



Hurting those who help: Development and validation of a victim conflict scale

Michael Sliter

ABSTRACT

Background: Workplace conflict is increasingly recognized as a common and harmful workplace stressor. However, despite anecdotal research evidence, researchers have relatively neglected to study the conflict that might occur between first responders and victims of emergency situations. This dearth of research may be due to the lack of an empirically validated scale measuring this conflict. As such, the first goal of the current study was to create and validate a victim conflict scale. Following, the second goal of the current study was to empirically investigate some possible negative outcomes of victim conflict, including burnout, turnover intentions, and job satisfaction. **Methods:** To create the Victim Conflict Scale, items were generated by meeting with focus groups of first responder firefighters, and paired down through working with another focus group and content analyses, yielding 17 total items. These items, as part of a larger survey project, were administered to a sample of 201 firefighters. **Results:** In terms of findings, from a psychometric standpoint, the Victim Conflict Scale seems to function well. Additionally, based on a structural equation modeling analysis, the initial evidence provided support that victim conflict is negatively associated with important employee outcomes. **Conclusion:** These results indicate that victim conflict is an important workplace stressor for this first responders, and the Victim Conflict Scale can be used in future research to investigate the effects of victim conflict, as well as to design interventions surrounding this construct.

KEY WORDS: Burnout, conflict, incivility, firefighters, first responders, job satisfaction, turnover intentions, victims

Department of
Psychology, Indiana
University-Purdue
University Indianapolis,
Indianapolis, IN 46202

Address for correspondence:

Michael Sliter, Department
of Psychology, Indiana
University-Purdue
University Indianapolis,
402 N. Blackford St.,
LD126P Indianapolis, IN
46202. E-mail: slitermt@
gmail.com

Received: June 16, 2014

Accepted: January 27, 2015

Published: February 03, 2015

INTRODUCTION

Interpersonal conflict is an increasingly common occurrence in the workplace [1]. Research has shown that employees, across many types of jobs, are at risk of being exposed to conflict from supervisors [2], coworkers [3], patients [4], and customers/clients [5]. However, a relatively large occupational category that has been relatively ignored is emergency medical services (EMS) and first responders, a group including ambulance workers, firefighters, and police officers. These employees are dispatched in emergency situations, and most times, these emergencies involve direct contact with people: The victims of the emergency situations, as well as their family and friends.

Despite the anecdotal evidence that first responders are exposed to mistreatment from these victims [6], little research has empirically examined the incidence and impact of this conflict. One of the reasons for this dearth of research may be the lack of an empirically validated scale to measure varying intensities of victim conflict. As such, the purpose of the current study was to (1) develop a scale measuring victim incivility and conflict, and (2) to gather initial evidence of the impact of this conflict.

Evidence of Victim Conflict

As mentioned above, it is possible that emergency service workers experience conflict from the individuals or the family

and friends of these individuals that they are trying to protect, serve, and otherwise help. There has been little systematic research investigating the occurrence of victim conflict; however, there is some literature suggesting that conflict with victims might be a common occurrence. LeBlanc and Kelloway [7] discuss possible occupational precursors that could potentially expose employees to interpersonal conflict and violence at work. First responders share many of these job characteristics, including physical care of others, emotional care of others, interactions with the public, decisions that influence other people's lives, exercising physical control over others, interacting with frustrated individuals, working nights or evenings, going to (victims) homes, and contact with individuals under the influence of alcohol, drugs, or medication.

Indeed, there have been many documented cases of first response workers facing violence and abuse from their patients. It is estimated that there are 700,000 assaults on paramedics per year in the United States, a group that includes firefighters and EMTs [8]. This is not unexpected; the situational nature of an emergency situation presents a perfect situation for the perpetration of victim conflict. Generally speaking, experiencing strong negative emotions in an emergency situation (e.g. fear, anger, uncertainty) may result in victims ignoring social niceties and cause an increase in conflict behavior. Along these lines, various theoretical models have been proposed where emotions are the precursor to aggressive behavior, including

the frustration-aggression [9] and the cognition attribution-emotion models [10]. Empirical research has supported these propositions, finding that organizational outsiders are prone to vent their negative emotions on employees, including customer service representatives [11], nurses, [12], and police officers [13].

Limitations with Current Scales

Currently, many scales exist for measuring workplace incivility, conflict, and other related variables (e.g. bullying, mobbing, emotional abuse). However, the majority of these measures has been developed for, and is only applicable to, conflict-directed from coworkers and supervisors. For instance, the interpersonal conflict at work scale (ICAWS) was developed, and validated on, groups of coworkers, subordinates, and supervisors [14]. Though it has been occasionally used to measure conflict from organizational outsiders [3], altering the content/instructions/response scale for any measure can affect generalizability of that measure [15].

In addition to the problems inherent with altering scales to suit a different sample, the items on existing scales may not be applicable to all samples. That is, if a conflict scale was developed with coworkers in mind, the items were designed to reflect commonly-experienced conflicts within the workplace. Types of conflict from organizational outsiders might be significantly different than the conflict experienced from coworkers. As such, scales need to be developed specifically for different sources of conflict in order to best gain an understanding of different types of frequently experienced conflict from that source. Researchers are beginning to recognize this need and develop occupation-specific scales, such as the Nursing Incivility Scale [16] and the Incivility from Customers Scale [17]. It is reasonable to assume that conflict with victims-and family/friends of victims-differs from other types of workplace conflict, highlighting the importance of creating a scale and investigating this construct. Hence, the first purpose of the current study is to create such a scale.

Proposed Impact of Victim Conflict

Following, once a scale assessing victim conflict is created, it is important to take steps to understand how victim conflict can impact employees. It is relatively well-established that general workplace conflict can have a negative impact on employees, whether this conflict stems from coworkers, supervisors, or outsiders [3,14]. As part of the validation of the victim conflict scale, I seek provide initial evidence that victim conflict might impact employee outcomes. Specifically, I expect that victim conflict will relate negatively with job satisfaction and engagement, and positively with intentions to quit and burnout. The impact of workplace conflict is often framed in terms two theories: Affective events theory (AET) [18] and conservation of resources theory (COR) [19].

AET posits that events are the proximal cause of emotions in the workplace, which, in turn, affect behaviors and attitudes. That is, events at work compound into average feelings of

pleasantness or unpleasantness, which, in turn, affect the evaluation of the overall work experience. If a job has many negative events, employees are likely to experience negative emotions that eventually compound into feelings of job dissatisfaction. Additionally, employees who are generally experiencing negative emotions at work are more likely to want to distance themselves from that organization and, eventually, quit that organization [20]. Research has shown that workplace conflict can result in negative emotions [21], and conflict with victims should be no exception. In fact, the negative, stressful situation in which emergency workers interact with victims already causes negative emotions, and this negativity would only compound when victims are conflictive. As such, I expect that victim conflict would relate negatively with job satisfaction and positively with intentions to quit.

COR theory [19] provides further insight as to how victim conflict might impact other employee outcomes. COR theory posits that people strive to retain, protect, and build resources, where resources are defined as objects, personal characteristics, and energies that are valued by an individual. Stressors in the work environment have often been shown to drain employee resources, a state that could be linked to feelings of emotional, physical, or mental exhaustion, also known as burnout. Additionally, lower levels of resources have been linked to feelings of disengagement from the workplace [22], where employees make efforts to distance themselves from stressors in the environment [23]. Based on the tenets of COR theory and past research linking various sources of workplace conflict with burnout and engagement, I expect victim conflict to relate positively with burnout and negatively with engagement.

METHODS

Study 1 Item Development

Participants, procedures, and results

In order to develop the victim conflict scale, I met with three focus groups, which consisted of 5-8 firefighters each. All of the firefighters worked on the rescue squad, which is a first response unit (often arriving on the scene prior to ambulances). These firefighters have extensive exposure to victims. The final sample of firefighters consisted of 18 employees, all male, with an average age of 43.2 ($S = 4.35$). These firefighters were mostly white (77%), and in non-supervisory positions (77%).

The focus groups were held on-site (at fire departments). I introduced the study and asked firefighters to think about specific events in which victims were rude, uncivil, or aggressive. Several examples were provided, and then the participants were given 20 min to write down as many incidences as they could think of. When the group reconvened, participants were given an opportunity to describe some of these incidences out loud to the group. Participants were welcome to continue writing down incidences during this group session. Verbal responses were recorded, and all written responses were collected.

A total of 24 items were created based on commonly-occurring events. Participants described more events that would be categorized as “incivility” as opposed to “aggression,” so 16 of these items represented victim incivility, and 8 represented victim aggression. Following the creation of these items, a roundtable discussion was held with a subset of the above participants ($n = 6$), who evaluated the items based on clarity and occurrence. One item was dropped, and several of the items were re-worded for the sake of clarity.

I also conducted a content analysis of the items, where a group of advanced psychology graduate students ($n = 9$) were provided with definitions, and asked to sort items as representing “incivility,” “aggression,” or “unsure.” Items with <85% agreement were omitted (6 items). Overall, the sorting task showed high levels of agreement for determining the correct factor for each item, with only mild overlap with a small portion of the items, and only a single item receiving more than one “unsure.”

The remaining 17 items represented victim incivility and victim aggression and were administered to participants in Study 2. Per the focus group participants, these items were administered twice, first to reflect the conflict stemming from the victims, and second to reflect the conflict stemming from the family and friends of victims. As one firefighter put it, “sometimes, the victim is unconscious or out of it, but their friends and family are shouting at you and swearing at you, or sometimes just ignoring you.”

Study 2 Construct Validation

Participants and procedure

Participants in this study were firefighters employed by a major Midwestern city. A total of 636 survey packets were distributed to all firefighters working in suppression (e.g. 24-h shift work). Each survey packet contained: (1) a letter of endorsement from the chief, (2) several survey measures (as part of a larger, grant funded study), (3) an informed consent document, and (4) a postage-paid return envelope. A total of 201 participants returned the survey, resulting in a response rate of 31.6%.

The final group of participants were all male, with an average age of 48.6 (standard deviation [SD] = 6.87). Most of the participants were Caucasian (74%) and had been employed as firefighters for an average of 21.1 years (SD = 6.81). Most participants were ranked as firefighters (69%), though many lieutenants and captains participated, as well.

Measures

Victim conflict

Victim conflict and families/friends of victim conflict, were each assessed using the 17-item Victim Conflict Scale developed in Study 1. More detail will be provided on the psychometric qualities of this measure below.

Job satisfaction

Satisfaction was measured using the Abridged Job in General (8-items; aJIG), which is the most widely-used measure of job satisfaction [24]. This scale has been validated in multiple studies and has been shown to relate strongly to other measures of satisfaction, as well as to constructs such as organizational commitment and intentions to quit [24]. Participants are asked to indicate whether a series of adjectives and short phrases describe their current job, where example items include “enjoyable,” “undesirable,” or “better than most.” The validated response scale for the aJIG is “Yes,” “No,” and “?” “Yes” is scored as a “3,” “No” is scored as a “0,” and “?” is scored as a “1.” Cronbach’s alpha was acceptable for this measure ($\alpha = 0.87$).

Burnout

Burnout was assessed using the burnout measure [25]. The burnout measure has been empirically validated in numerous studies, with data showing convergent validity with other measures of burnout [26]. Research has also shown criterion-related validity, with the Burnout Measure relating to outcomes of burnout, such as anxiety and depression [27]. This measure consists of three subscales of burnout: Physical exhaustion (e.g. “being tired”), emotional exhaustion (e.g. “feeling hopeless”), and cognitive exhaustion (e.g. “feeling rejected”). Participants indicated how often they experienced each of these symptoms of burnout, where 1 = never, and 5 = always (5). Cronbach’s alpha was acceptable for this measure ($\alpha = 0.88$).

Engagement

Engagement was assessed using the Utrecht Work Engagement Scale (UWES) [28]. The UWES has been empirically validated in numerous studies; engagement has been shown to be distinct from other, related constructs such as job involvement and commitment [29]. The UWES has also been shown to predict important workplace outcomes, such as performance [30]. The 17 items measure three related dimensions of engagement: Vigor (6 items), dedication (5 items) and absorption (6 items). Example items include “At my job, I feel strong and vigorous” (vigor), and “I am enthusiastic about my job” (dedication), and “I am immersed in my work” (absorption). All items were rated along a five-point Likert scale, where 1 = strongly disagree, and 5 = strongly agree. Cronbach’s alpha was acceptable for this measure ($\alpha = 0.86$).

Turnover intentions

Turnover intentions were measured using a two-item scale workplace withdrawal scale adapted from Hanisch and Hulin [31]. This scale has been shown to be related to earlier intentions to quit, as well as with subsequent job withdrawal [32]. These items were “How often do you think about leaving the job?” and “How likely are you to look for a new job within the next year?.” The items were rated along a five-point frequency scale, ranging from 1 = never to 5 = all of the time. Cronbach’s alpha was acceptable for this measure ($\alpha = 0.76$).

RESULTS

Analytic Strategy

The analysis of the victim conflict scale took place across two stages. First, in order to assess the dimensionality of the new scales, an exploratory factor analysis (EFA) was conducted for (1) the victim conflict scale, and (2) the family/friends of victims conflict scale. An EFA supporting our anticipated factor structure would show items loading on incivility and aggression factors. Second, in order to assess the impact of victim conflict, Pearson correlations were calculated to gather initial information about the relations among the focal variables. Next, given that the model considered multiple outcome variables, structural equation modeling was used, with both sources of victim conflict as the domestic violence, and job satisfaction, burnout, engagement, and intentions to quit as the innocent victims. Scanning electron microscopy allows researchers to simultaneously estimate the relationships among latent variables in a model, and better estimates measurement error compared to regression-based models. Several models were compared, with the final model presented being the most parsimonious and best fit. A description of fit statistics can be found in Hu and Bentler [33]; a discussion of the fit statistics are beyond the purview of the current study.

Scale Validation

In order to determine whether the victim and family/friend victim conflict scales were psychometrically valid, an EFA was conducted to determine the factor structure of each scale [Table 1]. Promax rotation with Kaiser normalization was utilized as the extraction method, with all factor loadings <0.30 being suppressed. The first factor explained 59.3% of the variance, with the second factor explaining 27.4% of the variance. The first factor appeared to indicate the items

Table 1: Exploratory factor analysis for victim conflict scale

Items	Factor 1	Factor 2
Victims ignore instructions I give them.	0.69	
Victims change their stories while talking to me.	0.72	
Victims question my competence.	0.69	
Victims say rude things.	0.76	0.39
Victims act like they know better than I do.	0.74	
Victims don't show appreciation (e.g., say please and thank you.)	0.70	
Victims try to talk over me.	0.78	
Victims won't move out of my way when I am trying to work.	0.78	
Victims raise their voice at me.	0.75	0.42
Victims are not truthful with me.	0.67	
Victims get too close to me when talking.	0.63	
Victims walk away from me while I'm talking.	0.75	
Victims say demeaning things to me.		0.64
Victims call me names.		0.79
Victims swear at me.		0.73
Victims shout at me in a hostile manner.		0.78
Victims heatedly argue with me.		0.68

Factor extraction method: Promax with Kaiser normalization, Factor 1: Explained 59.3% of the variance, Factor 2: Explained 27.4% of the variance

designed to reflect incivility, and the second factor appeared to indicate items that were designed to indicate aggression. There was some overlap, with two items having factor loadings above 0.30 on both of the factors though both items loaded more heavily on the incivility factor. Overall, the evidence indicated that a two factor solution was most logical. This assertion was further supported by a reliability analysis. Each factor had adequate internal reliability (incivility, $\alpha = 0.89$; conflict, $\alpha = 0.84$), and no items could have been deleted to improve the internal consistency.

Second, the factor structure of the family/friend victim conflict scale was examined [Table 2]. Once again, the first factor explained a large amount of variance (61.1%), whereas the subsequent factors explained 22.3% of the variance. Using the same rotation method as above, the items once again seemed to load onto the incivility and aggression factors. There was some mild overlap for one item, but this item loaded much more strongly on the incivility factor. Overall, the two factor solution was once again supported, and each factor had good internal consistency (incivility, $\alpha = 0.89$; conflict, $\alpha = 0.86$) [Table 2].

Across both scales, the incivility and aggression factors correlated relatively highly ($r < 0.70$). Because of this, and because other conflict scales (e.g. ICAWS) [14] have combined incivility and aggression items, a composite victim conflict score was utilized for the validation portion of this study.

Path Modeling

Descriptive statistics and correlations among all variables can be found in Table 3. Prior to utilizing structural equation modeling to test our hypotheses, we examined correlations for initial evidence of relationships among the variables. Victim conflict and family/friend of victim conflict correlated highly ($r = 0.87$,

Table 2: Exploratory factor analysis for family/friends of victim conflict scale

Items	Factor 1	Factor 2
FF of victims ignore instructions I give them.	0.82	
FF of victims change their stories while talking to me.	0.79	
FF of victims question my competence.	0.72	
FF of victims say rude things.	0.80	
FF of victims act like they know better than I do.	0.80	
FF of victims don't show appreciation (e.g., say please and thank you.)	0.64	
FF of victims try to talk over me.	0.86	
FF of victims won't move out of my way when I am trying to work.	0.85	
FF of victims raise their voice at me.	0.79	0.47
FF of victims are not truthful with me.	0.78	
FF of victims get too close to me when talking.	0.72	
FF of victims walk away from me while I'm talking.	0.79	
FF of victims say demeaning things to me.		0.82
FF of victims call me names.		0.81
FF of victims swear at me.		0.65
FF of victims shout at me in a hostile manner.		0.62
FF of victims heatedly argue with me.		0.79

Factor Extraction Method: Promax with Kaiser Normalization, Factor 1: Explained 61.1 % of the variance, Factor 2: Explained 22.3% of the variance

Table 3: Descriptive statistics and correlations among all variables

Variables	M	SD	1	2	3	4	5	6
Victim conflict	2.81	0.82	0.89	-	-	-	-	-
FF victim conflict	2.51	0.72	.87**	0.90	-	-	-	-
Job satisfaction	3.11	0.81	0.17*	0.12	0.87	-	-	-
Burnout	3.42	0.79	0.25**	0.21**	0.51**	0.88	-	-
Engagement	3.50	0.51	-0.12	-0.10	-0.31**	-0.67**	0.86	-
Turnover intentions	2.25	1.07	.30**	.29**	.47**	.51**	-0.30	0.76

n=208; **P*<0.05, ***P*<0.01, Italicized values on the diagonal indicate internal consistency

P < 0.01) with each other, indicating likely overlap between the scales. Both types of conflict-related significantly with burnout and turnover intentions, while only victim conflict related to job satisfaction. Interesting, no types of conflict-related significantly with engagement. As such, engagement was dropped from consideration in the overall model.

In order to test the relationships among types of victim conflict and their outcome variables, structural equation modeling was utilized in LISREL, v8.54 [34]. The final model can be seen in Figure 1. This model demonstrated acceptable fit ($\chi^2=19.9$, *P* = 0.01; comparative fit index [CFI] = 0.97; RMSEA=.04; GFI = 0.88; NFI = 0.94), and fit significantly better than a model with a link between family/friend victim incivility and job satisfaction ($\Delta\chi^2 = 107.32$, *P* < 0.01). As expected, victim conflict related significantly with job satisfaction ($\beta = -0.20$, *P* < 0.05) turnover intentions ($\beta = 0.32$, *P* < 0.01), and burnout ($\beta = 0.31$, *P* < 0.01). Family/friends of victim conflict related significantly with turnover intentions ($\beta = 0.28$, *P* < 0.01) and burnout ($\beta = 0.21$, *P* < 0.05). As such, the majority of my propositions were supported.

DISCUSSION

Given the number of people, worldwide, who work as first responders, it is important to investigate and understand the unique stressors that these individuals might face. Evidence exists indicating that these individuals might be exposed to conflict from victims, but this has not been systematically and empirically examined. As such, the purpose of the current study was to develop a scale measuring victim conflict and to gather initial evidence of potential negative outcomes of this conflict.

The victim conflict scale functioned relatively well from a psychometric standpoint and seemed to consist of two factors-incivility and aggression. And, indeed, firefighters appeared to experience victim conflict with relative frequency (99% of firefighters reported experiencing some level of victim conflict). Additionally, the validation portion of the current study revealed that victim conflict is associated with several negative employee outcomes. That is, conflict from both victims and their family/friends related positively with turnover intentions and burnout, and victim conflict also related negatively to job

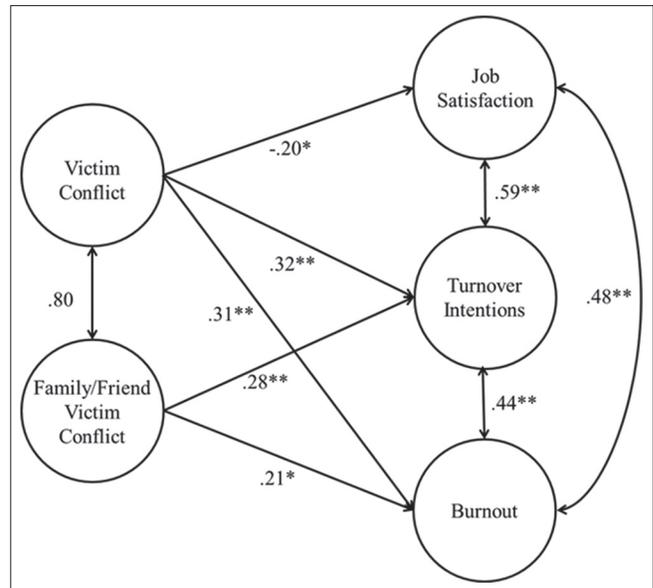


Figure 1: Test of the model of the relationship between victim conflict and its outcomes, Fit Indices: $\chi^2 = 19.9$, *P* = 0.01; comparative fit index (CFI) = 0.97; RMSEA = 0.04; GFI = 0.88; NFI = 0.94

satisfaction. This highlights the possible costs of victim conflict to both employees and organizations. Interestingly, though the victim conflict and family/friend victim conflict scales were highly correlated, the scales were differentially related to the outcomes. Perhaps this is a function of salience firefighters' negative experiences with victims are more salient than those with the family/friends of the victims. Firefighters likely have more control over, and can create more distance from, families/friends. With uncivil victims, however, firefighters are unable create distance and might have to spend extended periods of time with this difficult person.

Overall, these results point to the fact that fire-fighters first responders do not just shrug off this conflict as “part of the job,” but rather it can have negative effects on these employees. As we detail below, it is important to continue to examine this workplace stressor, both in terms of determining its negative effects, but also in determining antecedents of victim conflict, and possible buffers of the negative effects of this conflict.

Limitations and Future Directions

Although our study had several strengths (e.g. large, relevant sample; multiple studies), the findings should be taken with some caution. First, the results from Study 2 were based on cross-sectional, correlational data, which can cause common method variance concerns [35]. Second, we examined and validated victim conflict in a single occupation: Firefighters. It may be that exposure, frequency, and type of victim conflict differs from occupation to occupation. Along those lines, our sample was limited geographically (Midwest United States) and was limited in some demographic characteristics (age, tenure).

In terms of future research, victim conflict should be investigated across different types of occupations, such as ambulance drivers,

police officers, and other emergency service workers, and the victim conflict scale should be validated in these different samples. In terms of the negative impact of victim conflict, researchers should begin to identify ways in which these effects can be ameliorated. For instance, conflict resolution training might be effective in “cooling down” conflictive victims. Alternately, there might be certain individual differences that could act to impact the perception of, or the reaction to, victim conflict. Evidence exists that indicates certain personality characteristics might buffer or exacerbate the negative effects of workplace conflict [3,36], and that may be the case with victim conflict. Regardless of the mechanism, however, it is important to take steps into better understanding the antecedents, causes, and ways of preventing victim conflict.

REFERENCES

- Cortina LM, Magley VJ, Williams JH, Langhout RD. Incivility in the workplace: Incidence and impact. *J Occup Health Psychol* 2001;6:64-80.
- Frone MR. Predictors of overall and on-the-job substance use among young workers. *J Occup Health Psychol* 2003;8:39-54.
- Sliter MT, Pui SY, Sliter KA, Jex SM. The differential effects of interpersonal conflict from customers and coworkers: Trait anger as a moderator. *J Occup Health Psychol* 2011;16:424-40.
- Lanza ML. Nurses as patient assault victims: An update, synthesis, and recommendations. *Arch Psychiatr Nurs* 1992;6:163-71.
- Sliter MT, Sliter KA, Jex SM. The employee as a punching bag: The effect of multiple sources of incivility on employee withdrawal behavior and sales performance. *J Organ Behav* 2012;33:121-39.
- Pozzi C. Exposure of prehospital providers to violence and abuse. *J Emerg Nurs* 1998;24:320-3.
- LeBlanc MM, Kelloway EK. Predictors and outcomes of workplace violence and aggression. *J Appl Psychol* 2002;87:444-53.
- Munding HM. Violence against firefighters: Angels of mercy under attack. Executive Fire Officer Program – Leading Community Risk Reduction R-280, 2006. Available from: <http://www.usfa.fema.gov/pdf/efop/efo39115.pdf>.
- Fox S, Spector PE. A model of work frustration-aggression. *J Organ Behav* 1999;20:915-31.
- Betancourt H, Blair I. A cognition (attribution)-emotion model of violence in conflict situations. *Pers Soc Psychol Bull* 1992;18:343-50.
- Grandey AA, Dickter DN, Sin H. The customer is not always right: Customer aggression and emotional regulation of service employees. *J Organiz Behav* 2004;25:397-418.
- Lancee WJ, Gallop R, McCay E, Toner B. The relationship between nurses' limit-setting styles and anger in psychiatric inpatients. *Psychiatr Serv* 1995;46:609-13.
- Martin SE. Police force or police service? Gender and emotional labor. *Ann Am Acad Political Soc Sci* 1999;561:111-26.
- Spector PE, Jex SM. Development of four self-report measures of job stressors and strain: Interpersonal conflict at work scale, organizational constraints scale, quantitative workload inventory, and physical symptoms inventory. *J Occup Health Psychol* 1998;3:356-67.
- DeVellis RF. Scale Development: Theory and Applications. Newbury Park, CA: Sage; 2003.
- Spence Laschinger HK, Leiter M, Day A, Gilin D. Workplace empowerment, incivility, and burnout: Impact on staff nurse recruitment and retention outcomes. *J Nurs Manag* 2009;17:302-11.
- Wilson NL, Holmvaill CM. The development and validation of the Incivility from Customers Scale. *J Occup Health Psychol* 2013;18:310-26.
- Weiss HM, Cropanzano R. Affective events theory: A theoretical discussion of affective experiences at work. In: Staw BM, Cummings LL, editors. *Research in Organizational Behavior*. Greenwich, CT: JAI Press; 1996. p. 1-74.
- Hobfoll SE, Freedy J. Conservation of resources: A general stress theory applied to burnout. In: Schaufeli WB, Maslach C, Marek T, editors. *Professional Burnout: Recent Developments in Theory and Research*. Washington, DC: Taylor & Francis; 1993. p. 115-29.
- Kiefer T. Feeling bad: Antecedents and consequences of negative emotions in ongoing change. *J Organ Behav* 2005;26:875-97.
- Vartia MA. Consequences of workplace bullying with respect to the well-being of its targets and the observers of bullying. *Scand J Work Environ Health* 2001;27:63-9.
- Schaufeli WB, Bakker AB, Rhnenen W. How changes in job demands and resources predict burnout, work engagement, and sickness absenteeism. *J Organ Behav* 2009;30:893-917.
- Leiter MP. Coping patterns as predictors of burnout: The function of control and escapist coping patterns. *J Organ Behav* 1991;12:123-44.
- Russell SS, Spitzmuller C, Lin LF, Stanton JM, Smith PC, Ironson GH. Shorter can also be better: The abridged job in general scale. *Educ Psychol Meas* 2004;64:878-93.
- Pines AM, Aronson E. *Career Burnout: Causes and Cures*. New York: Free Press; 1988.
- Rohland BM, Kruse GR, Rohrer JE. Validation of a single-item measure of burnout against the Maslach Burnout Inventory among physicians. *Stress Health* 2004;20:75-9.
- Shirom A, Ezrachi Y. On the discriminant validity of burnout, depression and anxiety: A re-examination of the burnout measure. *Anxiety Stress Coping* 2003;16:83-97.
- Schaufeli WB, Salanova M, Gonzalez V, Bakker AB. The measurement of engagement and burnout: A sample sample confirmatory analytic approach. *J Happiness Stud* 2002;3:71-92.
- Hallberg UE, Schaufeli WB. "Same same" but different? can work engagement be discriminated from job involvement and organizational commitment? *Eur Psychol* 2006;11:119.
- Bakker AB, Schaufeli WB, Leiter MP, Taris TW. Work engagement: An emerging concept in occupational health psychology. *Work Stress* 2008;22:187-200.
- Hanisch KA, Hulin CL. Job attitudes and organizational withdrawal: An examination of retirement and other voluntary withdrawal behaviors. *J Vocat Behav* 1990;37:60-78.
- Hanisch KA. A causal model of general attitudes, work withdrawal, and job withdrawal, including retirement. University of Illinois at Urbana-Champaign; 1990.
- Hu Lt, Bentler PM. Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Struct Equ Modeling* 1999;6:1-55.
- Joreskog KG. A general method for estimating a linear structural equation system. In: Goldberger AS, Duncan OD, editors. *Structural Equation Models in the Social Sciences*. Chicago: Academic Press; 1973. p. 85-112.
- Podsakoff PM, MacKenzie SB, Lee JY, Podsakoff NP. Common method biases in behavioral research: A critical review of the literature and recommended remedies. *J Appl Psychol* 2003;88:879-903.
- Osatuke K, Moore SC, Ward C, Dyrenforth SR, Belton L. Civility, respect, engagement in the workforce (CREW): Nationwide organization development intervention at veterans health administration. *J Appl Behav Sci* 2009;45:384-410.

© SAGEYA. This is an open access article licensed under the terms of the Creative Commons Attribution Non-Commercial License (<http://creativecommons.org/licenses/by-nc/3.0/>) which permits unrestricted, noncommercial use, distribution and reproduction in any medium, provided the work is properly cited.

Source of Support: This research study was (partially) supported by the National Institute for Occupational Safety and health pilot research project training program (More details hidden for blind peer review), **Conflict of Interest: None declared.**