EXTENDING A BULLYING MODEL TO INVESTIGATE THE ANTECEDENTS OF WORKPLACE AGGRESSION AMONG NURSES

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ABSTRACT

This study extends a workplace bullying model to a wider range of types of workplace aggression, including bullying and types of violence, among nurses. The sample comprised 273 nurses/midwives working in a medium to large hospital in Australia. Ordinal regressions were conducted to assess antecedents of bullying and violence, examining the effects of the Demand-Control Support model and negative affectivity, tenure and shift. Results suggest mechanisms that characterize forms of violence.

INTRODUCTION

High rates of workplace aggression, including bullying and violence, are experienced by nursing staff [7] and linked to negative consequences (e.g., [22], [27]). Further, nurses in hospital settings are argued to be an oppressed group, whereby these settings are influenced by medical hierarchies through which nurses lack power and control [26], increasing their vulnerability.

Studies of nursing staff tend to focus on antecedents of workplace bullying (e.g., [11]), yet antecedents of forms of violence are rarely investigated. Research that examined the antecedents of workplace bullying for nurses and other occupational groups has found that aspects such as job demands, control and social support play important roles [1]. Research has also found that individual factors, such as negative affectivity (NA) [34] and demographic factors, have an impact (e.g., [8]). Thus, it is beneficial to apply work stress/bullying models to workplace aggression that includes bullying and types of violence. Thus, the aim of this study was to test this multi-dimensional model of the antecedents of workplace aggression across forms.

What is Workplace Aggression?

Workplace aggression, as perceived by the victim, can manifest in several forms, including those that are bullying- and violence-related. Workplace bullying can be psychological and/or physical; however, many researchers agree that workplace bullying is primarily psychological, including perceived and/or actual psychological harm [6]. Sources of bullying are typically from within the organization, such as co-workers and/or supervisors.

In contrast, workplace violence is primarily focused on perceived threat or actual physical harm; however, violence can also be psychological. In the hospital context, multiple sources of violence exist, internal or external to the organisation, including violence from co-workers and supervisors, and violence from patients, family and visitors to patients [9]. Examples of types of violence include physical assault, threat of assault, emotional, verbal, and sexual types of abuse [9]. Single and repeated acts are encompassed in the definition of violence.

Given the distinctions between bullying and violence at work, it is worthwhile to examine both forms of workplace aggression to provide greater insight into the similarity or dissimilarity of factors leading to each. Research has tended to focus on the antecedents of one type of aggression, commonly workplace bullying (e.g., [11]), with studies rarely examining both types.

Antecedents to Workplace Aggression

Research into the antecedents of workplace bullying has found utility in the Demand-Control-Support (DCS) model (e.g., [1]). The DCS model has been tested and validated for various occupational groups and outcomes, such as job satisfaction, commitment, and wellbeing [23], including bullying as a stressor (e.g., [1]). These studies highlight the applicability of the DCS model, however, there is limited research that explores these relationships in nurses across forms of workplace aggression, including bullying and violence.

Further, evidence suggests that particular personality traits may also be antecedents to workplace aggression. Specifically, research on workplace bullying has shown that NA can play a significant role [8] [21]. One explanation for this relationship is the view that NA may act as a potential perceptual bias, whereby individuals with high levels of NA perceive behaviours as more personal than they actually are, and so, report greater instances of workplace bullying [21]. Mikkelson and Einarsen [21] discuss this process as a cycle through which an individual is exposed to interpersonal conflict that increases their distress levels, and while distressed, the individual interprets the conflict as negative and personal, leading to increased experiences of negative emotions.

Another explanation of NA as an antecedent of bullying comes from the field of work stress; the stressor creator mechanism [29]. According to this mechanism, individuals with high NA may may be more likely to get into interpersonal conflicts at work and/or perform poorly [29] and NA may create stressors, such as workplace bullying. Given previous findings of an association between NA and workplace bullying, it is plausible that NA has similar mechanisms for other forms of aggression experienced by nurses, such as violence.

Finally, other potential antecedents to workplace aggression are demographic factors where these factors impact the occurrence or perception of aggressive acts. Research has revealed that tenure and work-schedule may alter reports of bullying among nurses (e.g., [4]). Thus, potential demographic effects should be included in analyses of forms of workplace aggression.

This paper aims to investigate the antecedents of workplace aggression in nursing staff, by applying what we know about workplace bullying to other forms of aggression, including workplace violence. This study's hypotheses are that the elements of the DCS model, NA and the demographic factors of tenure and work-schedule will significantly impact reports of workplace aggression.

METHOD

The sample comprised 273 nurses and midwives (27.3%) working at a medium to large hospital in Australia. Participation was voluntary and anonymous.

The frequency of bullying was measured using a single item from Hoel and Cooper [10]. Respondents indicated whether they had experienced bullying at work within the last six months. The response options on the item were 'no', 'yes, very rarely', 'yes, now and then', 'yes, several times a month', 'yes, several times a week' and 'yes, almost daily'. The frequency of violence measure was adapted from the

scale developed by Hesketh et al. [9]. Respondents indicated if in the last five work shifts they had experienced any of the following types of violence: physical assault, threat of assault, emotional abuse and verbal sexual harassment. The response options for each of the items included ‘never’, ‘1 time’, ‘2 times’ and ‘3 or more times’. Each item also asked for the source of violence, which were collapsed to form subscales of internal (supervisor or co-worker) and external (patient or visitor/family member) for each violence type.

Job demands were measured using a scale [2] that asked respondents about the levels of physical and psychological demands their job places on them. There were 11 items on the scale, rated on a five-point Likert scale (from *rarely* to *very often*). The Cronbach’s alpha of job demand was .89. Job control [14] assesses perceptions of control one perceives they have over the demands of their job. The scale has nine items, rated on a five-point Likert scale (from *strongly disagree* to *strongly agree*), with a Cronbach’s alpha of.73. Social support was measured using a scale developed by Caplan et al. [2]. The responses on the items were used to form three subscales of social support: supervisor support, co-worker support and outside work support. Each item was rated on a five point Likert scale (from *don’t have any such person* to *very much*). The Cronbach’s alphas for supervisor support, co-worker support and outside work support were .88, .80 and .81, respectively. The NA scale was from the Positive and Negative Affect Schedule (PANAS) by Watson, Clark and Tellegen [33]. The scale has 10-items with response options rated on a five-point Likert scale from ‘very slightly or not at all’ to ‘very much’, with a Cronbach’s alpha of .77.

Tenure categories included ‘9 years or less’, ‘10-14 years’, ‘15-19 years’, ’20-24 years’, and ’25 years or more’. Work-schedule categories included ‘morning’, ‘afternoon’, ‘night’ and ‘other’ shifts.

RESULTS

To ensure adequate sample sizes across groups, the bullying responses and violence responses were separately collapsed into those who responded ‘no’, ‘yes, rarely’ and ‘yes, frequently’. The frequency of bullying and violence types is presented in Table 1.

Table 1. Frequencies and percentages of bullying and violence responses

Response options	No		Yes, rarely		Yes, frequently	
Workplace aggression	n	%	n	%	n	%
Bullying	167	61.9	53	19.6	50	18.5
Violence						
External physical assault	263	97.0	6	2.2	2	.7
Internal physical assault	266	97.8	3	1.1	3	1.1
External threat of assault	243	90.0	20	7.4	7	2.6
Internal threat of assault	265	98.9	1	0.4	2	.7
External emotional abuse	216	80.9	35	13.1	16	6.0
Internal emotional abuse	199	74.3	47	17.5	22	8.2
External verbal sexual harassment	264	97.8	5	1.9	1	.4
Internal verbal sexual harassment	267	98.9	0	.0	3	1.1

Ordinal regressions assessed the antecedents of bullying and forms of violence. Preliminary checks found no violations of assumptions for regressions. The results of the ordinal regressions are detailed in

Table 2. The likelihood ratio (R^2_L), analogous to the R^2 employed in linear regression, was derived through a two step process outlined in Menard [19].

Table 2. Results of the ordinal regressions for the antecedents of workplace aggression

Independent variables	Bullying	Internal physical assault	External threat of assault	External emotional abuse	Internal emotional abuse	External verbal sexual harassment	Internal verbal sexual harassment
Job control	-.03	-.06	-.02	-.02	-.07*	-.25*	-.24*
Demand	.03	.07	.07*	.08**	.01	-.13	.10
Supervisor support	-.05	-.55	-.06	.08	-.15**	-.07	-.17
Co-worker support	-.07	.25	-.04	.011	-.15**	-.04	.03
Outside work support	-.03	-.06	.03	-.00	.05	.16	.19
Negative affect	.08***	.22	-.01	.03	.01	.20	.03
Job tenure							
9 years or less	.46	16.18***	19.03***	.12	-.62	15.17	15.48
10-14 years	-.29	18.97***	18.87***	-.63	-.49	15.59	.12
15-19 years	.94	19.67	19.98***	.32	.51	.82	.84
20-24 years	-.026	-1.94	19.04	1.03	.17	17.26	17.41
25+ years	-	-	-	-	-	-	-
Work-schedule							
Morning shift	.66*	22.15	-.20	-.28	-.23	.09	.45
Afternoon shift	-.33	2.81	.03	-.09	-.35	16.59	15.79
Night shift	-.29	19.40	-.88	-.46	-.66	-.23	15.44
R^2_L	12.8%	62.0%	7.0%	6.9%	15.4%	36.0%	38.0%

* $p<.05$ ** $p<.01$ *** $p<.001$

DISCUSSION

This paper investigated the antecedents of workplace aggression among nurses, by applying a model from the workplace bullying and stress literature to other forms of aggression, particularly to workplace violence. The results found high levels of bullying (18.5% reported occasional or frequent bullying) and concerning levels of emotional abuse – both internal and external, and external threat of assault (10% reported rare of higher).These levels are worryingly high, confirming prior research on aggression in nursing [7], particularly given the associated consequences (e.g., [22], [27]). These results confirm that workplace aggression is a serious problem in nursing.

Predictors of Workplace Aggression

Contrary to previous research (e.g., [1]) the DCS variables did not predict bullying. Demand did predict external threat of assault and external emotional abuse, which are non-physical forms of aggression from non-employees. Low levels of job control were significantly associated with internal emotional abuse and both internal and external verbal sexual harassment. These results highlight the argument that nurses are an oppressed group with reduced levels of power [26] is predictive of verbal sexual

harassment (internal and external) and internal emotional abuse for those nurses with low job control. These results suggest that job control is an indicator of the more vulnerable nursing staff.

Similarly, while the stress literature emphasizes the potential buffering affects of social support [13], in the context of predicting forms of aggression, lower levels of social support exacerbate or facilitate internal emotional abuse. That is, the potential for internal emotional abuse appears to be enabled under conditions of social isolation, possibly due to the mechanisms of social out-group processes.

A surprising result was the lack of significant results for NA. The results support prior research on NA's role in workplace bullying (e.g., per [8], [21]). NA significantly predicting bullying suggests that NA may be acting through the stressor-creation mechanism [29] where individuals with high NA may be more likely to get into bullying-prone situations at work. However the finding that NA did not predict any form of violence, distinguishes bullying from violence and also weakens the likelihood that the individual can "attract" violence. That is, our findings highlight the extra-individual nature of violence being inflicted upon the victim.

The findings for the demographic variables provide some interesting caveats to the results. When the results were discussed via qualitative processes with representatives from the hospital, the discussants noted (similarly to [27]) that the less qualified staff are more likely to be given the least desirable work on the morning shifts, which may have been interpreted as bullying by those staff and that this informal practice may be the cause of these results. For internal physical assault and external threat of assault the other significant demographic variable was tenure. The loadings indicate an "exposure" effect where the nurses most likely to suffer these forms of violence are those that have the most exposure to them and are working on the hospital equivalent to a "coalface". Finally, there were no significant predictors for these forms of violence, indicating that if these are systematically determined, then they may be by alternate variables (e.g., drunkenness).

Some Initial Characterizations of Workplace Aggression in Nursing

Perhaps the most useful grouping of the types of violence was internally-sourced (i.e., from co-workers and supervisors) versus externally-sourced (e.g., from patients and/or the patients' families). Demand being a significant predictor for external threat of assault and external emotional abuse may indicate a mechanism where the busyness of the nurses under high demands may be perceived by the external party as a lack of attention from the nurse, resulting in the external party's violent behaviour. Thus, management could address this issue by paying attention to managing the work demands of nurses, especially for nurses in areas with substantial external contact and "exposure".

The finding that low job control was associated with verbal sexual harassment, whether internal or external, suggests that control over work may determine situations where violence-as-oppression may occur. These results suggest that sexual harassment may be the form of violence that is most likely to occur in a situation of oppression [26], particularly in a hospital dominated by medical hierarchies. Similarly, this study's results suggest that internal emotional abuse may be enacted through social out-group processes, with a further oppression effect for nurses with less job control being more at risk.

These results suggest some mechanisms to delineate various forms of violence, and highlight mechanisms common across violence types.

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