2014

The influence of bullying on the wellbeing of Brazilian nursing professionals

Silvia A. Nelson
Southern Cross University, silvia.nelson@scu.edu.au

Patricia R. Azevedo
Federal University of Maranhao

Rosilda S. Dias
Federal University of Maranhao

Santana M. de Sousa
Federal University of Maranhao

Liscia D. de Carvalho
Federal University of Maranhao

See next page for additional authors

Publication details

Published article available from:
http://doi.org/10.1080/09540962.2014.962364
Authors
Silvia A. Nelson, Patricia R. Azevedo, Rosilda S. Dias, Santana M. de Sousa, Liscia D. de Carvalho, Andrea C. Silva, and Poliana P. Rabelo

This article is available at ePublications@SCU: http://epubs.scu.edu.au/bus_tourism_pubs/14
The influence of bullying on the wellbeing of Brazilian nursing professionals

Silvia A. Nelson\textsuperscript{a}, Patricia R. Azevedo\textsuperscript{b}, Rosilda S. Dias\textsuperscript{b}, Santana M. A. de Sousa\textsuperscript{b}, Liscia D. P. de Carvalho\textsuperscript{b}, Andrea C. O. Silva\textsuperscript{b} & Poliana P. C. Rabelo\textsuperscript{b}

\textsuperscript{a}Silvia Nelson is a lecturer at Southern Cross University Business School, Australia
\textsuperscript{b}Patricia Azevedo, Rosilda Dias, Santana de Sousa, Liscia de Carvalho, Andrea Silva and Poliana Rabelo are lecturers in the Nursing Department, Federal University of Maranhão, Brazil.

ABSTRACT

Social exchange theory is used in this paper to explore how the quality of leader–member exchange (LMX) and perceived organizational support (POS) affect Brazilian nursing professionals’ perceptions of bullying and harassment and, in turn, their wellbeing. Data was obtained from 868 nursing professionals in four public hospitals in Brazil. Statistically significant linkages were found between LMX, POS, bullying/harassment and wellbeing, except for the relationship between POS and bullying/harassment. Healthcare managers and human resource managers clearly need to take initiatives to strengthen LMX and POS, minimize bullying and to strengthen nursing professionals’ wellbeing.

Keywords: Bullying and harassment; leader–member exchange (LMX); nursing management; perceived organizational support; wellbeing.

Bullying is an increasingly recognized problem in many workplaces, including the nursing workplace, and is becoming better understood in terms of differentials in workplace power, as well as structural issues such as the continuous challenges to nursing work and nursing management worldwide in terms of the supply of nursing professionals (Hogh \textit{et al.}, 2011). These challenges are shared in BRICS (Brazil, Russia, India, China and South Africa) countries, particularly Brazil (Bliss, 2010), where the interplay between the supply of nursing professionals and their personal wellbeing is linked to their work relationships, especially their supervisor, their perceived organizational support (POS) and experience of workplace bullying and harassment.

Nursing work in the northeast region of Brazil has been affected by an expansion of the contract employment system in both the public and private hospital sectors. Consequently, a significant number of Brazilian nursing professionals hold two or more jobs (‘multi-jobbing’) to earn a living wage (Portela \textit{et al.}, 2004). Moreover, many contracted nursing professionals in the northeast region of Brazil will work 12-hour shifts in one job in order to ‘create time’ for their second job (Ribeiro-Silva \textit{et al.}, 2006). For example, in a major teaching hospital in
the Northeastern state of Maranhao, the number of permanent nursing staff decreased by 5.7% between 2004 and 2009 and the number of contract nursing staff increased by 247.4% (HUUFMA, 2009).

Bullying has been identified as a serious problem in the Brazilian healthcare sector (Cahú et al., 2012). While good leader–member exchange (LMX), in terms of supervisor–subordinate relationships, will ameliorate the impact of a negative culture, wherever bullying and harassment are tolerated and POS is low, all of the indicators for wellbeing suffer when workplace bullying occurs. The interplay between these factors for nurses in the northeast of Brazil is not yet well understood. This paper uses social exchange theory (SET) as a framework to examine whether and how on-the-job relationships (especially with supervisors), and POS, minimize bullying and in turn, improves nurse wellbeing. The primary research question behind this paper was:

_How does the quality of LMX and POS affect nursing professionals’ perceptions of bullying and harassment and in turn, their wellbeing?_

**Theoretical background**

_Social exchange theory (SET)_

SET is one of the more useful frameworks for exploring workplace relationships (Graen and Uhl-Bien, 1995). Interdependencies are recognized as the critical factors in developing relationships, which are then based on ‘exchange’ (Cropanzano and Mitchell, 2005), where the relationship between supervisor and subordinates provides a clear case of agreed (more or less, depending on organizational environment) rules and norms of exchange. SET provides the theoretical basis for both LMX (Sparrowe and Liden, 1997) and POS (Eisenberger et al., 2002). Employees who are in high LMX relationships are more likely to receive better training opportunities, gain promotions and develop satisfying careers or obtain more interesting work (Cropanzano and Mitchell, 2005). Based on SET theory, the better the exchange of resources (knowledge, information-sharing, trust and respect, opportunities to develop etc.), the better the quality of the relationship between a supervisor and subordinate. The association of LMX and POS may be an important factor influencing bullying and wellbeing. This paper contributes to the literature by exploring the relationship between LMX, POS, bullying/harassment and wellbeing for nursing professionals in the Northeast of Brazil.
Supervisor–subordinate relationships

LMX theory provides a set of ideas and insights for exploring the supervisor–subordinate relationship. High-quality or low-quality LMX relationships develop according to the quality of interpersonal exchange between supervisors and subordinates (Muller and Lee, 2002). Previous research has demonstrated a link between LMX and POS, in terms of employees’ perceptions of supervisor support, as well as supervisor reporting on the performance of employees in their area of responsibility (Wayne et al., 1997). The role played by LMX in shaping employees’ perceptions of organizational support (POS) reflects the ability of supervisors to distribute discretionary rewards such as access to training, special leave arrangements, and other rewards which are offered to some employees but not all (Rhoades and Eisenberger, 2002). Past research has also demonstrated a link between LMX and wellbeing (Brunetto et al., 2011) and perceptions of abusive supervision (Martinko et al., 2012). The managerial environment (for example poor interpersonal and people management skills) has been associated with workplace bullying (Dick, 2008). In relation to Brazil, the majority of research on work relationships among nursing professionals is qualitative in nature (Dalmolin et al., 2009) and it has become clear that follow-through quantitative or mixed methods research is also required (Nelson et al., 2013). It is not clear whether or not effective LMX is likely to minimize bullying and improve wellbeing in the northeast of Brazil, given the particular circumstances shaping nursing management in that region.

Perceived organizational support (POS)

POS is an employee’s view, based on experience, of the degree to which his/her organization provides material, symbolic and emotional benefits in return for work effort and loyalty to the organization (Eisenberger et al., 2002). It is important to stress that this is a matter of employee perception, as recognized in SET, and that POS will vary between employees in an organization (Rhoades and Eisenberger, 2002). Previous research has demonstrated that POS relates positively to wellbeing (Rhoades and Eisenberger, 2002). If employees perceive that their organization cares for and supports them, POS may minimize the impact of workplace bullying (Parzefall and Salin, 2010) on employees’ health and wellbeing (Dulac et al., 2008). However, given the limited research to date, it is not clear whether the Brazilian nursing professionals’ general levels of POS will minimize the negative impact of workplace bullying on their levels of wellbeing.
**Bullying**

Workplace bullying involves emotional abuse and exposure to negative behaviour (violence, threats and sexual harassment) at the hands of both supervisors (more often) and peer bullying (Einarsen and Mikkelsen, 2003). Findings from a study conducted with healthcare workers suggest a significant nexus between bullying and turnover and the main reason for leaving was associated with poor leadership (Hogh et al., 2011). Previous research has demonstrated that bullying has negative effects on both employee wellbeing and health (Einarsen and Mikkelsen, 2003; Giorgi, 2010). Workplace bullying might also impact negatively on the quality of care and patients’ safety (Ortega et al., 2011). In Brazil, workplace bullying has received some attention from healthcare researchers because of the negative consequences on employees’ health and wellbeing (Cahú et al., 2012). An international report on workplace violence in the health sector, based on qualitative data from healthcare workers (nurses, physicians and managers) across six countries, including Brazil, indicated a major focus in the Brazilian health system was for policies on health and safety (59.4%), while the level of significance of policies on bullying was assessed at a mere 20.9% (Di Martino, 2002), indicating a disconnect between health and safety and bullying in the opinion of Brazilian healthcare workers. Therefore, it is important to examine whether or not Brazilian nursing professionals’ perceptions of bullying affect their wellbeing.

**Wellbeing**

‘Wellbeing’ is defined in this paper in terms of psychological wellbeing—attitudes and feeling about work and the work–home nexus (Grant et al., 2007). Managerial practices affect the psychological wellbeing of employees by shaping their satisfaction with their jobs and lives (Judge and Watanabe, 1993). Some research indicates that employee wellbeing is significantly related to perceptions of supervisory support (Halbesleben and Buckley, 2006). Health/wellbeing has also been linked to bullying (Giorgi, 2010). Extensive evidence indicates that employee wellbeing has a significant impact on the performance and survival of organizations by affecting costs related to illness and health care (Danna and Griffin, 1999). Therefore nurse wellbeing is a vital factor in hospital performance. Several nursing employment practices in the northeast of Brazil may have a detrimental effect on nurse wellbeing, including the job insecurity associated with contract nursing work, multi-jobbing as a consequence of low wage structures, long shifts and excessive hours worked and ‘long-distance’ relationships between nursing professionals on the job and their supervisors as a result of heavy administrative and clinical supervision workloads of supervisors. Examining
levels of wellbeing in relation to key workplace relationships and practices, such as bullying, in the employing organization (Giorgi, 2010) can help draw out and clarify assumptions about nursing professionals’ work, nurse management practices and the quality of nurse management.

The research for this paper investigated six hypotheses to test the inter-relationships of these various components of workplace context (LMX, POS, bullying/harassment and wellbeing):

Hypothesis 1: There is a significant and positive relationship between supervisor–subordinate relationships and POS.

Hypothesis 2: There is a significant and negative relationship between supervisor–subordinate relationships and perceptions of bullying/harassment.

Hypothesis 3: There is a significant and negative relationship between POS and perceptions of bullying/harassment.

Hypothesis 4: There is a significant and positive relationship between supervisor–subordinate relationships and wellbeing.

Hypothesis 5: There is a significant and negative relationship between POS and wellbeing.

Hypothesis 6: There is a significant and negative relationship between perceptions of bullying/harassment and wellbeing.

**Methods**

*Data and sample*

Quantitative data was obtained using a cross-sectional, survey-based design. Data were collected from nursing professionals in four Brazilian public hospitals in the Northeastern state of Maranhao: three medium-sized hospitals (300–400 beds) and one small hospital (<300 beds). To gather data from nursing professionals, 1700 anonymous surveys were distributed to all nursing professionals in the four hospitals—registered nurses, nurse technicians and nurse assistants. The response rate was 51.5% (868 usable surveys). Once all completed questionnaires were collected and analysed, the results were compared to past research. The sample comprised 777 females (89.5%). In terms of categories of nursing professionals, 21.5% were registered nurses, 54.7% were nurse technicians, and 23.8% were nurse assistants. In addition, 65.9% had permanent jobs and 42.4% had two or more jobs.
Measures
Responses were scored on a six-point Likert type scale, ranging from 1 = strongly disagree, to 6 = strongly agree. LMX was measured using Mueller and Lee’s (2002) six-item instrument to measure the satisfaction of nurses with the quality of the relationship with their supervisor. POS was measured using a validated instrument by Eisenberger et al. (1997). Bullying was measured using a three-item task attack scale from Rayner (2002). Wellbeing was measured using the four-item scale from Brunetto et al. (2011).

Data analysis
Anderson and Gerbing’s (1988) two-step approach was applied, first testing the measurement model (confirmatory factor analysis) and then examining the structural model. The structural model was examined, while controlling for time since graduation and marital status. Model fit was examined with absolute and incremental fit indices, including normed chi-square (Δχ²), goodness-of-fit index (GFI), comparative fit index (CFI), Tucker-Lewis index (TLI), and root mean square of approximation (RMSEA). A number of rules of thumb were used to determine model fit, for example, Δχ² between 1 and 3; GFI, CFI and TLI ≥ .90 adequate fit or ≥ .95 superior fit (Byrne, 2010); RMSEA below .08 adequate fit and below .05 good fit (Browne and Cudeck, 1993). There is support that the data has a normal distribution, skewness ranged from -1.44 to 1.81 and kurtosis ranged from -1.06 to .52.

Results
Confirmatory factor analysis
Model 1 initially appeared to be a poor fit to the data (Δχ² = 4.77, GFI = 0.88, CFI = 0.87, TLI = 0.86, RMSEA = 0.07). Due to poor squared multiple correlations (SMC), four items were removed from the bullying scale, one at a time. However, to limit the space used, model fit following the removal of all items is reported here. Although there was an improvement in model fit (Δχ² = 3.48, RMSEA = 0.05, GFI = .92 CFI = 0.93 and TLI = 0.93), the normed chi-square was still slightly inadequate. To further investigate issues with model fit, the modification indices were examined, which indicated a very large correlated error between Bully5 and Bully6 (MI = 149.64, .47). Following the estimation of the error covariance, the model provided a reasonable fit to the data (Δχ²≤ = 2.38, RMSEA = 0.05, GFI = .92 CFI = 0.93 and TLI = 0.93). In model 2, common method variance was controlled (Podsakoff et al., 2003). Model 2 fit the data well (Δχ² = 2.46, RMSEA = 0.04, GFI = 0.95, CFI = 0.96 and TLI = 0.96) and the parameter estimates for all hypothesized relationships found in model 1
were significant in model 2, suggesting that common method variance was of no major concern in this study. To establish the distinctiveness of the hypothesized model (model 1), two alternative models were also tested. As depicted in table 1, the hypothesized model provided a reasonable fit that was superior to models 3 and 4 ($\Delta \chi^2 = 2.83$, RMSEA = 0.04, GFI = 0.94, CFI = 0.95 and TLI = 0.95).

---

Descriptive statistics and correlations
The means, standard deviations, Cronbach’s alphas and inter-correlations for all variables included in the hypothesized model (see table 2).

---

Cross-validation
There was an issue with post hoc model fitting because there is a possibility that a researcher will capitalize on chance when re-specifying the model, causing the results to be sample specific (MacCallum et al., 1992). The CFI difference test was used for calculating invariance. The configural CFI was .945 and the measurement (CFI = .942) and structural weights (CFI = .940) were both below the prescribed .01 cut-off value (Cheung and Rensvold, 2002), indicating that the results were not sample specific.

Testing the hypotheses
Figure 1 represents the SEM results of the hypothesized model. The control variables were not significantly related to employee perceptions of their wellbeing, so they were removed from the figure. The results depicted in figure 1 provide support for the acceptance of hypotheses 1, 2, 4, 5 and 6.

---

Discussion
The findings from the path model demonstrated statistically significant linkages between LMX, POS, bullying/harassment and wellbeing, except for the relationship between POS and bullying/harassment. These findings are in line with previous studies in relation to the link...
between LMX and POS (Wayne et al., 1997), LMX and wellbeing (Brunetto et al., 2011), POS and wellbeing (Rhoades and Eisenberger, 2002) and bullying and health/wellbeing (Giorgi, 2010). However, unlike LMX, POS had no impact on workplace bullying and this appears to reflect a perceived lack of organizational support for nurses, for whom the primary support relationship is with their supervisors. Brazilian nursing professionals may not experience significant organizational support because many of them are employed on a contract basis and do not feel valued because there are many candidates available for the job—they are disposable. This is supported by findings from previous research in which POS was negatively related to perceived lack of employment alternatives which, in turn, was negatively related to wellbeing (Panaccio and Vandenberghe, 2009). Healthcare managers in Brazil need to create more positive supportive environments to reduce the incidence and impact of bullying by enhancing supervisor–nurse relationships (LMX), improving the provision of supervisor training in relation to bullying/harassment and strengthening nurses perceptions of organizational support (POS) by providing a clearer focus on both the unacceptability of workplace bullying and an emphasis on nurse wellbeing. In order to improve a hospital’s performance, especially in terms of the quality of patient care (and consequent reduction in costs), the nursing workforce needs to be rebalanced and managed more effectively. This can be done by improving and prioritizing the HR function in the hospitals. In this respect, the role of the CEO is crucial in creating a strategic HR function by providing legitimacy, leadership and resources (Stanton et al., 2010). The contribution of health system leaders and hospital HRM units to developing effective responses to these challenges is of the utmost importance.

**Limitations**

This study had a number of limitations. First, it was about the northeast of Brazil and therefore cannot be taken as representative of the whole of Brazil. Second, it looked at public sector hospitals and therefore any significant differences between public and private sector nurse management are unknown. Third, the self-reporting techniques used in this study to gather information may be open to common method bias (Zigmund, 2003), which may have influenced the significance of relationships between variables. However, Spector (1994, p. 386) argues that self-reporting methodology is useful in providing trends that in turn provide an understanding about employees’ feelings and perceptions, as long as the literature review and other evidence supports the inferences and interpretations made about the data.
Implications for management

The implications of this study for healthcare and hospital management in the public sector in the northeast of Brazil is that, given a likely longer term situation of contract employment, low wages, and a ready supply of replacement nurses, the immediate way forward for management to improve nurse wellbeing is by investing in superior LMX to reduce bullying and harassment. The best way of achieving this would be to design nurse supervisor development programmes which focus on improving LMX, as a leverage to reduce bullying and optimize nurse wellbeing. An immediate solution for HR managers would be to develop clear and strong policies and guidelines on employee wellbeing, violence and bullying and consistently communicating and enacting those policies (Di Martino, 2002). This would provide support for all employees, but particularly supervisors and senior managers in shaping anti-violence, anti-bullying, pro-health and wellbeing strategies. The results of this study suggest that HR managers in hospitals can make significant longer term contributions to changing the structural factors that this study has revealed as contributing to present levels of bullying and negative environments for nurse wellbeing. These changes would contribute to improving LMX and POS, thereby reducing bullying and enhancing nursing professionals’ wellbeing:

• Reducing levels of contracting of nursing professional positions, thereby reducing the levels of ‘precarious employment’, i.e. employment that is marked by insecurity and vulnerability to bullying.

• Reducing multiple job holding among nursing professionals by moving towards a more realistic and satisfactory wage structure that meets the livelihood needs of nursing professionals and improves wellbeing.

These changes would not be easy because of the costs; however, the longer-term results of enhanced efficacy, improved efficiency in patient care and vastly improved people management and nursing professionals team working would provide important dividends, including improved human capital investment outcomes to underpin ongoing investment in the health system.

Conclusion

SET provides a useful lens for research into future directions for healthcare managers seeking to build positive POS for nurses and allied health professionals in the public hospital system in the northeast of Brazil, as they seek to eliminate or minimize bullying and enhance the personal wellbeing of healthcare professionals. However, the finding that POS, presently, has
little or no impact on the incidence of workplace bullying, indicates that nursing professionals do not feel that their organizations either cares for them or supports them (Sparrowe and Liden, 1997; Parzefall and Salin, 2010). An over-use of contracting out, a major extension of employment of para-professionals (nurse technicians and nurse assistants) with consequent increases of supervisory workload for registered nurses and maintenance of a low wage structure for nursing professionals, creates multi-jobbing—more than 40% of nursing professionals in this study had two or more jobs. The significant organizational changes involved in remedying these structural problems in nursing in the northeast of Brazil, such as reducing the amount of contract work and enhancing training and development opportunities, will make heavy demands on nursing management. Portoghese and colleagues (2012) highlight the importance of the quality of supervisor–subordinate relationships for implementing successful organizational changes. The major findings of this study suggest that healthcare managers and HRM units need to take initiatives to strengthen supervisor–nurse relationships and POS, minimize bullying and to strengthen nursing professionals’ wellbeing. This research needs to be replicated in other regions of Brazil, especially in the south and southeast. It would also be useful to extend this study to private sector hospitals, which are becoming more prominent in the Brazilian health system. Finally a comparative study between Brazil and other developing countries, as well as OECD countries, would be fruitful.
References


Bliss, K. E. (2010), *Key Players in Global Health: How Brazil, Russia, India, China and South Africa are Influencing the Game* (Center for Strategic and International Studies, Washington, D.C.).


Dick, G. (2008), The influence of managerial factors on bullying on the police. See www.kent.ac.uk


HUUFMA—Hospital Universitário, Universidade Federal do Maranhão (2009), Annual Report (Relatório de Atividades). See http://www.huufma.br


Table 1. Confirmatory factor analysis

<table>
<thead>
<tr>
<th>Model</th>
<th>$\Delta \chi^2$</th>
<th>$p$</th>
<th>CFI</th>
<th>GFI</th>
<th>TLI</th>
<th>RMSEA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respecified measurement model</td>
<td>2.38</td>
<td>.000</td>
<td>.93</td>
<td>.92</td>
<td>.93</td>
<td>.05</td>
</tr>
<tr>
<td>Model 1: Hypothesised model</td>
<td>2.83</td>
<td>.000</td>
<td>.95</td>
<td>.94</td>
<td>.95</td>
<td>.04</td>
</tr>
<tr>
<td>Model 2: Adds common method variance factor to model 1</td>
<td>2.46</td>
<td>.000</td>
<td>.96</td>
<td>.95</td>
<td>.96</td>
<td>.04</td>
</tr>
<tr>
<td>Model 3: Removed POS and bullying from model 1</td>
<td>3.36</td>
<td>.000</td>
<td>.94</td>
<td>.93</td>
<td>.93</td>
<td>.05</td>
</tr>
<tr>
<td>Model 4: Removed POS from model 1</td>
<td>3.21</td>
<td>.000</td>
<td>.94</td>
<td>.93</td>
<td>.93</td>
<td>.05</td>
</tr>
</tbody>
</table>

Table 2: Descriptive statistics and correlations

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>S.D.</th>
<th>$\alpha$</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Well-being</td>
<td>4.67</td>
<td>0.80</td>
<td>0.73</td>
<td>(0.83)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Bullying</td>
<td>2.82</td>
<td>0.57</td>
<td>0.72</td>
<td>-.08*</td>
<td>(0.77)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. POS</td>
<td>2.75</td>
<td>0.87</td>
<td>0.73</td>
<td>.23**</td>
<td>-.13*</td>
<td>(0.81)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. LMX</td>
<td>4.54</td>
<td>0.87</td>
<td>0.87</td>
<td>.34**</td>
<td>-.20**</td>
<td>.30**</td>
<td>(0.76)</td>
<td></td>
</tr>
<tr>
<td>5. Time since graduation</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>.00</td>
<td>-.01</td>
<td>.05</td>
<td>-.02</td>
<td></td>
</tr>
<tr>
<td>6. Marital status</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>.02</td>
<td>.43</td>
<td>.01</td>
<td>.05</td>
<td>-.04</td>
</tr>
</tbody>
</table>

* Correlation is significant at the 0.05 level (2-tailed).
** Correlation is significant at the 0.01 level (2-tailed).
a Rated on a scale of 1 = strongly disagree to 6 = strongly agree
Square root of AVE in parentheses

Figure 1 Results of the proposed path model