Because nurses, including those working in the peri-anesthesia setting, interact frequently with others, they are exposed to emotion resulting from interactions. Managing emotion is a critical skill directing the outcome of interactions with others. A group’s emotional competency is reflected in the group’s culture (behavior). The culture of each nursing unit (team) exemplifies that particular unit’s group emotional competence. The participants of this study were RNs, representing multiple nursing units, employed by a military hospital in the Pacific Northwest. Although study findings validated Bartholomew’s research that nurses fear confrontation and need to improve team-building skills, further research is required to determine generalizability of the pilot study findings. Therefore, study findings are of interest to, but may not be representative of, perianesthesia nurses or nurses in general.

Although inconclusive because of the small sample size, this pilot study has shown a trend toward high confrontational anxiety scores being associated with low individual and group EI (specifically regulation of emotion, confronting members who break norms, and team self-evaluation). This trend suggests that a commitment to improving competency in these three subscales may be a needed intervention to improve group member awareness, regulation, and interactions. In theory, confrontational anxiety and NNH can be reduced by gaining personal and group competency by learning to regulate emotion through personal growth; encouraging behavior that seeks out awareness of and promotes questioning, and exploring habits and behaviors that work and do not work for the group; and empowering group members with proactive skills to speak up when a group member is “out of line,” allowing for constructive confrontation of inappropriate behavior. Thematic analysis found that 100% of participants valued and expressed a desire for effective teamwork. Promoting growth in EI leads to emotionally competent groups. When groups are emotionally competent, they build effective teams that exhibit positive characteristics such as trust, effectiveness, and an ability to network. These characteristics are of value to perianesthesia nurses and to nurses in general because according to researcher Kathleen Bartholomew, team building was recognized as a key factor in reducing NNH.

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