The Effect of Relational Aggression Training on New Emergency Department Nurses

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The Effect of Relational Aggression Training on New Emergency Department Nurses

Submitted in Partial Fulfillment of the Requirements for the Degree of Doctor of Nursing Practice at the University of Kentucky

By

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Lexington, Kentucky

College of Nursing

2022
Abstract

BACKGROUND: Relational aggression (RA) in nursing is widespread. One group often at risk for exposure to RA is the newly licensed nurse. RA can lead to a negative work environment which can cause poor patient outcomes and high nurse turnover.

PURPOSE: The purpose of this study was to evaluate the effects of an educational program on RA in the emergency department with newly licensed registered nurses. This was conducted using one pre and two post surveys. The surveys evaluated the nurses’ knowledge of RA self-awareness before and six weeks after an educational session.

METHODS: This was a single-site, single-unit pretest posttest study including 12 nurses working in the University of Kentucky Emergency Department. The educational program included didactic interactive subject interaction guided by prepared scenarios. The participants received written materials for future use following the formal education. The study was conducted December 2021-January 2022 after IRB approval.

RESULTS: Overall, no statistically significant change in the NAQ-R was found but there was a statistically significant change in the person-related questions ($p = 0.05$). There was also a statistically significant increase in perceived understanding of relational aggression ($p = 0.10$).

DISCUSSION: Due to the sample size and survey response, the results of this study are limited. Although the changes were small, there was an increase in most areas from the pre-survey to the post-survey.

CONCLUSION: It is recommended that this study be repeated with a larger group. If the results are statistically significant, it could be expanded within the enterprise and beyond.
Acknowledgments

I would like to recognize and thank my DNP advisor, Dr. Karen Stefaniak for her constant support through my entire journey through the DNP program. She was always available to give advice and was a terrific mentor. Dr. Patricia Howard, DNP committee member, has always been someone I have admired for her leadership in emergency nursing within my organization as well as nationally through the Emergency Nurses Association (ENA). Dr. Cheryl Dellasega, for sharing her work with me, meeting with me to discuss my project, and reviewing my small study. Lastly, Dr. Matthew Proud, DNP committee member, for being a mentor as I walked through this journey and allowing me to complete some of my clinical hours along his side.
Dedication

This project is dedicated to every nurse that has been victim of relational aggression. I truly hope this small study is a step in the right direction for change within my organization and to change the stigma of nursing and the age-old adage of “nurses eat their young”.

This work and my entire DNP journey are also dedicated to my husband and three children that have been supportive and understanding as I took time away from them to complete this, my 3rd and final nursing degree. My husband handled the house as I traveled to complete clinical hours, worked a crazy work schedule to allow more time for my studies, and spent countless hours behind my computer screen.

Lastly, to my mother-in-law and my sister. They both are the best cheerleaders and kept me motivated throughout this journey. None of what I accomplished could have been done without these amazing people in my life.
# Table of Contents

Abstract........................................................................................................................................1
Acknowledgements.......................................................................................................................2
Dedication.....................................................................................................................................3
Background/Significance...............................................................................................................6
Current evidence-based interventions/strategies.................................................................8
Purpose/Objectives.....................................................................................................................8
Theoretical Framework...............................................................................................................9
Synthesis of the Evidence.........................................................................................................10
Current State, Desired State and Gaps in Practice..............................................................12
Design and Methods.................................................................................................................13
  Setting.....................................................................................................................................13
  Sample.....................................................................................................................................14
  Procedures...............................................................................................................................14
Data Analysis.............................................................................................................................15
Results........................................................................................................................................15
Discussion.................................................................................................................................17
  Limitations..............................................................................................................................18
  Recommendations................................................................................................................18
Conclusion.................................................................................................................................19
References.................................................................................................................................20
List of Tables

Table 1: Summary of nurse demographic characteristics ................................................. 25
Table 2: Changes in NAQ-R over time .............................................................................. 25
Table 3: Changes in Awareness questionnaire over time .................................................. 26

List of Figures

Figure 1: Percent responding yes to Gossip ................................................................. 27
Figure 2: Percent responding yes to Cliques ................................................................. 27
Figure 3: Percent responding yes to Intimidation ......................................................... 28
Figure 4: Percent responding yes to Humiliation ......................................................... 28
Figure 5: Percent responding yes to Cyber RA ............................................................ 29

List of Appendices

Appendix A: Negative Acts Questionnaire-Revised (NAQ-R) ..................................... 30
Appendix B: Demographic Questionnaire .................................................................... 31
Appendix C: Awareness Questionnaire ....................................................................... 33
Appendix D: Prevalence Questionnaire ....................................................................... 34
The Impact of Relational Aggression Training on New Emergency Department Nurses

Background & Significance

There are several terms that are used to describe workplace bullying including horizontal violence, lateral violence and relational aggression (RA.) While all of these terms can apply, that which is most applicable in the nursing professional environment is relational aggression (Dellasega, 2019). Relational aggression (RA) is defined as a type of bullying that has various forms of psychological (rather than physical) abuse and includes behaviors such as gossiping, withholding information and ostracism. The American Nurses Association (ANA) has further described RA as to specify that the intent of such behavior is to “humiliate, offend and cause distress to the recipient” (ANA, 2015). This type of violence appears in different forms of psychological rather than physical trauma.

These behaviors can occur toward each other and toward those less powerful than themselves. A population most at risk for relational aggression is newly licensed nurses (D’Ambra & Andrews, 2014). One challenge facing the nursing profession is how to identify, expose and eliminate these behaviors from work environments.

RA can occur at any hospital and in any department, but this study focuses on new nurse interns in the emergency department at the University of Kentucky. RA can lead to negative outcomes to patients and healthcare institutions (Dellasega et. al, 2014). The U.S. has a nursing shortage and high turnover and according to the NSI National Health Care Retention & RN Staffing Report (2021), the U.S. has nearly a 19% nurse turnover rate which has increased by 2% in just the last two years. In addition, emergency department nurses have some of the highest turnover rates compared to other areas of the hospital. Since 2016, the average hospital has turned over 83% of their RN workforce (NSI National Health Care Retention & RN Staffing Report, 2021).
Report, 2021). While the average turnover and vacancy rates are lower than that national average, recent trends are concerning at UK Healthcare. Increased turnover occurs in unhealthy work environments including those with high incidences of RA. Work environments which are positive, nurturing, and supportive experience lower turnover rates (Anusiewicz et al., 2019). The prevention of RA is an important strategy in providing and nurturing a healthy work environment.

Although RA can occur during any stage of a nurse’s career, this project focuses on newly licensed nurse since they are vulnerable and in a position of less power. According to Roberts Oppressed Group Behavioral Model (1983), oppressive behaviors are characterized as the result of efforts to control the behavior of subordinates by those in positions of power (or more experience). New nurses are often described as an oppressed group because they are often competing for control with experienced nurses, physicians, and nurse leaders. This power conflict may result in RA. The Joint Commission (TJC, 2016) reports that 44% of all nurses have experienced bullying but other researchers have reported this as high as 90%, especially among new nurses (Anusiewicz, 2019).

High rates of nurse turnover are a large problem for most hospitals. As many as one-third of novice nurses may leave the profession because of relational aggression. This high rate of novice nurse turnover impacts the ability of an organization to deliver quality, cost-effective patient care (D’Ambra & Anderews, 2014). Frequent turnover causes staff dissatisfaction and costs the hospital thousands of dollars to orient a new nurse. According to Nursing Solution, Inc (2021), the average cost of turnover for a staff nurse is $40,038 resulting in the average size hospital losing $5.1 million per year. Each percent change in nurse turnover costs/saves an average hospital $270,800 per year. The issue of turnover needs to be addressed especially in the
current environment of high RN vacancy rates. In 2020, most hospitals had a 10% vacancy rate (NSI National Health Care Retention & RN Staffing Report, 2021). In addition to the concern of cost related to RA, a toxic work environment where RA is prevalent, can have a negative impact on patient outcomes. When nurses are unhappy at work, it can lead to a wide variety of negative patient consequences. The Institute of Medicine (IOM) acknowledged the link between a nurse’s work environment and patient outcomes (2021). Further, this report explains that nurses that are engaged and participate in decision making opportunities are associated with better patient outcomes (Loeppke et.al, 2017). In addition, IOM estimates that approximately 200,000 patients die each year due to a medical error. Nearly 80% of these errors have been tied to communication and relational aggression creates an environment where poor communication is the prevalent.

Current evidence-based interventions/strategies

There is no clear evidence that education about horizontal violence or RA is a routine part of newly registered nurses’ orientation, nor is there evidence that it is taught in undergraduate nursing curriculum (Roberts, 1996). What is known however, is education about RA and strategies to prevent RA is minimal during orientation to UK Healthcare and has not been formally evaluated for their effectiveness.

Purpose and objectives

The purpose of this project is to create and implement an educational program for newly licensed nurses in the emergency department and to evaluate the effects of RA training on them.

Specific objectives include:
1) Provide new nurses the skills to manage exposures to acts of RA with relational aggression.

2) Compare pre and post intervention survey results to evaluate if an educational intervention is effective.

3) Give new nurses time to reflect on current work environment and recognize if RA is occurring, when to intervene and identify RA behaviors in self, if applicable.

These objectives will be shown through a pre and post survey determining nurses’ confidence that they have the skills needed to manage RA. Individuals have more power to change their own actions, attitudes and interactions with each other rather than changing the behaviors of others. Providing education about RA will hopefully lead nurses to be aware and if needed, modify their behavior to support a more professional, collaborative and supportive environment.

**Theoretical Framework**

The model used to guide this project was the Swanson’s Theory of Caring (Swanson, 1991). According to Swanson, “caring is a nurturing way of relating to a valued other toward whom one feels personal sense of commitment and responsibility” (p.165). Swanson’s Theory was originally derived from research with women experiencing miscarriage, those with children in the neonatal intensive care unit (NICU) and pregnant women in high social risk but has since been applied to many different populations. It relates to novice nurses as it focuses on easing transitions. The focus on easing transitions by knowing-seeking cues and avoiding assumptions, being with-being there (emotionally present), doing for others as he/she would do for self, enabling by supporting/allowing feedback and maintaining belief by going the distance for others.
and helping them get through the event (Swanson, 1991). These five components are key to understanding RA and helping the novice nurse navigate through sometimes difficult work environments.

**Synthesis of the Evidence**

New graduate nurses are subject to RA in the work environment. Nurses need to be armed with the skills to deal with these difficult situations. While national organizations such as TJC (2016) and the American Nurses Association (2015) have recognized that bullying, incivility and workplace violence are problems and have published zero tolerance position statements, the problems continue to be evident in many nursing work environments.

An integrative review was conducted to identify, appraise and examine literature concerning RA. Search terms used were bullying, new nurses, relational aggression and incivility. The databases were explored were CINAHL and Medline. There were 149 articles found. The search was further narrowed down to 38 excluding articles older than 10 years and those not published in peer reviewed journals. While consideration was made to include only the most recent articles from the last ten years, three articles were older and included due to their significance on future research and serve as benchmarks for research. Articles that related to “top-down bullying” or bullying from other disciplines such as physicians were not included. Articles from the United States and other countries were included because the problem occurs in all healthcare settings.

Several studies examined the prevalence of RA (Anusiewicz, 2019, Vogelpohl (2013), & Difazio (2013), but they did not address intervention or prevention. Bardakçı (2016) and Wilson et.al (2011) reviewed prevalence and how it impacts burnout and the impact on nurses leaving the profession. Dellasega, (2019), Razzi (2019) and Thompson (2016) studied interventions and
if those interventions decreased relational aggression. This intervention included online education modules about RA. Each of these studies were small with new tools that were being evaluated but there were some positive results related to awareness of RA and the frequency that RA was occurring at the sites studied.

An intervention that should be considered is early recognition and cognitive rehearsal training (Rizzo, 2019) during the first year of professional nursing practice. The intended outcomes of cognitive rehearsal training are increased awareness and skills to work with those that cause RA. Other possible interventions include adding awareness training during undergraduate nursing programs (Vogelpohl, 2013). Dellasega (2014) suggests that it is important to complete a survey of prevalence to determine the incidence of RA in the workplace. In addition, Egues and Leinung (2013), found workshops for nurses providing education and awareness of RA were effective in preventing, aided in intervening and provided details for reporting. They explained it is important to recognize the roles in bullying including the victim, the witness and the perpetrator. They evaluated their education with pre/post tests and written evaluations.

Bambi et al (2017), completed a literature review on the topic of RA and found “zero-tolerance” and passive dissemination of information are ineffective. They did find limited scientific evidence that other education methods such as creative in person sessions rather than passive educational methods, increase awareness of the problem, provide nurses tools to communicate when faced with RA and how to intervene if such behavior is witnessed. Further, Sanner-Steiner and Ward-Smith (2017), remind undergraduate nurse educators that they need to understand RA and its impact on the nursing profession and patient outcomes in clinical practice
settings. These topics should be formally included in curriculums. The authors also suggest this education continues after graduation as continued education in the workplace.

**Current state, Desired State and Gaps in Practice**

Currently, at the University of Kentucky emergency department, new graduate nurses are provided an intern class that involves 4-6 months of intense training including online modules focusing on clinical care, nurse residency meetings and project development and orientation guided by a preceptor and educational face to face classes/certifications. Currently no RA training is included in the intern program. Upon review of the evidence, RA is a problem within healthcare. Relational aggression can lead to nurses transferring departments, leaving the workplace, or leaving the profession. (Laschinger, Finegan, & Wilk, 2009). Nurse turnover is expensive and can lead to poor patient outcomes (D’ambra, 2014). It is desired that new nurses obtain the skills needed to address RA and decrease its prevalence. While there is evidence to describe the prevalence and the impact on nurses, there are few studies that provide an intervention to identify and respond to RA among new nurses in the ED.

This project addresses the gaps by providing an intervention. Data were collected pre intervention as well as two times post intervention to compare the three points. The rationale for having three time points include: pre-intervention to assess prevalence and awareness prior to education, immediately post intervention to assess knowledge and see if there is an immediate increase with awareness and the six-week survey was to assess prevalence and awareness after time in the department.

The intervention was conducted via zoom due to Covid-19 restrictions on 1/24/2022 during the nurse residency meeting for University of Kentucky emergency department nurse
Interns. Nineteen nurse interns in the residency group participated in the virtual educational session.

**Design and Methods**

**Setting**

The University of Kentucky Medical Center is a large referral academic medical center servicing the Commonwealth of Kentucky. It is a Magnet nursing designated facility. In addition, it is a Level 1 trauma center for both adults and pediatrics, a comprehensive stroke center, and has a Level IV NICU. The identified core values for the hospital system are diversity, innovation, respect, compassion, and teamwork. In addition to these core values the department of nursing incorporated “a culture of safety” to include a healthy work environment into the strategic goals for 2020-2022. This project aligns with these values and strategic goals. As described by the AACN (2021), a healthy work environment improves overall health of the nurses, better nursing and staff retention and less moral distress.

Facilitators for the study included staff development team, the unit nurse manager and enterprise director for Emergency Services. The stakeholders for this project were the new graduate registered nurses, the emergency department leadership team and ultimately patients and families. Other stakeholders include the staff development team for the emergency department. Leadership support was valuable in providing time for the nurses to participate in this project which was key to the feasibility of the project. Some of barriers included scheduling logistics with the new graduates, the continued challenges of Covid-19 and the inability to conducting in-person training.
Sample

The target population was new nurses hired as part of the nurse intern program at the Chandler emergency department in June 2021. All new RNs, including ADN and BSN graduates were included. All other nurses were excluded from participating. Of the 19 nurses in this newly hired group, 12 participated in the pre-survey, five in the first post survey, and four in the second.

Procedure

IRB approval was obtained in Sept. 2021. The intervention was a RA education program which was required for all in the new nurse intern cohort. This education program included both a didactic and an interactive component with simulated scenarios applicable to the participants work environment. A copy of the power point slides was provided with information for future reference. Relational aggression had not previously been a routine component of newly registered nurses’ orientation in this setting. This program included a pre- and post-intervention survey which assessed demographic data, completed only at pre-intervention (Appendix B), Prevalence questionnaire (Appendix D), Awareness questionnaire (Appendix C) and The Revised Negative Acts Questionnaire (NAQ-R) (Staale, 2009), (Appendix A). Permission to use the NAQ-R tool was obtained prior to IRB approval. This tool measures bullying in the workplace. The NAQ-R is a 22-item instrument that measures in three realms; work related-bullying, person-related bullying and physically intimidating bullying.

The director of emergency services determined the content was important to be included in the mandatory intern program, but completing the surveys was voluntary. Prior to asking the participants to complete the survey, the project was explained to all intern participants and the
informed consent was obtained by those volunteering to participate. The surveys were anonymous using Red Cap, which is a secure, web-based application, and no names or identifiers were collected.

Resources granted were paid time for participants to attend the educational sessions and complete the surveys. Other resources used were access to space and technology equipment for the intervention.

**Data analysis**

Descriptive statistics, including means and standard deviations or frequency distributions, were used to summarize the demographic data. NAQ-R and RA frequency and typing were examined using one-way Analysis of Variance (ANOVA) with cross-tabulation comparing pre-survey and two post surveys for their statistical significance. All data analysis was conducted using SPSS, version 28 with an alpha level of .05.

**Results**

Out of the 19 nurse interns who were eligible to participate, 12 completed the pre-survey between January 17, 2022 and January 23, 2022. The mean age of participants was 26 years old (SD =4.8) and all were Caucasian, most had a bachelor's degree (67%) with the others having an associate degree (33%). Nearly all were childless (83%) and one-third (33%) reported they provided care of a relative either in or outside their home on a regular basis. Over half were married or partnered (25%) or living with a significant other (33%) (see Table 1). Of the 12, 10 were female and two were male. None worked day shift (7a-7p) and 11 worked night shift (7p-7a) and only one worked evening shift (3p-3a).
The NAQ-R (appendix A) results showed a statistically significant change in the person-related realm of the survey \( F(p) = 3.61, p = .047; \) see Table 2] but was not significant in the work-related or physical acts of harm categories. For person-related aggression, there was a significant change from baseline in both follow-up surveys. Measured on a 5-point Likert response ranging from 1) ‘Strongly disagree’ to ‘5) Strongly agree’, there was a significant increase in perceived understanding RA from pre \((M = 3.42, SD = 1.17)\) to post \((M = 4.80, SD = 0.48, p = .012)\), “I feel I have a good understanding of what RA is” \((pre m = 3.42, SD = 1.17 vs. post m = 4.80, SD = .48; p = 0.10)\). Although there was an increase in the other three knowledge questions, the differences were not statistically significant.

The Awareness questionnaire (Appendix C) revealed a statistically significant change from pre-survey to post surveys for the question, “I feel I have a good understanding of what RA is”. It changed from 3.42(SD 1.165) to 4.8(SD .447). Other questions also increased but were not statistically significant.

Next, the Prevalence questionnaire (Appendix D) related to gossiping, cliques, intimidation, manipulation, or cyber related RA was reviewed. On the pre-survey, most participants had witnessed gossiping (75%), 25% had been victim of gossiping and only 17% admitted to participating (Figure 1). The results related to cliques (Figure 2) on the pre-survey indicated 75% witnessed, none admitted to participating in and 17% admitted they have been a victim of a clique. For intimidation, (Figure 3) 25% had been victim, 75% had witnessed and none of participants claimed they had participated in this behavior. Luckily, for manipulation, none have participated, none had been victim but 33% had witnessed. For humiliation, (Figure 4) none had been victim, 42% had witnessed it, but none had participated in this behavior. Lastly
for cyber-RA, (Figure 5) none reported being victim or participating but 17% reported that they have witnessed this activity.

When comparing the Prevalence questionnaire in the post interventions surveys, there were several changes. Though these changes were not statistically significant, they are worth mentioning. For gossiping, it is noted witnessed and participated increased, 100% and 40% respectively. Cliques resulted in little change, but intimidation increased to 60% for both witnessed and victim. Manipulation increased to 20% for victim and 60% for witnessed. Humiliation increased to 40% for victim and 60% for witnessed. Minimal change/frequency for cyber related aggression was found.

**Discussion**

This study was designed to analyze the current level of self-awareness related to RA and to determine if an educational intervention would be successful in increasing awareness and knowledge concerning RA. As nurses face critical shortages in staffing, nurses need to take control of the work environment including increasing self-awareness as victim or a perpetrator of RA and appreciating and the importance of intervening when witness to this type of behavior.

These results were consistent with the findings of Egues and Leinung (2013) in that exposure to practical approaches to curtailing RA is effective. In person sessions can be an effective method of educational disbursement. Like the Egues and Leinung study, it is important to address issues whether you are the victim, the bystander, or the perpetrator.

Self-awareness of the emotional environment of the workplace can have a significant impact on health and well-being of nurses and further health and safety of the patients they care
Hospitals reporting a healthy work environment have decreased patient mortality and increased patient satisfaction (Dellasega, et al, 2014). Thompson (2019) reports that poor emotional environments can lead to vague health problems in nurses such as headaches, insomnia and fatigue and can lead to poor coping mechanisms like alcohol use, missing work, or leaving their position.

As RA becomes an area of importance for hospitals, expanding educational offerings, such as the one in this study, can be helpful. However, due to the small sample size and limited participation in the surveys, evaluation would need to continue with expansion of the program. A possible next step would be to expand to an entire nurse residency class from several departments, not just the emergency department.

Limitations

Several limitations were identified as part of this study. First, the study group was small and participation was low. Only 12 completed the pre-survey and five completed the first post survey and only four did the last survey. Also, the study was conducted in one department. The sample was all Caucasian participants. Also, the study relies on self-reflection and therefore, it may be difficult to ascertain how many of the participants are actual perpetrators. Due to Covid-19 restrictions, the educational session was conducted via zoom and future sessions may benefit from in-person activities. In-person sessions would support expanded instructional formats including real life scenarios including role play.

Recommendations

Recommendations for future studies related to RA would include a larger scale, across varied clinical settings. If the program is successful with nurse residency groups, it can be
expanded to other groups within the enterprise such as nurse preceptors, support staff, or management. It would also be helpful to compare different work environments and analyze the differences in occurrences of RA. For example, is RA higher in ICU settings versus post-partum and why? Incentivizing the survey participants with a drawing for a gift card would potentially increase completion of all the surveys. The nurses in this university setting are frequently asked to participate in research and surveys. Survey fatigue may have minimized participation; therefore, facilitated focus groups and interviews should be considered in future research.

Conclusions

Relational aggression can occur in any workplace, but new nurses are especially at risk for becoming victims of this behavior. Education and awareness are key to stopping the cycle. Programs such as the one conducted in this study can make a positive difference. Although the results were limited, this study provides a framework for future research.
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https://doi-org.ezproxy.uky.edu/10.1097/NNA.0b013e3182346e90
Table 1. Summary of nurse demographic characteristics (N = 12)

<table>
<thead>
<tr>
<th></th>
<th>Mean (SD); range or n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>25.8 (4.8); 22 – 35</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>10 (83.3%)</td>
</tr>
<tr>
<td>Male</td>
<td>2 (16.7%)</td>
</tr>
<tr>
<td>Race/ethnicity</td>
<td></td>
</tr>
<tr>
<td>White, non-Hispanic</td>
<td>12 (100.0%)</td>
</tr>
<tr>
<td>Other</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>Highest level of education</td>
<td></td>
</tr>
<tr>
<td>Associate degree</td>
<td>4 (18.2%)</td>
</tr>
<tr>
<td>Bachelors degree</td>
<td>8 (66.4%)</td>
</tr>
<tr>
<td>Work schedule</td>
<td></td>
</tr>
<tr>
<td>Regular evening shift (3p-3a)</td>
<td>1 (8.3%)</td>
</tr>
<tr>
<td>Regular night shift (7p-7a)</td>
<td>11 (91.7%)</td>
</tr>
<tr>
<td>Relationship status</td>
<td></td>
</tr>
<tr>
<td>Married or partnered</td>
<td>3 (25.0%)</td>
</tr>
<tr>
<td>Living with significant other</td>
<td>4 (33.3%)</td>
</tr>
<tr>
<td>Never married</td>
<td>5 (41.7%)</td>
</tr>
<tr>
<td>Dependents under the age of 18?</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>10 (83.3%)</td>
</tr>
<tr>
<td>1</td>
<td>1 (8.3%)</td>
</tr>
<tr>
<td>2</td>
<td>1 (8.3%)</td>
</tr>
<tr>
<td>Provide care at least 3 hours per week to an adult relative inside or outside your home?</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>4 (33.3%)</td>
</tr>
<tr>
<td>No</td>
<td>8 (66.7%)</td>
</tr>
</tbody>
</table>

Table 2. Changes in NAQ-R over time

<table>
<thead>
<tr>
<th></th>
<th>Time 1 Mean (SD)</th>
<th>Time 2 Mean (SD)</th>
<th>Time 3 Mean (SD)</th>
<th>F (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAQ total score</td>
<td>1.32 (0.37)</td>
<td>1.54 (0.40)</td>
<td>1.54 (0.40)</td>
<td>0.88 (.43)</td>
</tr>
<tr>
<td>Work-related</td>
<td>1.33 (0.3)</td>
<td>1.42 (0.41)</td>
<td>1.43 (0.44)</td>
<td>0.18 (.84)</td>
</tr>
<tr>
<td>Physical</td>
<td>1.31 (0.46)</td>
<td>1.33 (0.58)</td>
<td>1.33 (0.58)</td>
<td>0.01 (.92)</td>
</tr>
<tr>
<td>Person-related bullying</td>
<td>1.31 (0.42)a</td>
<td>1.83 (0.49)b</td>
<td>1.83 (0.49)b</td>
<td>3.61 (.05)</td>
</tr>
</tbody>
</table>

Note: Means with different letters significantly differed in post-hoc analysis.
Table 3. Changes in Awareness questionnaire over time

<table>
<thead>
<tr>
<th></th>
<th>Time 1 Mean (SD)</th>
<th>Time 2 Mean (SD)</th>
<th>Time 3 Mean (SD)</th>
<th>F (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel I have a good understanding of what RA is</td>
<td>3.42(1.17)</td>
<td>4.8(0.48)</td>
<td>4.8(0.48)</td>
<td>6.004(0.10)</td>
</tr>
<tr>
<td>I feel, as a bystander, I have the tools and knowledge to effectively handle RA situation</td>
<td>3.5(1.09)</td>
<td>4.2(0.84)</td>
<td>4.2(0.84)</td>
<td>1.37(0.28)</td>
</tr>
<tr>
<td>I feel, as a victim, I have the tools and knowledge to effectively handle RA situation</td>
<td>3.25(1.14)</td>
<td>4.00(1.23)</td>
<td>4.00(1.23)</td>
<td>1.11(0.35)</td>
</tr>
<tr>
<td>I know the appropriate pathway to report instances of RA</td>
<td>3.42(1.17)</td>
<td>4.20(0.84)</td>
<td>4.2(0.84)</td>
<td>1.55(0.24)</td>
</tr>
</tbody>
</table>

Note: Means with different letters significantly differed in post-hoc analysis
Figure 1: Percent responding yes to Gossip

![Graph showing percentages for Victim, Witnessed, and Participated in across different times.]

Figure 2: Percent responding yes to Cliques

![Graph showing percentages for Victim, Witnessed, and Participated in across different times.]
Figure 3: Percent responding yes to Intimidation

Figure 4: Percent responding yes to Humiliation
Figure 5: Percent responding yes to Cyber RA

![Graph showing percent responding yes to Cyber RA]

- **Victim**
- **Witnessed**
- **Participated in**

Time 1, Time 2, Time 3
Appendix A
Negative Acts Questionnaire – Revised (NAQ-R)

These statements describe your interactions with your coworkers. For each statement please rate the frequency with which you experience the following interactions by CIRCLING the appropriate number.

<table>
<thead>
<tr>
<th>Daily</th>
<th>Weekly</th>
<th>Monthly</th>
<th>Occasionally</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIRCLE ONE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Someone withholding information which affects your performance 1 2 3 4 5
2. Being humiliated or ridiculed in connection with your work 1 2 3 4 5
3. Being ordered to do work below your level of competence 1 2 3 4 5
4. Having key areas of responsibility removed or replaced with more trivial or unpleasant tasks 1 2 3 4 5
5. Spreading of gossip and rumors about you 1 2 3 4 5
6. Being ignored or excluded 1 2 3 4 5
7. Having insulting or offensive remarks made about your person, your attitudes, or your private life 1 2 3 4 5
8. Being shouted at or being the target of spontaneous anger 1 2 3 4 5
9. Intimidating behaviors such as finger-pointing, invasion of personal space, shoving, blocking your way 1 2 3 4 5
10. Hints or signals from others that you should quit your job 1 2 3 4 5
11. Repeated reminders of your errors or mistakes 1 2 3 4 5
12. Being ignored or facing a hostile reaction when you approach 1 2 3 4 5
13. Persistent criticism of your errors or mistakes 1 2 3 4 5
14. Having your opinions ignored 1 2 3 4 5
15. Practical jokes carried out by people you don’t get along with 1 2 3 4 5
16. Being given tasks with unreasonable deadlines 1 2 3 4 5
17. Having allegations made against you 1 2 3 4 5
18. Excessive monitoring of your work 1 2 3 4 5
19. Pressure not to claim something to which by right you are entitled (e.g. sick leave, holiday) 1 2 3 4 5
20. Being the subject of excessive teasing and sarcasm 1 2 3 4 5
21. Being exposed to an unmanageable workload 1 2 3 4 5
22. Threats of violence or physical abuse or actual abuse 1 2 3 4 5

Used with permission (Einarsen, Hoel, & Notelaers, 2009)
## Appendix B
### Demographic Questionnaire

**Background Information** (Please write answer in space provided) This information is necessary for our study.

What is your age? ____________

What is your gender? (Check one)
- 1) Female
- 2) Male

How would you describe your race? (Check all that apply)
- [ ] White
- [ ] Black or African American
- [ ] American Indian or Alaskan native
- [ ] Asian
- [ ] Native Hawaiian or other Pacific Islander
- [ ] Other [__________]

Are you Hispanic or Latino?
- 1) Yes
- 2) No

Were you born in the United States?
- 1) Yes
- 2) No

What is the highest level of education you have completed? (Check one)
- 1) Some high school
- 2) High school diploma or GED
- 3) Some college or associate’s degree
- 4) Bachelor’s degree
- 5) Graduate degree

How long have you worked in your current job?
- Years ________________ Months___________

How many hours do you currently work per week? _____ In hours

Which of the following best describes your work schedule at this job?
- 1) Variable schedule (one that changes from day to day)
- 2) Regular daytime schedule
- 3) Regular evening shift
- 4) Regular night shift
- 5) Rotating shift (one that changes regularly from days to evenings or nights)
- 6) Split shift (one consisting of two distinct periods each day)
- 7) Other (specify) _______________________

What is your relationship status? (Check one)
- 1) Married or partnered
- 2) Divorced or separated
- 3) Widowed
- 4) Living with significant other
- 5) Never married
<table>
<thead>
<tr>
<th>You and Your Family (Please read each statement and fill in the blank or check the box to indicate your response as it relates to how things really are for you.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>How many dependents do you care for under the age of 18?</td>
</tr>
<tr>
<td>During the past 6 months have you provided at least 3 hours of care per week to an adult relative inside or outside your home? This could include help with shopping, medical care, or assistance in financial/ budget planning.</td>
</tr>
<tr>
<td>1) Yes</td>
</tr>
<tr>
<td>2) No</td>
</tr>
</tbody>
</table>
## Appendix C

### Awareness questionnaire

For each of the following statements, please select level to which you agree or disagree

<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree</th>
<th>Somewhat disagree</th>
<th>Neither agree or disagree</th>
<th>Somewhat agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel I have a good understanding of what Relational Aggression is</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>I feel, as a victim or bystander, I have the tools and knowledge to effectively handle relational aggressive situation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I know the appropriate pathway to report instances of relational aggression</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix D

Prevalence questionnaire

For each behavior listed on the left, select all the roles you have played

<table>
<thead>
<tr>
<th></th>
<th>Victim</th>
<th>Witnessed</th>
<th>Participated In</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gossiping</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cliques</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intimidation</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Manipulation</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humiliation</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cyber Relational Aggression</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Relational Aggression</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>