

Mediating toxic emotions in the workplace - the impact of abusive supervision

LI-CHUAN CHU ^{PhD}^{1,2}

¹Assistant Professor, School of Health Policy and Management, Chung Shan Medical University, Taichung, and

²Consultant, Department of Medical Education, Chung Shan Medical University Hospital, Taichung, Taiwan

Correspondence

Li-Chuan Chu

11F-2, No. 1219

Jhongming S. RD, Taichung

402 Taiwan

E-mail: lichuan@csmu.edu.tw

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Aim This study explores whether abusive supervision can effectively predict employees' counterproductive work behaviour (CWB) and organisational citizenship behaviour (OCB) and the role of toxic emotions at work as a potential mediator of these relationships in nursing settings.

Background Workplace bullying is widespread in nursing. Despite the growing literature on abusive supervision and employees' counterproductive work behaviour and organisational citizenship behaviour, few studies have examined the relationships between abusive supervision and these work behaviours from the viewpoint of the victimised employee's emotion process.

Methods This study adopted a two-stage survey of 212 nurses, all of whom were employed by hospitals in Taiwan. Hypotheses were tested through the use of hierarchical multiple regression.

Results The results showed that abusive supervision was positively associated with toxic emotions. Moreover, toxic emotions could effectively predict nurses' counterproductive work behaviour and organisational citizenship behaviour. Finally, it was found that toxic emotions partially mediated the negative effects of abusive supervision on both work behaviours.

Conclusion Toxic emotions at work are a critical mediating variable between abusive supervision and both counterproductive work behaviour and organisational citizenship behaviour. Hospital administrators can implement policies designed to manage events effectively that can spark toxic emotions in their employees.

Implications for nursing management Work empowerment may be an effective way to reduce counterproductive work behaviour and to enhance organisational citizenship behaviour among nurses when supervisors do not promote a healthy work environment for them.

Keywords: abusive supervision, counterproductive work behaviour, organisational citizenship behaviour, toxic emotions at work

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Introduction

Workplace bullying is widespread in nursing (Hutchinson *et al.* 2006, Hogh *et al.* 2011, Ortega *et al.* 2011). Continual exposure to bullying in the work-

place has serious harmful outcomes, not only for those bullied but also for organisations (Hutchinson *et al.* 2006). Workplace bullying has a negative impact on the physical and psychological health and well-being of victims (Yildirim & Yildirim 2007,

Johnson 2009, Magnavita & Heponiemi 2011). It also has a negative influence on the organisations in which the bullying occurs, can result in increased staff turnover, decreased job satisfaction, poorer performance and attrition (Quine 2001, Jackson *et al.* 2002, Rowe & Sherlock 2005, Simons 2008, Johnson 2009, Hogh *et al.* 2011). Bullying may be costly to a hospital.

In many studies of workplace bullying, the majority of bullies were found to be managers or supervisors (Diaz & McMillin 1991, Hoel *et al.* 2001, Zapf *et al.* 2003, Lutgen-Sandvik *et al.* 2007). Although the deleterious consequences of abusive supervision on employees' work behaviours (such as counterproductive work behaviour (CWB) and organisational citizenship behaviour (OCB)) are generally recognized in the non-nursing literature (Zellars *et al.* 2002, Aryee *et al.* 2007, Thau *et al.* 2009, Bowling & Michel 2011, Wang *et al.* 2012, Wei & Si 2013), there are few studies examining this topic in nursing science and the mediating process underlying the relationships between abusive supervision on employees' CWB and OCB. To narrow these gaps in the literature, this study sought to examine the effects of abusive supervision on employees' CWB and OCB and the role of toxic emotions at work as a potential mediator of these relationships in nursing settings.

Literature review

The influence of abusive supervision, toxic emotions at work, and counterproductive work behaviour

Abusive supervision refers to 'subordinates' perceptions of the extent to which supervisors engage in the sustained display of hostile verbal and nonverbal behaviours, excluding physical contact' (Tepper 2000, p. 178). Behavioural manifestations of abusive supervision include loud and angry tantrums, rudeness, impoliteness, humiliating or ridiculing someone in front of others, coercion, withholding needed information, and silent treatment of someone in front of others (Tepper 2000, Aryee *et al.* 2007, Tepper *et al.* 2009).

According to social exchange theory, employees who are treated hostilely by their supervisor are likely to react with unfavourable behaviour due to the negative reciprocity norm (Tepper *et al.* 2009). Such organisationally destructive behaviour is known in the field of organisational research as counterproductive work behaviour (CWB), and has in recent years

elicited a considerable amount of research and discussion (Spector & Fox 2002, Bowling & Michel 2011, Wei & Si 2013).

Counterproductive work behaviour is defined broadly as intentional employee behaviour that is harmful to organisations and/or to people in organisations. These behaviours consist of various acts such as aggression, deviance, retaliation and revenge (Spector & Fox 2005). Wei and Si (2013) found that abusive supervision resulted in increased levels of sabotage, withdrawal, production deviance and theft of victim subordinates.

Spector and Fox (2002) developed a work stress-emotions-CWB model that indicates that these CWBs mainly reflect the sources of stress in the workplace, in which emotions play an exceedingly important role, as emotions are an immediate reaction to the perceived stressful environment. Fitness (2000) found that subordinates were angered by acts of public humiliation and unjust treatment. However, they were less likely to confront the anger target, less likely to seek to address the situation, and more likely to consider the source of their anger as being unresolved. It is clear that the suppression of anger in the workplace can create toxicity (Lawrence 2008). Montgomery *et al.* (2005) also argued that the continued management of emotions for social interactions can be 'toxic'.

Toxic means poisonous, and therefore harmful or deadly. According to Frost's (2003) definition, toxic emotions at work refers to a more sustained affective state that emerges from negative emotions and consists of three dimensions of psychologically recurring, disconnecting and draining. **Psychologically recurring** refers to an experience that weighs on the individual, feels psychologically unresolved, or the individual negatively anticipates a reoccurrence. **Disconnecting** refers to an individual's disengagement from his or her social network and/or colleagues, whereas **draining** refers to an individual's mental and physical energy levels being exhausted or depleted by these experiences (see Kiefer & Barclay 2012).

If organisations cannot cope with toxic emotions in a constructive way, the harmful effects they have on individuals such as lowering their self-confidence, hope and self-esteem, thereby threatening work morale and performance, eventually harm the organisation itself. This is because these powerful, energy-consuming negative emotions are likely to result in employees neglecting their work, their colleagues, and the organisation (Frost 2003). The production of toxic emotions therefore constitutes a serious organisational problem.

Frost (2003) discovered that inappropriate company policies and practices such as unexpected or unsuitable changes, reorganisations, redundancies, and undesirable interpersonal interactions such as supervisors treating staff inappropriately and employees having difficulties interacting with each other, resulted in the employees commonly experiencing forms of distress and negative emotions such as anger, frustration, fear and anxiety. When people responded to them in hurtful and destructive ways they transformed into toxic emotions.

Frost (2003) noted the major sources of toxic emotions within organisations, with particular reference to what he called the seven deadly *ins*. These deadly sources of toxins are largely related to the nature of the leadership that supervisors exercise. **Intention**, one of these seven, involves seeking to cause subordinates' distress. Such malicious intent and defamatory behaviour undermine subordinates' self-confidence and self-respect (Whicker 1996). The motivation of those who do this is to exercise control in a way that intimidates subordinates from challenging their supervisors' authority. Some treat workers they simply dislike with a great degree of suspicion, which they show by methods such as constantly complaining about their performance. However, regardless of what such supervisors' malicious and defamatory intention is, the slandered workers tend to respond with such emotions as fear, anger, bewilderment and indignation. Although some people are able to ignore such behaviour in order to protect themselves against attack, at least in the short term, when abusive behaviour persists the situation is likely to reach a critical point, and its victims then need to defend themselves, usually at considerable personal cost (Frost 2003).

Frost (2003) concluded that negative emotions such as frustration and anger can result in more serious consequences for workers, particularly because when they perceive themselves as being unfairly treated by those in positions of authority they are likely to change their attitudes or to adopt various practices in an attempt to return balance to those areas within themselves where they need it, and such responses are likely to result in imposing of extremely high costs to their organisations. In addition to the possibility that employees may choose to leave, imposing turnover costs, some may engage in retaliation, destructive acts, stealing, willful damage to the organisation's property, stepping back and suppressing effort, spreading rumours, resorting to sarcasm, or being oversensitive.

Based on the preceding review of the literature, we propose the following hypothesis:

Hypothesis 1: Toxic emotions at work can effectively mediate the positive relationship between abusive supervision and subordinates' CWB.

The influence of abusive supervision, toxic emotions at work and organisational citizenship behaviour

However, by focusing on the relationship between the supervisors and their subordinates, particularly their differences in authority, Lord (1998) concluded that subordinates are unlikely to repay their supervisors directly by resorting to reprisals equal in magnitude to the unfair treatment they have received.

According to social exchange theory (Blau 1964) and to power dependence theory (Emerson 1962), Rafferty and Restubog (2011) identify withdrawal of OCB as an important way by which subordinates restore the balance of their exchange relationship with their leader when they are treated poorly. OCB is a type of self-initiated behaviour that is beneficial to the organisation without being contractually regulated. Organ (1988) proposed that OCB consists of five dimensions: altruism, courtesy, conscientiousness, civic virtue and sportsmanship. Examples include helping co-workers to resolve work-related problems, not complaining about trivial matters, being courteous to co-workers, and speaking highly of the organisation with outsiders. What is centrally important is that the organisation does not punish workers for not exhibiting OCB.

Previous studies have examined relationships between abusive supervision and OCB (Zellars *et al.* 2002, Aryee *et al.* 2007, Thau *et al.* 2009). Thau *et al.* (2009) argued that poor treatment by one's supervisor violates the social exchange between a leader and a follower, and as a result abused subordinates may seek to restore balance to the exchange by withholding OCB.

Based on the preceding review of the literature, we propose the following hypothesis:

Hypothesis 2: Toxic emotions at work can effectively mediate the negative relationship between abusive supervision and subordinates' OCB.

Aims

The aim of this study was to examine whether abusive supervision could result in employees engaging in more CWB and less OCB. In addition, this study also examined the mediating role of toxic emotions at work in the relationship between abusive supervision

and the two forms of work behaviour (CWB and OCB).

Methods

Research design

Despite the increasing number of studies on supervisors' abusive supervision and their subordinates' OCB (Zellars *et al.* 2002, Aryee *et al.* 2007, Thau *et al.* 2009) and CWB (Bowling & Michel 2011, Wang *et al.* 2012, Wei & Si 2013) in the non-nursing literature, few studies explore whether this topic is applicable to nursing science and whether the toxic emotions at work that result are a potential mediator of these relationships. To narrow these gaps in the literature, the present study is designed to explore whether abusive supervision can effectively predict employees' CWB and OCB, and whether toxic emotions at work can play a mediating role of these relationships in nursing settings.

In order to avoid the possibility of common method bias (Podsakoff *et al.* 2003), this study used a two-stage survey to examine the relationships among all the variables. The first-stage survey aimed to estimate the participants' perceptions of abusive supervision, toxic emotions at work, control variables as negative affect (NA) and demographics. Two months later, the second-stage survey was administered and it measured the participants' CWB and OCB.

Sample and data collection

We distributed 300 survey questionnaires to hospital nurses in six hospitals in Central Taiwan through two distribution stages. Prior to distributing the first questionnaires, we obtained the permission and support of the target hospitals' managers or specialists for data collection. We requested graduates from our department who were working at the target hospitals to distribute the questionnaires to their nursing colleagues, and to explain the purpose of this study and the sampling process. Participants had to answer the surveys within a week of receiving the questionnaires. We used anonymous questionnaires to minimize any pressure that the respondents may have felt, requesting only that respondents use the same identity code on the upper-right corner on both questionnaires, as this was necessary for data compilation.

We collected the data in March 2008 and May 2008 in separate months. We distributed the first

questionnaire, and asked the respondents to complete the evaluation questions with regard to independent variable such as abusive supervision, mediating variables such as toxic emotions at work, and control variables such as negative affect (NA) and demographics. A total of 247 valid questionnaires were returned. The second questionnaire was distributed to the same respondents 2 months after the first survey. This questionnaire asked the respondents to complete the evaluation questions with regard to dependent variables such as CWB and OCB. A total of 226 valid questionnaires were returned. Cases without complete matched data across the two time points were removed from the study. The final sample consisted of 212 nurses, representing a valid response rate of 71%. The majority of the subjects were women (95.3%), 59.4% were unmarried, the majority were aged 26–30 (40.1%), 55.2% had a college-level education, had a tenure of 1–5 years (61.8%) and 82.1% were in a non-management position.

Instruments

Abusive supervision scale

We assessed abusive supervision by using Tepper's (2000) 15 item questionnaire. Respondents indicated the frequency with which their supervisors engaged in each of the 15 behaviours (e.g. 'tells me my thoughts or feelings are stupid'). Respondents indicated their level of agreement on a 5-point scale ranging from 1 (never) to 5 (always). High scores indicate more abusive supervision. This measure has an adequate internal consistency at $\alpha = 0.90$.

Toxic emotions at work scale

We used a 15-item scale (5-items per dimension) developed by Kiefer *et al.* (2005), Kiefer & Barclay (2008), Kiefer & Barclay (2012). All the items were used to assess the three dimensions of toxic emotions: psychologically recurring (e.g. 'My negative emotions are ongoing/keep resurfacing'), disconnecting (e.g. 'When I am having negative emotions, I withdraw from others/others tend to ignore me'), draining (e.g. 'When I am having negative emotions, I feel exhausted/my energy level decreases immediately'). Respondents indicated their level of agreement on a 6-point scale ranging from 1 (strongly disagree) to 6 (strongly agree). A composite score was created by averaging the items across the three dimensions. High scores indicate more toxic emotions at work. This measure has an adequate internal consistency at $\alpha = 0.95$ (Kiefer & Barclay 2008, 2012).

Counterproductive work behaviour scale

We assessed CWB by using the 33 item questionnaire of Spector *et al.* (2006). All the items were used to assess the five CWB: abuse (e.g. 'Started or continued a damaging or harmful rumor at work'), production deviance (e.g. 'Purposely did your work incorrectly'), sabotage (e.g. 'Purposely wasted your employer's materials/supplies'), theft (e.g. 'Stolen something belonging to your employer'), and withdrawal (e.g. 'Came to work late without permission'). Respondents indicated how often they have done these CWB at work on a 5-point scale ranging from 1 (never) to 5 (every day). We combined the five dimensions into one CWB scale. High scores indicate more CWB. This measure has an adequate internal consistency of $\alpha = 0.87$.

Organisational citizenship behavior scale

We assessed OCB by using the 20 item questionnaire of Farh *et al.* (1997). All the items were used to assess the five citizenship behaviours: identification with the company (e.g. 'Willing to stand up to protect the reputation of the company'), altruism toward colleagues (e.g. 'Willing to help colleagues solve work-related problems'), conscientiousness (e.g. 'Takes one's job seriously and rarely makes mistakes'), interpersonal harmony (e.g. 'Often speaks ill of the supervisor or colleagues behind their backs' (R)), and protecting company resources (e.g. 'Views sick leave as benefit and makes excuse for taking sick leave' (R)). Respondents indicated their level of agreement on a 6-point scale ranging from 1 (strongly disagree) to 6 (strongly agree). The five dimensions of OCB have an adequate internal consistency of $\alpha = 0.87$, $\alpha = 0.87$, $\alpha = 0.82$, $\alpha = 0.86$ and $\alpha = 0.81$, respectively. We combined the five dimensions into one OCB scale. High scores indicate more OCB.

Control variables

On the basis of a review of the literature (Zellars *et al.* 2002), five demographic variables were identified, age, marital status, education, tenure and position, that could co-vary with our dependent variables and that we felt should be controlled for in our analyses. We set the marital status variable (1, married; 2, unmarried) and the position variable (1, management; 2, non-management) as dummy variables and age, education, tenure as a continuous variable.

In addition, the predisposition to experience a negative affect (NA) may influence CWB and OCB (Duffy *et al.* 2002, Zellars *et al.* 2002, Chu *et al.* 2005). We

also controlled for NA before measuring the predictive effect of abusive supervision on the outcomes of interest. We measured NA using a 10-item subscale of the trait anger scale (Spielberger 1988) that assesses an individual's disposition to experience anger. Participants used a 4-point response scale, ranging from 1 (never) to 4 (always), to indicate how frequently they tend to feel and express anger. Example is 'It makes me furious when I am criticized in front of others'. Higher scores mean more NA. Cronbach's alphas in various samples ranged from 0.81 to 0.91 (Spielberger 1988).

Translation and linguistic validation of the instruments

As this study used scales that were originally in English, we followed Brislin's (1980) suggestion to ensure that the translated Chinese version had similar meanings. Two experts, fluent in both English and Chinese, were hired. One translated the English version to Chinese and the other translated the Chinese version back to English.

In order to confirm the reliability estimates of these existing scales, we conducted a pilot test with 52 randomly selected nurses prior to the main study. Analyses of the pilot test showed that the assessment instruments are reliable (the Cronbach's α scores obtained ranged from 0.89 to 0.94).

Ethical considerations

This study was approved by the National Science Council of Taiwan in 2007 with the approval number NSC 96-2413-H-040-003-. We also obtained permission and support from the sample hospitals' management for data collection. During this sampling process, all participants would be anonymous and were guaranteed confidentiality.

Data analysis

We assessed the proposed model with a hierarchical regression using the Statistical Package for the Social Sciences 18.0 for Windows (SPSS Inc., Chicago, IL, USA). To test the reliability of the data, Cronbach's alpha was employed. Pearson's correlation was used to test the relationships among the various variables.

Results

The internal-consistency reliability coefficients are along the main diagonal in Table 1, and indicate that

all of the measures had acceptable internal consistency, with Cronbach's alpha scores of 0.94 (15 items) for the abusive supervision scale, 0.92 (15 items) for the toxic emotions scale, 0.95 (33 items) for the CWB scale and 0.92 (20 items) for the OCB scale.

Correlation analysis (Table 1) demonstrated that abusive supervision was positively correlated with toxic emotions at work ($r = 0.30$; $P < 0.01$) and CWB ($r = 0.39$; $P < 0.01$), and was negatively correlated with OCB ($r = -0.28$; $P < 0.01$). In addition, toxic emotions at work was positively correlated with CWB ($r = 0.31$; $P < 0.01$), and was negatively correlated with OCB ($r = -0.31$; $P < 0.01$), whereas CWB was negatively correlated with OCB ($r = -0.43$; $P < 0.01$).

Hierarchical regression analysis

Hypotheses 1 and 2 were tested by the hierarchical regression and the results are shown in Table 2. Models 1.1 and 2.1 show that the control variables accounted for a significant portion of the variance in CWB (11%) and OCB (31%). Gender was negatively associated with CWB ($\beta = -0.21$; $P < 0.01$) and was positively associated with OCB ($\beta = 0.27$; $P < 0.01$), whereas age was positively associated with OCB

Table 1

Descriptive statistics and intercorrelations among study variables

Variable	1	2	3	4
1. Abusive supervision	(0.94)			
2. Toxic emotions	0.30**	(0.92)		
3. CWB	0.39**	0.31**	(0.95)	
4. OCB	-0.28**	-0.31**	-0.43**	(0.92)
Mean	1.82	3.37	1.20	4.58
SD	0.62	0.81	0.29	0.57

Cronbach's alphas appear on the diagonal. CWB, counterproductive work behaviour; OCB, organisational citizenship behavior. * $P < 0.05$; ** $P < 0.01$.

($\beta = 0.21$; $P < 0.05$). This means that female nurses had less CWB and had more OCB than male nurses, whereas older nurses had more OCB than younger nurses. Organisational tenure was negatively associated with CWB ($\beta = -0.17$; $P < 0.05$) and was positively associated with OCB ($\beta = 0.18$; $P < 0.05$), whereas position was negatively associated with OCB ($\beta = -0.17$; $P < 0.05$). This means that longer tenured nurses had less CWB and had more OCB than those with shorter tenure, whereas nurses in non-management positions had less OCB than those in management positions. In addition, negative affect was positively associated with CWB ($\beta = 0.14$;

Table 2

Results of regression analyses on the CWB and OCB

Dependent variable	CWB			OCB		
	Model 1.1 Beta	Model 1.2 Beta	Model 1.3 Beta	Model 2.1 Beta	Model 2.2 Beta	Model 2.3 Beta
Age	0.00 (0.02)	0.04 (0.43)	0.04 (0.36)	0.21 (2.29)*	0.19 (2.10)*	0.20 (2.21)*
Gender	-0.21 (-3.10)**	-0.16 (-2.53)**	-0.15 (-2.42)*	0.27 (4.65)**	0.25 (4.28)**	0.24 (4.18)**
Marital status	-0.07 (-0.83)	-0.02 (-0.28)	-0.04 (-0.52)	0.05 (0.65)	0.02 (0.31)	0.04 (0.55)
Education	-0.06 (-0.94)	-0.10 (-1.56)	-0.10 (-1.63)	0.02 (0.37)	0.04 (0.70)	0.04 (0.75)
Organisational tenure	-0.17 (-2.00)*	-0.15 (-1.93)	-0.13 (-1.62)	0.18 (2.36)*	0.17 (2.28)*	0.14 (1.98)*
Position	0.05 (0.66)	0.06 (0.77)	0.07 (0.97)	-0.17 (-2.50)*	-0.17 (-2.60)**	-0.18 (-2.81)**
Negative affect	0.14 (2.08)*	0.09 (1.40)	0.03 (0.43)	-0.14 (-2.29)*	-0.11 (-1.85)	-0.05 (-0.85)
Abusive supervision		0.35 (5.48)**	0.31 (4.75)**		-0.19 (-3.21)**	-0.15 (-2.52)**
Toxic emotions at work			0.18 (2.54)**			-0.16 (-2.53)**
R^2	0.11	0.22	0.25	0.31	0.35	0.37
Adjusted R^2	0.08	0.19	0.21	0.29	0.32	0.34
R^2 change	0.11**	0.12**	0.02**	0.31**	0.03**	0.02**
F	3.50**	7.25**	7.33**	13.36**	13.51**	13.04**

CWB, counterproductive work behaviour; OCB, organisational citizenship behavior. * $P < 0.05$; ** $P < 0.01$.

$P < 0.05$) and was negatively associated with OCB ($\beta = -0.14$; $P < 0.05$). This means that high negative-affect nurses had more CWB and had less OCB than low negative-affect nurses.

Models 1.2 and 2.2 indicate that abusive supervision accounted for an additional 12% of the variance in CWB at $P < 0.01$ and an additional 3% of the variance in OCB at $P < 0.01$. Additionally, the abusive supervision was positively associated with CWB ($\beta = 0.35$; $P < 0.01$) and was negatively associated with OCB ($\beta = -0.19$; $P < 0.01$). This means that nurses who were treated abusively by their supervisor had more CWB and had less OCB than those who non-treated abusively by their supervisor.

Models 1.3 and 2.3 show that toxic emotions at work accounted for an additional 2% of the variance in CWB at $P < 0.01$, and 2% of the variance in OCB at $P < 0.01$. Additionally, the toxic emotions at work was positively associated with CWB ($\beta = 0.18$; $P < 0.01$), and was negatively associated with OCB ($\beta = -0.16$; $P < 0.01$). However, the beta weight associated with abusive supervision was reduced, but it remained statistically significant. This indicated that toxic emotions at work mediate partially the relationship between abusive supervision and both CWB and OCB. This means that abusive supervision heightened nurses' toxic emotions at work, and these toxic emotions can enhance nurses' CWB, and decrease their OCB. These findings provide partial support for Hypotheses 1 and 2.

Discussion

The aims of this study were to explore whether abusive supervision can effectively predict employees' counterproductive work behaviour and organisational citizenship behaviour, and further to determine whether toxic emotions at work can mediate these relationships. Firstly, our research results showed that abusive supervision is an effective predictor of the nurses' CWB and OCB after controlling for negative affect. We found that nurses who were treated abusively by their supervisor are likely to withhold OCB that benefits their organisations, for example helping co-workers resolve work-related problems or speaking highly of the organisation with outsiders; those nurses with notably high levels of toxic emotions are also likely to adopt such relatively drastic behaviours as deliberately damaging organisational property and spreading rumours in order to give vent to their inner turmoil. This finding is consistent with previous research, which suggested that abusive supervision

resulted in their employees engaging in more CWB and less OCB (Zellars *et al.* 2002, Aryee *et al.* 2007, Thau *et al.* 2009, Bowling & Michel 2011, Wei & Si 2013).

This study found further, however, that the CWB or OCB in which victimised nurses engage as a result of being treated abusively by their supervisor were partially achieved through the mediating effect of toxic emotions at work. This finding supports Spector and Fox (2002) who developed a work stress-emotions-CWB model, which indicates that emotions play an important mediating role between sources of stress such as organisational restrictions and CWB. This study showed that emotions such as toxic emotion at work as a mediator between abusive supervision and both employees' CWB and OCB, thus also support Frost's notion that toxic events generate toxic emotions that prove destructive to both individuals and organisations.

While many factors affect toxic emotions at work, this study has focused mostly on a discussion of the effect of abusive supervision on toxic emotions. We found that the more abusive the supervisory behaviour, the more likely nurses are to experience toxic emotions. When nurses encounter supervisors who behave with deliberate malice, defamation and abuse over a long period they are likely to feel unfairly treated and consequently become more likely to experience toxic emotions. Abused nurses may express or release toxic emotions and feelings through withholding OCB or engaging in serious destructive behaviours such as verbal and physical aggression.

Workplace bullying not only negatively impacts the abused nurses and the hospitals, it also has harmful effects on coworkers and patients. Employees who witness bullying report higher stress and lower job satisfaction than those who are non-witnesses (Lutgen-Sandvik *et al.* 2007). In a chronically hostile working environment created by bullying, employees may fear becoming the next target, and the inability to aid the victims leads to chronic low-level anxiety among witnesses of bullying (Einarsen & Mikkelsen 2003). Patient care is also negatively impacted by workplace bullying: abused nurses were more likely to make errors in carrying out their duties because they were upset over an incident of bullying, and were less tolerant and compassionate towards their patients (Quine 2001, Randle 2003, Farrell *et al.* 2006). Managers need to take the likely consequences of abusive supervision on their hospitals seriously. Preventive practice is urgently needed to control abusive supervision in nursing settings.

Implications for nursing management

Too many employees displaying CWB or withholding OCB in the workplace could be detrimental to a healthcare organisation, its employees and patients (Pulich & Tourigny 2004). Effectively decreasing the negative effects of abusive supervision on nurses is a significant issue for hospital management. By utilizing various human resource management practices and effective intervention strategies, hospitals may address the negative effects of abusive supervision.

First, hospitals can effectively reduce the occurrence of abusive supervision through selecting, training and monitoring supervisors with the aim of attracting qualified supervisors and training them in management skills that enable them to behave in ways that will induce nurses to perceive them as fair and suitably qualified. Supervisors should be encouraged to seek additional training in areas such as the development of interpersonal relationship skills and anger management (Aryee *et al.* 2007).

A number of strategies are available to improve situations where supervisors do not promote a healthy work environment for nurses. The first such strategy is individual empowerment. Numerous studies have established links between empowerment and positive workplace attitudes and behaviours (Cirka 2005, Spence Laschinger *et al.* 2009, Gilbert *et al.* 2010). Empowering workplaces are those that provide employees with access to information, support, resources and opportunity so that they are able to do their job to the best of their ability. When employees experience their work environment as empowering, they are more likely to experience higher intrinsic motivation to improve their work environment, possibly by engaging in discretionary behaviours such as OCB (Kanter 1979, see Gilbert *et al.* 2010). According to social exchange theory, OCB is a form of repayment on behalf of the employee in return for empowering the working environment promoted by their organisation (Cirka 2005). Jensen and Raver (2012) found that employee empowerment strategies such as self-management are effective in increasing employees' discretionary behaviour that benefits organisations, that is, OCB. Lawrence and Robinson (2007) theorized that employees engage in CWB when their freedoms at work are threatened by illegitimate managerial action. Thus, empowerment may be an effective way to reduce CWB and to enhance OCB among nurses. Managers may create more empowered workplaces through improving formal and informal power, and access to support, information, resources

and opportunity including: increasing recognition of the nursing role as central and relevant to organisational goals; developing interdisciplinary networking opportunities; unblocking channels of communication; and assuring that necessary supplies and resources are available to accomplish work (Laschinger 2007).

Second, hospitals can establish anti-bullying policies and practices for dealing with the question of abusive supervision, including agreed grievance procedures and proper investigation of complaints. The provision and enactment of policies and procedures against bullying will benefit employees and hospitals.

Third, a respectful climate and an organisation culture where bullying at work is not tolerated could be created ensuring that leadership styles and managerial behaviours within the organisation can lead to each employee being treated fairly.

Finally, effectively reducing toxic emotions with reducing the occurrence of abusive supervision, and engaging in constructive practices such as care and compassion, if possible, makes it likely that the organisation can mitigate the production and subsequent spread of toxic emotions (Kahn 1993, Frost *et al.* 2000). Lilius *et al.* (2008) found that positive emotions appeared more frequently among those who have experienced compassion in their work than among others. Therefore, hospitals can attach more importance to cultivating compassionate competence throughout their hierarchies, especially from the top down, as perceptions of compassion in the workplace are likely to moderate the relationship between toxic emotions and both CWB and OCB. When nurses frequently feel that their bosses and co-workers are willing to listen to them and empathize with their negative emotions, even to the extent that they help them to lessen their distress, the strength that arises from this compassion could moderate the negative influences of toxic emotions, reducing CWB or increasing OCB.

Limitations and future research directions

Besides the topics above, into which research could be conducted in future, and the practical recommendations for hospitals, there still remain a number of limitations in this study. First, we did not control for other factors (e.g. perceived justice, job satisfaction) that may be related to employee's CWB and OCB (Moorman 1991, Williams & Anderson 1991, Fox *et al.* 2001, Zellars *et al.* 2002, Chu *et al.* 2005). Therefore, future studies on the relationships between employees' toxic emotions and their CWB and OCB should attempt to rule out the effects of other variables.

Second, to avoid the possibility of common method bias, we made efforts to measure these variables at different points in time, which could have reduced common method bias effects (Podsakoff *et al.* 2003). Despite this, however, we did measure variables in our theoretical model (such as abusive supervision and toxic emotions at work) at the same time, and some of the relationships reported by the proposed model may be inflated due to such bias. We did, however, make an effort to measure these variables at different times, which is likely to reduce common method bias effects (Podsakoff *et al.* 2003).

A final point worth discussing is the sample used in this article. The data were collected in Taiwan; thus, cross-cultural generalizability of the results may be a concern. Future research testing the study's model using samples from Western societies could provide direct evidence of the generalizability of our findings across cultures.

Conclusions

Destructive employee behaviour imposes enormous costs on organisational performance and productivity. Organisational citizenship behaviour is believed to facilitate the achievement of a hospital's goals and to enhance its performance. Our results suggest that abused nurses engage in more CWB and less OCB than their non-abused counterparts. Hence, hospitals should take the issue more seriously, allocating the necessary time and resources for prevention and control.

This study also found that toxic emotions at work are a critical mediating variable between abusive supervision and both CWB and OCB. Hospital administrators can implement policies designed effectively to manage events that can trigger toxic emotions in their employees, and pay more attention to those who exhibit toxic characteristics in order to ensure that they receive the necessary support to effectively buffer these experiences.

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Ethical approval

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References

- Aryee S., Chen Z.X., Sun L. & Debrah Y.A. (2007) Antecedents and outcomes of abusive supervision: test of a trickledown model. *Journal of Applied Psychology* **92**, 191–201.
- Blau P.M. (1964) *Exchange and Power in Social Life*. Wiley, New York.
- Bowling N.A. & Michel J.S. (2011) Why do you treat me badly? The role of attributions regarding the cause of abuse in subordinates' responses to abusive supervision. *Work and Stress* **25**, 309–320.
- Brislin R. (1980) Translation and content analysis of oral and written materials. In *Handbook of Cross-cultural Psychology: Methodology*. Vol. 2(H.C. Triandis & J.W. Berry eds), pp. 389–444. Allyn & Bacon, Boston, MA.
- Chu C., Lee M., Hsu H. & Chen I. (2005) Clarification of the antecedents of hospital nurse organisational citizenship behavior – an example from a Taiwan regional hospital. *Journal of Nursing Research (Taiwan Nurses Association)* **13**, 313–323.
- Cirka C.C. (2005) When actions speak as loudly as words: autonomy support, psychological empowerment and organisational citizenship behavior. In *Handbook of Organisational Citizenship Behavior: A Review of 'Good Soldier' Activity in Organizations*(D.L. Turnipseed ed.), pp. 291–327. Nova Science Publishers, Inc., New York.
- Diaz A.L. & McMillin J.D. (1991) A definition and description of nurse abuse. *Western Journal of Nursing Research* **13**, 97–109.
- Duffy M.K., Ganster D. & Pagon M. (2002) Social undermining in the workplace. *Academy of Management Journal* **45**, 331–351.
- Einarsen S. & Mikkelsen E.G. (2003) Individual effects of exposure to bullying at work. In *Bullying And Emotional Abuse in the Workplace: International Perspectives in Research and Practice*(S. Einarsen, H. Hoel, D. Zapf & C.L. Cooper eds), pp. 127–144. Taylor & Francis, New York.
- Emerson R.M. (1962) Power-dependence relations. *American Sociological Review* **27**, 31–41.
- Farh J.L., Earley P.C. & Lin S.C. (1997) Impetus for extraordinary action: a cultural analysis of justice and organisational citizenship behavior in Chinese society. *Administrative Science Quarterly* **42**, 421–444.
- Farrell G., Bobrowski C. & Bobrowski P. (2006) Scoping workplace aggression in nursing: findings from an Australian study. *Journal of Advanced Nursing* **55**, 778–787.
- Fitness J. (2000) Anger in the workplace: an emotion script approach to anger episodes between workers and their superiors, co-workers and subordinates. *Journal of Organizational Behavior* **21**, 147–162.
- Fox S., Spector P.E. & Miles D. (2001) Counterproductive work behavior (CWB) in response to job stressors and organisational justice: some mediator and moderator tests for autonomy and emotions. *Journal of Vocational Behavior* **59**, 291–309.
- Frost P.J. (2003) *Toxic Emotions at Work*. Harvard Business School Press, Boston, MA.
- Frost P.J., Dutton J.E., Worline M.C. & Wilson A. (2000) Narratives of compassion in organisations. In *Emotion in organisations* (S. Fineman ed.), pp. 25–45. Sage, London.

- Gilbert S., Laschinger H.K.S. & Leiter M. (2010) The mediating effect of burnout on the relationship between structural empowerment and organisational citizenship behaviours. *Journal of Nursing Management* 18, 339–348.
- Hoel H., Cooper C.L. & Faragher B. (2001) The experience of bullying in Great Britain: the impact of organisational status. *European Journal of Work and Organizational Psychology* 10, 443–465.
- Hogh A., Hoel H. & Carneiro I.G. (2011) Bullying and employee turnover among healthcare workers: a three-wave prospective study. *Journal of Nursing Management* 19, 742–751.
- Hutchinson M., Vickers M., Jackson D. & Wilkes L. (2006) Workplace bullying in nursing: towards a more critical organisational perspective. *Nursing Inquiry* 13, 118–126.
- Jackson D., Clare J. & Mannix J. (2002) Who would want to be a nurse? Violence in the workplace – a factor in recruitment and retention. *Journal of Nursing Management* 10, 13–20.
- Jensen J.M. & Raver J.L. (2012) When self-management and surveillance collide: consequences for employees' organisational citizenship and counterproductive work behaviors. *Group and Organization Management* 37, 308–346.
- Johnson S.L. (2009) International perspectives on workplace bullying among nurses: a review. *International Nursing Review* 56, 34–40.
- Kahn W.A. (1993) Caring for the caregivers: Patterns of organisational caregiving. *Administrative Science Quarterly* 38, 539–563.
- Kanter R.M. (1979) Power failure in management circuits. *Harvard Business Review* 57, 65–75.
- Kiefer T. & Barclay L.J. (2008) *Why are negative emotions harmful? The mediating role of toxic emotional experiences*. Accepted for presentation at the Annual Meeting of the Academy of Management, Anaheim, CA.
- Kiefer T. & Barclay L.J. (2012) Understanding the mediating role of toxic emotional experiences in the relationship between negative emotions and adverse outcomes. *Journal of Occupational and Organizational Psychology* 85, 600–625.
- Kiefer T., Barclay L.J. & Frost P.J. (2005) Understanding toxic emotions at work: towards a definition and measurement. *Proceedings: Annual Meeting of the European Academy of Management (EURAM)*. Munich, Germany.
- Laschinger H.K. (2007) *Structural Empowerment*. Presented at The Dorothy Wiley Institute for Nursing Leadership, Toronto, ON.
- Lawrence S.A. (2008) The case for emotion-induced toxicity: making sense of toxic emotions in the workplace. In *Research Companion to Emotions in Organizations* (N.M. Ashkanasy & C. Cooper eds), pp. 73–89. Edward Elgar (New Horizons in Management Series), Cheltenham, UK.
- Lawrence T.B. & Robinson S.L. (2007) Ain't misbehavin': workplace deviance as organisational resistance. *Journal of Management* 33, 378–394.
- Lilius J.M., Worline M.C., Maitlis S., Kanov J., Dutton J.E. & Frost P. (2008) The contours and consequences of compassion at work. *Journal of Organizational Behavior* 29, 193–218.
- Lord V.B. (1998) Characteristics of violence in state government. *Journal of Interpersonal Violence* 13, 489–504.
- Lutgen-Sandvik P., Tracy S.J. & Alberts J.K. (2007) Burned by bullying in the American workplace: prevalence, perception, degree and impact. *Journal of Management Studies* 44, 837–862.
- Magnavita N. & Heponiemi T. (2011) Workplace violence against nursing students and nurses: an Italian experience. *Journal of Nursing Scholarship* 43, 203–210.
- Montgomery A.J., Panagopoulou E. & Benos A. (2005) Emotional labor at work and home among Greek health professionals. *Journal of Health Management* 19, 395–408.
- Moorman R.H. (1991) Relationship between organisational justice and organisational citizenship behaviors: do fairness perceptions influence employee citizenship? *Journal of Applied Psychology* 76, 845–855.
- Organ D.W. (1988) *Organizational Citizenship Behavior: The Good Soldier Syndrome*. Lexington Books, Lexington, MA.
- Ortega A., Christensen K.B., Hogh A., Rugulies R. & Borg V. (2011) One-year prospective study on the effect of workplace bullying on long-term sickness absence. *Journal of Nursing Management* 19, 752–759.
- Podsakoff P.M., MacKenzie S.B. & Podsakoff N.P. (2003) Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of Applied Psychology* 88, 879–903.
- Pulich M. & Tourigny L. (2004) Workplace deviance: strategies for modifying employee behavior. *The Health Care Manager* 23, 290–301.
- Quine L. (2001) Workplace bullying in nurses. *Journal of Health Psychology* 6, 73–84.
- Rafferty A.E. & Restubog S.L.D. (2011) The influence of abusive supervisors on followers' organisational citizenship behaviours: the hidden costs of abusive supervision. *British Journal of Management* 22, 270–285.
- Randle J. (2003) Bullying in the nursing profession. *Journal of Advanced Nursing* 43, 395–401.
- Rowe M.M. & Sherlock H. (2005) Stress and verbal abuse in nursing: do burned out nurses eat their young? *Journal of Nursing Management* 13, 242–248.
- Simons S. (2008) Workplace bullying experienced by Massachusetts registered nurses and the relationship to intention to leave the organisation. *Advances in Nursing Science* 31, 48–59.
- Spector P.E. & Fox S. (2002) An emotion-centered model of voluntary work behavior: some parallels between counterproductive work behavior (CWB) and organisational citizenship behavior (OCB). *Human Resource Management Review* 12, 269–292.
- Spector P. & Fox S. (2005) *The Stressor-Emotion Model of Counterproductive Work Behavior*. American Psychological Association, Washington, DC.
- Spector P.E., Fox S., Penney L.M., Bruursema K., Goh A. & Kessler S. (2006) The dimensionality of counterproductivity: are all counterproductive behaviors created equal? *Journal of Vocational Behavior* 68, 446–460.
- Spence Laschinger H.K., Leiter M., Day A. & Gilin D. (2009) Workplace empowerment, incivility, and burnout: impact on staff nurse recruitment and retention outcomes. *Journal of Nursing Management* 17, 302–311.
- Spielberger C.D. (1988) *Manual for the State-Trait Anger Expression Inventory*. Psychological Assessment Resources, Odessa, FL.
- Tepper B.J. (2000) Consequences of abusive supervision. *Academy of Management Journal* 43, 178–190.
- Tepper B.J., Carr J.C., Breaux D.M., Geider S., Hu C. & Hua W. (2009) Abusive supervision, intentions to quit, and employees' workplace deviance: a power/dependence analysis. *Organizational Behavior and Human Decision Processes* 109, 156–167.

- Thau S., Bennett R.J., Mitchell M.S. & Marris M.B. (2009) How management style moderates the relationship between abusive supervision and workplace deviance: an uncertainty management theory perspective. *Organizational Behavior and Human Decision Processes* 108, 79–92.
- Wang W., Mao J., Wu W. & Liu J. (2012) Abusive supervision and workplace deviance: the mediating role of interactional justice and the moderating role of power distance. *Asia Pacific Journal of Human Resources* 50, 43–60.
- Wei F. & Si S. (2013) Tit for tat? Abusive supervision and counterproductive work behaviors: the moderating effects of locus of control and perceived mobility. *Asia Pacific Journal of Management* 30, 281–296.
- Whicker M.L. (1996) *Toxic Leader: When Organizations Go Bad*. Quorum Books, Westport, CT.
- Williams L.J. & Anderson S.E. (1991) Job satisfaction and organisational commitment as predictors of organisational citizenship and in-role behaviors. *Journal of Management* 17, 601–617.
- Yildirim A. & Yildirim D. (2007) Mobbing in the workplace by peers and managers: mobbing experienced by nurses working in health care facilities in Turkey and its effect on nurses. *Journal of Clinical Nursing* 16, 1444–1453.
- Zapf D., Einarsen S., Hoel H. & Vartia M. (2003) Empirical findings on bullying in the workplace. In *Bullying and Emotional Abuse in the Workplace* (S. Einarsen, H. Hoel, D. Zapf & C.L. Cooper eds), pp. 103–126. Taylor & Francis, London.
- Zellars K.L., Tepper B.J. & Duffy M.K. (2002) Abusive supervision and subordinates' organisational citizenship behavior. *Journal of Applied Psychology* 87, 1068–1076.