



# Perceived Social Support: A Protective Factor against Workplace Violence and Psychopathologies in Paramedics and Firefighters

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## INTRODUCTION

### Workplace Violence (WPV)

As first responders, paramedics, and firefighters experience elevated levels of WPV, often instigated by members of the public.<sup>1</sup> Over 70% of first responders experience some form of physical violence within an estimated year, while 95% experience verbal violence.<sup>2</sup> Consisting of verbal and physical behaviours, WPV is associated with a higher risk of developing psychopathologies, including PTSD, anxiety and depression.<sup>3</sup>

### Perceived Social Support (PSS)

PSS is a protective factor that may enhance first responders' resilience in the face of violence. By communicating with others, getting alternative perspectives and feeling supported, individuals may re-appraise negative situations in a more accurate and beneficial manner.<sup>4</sup> However, the source of support may impact its potential benefits.<sup>5</sup> Specifically, the shared experiences of unique stressors among co-workers may lead to a sense of greater relatability that may help reduce workplace violence's psychological impacts above support from loved ones.

### Purpose

The current study assessed how PSS from co-workers and loved ones moderated the relationship of WPV to psychopathology in first responders.

## METHOD

### Participants

A total of 349 firefighters and paramedics consented and started the survey; n = 246 (47.6% career firefighter; 52.4% paramedics) provided usable data.

### Materials and Procedures

Data were collected using the online survey and distribution tool Qualtrics and consisted of self-report questionnaires.

- *Posttraumatic stress disorder* was measured using the PCL-5.<sup>6</sup>
- *Anxiety and depression* were measured using the 21-item Depression Anxiety Stress Scale (DASS-21)<sup>7</sup>
- *Past month exposure to workplace violence* was measured using the First Responder Workplace Violence Scale (FRWVS)<sup>2</sup>
  - The FRWVS assesses for threat of violence, verbal violence and physical violence.
- *Past year exposure* was measured by asking participants how often in the past year:
  - "have you been engaged in the line of duty where you felt your life was at risk?" and "have you felt that you were at risk of serious physical injury?"
- *Perceived social support* was measured using an adapted version of the Multidimensional Scale of Perceived Social Support (MSPSS).<sup>8</sup>
  - The original MSPSS assesses support from family, friends and significant others (loved ones).
  - In consultation with first responders, a fourth source of support was added; perceived social support from co-workers.

## RESULTS

A series of moderated regressions were conducted to test the interactive effects of PSS (co-worker [CO] and loved ones [LO]) and WPV on PTSD, depression and anxiety. Two sets of models were run, one using **Past Year** exposure to workplace violence and the second using **Past Month** exposure to workplace violence. Similar results were found for both Past Year Exposure and Past Month Exposure. Therefore, only the results from Past Year Exposure are presented here.

PTSD, depression, anxiety were regressed on Past Year exposure to violence in the workplace (predictor), levels of PSS CO (moderator), levels of PSS LO (moderator), and the two predictor by moderator interaction terms. We tested both interaction terms in the same model to disentangle the unique moderating effects of perceived social support from co-workers versus from loved ones.

Predictors	B	SE	$\beta$	R <sup>2</sup>	t	p
<b>PTSD Symptoms</b>						
Past Year Exposure	3.53	0.66	0.28		5.27	.000
PSS CO	-3.42	0.73	-0.28		-4.67	.000
PSS LO	-1.75	0.82	-0.13		-2.11	.035
<b>Past year by PSS CO</b>	<b>-1.91</b>	<b>0.53</b>	<b>-0.22</b>		<b>-3.59</b>	<b>.000</b>
<b>Past Year by PSS LO</b>	<b>0.36</b>	<b>0.58</b>	<b>0.04</b>		<b>0.61</b>	<b>.540</b>
				.323 [.229 - .416]		
<b>Depression Symptoms</b>						
Past Year Exposure	1.15	0.43	0.15		2.68	.008
PSS CO	-1.80	0.47	-0.24		-3.82	.000
PSS Loved ones LO	-2.18	0.53	-0.25		-4.09	.000
<b>Past year by PSS CO</b>	<b>-1.23</b>	<b>0.34</b>	<b>-0.23</b>		<b>-3.60</b>	<b>.000</b>
<b>Past Year by PSS LO</b>	<b>-0.15</b>	<b>0.38</b>	<b>-0.03</b>		<b>-0.38</b>	<b>.697</b>
				.316 [.222 - .409]		
<b>Anxiety Symptoms</b>						
Past Year Exposure	1.31	0.31	0.25		4.23	.000
PSS CO	-1.31	0.34	-0.26		-3.88	.000
PSS LO	-0.10	0.38	-0.02		-0.26	.795
<b>Past year by PSS CO</b>	<b>-0.76</b>	<b>0.25</b>	<b>-0.21</b>		<b>-3.12</b>	<b>.002</b>
<b>Past Year by PSS LO</b>	<b>0.25</b>	<b>0.27</b>	<b>0.07</b>		<b>0.94</b>	<b>.346</b>
				.204 [.116 - .291]		

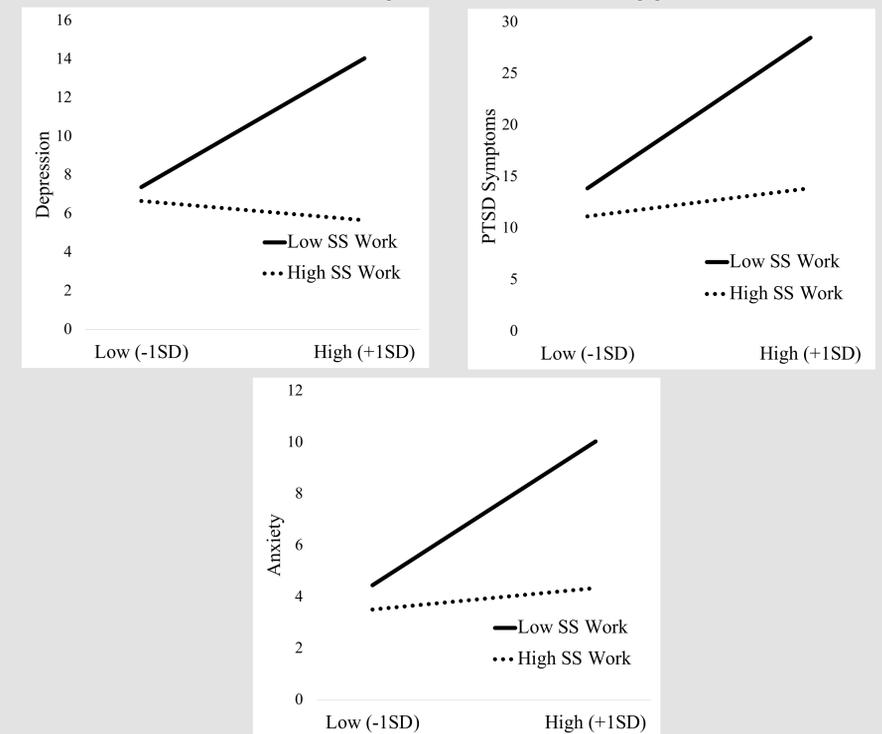
**PTSD:** The model accounted for an estimated 32.3% of the variance in PTSD symptoms with the Past Year Exposure by PSS CO interaction accounting for 4.1% of unique variance.

**Depression:** The model accounted for an estimated 31.6% of the variance in depression symptoms with the Past Year Exposure by PSS CO interaction accounting for 5.5% of unique variance.

**Anxiety:** The model accounted for an estimated 20.4% of the variance in anxiety symptoms with the Past Year Exposure by PSS CO interaction accounting for 3.4% of unique variance.

Supported interaction effects were probed using the simple slopes approach. Results are shown on the following figures.

## Simple Slopes of past year exposure to workplace violence and perceived social support



## Discussion

- WPV positively predicted psychopathology, but only at low levels of co-worker PSS. WPV was not associated with psychopathologies at high levels of co-worker support. Interestingly, the PSS level from loved ones did not affect WPV's negative impacts.
- These results suggest that not all sources of PSS are equal. The shared experience among co-workers may facilitate sharing and support from co-workers allowing individuals to gain alternative perspectives and facilitating the re-appraise adverse incidents.<sup>4</sup>
- In contrast, paramedics and firefighters may choose not to seek support from family and friends in the face of WPV for fear of causing additional worries for loved ones, appearing weak, or being misunderstood due to the potential lack of shared experiences.<sup>9</sup>
- The present findings indicate that co-worker support is beneficial and could be incorporated into organizations to reduce the impact of WPV.

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