

Contents lists available at ScienceDirect

Heliyon

journal homepage: www.cell.com/heliyon



Research article

Lashing out: emotional exhaustion triggers retaliatory incivility in the workplace



Jennifer M.I. Loh*, Abu Saleh

University of Canberra, Canberra Business School, Bruce Campus, Canberra, Australia

ARTICLE INFO

Keywords:
Retaliatory incivility
Emotional exhaustion
Job satisfaction
Work withdrawal
Structural equation modelling

ABSTRACT

Incivility in the workplace is a growing problem in many workplaces that can detrimentally affect employees and organisations. Despite this increasing problem, the current literature on incivility lacks an integrated theoretical model to explain engaged and retaliated incivility in the workplace. To address this gap, we tested a model which incorporated both Spiral Theory of Incivility with Conservation of Resource Theory to explain the underlying processes involve in the relationship between engaged and retaliatory workplace incivility. Specifically, retaliatory incivility was hypothesised as an influencing factor, work withdrawal and job dissatisfaction as consequences, and emotional exhaustion as a moderator. A total of 875 employees in multinational organisations across three countries were panel surveyed. The overall result from the Structural Equation Modelling (SEM) indicated that the fit indices for the proposed model fulfilled all recommended levels. Importantly, emotional exhaustion was found to be the trigger point in the negative spiral of workplace incivility. Theoretical implications and practical considerations were discussed.

1. Introduction

Workplace incivility has gained considerably research attention over the past 20 years due to its prevalence and detrimental impact on both individuals and organisations (Andersson and Pearson, 1999; Loh et al., 2019; Porath and Pearson, 2013). Workplace incivility has been referred to as, "low intensity behaviour with ambiguous intent to harm the target, in violation of workplace norms for mutual respect; and displaying a lack of regard for others" (Andersson and Pearson, 1999, p. 457). In other words, workplace incivility are thoughtless, rude behaviours that disregard what constitute normal respectful and ethical behaviours that are required between individuals (Hanrahan and Leiter, 2014). For instance, this can include individuals making disparaging comments, looking down on someone, forgetting to say thank you or please, and/or ignoring someone (Hershcovis, 2011; Porath and Pearson, 2010; Reich and Hershcovis, 2015).

1.1. The problem

Workplace incivility is a form of workplace mistreatment experienced by employees in many modern organisations (Civility in America, 2014, 2016). For example, Porath and Pearson (2013) surveyed 14,000 American and Canadian employees and found that at least 98% of the

respondents indicated that they experienced incivility at the workplace suggesting that incivility is a universal problem for organisations across the world. Importantly, workplace incivility has been found to adversely affect the mental health and productivity of employees across the globe (Doshy and Wang, 2014; Lim and Lee, 2011; Oyeleye, Hanson, O'Connor and Dunn, 2013; Porath and Pearson, 2013).

When it comes to work outcomes, it has been well established that there are significant negative impact of workplace incivility on reduced job satisfaction, lower job engagement, increased work withdrawal, increased absenteeism and increased turnover intentions across a number of occupational sectors including the service, health, and other industries such as finance, banking, education, construction and real estate (Bibi et al., 2013; Bunk and Magley, 2013; Giumetti et al., 2013; Lim and Lee, 2011; Loh et al., 2019; Sliter et al., 2012). Given the detrimental consequences of workplace incivility experienced by employees across different industries, it is imperative that we understand not just the consequences associated with workplace incivility but also potential underlying mechanism that may hinder or exacerbate the consequences associated with it. In this study, we will test one such underlying mechanisms, emotional exhaustion to determine if it might be influenced workplace incivility, retaliatory workplace incivility and its workplace outcomes (i.e., job satisfaction and work withdrawal).

E-mail address: Jennifer.Loh@canberra.edu.au (J.M.I. Loh).

 $^{^{\}ast}$ Corresponding author.

An important differentiation between workplace incivility and the more overt form of workplace aggression is its ambiguous and covert intent to harm the victim (Pearson et al., 2001). Despite this, the adverse impacts experienced by victims of workplace incivility have been found to parallel those of victims from workplace bullying (Hershcovis, 2011; Pearson and Porath, 2009). In other words, despite its lower intensity, workplace incivility is as bad as workplace bullying. Other researchers have found that workplace incivility is a antecedent to workplace violence (Baron and Neuman, 1996) and that if it is not handled properly, it can lead to organisational and employee's inefficiency.

Research has also indicated, for example, that experiencing incivility incites targets to reciprocate (Bunk and Magley, 2013) and to engage in retaliatory (Kim and Shapiro, 2008), deviant (Lim and Teo, 2009), and counterproductive (Penney and Spector, 2005) behaviours at work. Moreover, employees who are targets of workplace incivility show adverse impact on various performance-engagement related work domains, such as task performance (Chen et al., 2013; Giumetti et al., 2013), citizenship behaviour (Taylor et al., 2012), withdrawal behaviour (Cortina et al., 2001; Lim and Cortina, 2005), turnover intentions (Miner-Rubino and Reed, 2010; Wilson and Holmvall, 2013), and job dissatisfaction (Loh and Loi, 2018).

While researchers have a clearer understand about the prevalence, antecedents and broad consequences of workplace incivility, there is a lack of an integrated theoretical model to explain how targets of incivility may retaliate causing more severe forms of negative workplace behaviours (Andersson and Pearson, 1999; Schilpzand et al., 2016). Hershcovis (2011) also argues that there is a need to examine the influence of potential underlying mechanisms and their impact on retaliatory behaviours. So far, empirical research has been scarce in this area. This is because researchers have adopted a myriad of theoretical approaches which produced a set of detached theories such as, power theories (Miner-Rubino and Cortina, 2004), group identity theories (Kern and Grandey, 2009), social exchange theory (Cameron and Webster, 2011), appraisal theory (Porath and Pearson, 2012), emotion-centered model of work behaviour (Sakurai and Jex, 2012), the Dollard-Miller model of aggression (Taylor et al., 2012), and cognitive-motivational-relational theory (Bunk and Magley, 2013).

Yet, in the early seminal work of Andersson and Pearson (1999), workplace incivility has been constructed from a social interactionist perspective. What this means is that workplace incivility requires the interactions of two or more parties and that "the instigator(s), the target(s), or the observer(s), as well as the social context all contribute to and are affected by an uncivil encounter" (Andersson and Pearson, 1999, p. 457). Perceived this way, workplace incivility is instigative in nature and can easily lead to counterproductive retaliatory behaviours between perpetrators and victims. Loh and Loi (2018) found empirical evidence to suggest that a tit for tat effect exists between targets of workplace incivility and perpetrators of workplace incivility. Similarly, Leiter et al. (2012) also found that the cynicism dimension of burnout strongly predicted future instigated incivility suggesting the importance of affect in the negative spiral of workplace incivility. These empirical evidence points to the need for a unified theoretical model to help explain the underlying processes that may exist between workplace incivility, retaliatory incivility and counter-productive workplace behaviours (Loh and Loi, 2018; Schilpzand et al., 2016).

Heeding this call, incivility in the workplace and its components were examined in relations to retaliatory workplace incivility, work withdrawal and job satisfaction in this study. In addition, emotional exhaustion was included in the model and examined as a potential moderator. In doing so, this study contributes to the existing literature on the instigative nature of workplace incivility and identified emotional exhaustion as a potential moderator that may attenuate the negative impact experienced by targets of workplace incivility.

1.2. Theoretical framework

1.2.1. Spiral theory of incivility

Andersson and Pearson's (1999) theoretical framework on the spiralling effects of incivility provides a useful theoretical framework to investigate how employees experience and response to workplace incivility. Experience workplace incivility refers to the extent the employee perceives he or she has encountered incivility at the hand of his/her perpetrator whereas retaliatory workplace incivility refers to when an employee has himself or herself engaged in an uncivil act (Blau and Andersson, 2005; Loh and Loi, 2018). According to Andersson and Pearson (1999), a negative incivility spiral begins when an uncivil act is recognised and perceived by the individual as offensive or unacceptable behaviour. The victim's reaction, triggered by negative affect is to retaliate because he/she wants to "right a wrong he or she perceived to have been done to him or her" (Loi and Loh, 2018). For example, you shouted at me so I will shout back at you.

There is also a possibility for secondary incivility. This occurs when witnesses to workplace incivility also engage in uncivil acts (Andersson and Pearson, 1999). Therefore, workplace incivility is a vicious cycle which can be triggered by minor issue but then escalate to severe or intense negative workplace behaviours with detrimental impact for the instigator(s), the target(s), and/or the witness(es) (Pearson and Porath, 2005). In this study, we focused on the primary stage of incivility because we wanted to investigate the direct retaliatory process between perpetrators and their targets. While the spiral theory of incivility provides a useful framework to understand the retaliatory response between targets and perpetrators of incivility, there has been a lack of empirical research for this theory. There has also been a lack of research which looks at potential moderators which might attenuate the impact and/or the severity of this negative workplace behaviours. Therefore, we integrated the Spiral of Incivility with the Conservation of Resource (COR) theory to provide a more cohesive approach to explain both the direct effect as well as the potential underlying processes involve in the negative spiral model for workplace incivility.

1.2.2. The Conservation of Resource (COR) theory

The Conservation of Resource (COR) theory complements Andersson and Pearson's (1999) spiral theory of incivility. COR is a motivational theory which posits that individuals strive to acquire, retain, protect, and cultivate personal, social, and material resources especially in times of stress (Hobfoll, 1989). Object resources typically include things such as homes, clothes, and food. Time, money and knowledge represent energy resources (Hobfoll, 1989). Individuals' personal characteristics such as self-esteem or mastery are also resources individuals possess.

According to the COR theory, stress occurs when individuals' key resources are threatened with loss, when resources are lost, or when individuals fail to retain or gain resources after significant resource investment. Emotional exhaustion or burnout is one such outcome of this stress (Halbesleben and Buckley, 2004; Hobfoll, 1989). In other words, COR theory provides a useful framework within which to understand why targets of incivility retaliate back, principally that "when peoples' resources are outstretched or exhausted, they enter a defensive mode to preserve the self which is often defensive, aggressive, and may become irrational (Hobfoll et al., 2018, p. 106, p. 106)". As a result, their social abilities become hindered when they are emotionally exhausted (Johnson and Indvik, 2001). Consequently, these individuals may have a greater difficulty interacting in social situations and may react more uncivilly than individuals who are less emotionally exhausted.

Indeed, Hobfoll (1989) and Shirom (2003) found that individuals who are burned out experience a net loss of resources which make them less able to deal effectively with stressors. In other words, emotionally exhausted individuals may react more uncivilly towards others. It is important to point out that burnout has been defined as "a prolonged response to chronic emotional and interpersonal stressors on the job" (Maslach et al., 2001, p. 397). According to burnout researchers,

exhaustion and depersonalisation are two core responses to burnout (Maslach, 1982). Exhaustion refers to the "feelings of being overextended and depleted of one's emotional and physical resources" (Maslach et al., 2001, p. 399) due to work overload or personal conflict at work. As a result, exhaustion is a central feature of burnout. For this reason, in this study, emotional exhaustion and burnout will be used interchangeably. Please refer to Figure 1 below for the Theoretical Framework.

1.3. Hypotheses development

Andersson and Pearson (1999) posit that a reciprocal social process exists between targets and perpetrators of workplace incivility giving raise to what is known as an uncivil spiral effect or "tit for tat" response between involved individuals. In other words, the self-sustaining nature of such a spiral heightens the risk of retaliatory incivility between targets and perpetrators. For example, in a recent survey of 303 white collar Australian employees in small to medium size enterprises, Loh and Loi (2018) found that employees who experienced workplace incivility retaliated towards their perpetrators. Similarly, Porath and Pearson (2012) surveyed 137 employed MBA students and found that targets who reported greater incivility also reported greater anger, fear, and sadness. Importantly, targets who experienced anger tended to retaliate with direct aggression towards their perpetrators. Based on these empirical evidence, we proposed the following hypothesis for testing:

H1: Workplace incivility is positively associated with retaliatory incivility.

1.4. Job satisfaction and work withdrawal

Workplace incivility has been linked to a number of adverse work outcomes including reduced work productivity, absenteeism, increased turnover intentions, job dissatisfaction, and work withdrawal (Bibi et al., 2013; Bunk and Magley, 2013; Cortina and Magley, 2009; Loh et al., 2019; Schilpzand et al., 2016). While important, many of these studies have focused on the experiences rather than in the outcomes associated with targets who retaliated back. Therefore, one of the aims of the present study is to investigate work outcomes (e.g., job satisfaction and work withdrawal) from the perspective of targets who retaliated against their perpetrators.

In the present study, two workplace outcomes, namely job satisfaction and work withdrawal are investigated. This is because there is general agreement within the management literature that job satisfaction plays a highly influential role in employee's job performance (Schleicher et al., 2004). Job satisfaction is also said to strongly predict employee's physical and psychological well-being (Hoole and Vermeulen, 2003). In this study, job satisfaction is conceptualised as the degree of contentment an employee feels towards his or her work (Brayfield and Rothe, 1951).

Work withdrawal refers to those behaviours engaged by dissatisfied employees in order to reduce or avoid specific work tasks or other aggravating situations (Hanisch and Hulin, 1990). For instance, Pearson et al. (2001) found that workplace incivility has a positive association with workplace withdrawal. Similarly, Harold and Holtz (2015) in their investigation of 122 employee-supervisor dyads and 105 coworker dyad found that employees who were exposed to high levels of workplace incivility and who worked for a passive leader were more likely to engage in withdrawal behaviours than employees who worked for a less passive supervisor. These studies suggest the importance of work withdrawal as an outcome of workplace incivility. Thus, more investigation is needed in this area.

As stated previously, there has been limited research from the perspective of targets who retaliated. One study which has investigated workplace incivility from targets who retaliated was Blau and Andersson (2005). In their study with 211 working adults, Blua and Andersson (2005) found that targets who retaliated experienced less distributive justice and less job satisfaction. Similarly, Cingöz & Kaplan (2015) found that instigated incivility negatively predicted job satisfaction in a group of 345 bank employees. However, the explanations provided by Cingöz and Kaplan (2015) as to why targets retaliated were contradictory. For example, the first explanation they provided was that employees may have retaliated uncivilly towards others to show their job dissatisfaction. Their second explanation was that employees might have retaliated because they experienced incivility from authority figures. However, it is unclear which is their preferred explanation.

In the present study, we adopted the spiral theory of incivility and COR theory to develop our hypotheses. Utilising these theories, we argue that once an uncivil act is perceived by targets as unacceptable behaviours, targets will retaliate because they believe they need to 'right a wrong'. This is because individuals who are treated uncivilly are highly likely to develop negative affect such as, a perceived feeling of injustice, resentment or frustration (Leiter, 2013) which makes them more prone to retaliatory acts (Leiter, 2013). In addition, in the process of retaliating against their perpetrators, targets who retaliated may over-stretch or deplete their resources and ended up emotionally exhausted (Halbesleben and Buckley, 2004; Hobfoll, 1989). At the same time, they justify their retaliatory behaviours by blaming their organisations for allowing the incivility to occur in the first place. As a result, their job satisfaction decreases and their work withdrawal behaviours increase. Therefore, based on the above empirical studies and theories, we proposed that:

H2: Retaliatory incivility is negatively associated with job satisfaction

H3: Retaliatory incivility is positively associated with work withdrawal Researchers have found that job satisfaction is negatively associated with work withdrawal (Johns, 1992; Meyer et al., 2002). According to Pearson et al. (2000) and Pearson et al. (2001), this is because encountering workplace incivility elicits negative affective responses and

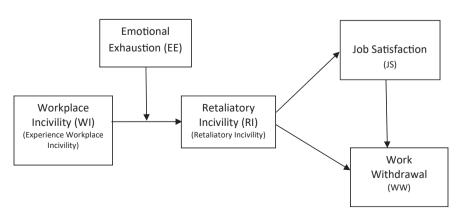


Figure 1. Theoretical framework.

cognitive reactions (e.g., worrying about when they will encounter incivility from perpetrator). This negative encounter will disrupt employees' occupational well-being and worsen their commitment to their job. For example, in a survey of 1158 US federal court employees, Lim et al. (2008) found that workplace incivility reduced supervisor and work satisfaction which contributed to employees' poor mental health and increased intention to quit. Similarly, past research has also found that job satisfaction negatively predicted various job withdrawal behaviours (e.g., Hanisch and Hulin, 1990; Meyer et al., 2002). Therefore, we proposed that:

H4: Job Satisfaction is negatively associated with work withdrawal Past research has identified the existence of a reciprocal social process between targets and perpetrators in what is known as known as an uncivil spiral effect of workplace incivility (Andersson and Pearson, 1999; Loh and Loi, 2018; Porath and Pearson, 2012). However, this relationship may be moderated by emotional exhaustion. Emotional exhaustion is important because studies have found that higher levels of emotional exhaustion are associated with reduced career satisfaction (Prosser et al., 1999) and increased withdrawal behaviours (Deery et al., 2002). Crucially, researchers have found that the more emotionally exhaustion employees experienced, the more their cognitive functions declined (Deligkaris et al., 2014). Individuals with lower cognitive functions are less resourceful in their social abilities to deal with conflict (Hobfoll, 1989; Shirom, 2003). As a result, more emotionally exhausted employees are more likely to respond with retaliatory behaviours towards their perpetrators than less emotionally exhausted employees. Based on these empirical evidence, we proposed that:

H5: Emotional exhaustion (Burnout) will moderate the relationship between workplace incivility and retaliatory incivility. Specifically, more emotionally exhausted employees will respond with higher levels of retaliatory incivility than less emotionally exhausted employees.

2. Method

2.1. Participants

Participants from different multinational organisations and industrial sectors in Australia, Singapore and the Philippines were panel surveyed through the Qualtrics Panel System. The inclusion criteria consisted of participants 18 years old or above and they *must* be currently engaged in paid jobs. Participants comprised of 875 adult employees (425 males and 450 females). The demographic information of participants are as follows, two hundred and sixty-two (N = 262, 30%) participants were in the 18–30 years old range, two hundred and seventy-six (N = 276, 32%) were in the 31–40 years old range, one hundred and seventy-six (N = 176, 20%) were in the 41–50 years old range, one hundred and seventeen (N = 117, 13%) were in the 51–60 years old range and fourty-four (N = 44, 5%) were in the greater than 60 years old range. In terms of the working industry, three hundred and fourteen (N = 314, 36%) were in the public sector, one hundred and sixty-four (N = 164, 19%) were in

trade and manufacturing, one hundred and twenty-eight (N = 128, 15%) were in service industry, one hundred and eighty-five (N = 185, 21%) were professional and eighty-one (N = 81, 9%) were in the construct and property business. Seven hundred and one (N = 701, 80%) participants worked full-time, one hundred and fourty-one (N = 141, 16%) participants worked part-time, twenty-nine (N = 29, 3%) participants worked on a casual basis, and four (N = 4, 1%) participants worked on a sessional basis. Please refer to Table 1 for details.

Considering survey fatigue caused by a typical online survey and to intensify the response rate, thereby minimising response bias and increasing validity of the statistical implication (Churchill and Iacobucci, 2002), numerous steps were taken. First the questionnaire instrument was developed from the verified sources, tested further and finalised. The survey instrument was comprised of items that operationalised workplace incivility and relevant variables in the proposed model, Figure 1. The initial version of the questionnaire was verified by relevant expert academics in the field to ensure content validity of the measures. Survey packets were emailed to the broad network. After a series of follow-up emails and reminder, 911 responses were received. Early and late responses were compared and checked using Armstrong and Overton's (1977) procedure; no response bias was revealed. Demographic and respondents' profiles for the final retained sample are shown in Table 1 below.

Based on Table 1, the data discovered interesting insights regarding the respondents that varied largely because of their characteristics and extent of involvement in profession. Specifically, sample elements in this study were 82% young and middle-aged, working in the trade, manufacturing, service, professional and public sector management area with solid experience in workplace environment. The majority (80%) of the key respondents' occupational status within the employment area attests to the reasonable participation in this survey and achieved sufficient data quality.

2.2. Procedures

Survey commenced once the ethic approval from the University of Canberra's Human Research Ethics Committee was granted. The survey was administered through the Qualtrics Panel System. Panel systems of recruitment of participants are used globally and have been found to be more accurate than data collected through survey (Hsiao, 2007). A cover sheet containing the information letter accompanied the survey. The information letter contained information about the purpose of the study, the voluntary nature of the study, assurance of participants' confidentiality and their informed consent (consent was considered received upon full completion of the survey questionnaire). Participants were also instructed to answer all questions as honestly as they can and that, there was no right or wrong answer as the researchers were only interested in their opinion. Participants were reminded that they could withdraw from the survey at any time without penalty. These instructions were included for each set of the measurement. Demographic information such as age, gender, occupation status and the industry participants worked in were also collected.

Table	1.	Informants'	profiles.
-------	----	-------------	-----------

Age of the	informants		Working Industry			Occupational status			Gender	Gender		
Group	N	%	Bus Area	N	%	Job	N	%	Group	N	%	
18–30	262	30	Trade and manufact	167	19	FT	701	80	Male	425	49	
31–40	276	32	Public sector	314	36	PT	141	16	Female	450	51	
41–50	176	20	Service sector	128	15	С	29	3				
51–60	117	13	Construct & Prop Bus	81	9	S	4	1				
≥61	44	5	Profess	185	21							
Total	875	100	Total	875	100	Total	875	100	Total	875	100	

Note: FT = Full-time, PT = Part-time, Casual = C, Seasonal = S, Profess = Professional.

2.3. Measures

2.3.1. Workplace Incivility Scale (Modified WIS-experienced)

Cortina, Kabat-Farr, Leskinen, Huerta and Magley's (2013) modified Workplace Incivility Scale was used to measure participants' experience of workplace incivility. This scale consists of 7 items which assesses the actual experiences of how often participants encounter specific rude or uncivil behaviours in their workplace in the past year. Participants' responses were recorded on a Likert scale ranging from (0 = never) to (4 = many times). Two examples of such uncivil or rude behaviours included, "Interrupted or spoke over you." and 'Gave you hostile looks, stares, or sneers." The Cronbach's alpha for this measure in the present study was .88, indicating strong internal consistency.

2.3.2. Retaliatory/instigated Workplace Incivility Scale (Modified WIS-retaliatory)

Retaliatory/instigated workplace incivility was measured using Cortina et al.'s (2013) 8 item modified Workplace Incivility Scale. However, for this measure, participants were given a different set of instructions to help them complete the scale. Instead of asking participants about their experiences, participants were asked to indicate how often they have engaged in instigated incivility in the workplace. For example, "Please indicate how often you have engaged in the following behaviours in the past year". Participants were also reminded to answer each question items as honestly as they can as there was no right or wrong answer. A Likert scale ranging from 0 (never) to 4 (many times) was used to assess how often participants have engaged in each of the rude or uncivil behaviours in their workplace. An example item included, "Targeted someone with anger outbursts or temper tantrums". The Cronbach's alpha for the modified WIS- retaliatory scale was .91 in the current study which indicated strong internal consistency.

2.3.3. Emotional exhaustion

Emotional Exhaustion (Burnout) was measured using the Gillespie-Numerof Burnout Inventory (1984). A 7-point Likert scale ranging from 0 (*never*) to 7 (*always*) was used. The scale consists of 7 items which empirically measure the degree to which employees feel *psychologically and emotionally fatigued* on the job. Two example items were, "I'm fed up with my job" and "My job makes me angry". In the current study, this inventory obtained a Cronbach's α value of .88, demonstrating excellent internal consistency.

2.3.4. Job satisfaction

Brayfield and Rothe's (1951) Index of Job Satisfaction was used to measured job satisfaction. The scale consists of 6 items. Items were scored on a 5-point Likert scale ranging from 1 (strongly agree) to 5 (Strongly disagree). The positively worded items were reverse scored so that for all items, a higher score indicated higher job satisfaction and a lower score indicated lower job satisfaction. The current study demonstrated good internal consistency with a Cronbach's value of .83.

2.3.5. Work withdrawal

The construct measure "work withdrawal" was measured using 6 items adopted from Hanisch and Hulin (1990). Survey items were scored using a 7-point Likert scale which ranges from 0 (Never) to 7 (hourly). Participants were asked how often they have engaged in any of the work withdrawal behaviours such as, been late for work or absent from work. The Cronbach Alpha reliability score for this measure was .71.

2.4. Data analysis

Several pre-emptive actions were taken to reduce bias and non-responsive answer. For example, steps recommended by Ryan and

Bernard (2003) were taken such as, ensuring that the clarity and overt judgments during questionnaire instrument preparation, data processing, entry, cleaning and different phases of analyses are monitored and maintained. Non-response bias check and evaluation of normality were undertaken to provide reliable and conclusive findings. For instance, to reduce data bias, a variety of employee organisations/industries (refer to Table 1, respondent profile) were included in the sample representative. Measurement instruments were all adopted from the extant relevant field of studies, survey data were collected from distinct categories, and systematic approaches (i.e., pre-testing, pilot-testing and normality testing, exploratory factor analysis (EFA), Cronbach Alpha reliability) were applied to ensure the reliability and consistency of the findings. In addition, Kaiser-Meyer-Olkin (KMO) sampling adequacy measure score of 93% was very high and has substantially exceeded the recommended threshold of .70 (Hair et al., 2014).

The study additionally assessed multicollinearity problems that may lead to biased estimation of coefficient (Yoo et al., 2014). This can be observed when measures are highly correlated (≥.80) or inter-item correlations (within the measure) exceed reliability score for the respective measure. Multicollinearity was not at all a problem in this study as reported in the Result section. The data refinement and screening process identified 22 out of 911 returned survey responses as unusable due to large section of missing data; these were excluded from the initial outlier analysis. Based on Tabachnick and Fidell (2001), identification of specific response cases with extreme values, assessing standardised z scores and Mahalanobis distance for univariate outliers and multivariate outliers (Tabachnick and Fidell, 2001) revealed 14 extreme outliers. These cases were excluded from the final CFA and SEM analyses. Thus, the final useable responses were 875.

3. Results

The correlation matrix in Table 2 shows that none of the correlations between any two constructs exceeds the score of 0.8 or any reliability score; thus, multicollinearity was not at all a problem in the analyses. The confirmatory factor analyses and measurement validation will be discussed in the sections to follow.

3.1. Validation of measurement

In assessing the psychometric properties of the measures, the study followed Anderson and Gerbing's (1988) procedure to validate the construct measures. As noted earlier, in the initial data refinement process, 14 extreme outlier cases were excluded. Furthermore, the initial confirmatory factor analysis (CFA) including 35 measurement items revealed 10 scale items in different construct measures were either redundant or problematic with low-loading scores. There scale items were excluded from the final CFA analysis. Finally, the study conducted CFA for the remaining 25 items with five constructs (Schumacker and Lomax, 1996), using AMOS software to confirm a maximum likelihood method. The results of the CFA analysis are highly acceptable, signifying a parsimonious model fit to the data with $\chi^2/df=2.60$, RMSEA = .043, IFI = .96, TLI = .96, and CFI = .96. The CFA loading scores are reported in Table 3 below.

3.2. Convergent and discriminant validity check

In order to confirm the convergent and discriminant validity of the construct measures, correlations between the independent and dependent variables and alpha reliability scores for each of the measures in Table 2 suggest that all construct measures are reliable and convergent. None of the correlation covariances exceeded any of the Standardised Alpha reliability scores, providing the evidence of convergent validity of

Table 2. Correlation matrix.

Construct	Mean	Std. Deviation	1	2	3	4	5
1. Job Satisfaction	3.39	.733	(.83)				
2. Work Withdrawal	2.16	1.07	347**	(.71)			
3. Emotional Exhaustion	1.66	. 487	789**	.401**	(.88)		
4. Retaliator Incivility	1.92	.870	223**	.447**	.318**	(.91)	
5. Workplace Incivility	2.31	.957	354**	.338**	.457**	.648**	(.88)

^{**} Correlation is significant at the 0.01 level. Figures in parentheses are Cronbach alpha reliability scores.

the measures (Gaski, 1984). Furthermore, as shown in Table 3, CFA analysis specifies that all standardised factor loadings are at the significance level of .001, providing further evidence of convergent validity of the measures (Saleh et al., 2019). To verify the discriminant validity of the construct measures, the current study followed Fornell and Larcker's (1981) recommendation and revealed that all squared covariance of correlations (highest .79) between IVs and DVs (among constructs) are less than the average variance extracted (AVE) for most of the constructs in the tested model (please refer to Table 3). This assures the discriminant validity of the measures. Further to note, it was revealed from the EFA analysis (refer to Appendix 1), that all retained (after outlier exclusion) measurement items satisfactorily converged onto their expected constructs providing evidence of convergent validity as well as discriminant validity of the measures. To further confirm the convergent and discriminant validities of the measures, this study conducted a series of χ^2 difference tests in 1 degree of freedom (constrained and unconstrained) for each pair of constructs (e.g., Atuahene-Gima, 2005; Saleh et al., 2019). The results stipulate that all unconstrained models are superior than that of the constrained models, hence providing evidence of both the convergent and discriminant validities of the measures. The minimum number of measurement items/indicators for a construct was retained as four and maximum six, thereby further satisfying the criteria of content as well as face validity of the measures.

3.3. Findings of the hypothesised structural model and moderation

As this study has developed and proposed an interdependent as well as multi-dependent model, available multivariate data analytical tool such as structure equation modelling (SEM) under AMOS software was applied to test the proposed model and assess the moderating effect of emotional exhaustion (burnout). Although there is a debate in the academic literature as to what Goodness of Fit indices are reasonable and should be considered to assess model fit, a subset of indices such as χ^2/df (CMIN/DF), IFI, TLI, CFI, and RMSEA have been commonly used and recommended by many SEM researchers (e.g., Hulland et al., 1996; McQuitty, 2004). As can be seen in Table 3, all Goodness of Fit indices are within the recommended fit levels suggesting adequate fit to the theoretical model (Bentler, 1990). To test the hypothesised path relationships and moderating effects, the study initially tested all hypothesised path relationships without moderation and further tested interaction as well as moderating effect. Table 4 shows the hypotheses relationships and their level of significance (see also Table 5).

Results of hypothesis testing showed that all five paths were statistically significant at the .000 level (see Table 4). Specifically, the path coefficient for hypotheses 1 was statistically significant for the relationship between workplace incivility and retaliatory incivility ($\beta=.559, p<.000$). Therefore, hypothesis 1 stating that workplace incivility is positively associated with retaliatory incivility was supported. The result for Hypothesis 2 specifies that workplace incivility has a negative significant impact on job satisfaction ($\beta=-.174, p<.000$), thus hypothesis 2 was supported. The result for hypothesis 3 indicates that workplace incivility has a positive significant impact on work withdrawal ($\beta=.457, p<.000$), therefore hypothesis 3 was supported. Finally, the result for Hypothesis 4 suggests that

employees job satisfaction has a negative significant effect on work withdrawal ($\beta = -.354$, p < .000), therefore Hypothesis 4 was supported.

To test the moderating effect of emotional exhaustion (burnout) between employees' workplace incivility and retaliator incivility, we generated standardised Z scores for the moderator, independent, dependent variables and further created interaction variable. In this model, we have added all dependent and independent variables including moderator and interaction variable to see if there is any variation in our analysis when we added moderating and interaction variables. The result of moderating effect analysis in Table 4 shows that there is not much variation in our previously tested model and moderation model.

As can be seen from Table 4 and Figure 2, the analyses revealed significant moderation for emotional exhaustion. The result suggests that the workplace incivility (Experience workplace incivility) has a stronger significant negative effect on retaliatory incivility when emotional exhaustion (burnout) is high. In other words, it can be said that the higher the emotional exhaustion, the lower will be the negative significant relationship between workplace incivility and retaliator incivility. Thus, hypothesis 5 is fully supported.

4. Discussion

The aim of the present study was to test a theoretical model which can explain the underlying processes involve in workplace incivility, retaliatory incivility, and counter-productive workplace behaviours (e.g., work withdrawal and job dissatisfaction). To achieve this, workplace incivility and its components were examined in relations to retaliatory workplace incivility, work withdrawal and job satisfaction in this study. Emotional exhaustion was identified as a potential moderator in the model.

The first hypothesis that workplace incivility is positively associated with retaliatory incivility was fully supported. This finding provides support for Andersson and Pearson's (1999) Spiral Theory of Incivility which suggests that when an uncivil act is perceived by target to be an insulting or unacceptable behaviour, the target will retaliate back. According to both Spiral Theory of Incivility and COR theory, targets who retaliated back do so at an expense, namely that their resources may be lost or overstretched in the process. When this happens, targets who retaliated are likely to end up feeling emotionally exhausted. At the same time, they justify their own negative behaviours by attributing blame towards their organisations (Bowling and Beehr, 2006) and in so doing reduced their job satisfaction and increased their work withdrawal. Hypothesis 2 (i.e., Retaliatory incivility is negatively associated with job satisfaction) and Hypothesis 3 (i.e., Retaliatory incivility is positively associated with work withdrawal) were thus supported.

Hypothesis 4 stated that job satisfaction is negatively associated with work withdrawal was also supported. In other words, when employees' job satisfaction decreases, their work withdrawal behaviours will increase. This finding is consistent with previous studies which have found that reduced job satisfaction negatively predicted job withdrawal behaviours (Hanisch and Hulin, 1990).

Finally, the negative spiral model of workplace incivility assumes that incivility is instigative in nature and can lead to increasingly

Table 3. Results of confirmatory factor analysis (CFA) and standardised factor loading scores (SFLS).

Constructs	Operational measures of constructs	SFLS	t-Value
Workplace Incivility	Paid little attention to your statements or showed little interest in your opinions. ^a	-	-
AVE = .82	Doubted your judgment in a matter over which you have responsibility.	.745	24.72*
Source:	Gave you hostile looks, stares, or sneers.	.797	27.24*
	Addressed you in unprofessional terms, either privately or publicly.	.795	27.13*
	Interrupted or "spoke over" you.	.734	24.23*
	Rated you lower than you deserved on an evaluation.	.765	25.67*
	Yelled, shouted, or swore at you. ^a	-	-
Retaliator Incivility	Doubted someone's judgment in a matter over which they had responsibility.	.664	21.53*
AVE = .83	Rated someone lower than they deserved to be on an evaluation. ^a	-	-
Source:	Yelled, shouted, or swore at someone. ^a	-	-
	Made insulting or disrespectful remarks about someone.	.860	31.17*
	Ignored or failed to speak to someone (e.g., gave them the "silent treatment").	.753	25.54*
	Accused someone of incompetence.	.837	29.85*
	Targeted someone with anger outbursts or "temper tantrums".	.828	29.38*
	Made jokes at someone's expense.	.795	27.62*
Emotional Exhaustion	I'm fed up with my job.	.717	23.63*
AVE = .80	I feel unable to get out from under my work. ^a	-	-
Source:	I am discouraged about my work.	.786	26.87*
	I feel buried in my job.	.680	21.98*
	I feel like giving up on my job.	.807	27.94*
	I am disillusioned with my job.	.787	26.94*
	My job makes me angry.	.714	23.46*
Job Satisfaction	My job is usually interesting enough to keep me from getting bored.	.761	24.51*
AVE = .82	I am satisfied with my job for the time being.	.660	20.70*
Source:	I feel that I am happier in my work than most other people.	.675	20.34*
	My job is pretty uninteresting. ^a	-	-
	I am disappointed that I ever took this job. ^a	-	-
	I find real enjoyment in my work.	.793	25.64*
Work Withdrawal	Completed work assignments late.	.481	13.30*
AVE = .74	Frequent/long coffee/lunch breaks. ^a	-	-
Source:	Made excuses to get out of the office.	.772	22.63*
	Been late for work.	.515	14.37*
	Absent from work. ^a	-	-
	Neglected tasks not affecting evaluation/pay raise.	.709	20.61*

CFA Model Fit Statistics: $\chi^2/df=2.60$, RMSEA = .043, IFI = .96, TLI = .96, and CFI = .96. Notes:

counterproductive retaliatory behaviours between perpetrators and victims (Andersson and Pearson, 1999). Indeed, Foulk et al. (2016) have found that workplace incivility is not unlike the common cold that can spread quickly through the organisation. Past research has also found that workplace incivility resulted in detrimental outcomes, such as the

experience of greater anxiety and depression (Lim et al., 2008), and the exhibition of similar ill-mannered behaviours (Foulk et al., 2016) or withdrawal behaviours (Sliter et al., 2012). These findings demonstrated that workplace incivility is a highly unfavourable workplace phenomenon.

 Table 4. Model Fit Indices with their recommended threshold.

Subset of Fit Indices	Recommended Threshold/Benchmark	Adequacy of fit criteria in this study
Model Fit		
CMIN/DF (χ^2 /df is called normed χ^2)	\leq 2 (this is sample sensitive, if sample size increases χ^2/df may likely to be increased)	CFA & SEM models shows reasonable fi
RMSEA	<.06 (Reasonable fit up to .08)	CFA & SEM models shows adequate fit
Model Comparison		
IFI (Incremental Fit Index)	≥.90	CFA & SEM models shows adequate fit
TLI (Tucker Lewis Index)	≥.90	CFA & SEM models shows adequate fit
CFI (Comparative Fit Index)	≥.90	CFA & SEM models shows adequate fit

Source: Adopted from Byrne (2001), Hair et al. (2010), Hulland et al. (1996) and Kline (2005).

^a These items are excluded from the measures.

^{*} t-value significant at .001 level; AVE = Average Variance Extracted.

Table 5	. Results	of hypotheses	testing and	moderating	effect.

Independent	Path direction	Dependent	Model 1 (Results of Hypotheses testing)		Model 2 (Moderating effect of Emotional Exhaustion)			
			Estimate	CR	P	Estimate	CR	P
Workplace Incivility	→	Retaliatory Incivility	.559	15.68	**			
Retaliatory Incivility	\rightarrow	Job Satisfaction	174	-5.50	**			
Retaliatory Incivility	\rightarrow	Work Withdrawal	.457	8.08	**			
Job Satisfaction	\rightarrow	Work Withdrawal	354	-5.49	**			
Independent: Workplace Incivility	\rightarrow	Retaliatory Incivility				.548	14.32	***
Interaction: Workplace Incivility × Emotional Exhaustion	\rightarrow	Retaliatory Incivility				066	-3.78	***
Moderating variable: Emotional Exhaustion	\rightarrow	Retaliatory Incivility				.130	2.04	.042*

SEM Model Fit Statistics: χ 2/df (CMIN/DF) = 2.86, IFI = .97, TLI = 96, CFI = 97, and RMSEA = .046. Note: P value indicates results significant at the **.01 and * .05 levels.

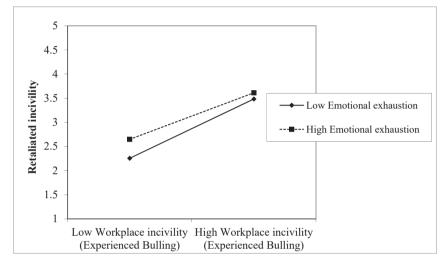


Figure 2. Moderating effect of emotional exhaustion (burnout).

However, several researchers have suggested that there may be potential moderators that might attenuate the relationships between workplace incivility and its outcomes. For instance, Pearson et al. (2000) and Pearson et al. (2001) identified affect as a potential moderator which detrimentally affected employee's occupational well-being and job commitment. In this study, we identified emotional exhaustion as a potential moderator in the relationship between workplace incivility and its outcomes. In fact, several studies have found that higher levels of emotional exhaustion are associated with reduced career satisfaction (Prosser et al., 1999), increased withdrawal behaviours (Deery et al., 2002), and diminished emotional wellness (Ramirez et al., 1995). Crucially, researchers have found that employees who experienced more emotional exhaustion have less cognitive ability to resourcefully deal with conflict compared to employees who experienced less emotional exhaustion (Deligkaris et al., 2014; Hobfoll, 1989; Shirom, 2003). As a result, these employees tend to react more uncivilly. This is consistent with the findings of our study, particularly for hypothesis 5 which predicted that more emotionally exhausted employees will respond with higher levels of retaliatory incivility than less emotionally exhausted employees.

4.1. Theoretical implications

In this study, several theoretical and practical implications can be drawn. First, this study adds empirical evidence to the body of knowledge

on the negative spiral model of workplace incivility by demonstrating the retaliatory nature of workplace incivility. Second, the present findings suggest that COR theory (Hobfoll, 1989) complements Andersson and Pearson's (1999) spiral theory of incivility and provides a holistic way to explain the negative spiralling effect of retaliatory incivility. Specifically, as individuals deplete and/or over stretch their resources in the process of retaliation, emotional exhaustion may set in. When this happens, their social abilities become hindered. Consequently, individuals who are more emotionally exhausted will lash out and engage in more retaliatory negative behaviours than individuals who are less emotionally exhausted (Johnson and Indvik, 2001). This, we believe is a novel contribution of the importance of affect (e.g., emotional exhaustion) in the field of instigated and retaliatory workplace incivility.

4.2. Practical implications

Researchers have found that emotional exhaustion can result in an inability to cope with problematic events on the job (Ito and Brotheridge, 2003). Therefore, it might be beneficial for employees to learn productive coping strategies such as direct action and help seeking behaviours (Ito and Brotheridge, 2003). In addition, managerial interventions such as stress management programs should be incorporated in staff welfare and well-being programs. Another intervention, for both perpetrators and targets, is emotion-regulation workshops or mindfulness workshops. Mindfulness workshop, for instance have bene found to be highly

effective. For example, in an experimental study, Hülsheger et al. (2013) randomly assigned 64 participants to either a self-training mindfulness intervention group or control group. The authors found that participants in the mindfulness intervention group experienced significantly less emotional exhaustion and more job satisfaction than participants in the control group. Finally, executive members and organisations should promote and develop clear procedures and policies to deal with workplace incivility, offer incivility awareness training and create an effective complaint system to lessen the negative consequences associated with workplace incivility among employees.

4.3. Limitations and future research direction

Whilst the current study shed some meaningful insights on the issue of retaliatory incivility in the workplace, this research is not without some limitations. The cross-sectional nature of the data makes inference and conclusions tenuous. Future analyses that compare workplace environment could apply a longitudinal approach to measuring these variables to describe any changes or flow in findings over time. Moreover, future research might consider replicating this study in developing country where there is less policies or regulations around workplace incivility.

5. Conclusion

Overall, this study provides empirical support for: (a) Andersson and Pearson's (1999) negative incivility spiral theory, (b) the complimentary integration of both COR and negative spiral theory, and (c) the importance of emotional exhaustion as a moderator in the retaliatory incivility literature. From a practical perspective, the results from this study can be used to develop appropriate intervention initiatives in organisations to prevent workplace incivility from escalating into more aggressive retal-

iatory behaviours between perpetrators and targets of workplace incivility or deviant workplace behaviours.

Declarations

Author contribution statement

Jennifer Loh: Conceived and designed the experiments; Performed the experiments; Analyzed and interpreted the data; Contributed reagents, materials, analysis tools or data; Wrote the paper.

Abu Saleh: Performed the experiments; Analyzed and interpreted the data; Contributed reagents, materials, analysis tools or data; Wrote the paper.

Funding statement

Jennifer Loh was supported by Edith Cowan University (FHES Collaborative Research Grant Scheme).

Data availability statement

Data will be made available on request.

Declaration of interests statement

The authors declare no conflict of interest.

Additional information

No additional information is available for this paper.

Appendix 1. Results of the χ^2 difference test for all theoretically related constructs

Models	Constrained model χ^2 (d.f.)	Unconstrained model χ^2 (d.f.)	χ^2 Differences (in 1 d.f.)
Workplace Incivility ←→ Retaliator Incivility	1223.7 (44)	205.8 (43)	1,017.9 (1)*
Workplace Incivility $\leftarrow \rightarrow$ Emotional Exhaustion	1599.2 (44)	128.7 (43)	1,470.5 (1) *
Workplace Incivility ←→ Work Withdrawal	635 (27)	80.1 (26)	554.9 (1) *
Workplace Incivility \longleftrightarrow Job Satisfaction	763.7 (26)	97.6 (25)	666.1 (1) *
Retaliator Incivility $\leftarrow \rightarrow$ Emotional Exhaustion	2292.3 (54)	145 (53)	2,147.3 (1) *
Retaliator Incivility ←→ Work Withdrawal	554.5 (35)	55.3 (34)	499.2 (1) *
Retaliator Incivility $\leftarrow \rightarrow$ Job Satisfaction	851.4 (34)	125.9 (33)	725.5 (1) *
Emotional Exhaustion \longleftrightarrow Work Withdrawal	629.4 (35)	104.9 (34)	524.5 (1) *
Emotional Exhaustion \longleftrightarrow Job Satisfaction	310.2 (34)	106.2 (33)	204 (1) *
Work Withdrawal ←→ Job Satisfaction	607.2 (19)	69.4 (18)	537.8 (1) *

Note: All $\chi 2$ Differences (in 1 d.f.) are significant at .001 level.

References

- Anderson, J., Gerbing, D., 1988. Structural Equation Modeling in practice: a review and recommended two-step approach. Psychol. Bull. 103, 411–423.
- Andersson, L.M., Pearson, C.M., 1999. Tit for tat? The spiraling effect of incivility in the workplace. Acad. Manag. Rev. 24, 452–471.
- Armstrong, J.S., Overton, T.S., 1977. Estimating non-response bias mail surveys. J. Market. Res. 14, 396–402.
- Atuahene-Gima, K., 2005. Resolving the capability-rigidity paradox in new product innovation. J. Market. 69, 61–83.
- Baron, R.A., Neuman, J.H., 1996. Workplace violence and workplace aggression: evidence on their relative frequency and potential causes. Aggress. Behav. 22, 161–173
- Bentler, P.M., 1990. Comparative fit indexes in structural models. Psychol. Bull. 107, 238–246.
- Bibi, Z., Karim, J., Din, S., 2013. Workplace incivility and counterproductive work behaviour: moderating role of emotional intelligence. J. Psychol. Res. 28, 297–314.
- Blau, G., Andersson, L., 2005. Testing a measure of instigated workplace incivility.

 J. Occup. Organ. Psychol. 78, 595–614.
- Bowling, N.A., Beehr, T.A., 2006. Workplace harassment from the victim's perspective: a theoretical model and meta-analysis. J. Appl. Psychol. 91, 998–1012.
- Brayfield, A.H., Rothe, H.F., 1951. An index of job satisfaction. J. Appl. Psychol. 3, 307–311.
- Bunk, J.A., Magley, V.J., 2013. The role of appraisals and emotions in understanding experiences of workplace incivility. J. Occup. Health Psychol. 18, 87–105.
- Byrne, B., 2001. Structural equation modeling with AMOS: Basic concepts, applications, and programming Lawrence Erlbaum Associates Publishers. Mahwah N.I.
- Cameron, A.F., Webster, J., 2011. Relational outcomes of multi-communicating: integrating incivility and social exchange perspectives. Organ. Sci. 22, 754–771.
- Chen, Y., Ferris, D.L., Kwan, H.K., Yan, M., Zhou, M., Hong, Y., 2013. Self-love's lost labour: a self-enhancement model of workplace incivility. Acad. Manag. J. 56, 1199–1219
- Churchill, G., Iacobucci, D., 2002. Marketing Research, Methodological Foundations. Harcourt publishing, London.
- Cingöz, A., Kaplan, A., 2015. An examination of the mediating role of job satisfaction on the relationship between psychological empowerment and innovation behaviour. Int. Rev. Soc. Sci. 3. 60–72.
- Civility in America, 2016. Nearly All Likely Voters Say Candidates' Civility Will Affect
 Their Vote; New Poll Finds 93% Say Behavior Will Matter. Retrieved from Weber
 Shandwick and Powell Tate (KRC Research). http://www.webershandwick.com/ne
 ws/article/nearly-all-likely-voters-say-candidates-civility-will-affect-their-vote.
- Civility in America, 2014. Five Generational Differences. Retrieved from Weber Shandwick and Powell Tate (KRC Research). https://www.webershandwick.com/news/article/civility-in-america-2014-forecast-bleak-but-with-hope-for-millennials.
- Cortina, L.M., Kabat Farr, D., Leskinen, E., Huerta, M., Magley, V.J., 2013. Selective incivility as modern discrimination in organisations: evidence and impact. J. Manag. 39, 1579–1605.
- Cortina, L.M., Magley, V.J., 2009. Patterns and profiles of response to incivility in the workplace. J. Occup. Health Psychol. 14, 272–288.
- Cortina, L.M., Magley, V.J., Williams, J.H., Langhout, R.D., 2001. Incivility in the workplace: incidence and impact. J. Occup. Health Psychol. 6, 64–80.
- Deery, S., Iverson, R., Walsh, J., 2002. Work relationships in telephone call centres: understanding emotional exhaustion and employee withdrawal. J. Manag. Stud. 39, 471–496.
- Deligkaris, P., Panagopoulou, E., Montgomery, A.J., Masoura, E., 2014. Job burnout and cognitive functioning: a systematic review. Work. Stress 28, 107–123.
- Doshy, P.V., Wang, J., 2014. Workplace incivility: what do targets say about it? Am. J. Manag. 14, 30–42.
- Foulk, T.A., Woolum, A., Erez, A., 2016. Catching rudeness is like catching a cold: the contagion effects of low-intensity negative behaviours. J. Appl. Psychol. 10, 50–67.
- Fornell, C., Larcker, D.F., 1981. Evaluating structural equation models with unobservable variables and measurement error. J. Market. Res. 18, 39–50.
- Gaski, J.F., 1984. The theory of power and conflict in channels of distribution. J. Market. 48, 9-29
- Gillespie, D., Numerof, R., 1984. The Gillespie-number of Burnout Inventory: Technical Manual. Washington University, St. Louis, MS.
- Giumetti, G.W., Hatfield, A.L., Scisco, J.L., Schroeder, A.N., Muth, E.R., Kowalski, R.M., 2013. What a rude e-mail! Examining the differential effects of incivility versus support on mood, energy, engagement, and performance in an online context. J. Occup. Health Psychol. 18, 297–309.
- Hair, J., et al., 2010. Multivariate data analysis. Pearson Prentice Hall, Upper Saddle River, NJ.
- Hair Jr., J.F., Sarstedt, M., Hopkins, L., Kuppelwieser, G.V., 2014. Partial least squares structural equation modeling (PLS-SEM) an emerging tool in business research. Eur. Bus. Rev. 26, 106–121.
- Halbesleben, J.R.B., Buckley, M.R., 2004. Burnout in organisational life. J. Manag. 30, 859–879.
- Hanisch, K.A., Hulin, C.L., 1990. Job attitudes and organisational withdrawal: an examination of retirement and other voluntary withdrawal behaviours. J. Vocat. Behav. 37, 60–78.
- Hanrahan, M., Leiter, M.P., 2014. Workplace mistreatment: recent developments in theory, research, and interventions. In: Chen, P.Y., Cooper, C.L. (Eds.), Wellbeing: A Complete Reference Guide, Volume III, Work and Wellbeing. Wiley Blackwell, Chichester, pp. 263–294.

Harold, C.M., Holtz, B.C., 2015. The effects of passive leadership on workplace incivility. J. Organ. Behav. 36, 16–38.

- Hershcovis, M.S., 2011. Incivility, social undermining, bullying...oh my!': a call to reconcile constructs within workplace aggression research. J. Organ. Behav. 32, 400–510
- Hobfoll, S.E., 1989. Conservation of resources: a new attempt at conceptualizing stress. Am. Psychol. 44, 513–524.
- Hobfoll, S.E., Halbesleben, J., Neveu, J.-P., Westman, M., 2018. Conservation of resources in the organisational context: the reality of resources and their consequences. Ann. Rev. Organ. Psychol. Organ. Behav. 5, 103–128.
- Hoole, C., Vermeulen, L.P., 2003. Job satisfaction among South African aircraft pilots. South Afr. J. Indust. Psychol. 29, 52–57.
- Hulland, J., et al., 1996. Use of causal models in marketing research: a review. Int. J. Res. Market. 13, 181–197.
- Hülsheger, U.,R., Alberts, H.,J.E.M., Feinholdt, A., Lang, J.W.B., 2013. Benefits of mindfulness at work: the role of mindfulness in emotion regulation, emotional exhaustion, and job satisfaction. J. Appl. Psychol. 98, 310–325.
- Hsiao, C., 2007. Panel data analysis: advantages and challenges. Test 16, 1-22.
- Ito, J., Brotheridge, C., 2003. Resources, coping strategies, and emotional exhaustion: a conservation of resources perspective. J. Vocat. Behav. 63, 490–509.
- Johns, G., 1992. How often were you absent? A review of the use of self-reported absence data. J. Appl. Psychol. 79, 574–591.
- Johnson, P.R., Indvik, J., 2001. Rudeness at work: impulse over restraint. Publ. Person. Manag. 30, 457–465.
- Kern, J.H., Grandey, A.A., 2009. Customer incivility as a social stressor: the role of race and racial identity for service employees. J. Occup. Health Psychol. 14, 46–57.
- Kim, T.Y., Shapiro, D., 2008. Revenge against supervisor mistreatment: negative emotion, group membership, and cross-cultural difference. Int. J. Conflict Manag. 19, 339–358
- Kline, R., 2005. Principles and practice of Structural Equation Modeling, 2nd. Guilford, New York.
- Leiter, M.P., 2013. Analysing and Theorizing the Dynamics of the Workplace Incivility Crisis. Springer. Amsterdam.
- Leiter, M.P., Nicholson, R., Patterson, A., Laschinger, H.K.S., 2012. Incivility, burnout, and work engagement. Sci. Work 14, 22–29.
- Lim, S., Cortina, L.M., 2005. Interpersonal mistreatment in the workplace: the interface and impact of general incivility and sexual harassment. J. Appl. Psychol. 90, 483–496.
- Lim, S., Cortina, L.M., Magley, V.J., 2008. Personal and workgroup incivility: impact on work and health outcomes. J. Appl. Psychol. 93, 95–107.
- Lim, S., Lee, A., 2011. Work and nonwork outcomes of workplace incivility: Does family support help? J. Occup. Health Psychol. 16 (1), 95–111.
- Lim, V.K., Teo, T.S., 2009. Mind your e-manners: impact of cyber incivility on employees' work attitude and behaviour. Inf. Manag. 46, 419–425.
- Loh, J.M.I., Loi, N., 2018. Tit for tat: burnout as a mediator workplace incivility and instigated workplace incivility. Asia-Pac. J. Bus. Administ. 10, 100–111.
- Loh, J., Thorsteinsson, E., Loi, N., 2019. Workplace Incivility and Work outcome: cross cultural comparison between Australian and Singaporean employees. Asia Pac. J. Human Res. First published: 09 July 2019.
- Maslach, C., 1982. Burnout: the Cost of Caring. Prentice-Hall, Englewood Cliffs, NJ. Maslach, C., Schaufeli, W.B., Leiter, M.P., 2001. Job burnout. Annu. Rev. Psychol. 52, 397–422.
- McQuitty, S., 2004. Statistical power and structural equation models in business research.

 J. Bus. Res. 57, 175–183.
- Meyer, J.P., Stanley, D.J., Herscovitch, L., Topolnytsky, L., 2002. Affective, continuance, and normative commitment to the organisation: a Meta-analysis of antecedents, correlates, and consequences. J. Vocat. Behav. 61, 20–52.
- Miner-Rubino, K., Cortina, L.M., 2004. Working in a context of hostility toward women: implications for employees' well-being. J. Occup. Health Psychol. 9, 107–122.
- Miner-Rubino, K., Reed, W.D., 2010. Testing a moderated mediational model of workgroup incivility: the roles of organisational trust and group regard. J. Appl. Soc. Psychol. 40, 3148–3168.
- Oyeleye, O., Hanson, P., O'Connor, N., Dunn, D., 2013. Relationship of workplace incivility, stress, and burnout on nurses' turnover intentions and psychological empowerment. J. Nurs. Adm. 43, 536–542.
- Pearson, C.M., Andersson, L.M., Porath, C.L., 2000. Assessing and attacking workplace incivility. Organ. Dynam. 29, 123–137.
- Pearson, C.M., Andersson, L.M., Wegner, J.W., 2001. When workers flout convention: a study of workplace incivility. Hum. Relat. 54, 1387–1419.
- Pearson, C.M., Porath, C.L., 2005. On the nature, consequences, and remedies of workplace incivility: no time for 'nice'? Think again. Acad. Manag. Exec. 19, 7–18.
- Pearson, C., Porath, C., 2009. The Cost of Bad Behaviour: How Incivility Is Damaging Your Business and what to Do about it. Penguin, New York.
- Penney, L.M., Spector, P.E., 2005. Job stress, incivility, and counterproductive work behaviour (CWB): the moderating role of negative affectivity. J. Organ. Behav. 26, 777, 706
- Porath, C., Pearson, C., 2010. The cost of bad behavior. Organ. Dyn. 39 (1), 64–71. Porath, C.L., Pearson, C.M., 2012. Emotional and behavioural responses to workplace
- incivility and the impact of hierarchical status. J. Appl. Soc. Psychol. 42, E326–E357. Porath, C.L., Pearson, C., 2013. The price of incivility. Harv. Bus. Rev. 91, 115–121.
- Prosser, D., Johnson, S., Kuipers, E., Dunn, G., Szmukler, G., Reid, Y., et al., 1999. Mental health, "Burnout" and job satisfaction in a longitudinal study of mental health staff. Soc. Psychiatr. Psychiatr. Epidemiol. 34, 295–300.
- Ramirez, A.J., Graham, J., Richards, M.A., Cull, A., Gregory, W.M., Leaning, M.S., Timothy, A.R., 1995. Burnout and psychiatric disorder among cancer clinicians. Br. J. Cancer 71, 1263–1269.

- Reich, T.G., Hershcovis, M.S., 2015. Observing workplace incivility and job performance. J. Appl. Psychol. 100, 203–215.
- Ryan, G., Bernard, H.R., 2003. Techniques to identify themes. Field Methods 15, 85–109.
 Sakurai, K., Jex, S.M., 2012. Co-worker incivility and incivility targets' work effort and counterproductive work behaviours: the moderating role of supervisor social support.
 J. Occup. Health Psychol. 17, 150–161.
- Saleh, M.A., et al., 2019. Buyer-supplier relational paradigm in internationalization process: an Asian emerging country perspective. J. Enterprise Inf. Manag. 32, 274–300.
- Schilpzand, P., De Pater, I., Erez, A., 2016. Workplace incivility: a review of the literature and agenda for future research. J. Organ. Behav. 37, S57–S88.
- Schleicher, D.J., Watt, J.D., Greguras, G.J., 2004. Re-examining the job satisfaction performance relationship: the complexity of attitudes. J. Appl. Psychol. 89, 165–177/.
- Schumacker, E.R., Lomax, G.R., 1996. A Beginner's Guide to Structural Equation Modeling. Erlbaum, Mahwah, NJ.

- Shirom, A., 2003. Job-related burnout: a review. In: Quick, J.C., Tetrick, L.E. (Eds.), Handbook of Occupational Health Psychology. American Psychological Association, Washington DC, pp. 245–264.
- Sliter, M., Sliter, K., Jex, S., 2012. The employee as a punching bag: the effect of multiple sources of incivility on employee withdrawal behaviour and sales performance. J. Organ. Behav. 33, 121–139.
- Tabachnick, B.G., Fidell, L.S., 2001. Using Multivariate Statistics, fourth ed.s. Allyn & Bacon, Needham Heights, MA.
- Taylor, S.G., Bedeian, A.G., Kluemper, D.H., 2012. Linking workplace incivility to citizenship performance: the combined effects of affective commitment and conscientiousness. J. Organ. Behav. 33, 878–893.
- Wilson, N.L., Holmvall, C.M., 2013. The development and validation of the incivility from customers scale. J. Occup. Health Psychol. 18, 310–326.
- Yoo, W., Mayberry, R., Bae, S., et al., 2014. A Study of effects of multicollinearity in the Multivariable analysis. Int. J. Appl. Sci. Technol. 4, 9–19.