



Psychological safety, workplace incivility, and institutional betrayal: Organizational factors shaping mental health in first responders

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ABSTRACT

First responders operate in high-stakes environments where organizational culture may influence mental health outcomes. This study examined the associations between psychological safety, workplace incivility, and institutional betrayal and their impact on posttraumatic stress disorder (PTSD), depression, burnout, and resilience among emergency medical services and fire personnel in Florida. A cross-sectional survey of $n = 799$ first responders measured mental health symptoms and organizational climate using validated scales. Findings revealed that 33.2% of respondents screened positive for probable PTSD, 32.3% reported moderate to severe depressive symptoms, and 27.6% reported moderate or high burnout. Institutional betrayal was reported by 59.5% of participants and was significantly associated with elevated PTSD, depression, and burnout and lower resilience. First responders experiencing mental health challenges reported significantly higher levels of workplace incivility. Greater exposure to incivility was strongly associated with lower resilience and higher rates of PTSD, depression, and burnout. In addition, psychological safety scores were consistently lower across all organizational levels, including supervisors, command staff, peers, and teams, among individuals with mental health concerns. These findings suggest that adverse organizational experiences may be linked to poorer mental health outcomes, regardless of role or rank. The results underscore the need for organizational interventions, such as leadership training, peer support, and transparent accountability policies, that promote psychological safety, reduce incivility, and restore trust. By addressing these modifiable workplace factors, first responder agencies can work to improve morale and wellness, while also positively influencing recruitment, retention, and overall workforce stability. Future research should explore causal pathways and evaluate the long-term impact of organizational culture change initiatives.

Key Words Psychological safety; workplace incivility; institutional betrayal; first responder mental health; burnout; PTSD; organizational culture; emergency services.

INTRODUCTION

In high-risk, high-pressure roles like those of first responders, mental health and performance are shaped not only by the emergencies encountered but also by the internal culture of their organizations. Increasingly, attention is turning to how agencies function: how teams interact, how leaders communicate, and how personnel experience their workplace environment. Three key dynamics stand out: psychological safety, workplace incivility, and institutional betrayal. These interconnected factors are important in first responder settings, where trust, support, and collaboration are essential. Psychological safety refers to feeling free to

speaking up or showing vulnerability without fear of retaliation or judgment. Workplace incivility involves subtle but damaging behaviours such as rudeness, exclusion, or dismissiveness. Institutional betrayal occurs when leadership violates trust through inaction, broken promises, or failure to address serious issues. The degree to which psychological safety is supported, incivility is tolerated, or betrayal is perceived may significantly impact morale, retention, job performance, and mental well-being in first responder agencies.

Psychological Safety

Psychological safety refers to a shared belief that individuals can take interpersonal risks like admitting mistakes

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or asking for help without fear of negative consequences to their self-image, status, or career (Edmondson & Lei, 2014; Kahn, 1990). In high-stakes fields like emergency response, psychological safety is essential. Psychological safety promotes effective communication, reduces errors, and supports mental health. In first responder settings, psychological safety can help personnel speak up about stress, trauma, or safety concerns. Studies in healthcare and emergency services show that teams with higher psychological safety experience better information sharing and fewer operational failures (Grailey et al., 2021; Newman et al., 2017). Psychological safety can also protect mental health by encouraging help-seeking and reducing stigma (Peddie et al., 2025). Lack of psychological safety, such as fear of looking weak or being judged, has been identified by first responders as a major barrier to coping with trauma (Cogan et al., 2024; Hoegh et al., 2024). Conversely, a supportive environment improves morale, retention, and willingness to stay in the profession (Fleagle, 2023; Stanley et al., 2019).

Workplace Incivility

Workplace incivility involves subtle but harmful behaviours like exclusion, sarcasm, or dismissive comments that violate norms of respect (Andersson & Pearson, 1999). In traditionally hierarchical and male-dominated fields such as first responder professions, this behaviour can be normalized as tough culture. However, research shows it can significantly damage mental health, leading to burnout, emotional exhaustion, and turnover (Afshari et al., 2021; Cash, 2019; Lu et al., 2023). Incivility undermines peer trust, reduces morale, and can push qualified responders out of the workforce (Cash et al., 2019). Studies also find that coworker support can protect against these negative outcomes, while its absence exacerbates stress and trauma symptoms (Brais et al., 2023).

Institutional or Administrative Betrayal

Institutional or administrative betrayal occurs when leadership fails to support or protect personnel, especially after trauma or when addressing misconduct (Smith & Freyd, 2013). In first responder organizations, this includes lack of psychological follow-up, dismissive responses to concerns, or penalizing those who speak up (Cogan et al., 2024; Lentz et al., 2021). Such failures violate trust and can intensify the emotional toll of the job. Fear of career consequences often deters help-seeking, while bureaucratic neglect, such as inaccessible services or broken confidentiality may deepen the sense of betrayal. Studies link institutional betrayal to increased posttraumatic stress disorder (PTSD), burnout, and moral injury. In contrast, supportive organizational responses can serve as protective factors (Stanley et al., 2019).

Connection to Mental Health Outcomes

While the inherently high-stress and trauma-exposed nature of their work is widely recognized, emerging evidence underscores that the culture and climate within first responder organizations may be influential in determining psychological well-being. Conditions like PTSD, depression, and burnout are not solely the result of traumatic exposure in the field, but may stem from how individuals are treated within their work environments, whether they feel safe, supported, and respected (Stanley et al., 2019). Studies

consistently show that environments characterized by low psychological safety, high levels of incivility, and perceived betrayal by leadership are strongly associated with worse mental health outcomes such as PTSD, depression, burnout, and anxiety (Brais et al., 2023; Cogan et al., 2024). In contrast, agencies that cultivate supportive interpersonal relationships, encourage open communication, and model fair and transparent leadership practices contribute to reduced psychological risk and greater resilience among personnel. These findings highlight the need for interventions not only at the individual level, but also at the organizational level, to build healthier and more psychologically protective workplaces for those on the front lines.

Significance of Study

Organizational culture is a critical and modifiable determinant of first responder well-being. Agencies that promote psychological safety, address incivility, and maintain trust can strengthen both performance and mental health outcomes. This study contributes to a growing evidence base linking workplace culture with behavioural health and underscores the need for further research, especially longitudinal and intervention-based studies to clarify causal relationships and inform prevention strategies.

METHODS

Researchers utilized survey methodology to administer a cross-sectional electronic survey instrument to a convenience sample of fire-rescue personnel (firefighters, emergency medical technicians, and paramedics) across the state of Florida to examine the relationship between certain organizational factors in the workplace and various mental health outcomes. The instrument included a battery of validated self-report assessments designed to gauge individual mental health and perceptions of organizational climate. Key outcome measures included symptoms of PTSD, assessed using the PTSD Checklist for Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) (PCL-5); depressive symptoms, measured via the Patient Health Questionnaire-9 (PHQ-9); burnout, assessed using the Oldenburg Burnout Inventory (OLBI); and resilience, measured with the Connor-Davidson Resilience Scale (CD-RISC-25). Independent variables of interest included perceived workplace incivility (measured by the Workplace Incivility Scale (WIS-7)), institutional betrayal (assessed using the Institutional Betrayal Questionnaire-Version 2 (IBQ-2)), and psychological safety (measured with Edmondson's Psychological Safety Scale). SAS version 9.4 was used to quantitatively examine the associations between perceived organizational climate factors (workplace incivility, institutional betrayal, and psychological safety) and mental health outcomes (PTSD, depression, burnout, and resilience). Procedures were approved by the institutional review board at the researcher's university.

Measures

This research utilized a set of validated self-report instruments to examine psychological functioning and organizational climate among first responders. Each scale was selected based on its empirical reliability, suitability for high-stress occupations, and relevance to first responder populations.

Posttraumatic stress disorder (PTSD)

This research evaluated PTSD symptoms using the PCL-5. Participants rated the frequency of 20 symptoms over the past month. Probable PTSD was identified using recommended cut-offs of 31 or 33 (Bovin et al., 2016). The PCL-5 was included due to its alignment with DSM-5 criteria and demonstrated reliability in trauma-exposed populations, including first responders (Ahmadi et al., 2023; Morrison et al., 2021).

Depression

To assess depressive symptoms, this research applied the PHQ-9 (Kroenke et al., 2001). Participants rated how often they experienced each of nine symptoms over the past 2 weeks. Scores were categorized into five levels: minimal, mild, moderate, moderately severe, and severe. The PHQ-9 was selected for its diagnostic alignment with DSM criteria and widespread use in clinical and occupational health settings with first responders (Ahmadi et al., 2023; Blake, 2022).

Burnout

The OLBI measured burnout severity through 16 items assessing two core domains: exhaustion and disengagement. Participants indicated their agreement with each statement. The scoring framework categorized burnout as low (0–43), moderate (44–51), or high (52–64). The OLBI was chosen for its applicability to occupational settings and its ability to capture both emotional fatigue and detachment from work in first responders (Kaplan et al., 2017; Shoji et al., 2015).

Resilience

The CD-RISC-25 assessed participants' ability to recover from stress and adversity (Connor & Davidson, 2003). The scale includes 25 items rated on a five-point Likert scale reflecting participants' experiences over the past month. Higher scores indicated greater psychological resilience. The CD-RISC has demonstrated acceptable internal consistency and convergent validity, and several studies have administered the CD-RISC to first responders (Connor & Davidson, 2003; Straud et al., 2018; Wild et al., 2016).

Workplace incivility

To assess subtle and chronic forms of workplace mistreatment, this research employed the WIS-7 (Cortina et al., 2001). Participants reviewed seven scenarios and indicated whether they had experienced each situation with either supervisors or coworkers in the past 5 years. Total scores ranged from 0 to 7, with higher scores indicating more frequent experiences of incivility. The scale was selected for its specificity in capturing low-intensity workplace conflict and its previous use in studies involving first responders (Cash et al., 2019; Miller & Brown, 2021; Shadwick & Kuchinka, 2018).

Institutional betrayal

The IBQ-2 measured participants' exposure to betrayal by their organization following a traumatic or stressful workplace event. This research asked participants to review 12 items and select all that applied. Any endorsement of one or more items indicated institutional betrayal. While some scholars indicate no appropriate scale exists to measure institutional betrayal in the first responder population, this instrument was selected for its relevance to examining how

organizational responses to trauma contribute to psychological harm (Berner & Hetsel-Riggin, 2025; Huang et al., 2022).

Psychological safety

This research used a version of the Psychological Safety Scale (PSS) to assess perceived safety in taking interpersonal risks across different workplace relationships (Edmondson & Lei, 2014). The scale included four subdomains: supervisor (nine items), command staff (nine items), peer (seven items), and team (three items). Participants rated each statement on a seven-point scale. Mean scores were calculated for each subscale, with higher scores reflecting greater psychological safety. The instrument was chosen for its capacity to differentiate between relational dynamics within complex organizational structures such as health-care settings (Hoegh et al., 2024).

RESULTS

A total of $n = 799$ first responders completed the survey. Among those who responded to the demographic items, the majority identified as male ($n = 595$; 74.9%), White ($n = 622$; 78.0%), and between 46 and 59 years of age ($n = 227$; 34.7%). A full summary of demographic characteristics appears in Table I.

Mental Health Measures

This research assessed mental health indicators using validated screening instruments for resilience, burnout, depression, and PTSD. Based on responses to the CD-RISC, the mean resilience score was 74.77 ($n = 724$), indicating a moderate level of resilience. Burnout levels, measured by the OLBI, showed that 72.3% of respondents fell within the low burnout category, 21.2% within the moderate range, and 6.4% within the high burnout range. The PHQ-9 identified that 32.3% of respondents screened in the moderate to severe range for depressive symptoms. Using the PTSD PCL-5, 33.2% of participants met the criteria for probable PTSD at the recommended cut-off score of 31, and 31.6% met the threshold using the more conservative cut-off score of 33.

Workplace and Organizational Culture Issues

This research assessed workplace and organizational culture factors through validated measures of institutional betrayal, workplace incivility, and psychological safety. Based on responses to the IBQ-2, 59.5% of participants reported experiencing at least one form of institutional betrayal in the workplace. The WIS-7 yielded a mean score of 3.28 (out of a possible 7), suggesting that respondents commonly encountered low-level but persistent interpersonal mistreatment.

Psychological safety was evaluated using the PSS. On the supervisor scale (maximum score = 63), respondents reported a mean score of 40.4, indicating moderate perceived safety in supervisory interactions. The command staff scale produced a lower mean score of 32.8 out of 63, suggesting relatively reduced psychological safety in interactions with leadership. Mean scores for the peer and team subscales were 38.3 out of 49 and 15.3 out of 21, respectively, reflecting comparatively higher perceptions of safety within immediate work groups.

TABLE I Demographics

Demographics		
	<i>n</i>	%
Age Groups		
18–25 years	74	11.3
26–35 years	121	18.5
36–45 years	173	26.4
46–59 years	227	34.7
60+ years	60	9.2
Race/Ethnicity		
White	622	78.0
Hispanic or Latino	105	13.2
African American/Black	23	2.9
Asian	9	1.1
Other	9	1.1
Native Hawaiian or Pacific Islander	2	0.3
Sex		
Male	595	75.9
Female	189	24.1
Profession		
Fire/EMS transport	362	45.4
Fire/EMS non-transport	108	13.6
Private ambulance	68	8.5
Not employed in the EMS field at this time	60	7.5
Other	58	7.3
EMS third service	48	6.0
Hospital based	47	5.9
Fire	32	4.0
Helicopter/fixed wing	14	1.8
Role		
Patient care provider	500	63.0
First-line supervisor	122	15.4
Administrator/manager	83	10.5
Other	60	7.6
Educator	17	2.1
Dispatcher/call taker	8	1.0
Preceptor	4	0.5
Active Duty or Retired		
Active	583	87.5
Retired	83	12.5

EMS = emergency medical services.

Workplace and Organizational Culture Issues on Mental Wellness

Institutional betrayal and mental wellness

This research found significant associations between institutional betrayal and a range of mental health outcomes. Respondents who reported experiencing institutional betrayal showed higher rates of probable PTSD, depression, and burnout, as well as lower resilience scores compared to those who had not.

Among those who experienced institutional betrayal, 43.4% met the criteria for probable PTSD (cut-off score ≥ 31), compared to 18.1% of those who had not. A chi-square test of independence confirmed a significant relationship between institutional betrayal and PTSD diagnosis, $\chi^2(1, N = 714) = 50.66, p < 0.001$. Rates of depression were also significantly elevated among respondents who reported institutional betrayal. Severe (6.5% vs. 1.4%), moderately severe (12.5% vs. 4.4%), moderate (19.5% vs. 7.2%), and mild (25.1% vs. 18.8%) depression were all more common in this group. A chi-square test revealed a significant association between institutional betrayal and depression severity, $\chi^2(4, N = 714) = 77.74, p < 0.001$.

Burnout levels followed a similar pattern. Moderate burnout was reported by 23.9% of those who experienced betrayal compared to 9.9% of those who had not, while high burnout was reported by 7.7% vs. 2.4%, respectively. This difference was statistically significant, $\chi^2(2, N = 714) = 35.20, p < 0.001$. Resilience was significantly lower among those who experienced institutional betrayal. An independent samples *t*-test revealed that respondents who had not experienced institutional betrayal reported higher mean resilience scores (mean (*M*) = 77.7, standard deviation (*SD*) = 13.1) compared to those who had (*M* = 72.8, *SD* = 13.6), $t(712) = 4.73, p < 0.001$.

These findings highlight a consistent and significant relationship between institutional betrayal and poorer mental health outcomes. Summary data appear in Table II.

Workplace Incivility Scale (WIS-7) and mental wellness

This research found that higher workplace incivility, as measured by the WIS-7, is significantly associated with poorer mental health outcomes among first responders. Respondents with probable PTSD, higher levels of depression and burnout, and lower resilience reported notably higher WIS-7 scores.

Respondents with probable PTSD reported a significantly higher mean WIS-7 score (*M* = 4.2, *SD* = 2.4) compared to those without PTSD (*M* = 2.5, *SD* = 2.5), $t(458) = -8.64, p < 0.001$. Workplace incivility scores also increased across burnout levels. Respondents with low burnout reported a mean WIS-7 score of 2.6 (*SD* = 2.5), compared to 4.3 (*SD* = 2.3) for moderate burnout and 4.8 (*SD* = 2.2) for high burnout. A one-way analysis of variance (ANOVA) confirmed a significant difference across groups, $F(2, 687) = 38.47, p < 0.0001$, with post-hoc tests showing significant differences between the low burnout group and both moderate and high groups.

Depression severity was similarly linked to higher WIS-7 scores. A one-way ANOVA revealed significant differences across depression levels, $F(4, 685) = 22.26, p < 0.0001$. Post-hoc analyses indicated that respondents with no or minimal depression scored significantly lower on the WIS-7 than

TABLE II Institutional Betrayal Questionnaire (IBQ) and mental wellness

	Experienced IB	Did Not Experience IB
PCL-5 (%)		
Probable PTSD (cut-off score of 31)	43.4	18.1
OLBI (%)		
Low burnout		
Moderate burnout	23.9	9.9
High burnout	7.7	2.4
CD-RISC		
Resilience score	72.8	77.6
PHQ-9 (%)		
No or minimal depression	36.4	68.3
Mild depression	25.1	18.8
Moderate depression	19.5	7.2
Moderately severe depression	12.5	4.4
Severe depression	6.5	1.4

CD-RISC = Connor–Davidson Resilience Scale; DSM-5 = Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition; OLBI = Oldenburg Burnout Inventory; PCL-5 = PTSD Checklist for DSM-5; PHQ-9 = Patient Health Questionnaire-9; PTSD = posttraumatic stress disorder.

all other groups. Mean WIS-7 scores rose steadily from 2.2 among those with no or minimal depression to 4.6 among those with severe depression. Pearson correlation further demonstrated a significant negative relationship between workplace incivility and resilience, $r(688) = -0.22, p < 0.0001$, indicating that higher WIS-7 scores were associated with lower levels of resilience.

Overall, these findings suggest that workplace incivility is strongly associated with adverse mental health indicators in first responders. Table III presents detailed WIS-7 results across each mental health variable.

Psychological Safety Scale (PSS) and mental wellness

Higher scores on the PSS reflect a greater sense of safety in taking interpersonal risks, such as sharing concerns or admitting mistakes without fear of negative consequences. This research found that respondents with poorer mental health outcomes consistently reported lower psychological safety across all workplace relationship categories. Across all PSS domains – supervisor, command staff, peer, and team – respondents with probable PTSD, higher levels of depression, greater burnout, and lower resilience reported significantly lower psychological safety. Those who had experienced institutional betrayal also had markedly lower PSS scores compared to those who had not.

Supervisor scale

Respondents without mental health concerns reported the highest levels of psychological safety with supervisors. Nota-

bly, those with probable PTSD ($M = 33.7$) or high burnout ($M = 26.6$) reported substantially lower supervisor scores than their counterparts. A positive correlation was found between resilience and supervisor PSS scores ($r = 0.35, p < 0.0001$).

Command staff scale

Psychological safety scores were lower overall in relation to command staff compared to supervisors. Respondents with probable PTSD scored an average of 25.3, while those without scored 36.5. The largest gap was observed between respondents who had and had not experienced institutional betrayal ($M = 27.2$ vs. 39.6). A significant positive correlation was also found between resilience and command staff scores ($r = 0.40, p < 0.0001$).

Peer scale

PSS scores with peers were moderately high overall but still showed a decline with worsening mental health. Respondents with no or minimal depression had a mean score of 41.8, while those with severe depression scored 33.1. Resilience remained positively correlated with peer PSS scores ($r = 0.33, p < 0.0001$).

Team scale

Scores on the team scale followed similar patterns. Respondents with probable PTSD reported significantly lower team safety ($M = 12.9$) compared to those without ($M = 16.5$). As burnout and depression levels increased, team scores decreased. Resilience was strongly associated with higher team safety ($r = 0.42, p < 0.0001$).

Psychological safety is consistently lower among first responders experiencing mental health challenges. This trend holds true across all organizational levels – from leadership to peer teams – highlighting the importance of organizational climate in supporting psychological well-being. Summary results for each domain appear in Tables IV-VI.

DISCUSSION

This study examined how key organizational factors, psychological safety, workplace incivility, and institutional betrayal, relate to mental health outcomes among first responders. Findings indicate that psychological safety is significantly lower among those with probable PTSD, depression, and burnout. This was observed consistently across all relational domains, with the lowest safety scores associated with command staff. These results support prior research suggesting that perceived safety in workplace interactions is protective against stress and trauma (Cogan et al., 2024; Edmondson, 1999; Stanley, 2019). Lower psychological safety may reduce communication, discourage help-seeking, and reinforce stigma around mental health challenges.

Workplace incivility was another salient factor, showing associations with every negative mental health outcome measured. Respondents who experienced greater incivility reported higher rates of PTSD, depression, and burnout, as well as lower resilience. These findings reinforce the growing body of literature that positions incivility as more than a minor workplace issue; it is a predictor of distress, exhaustion, and disengagement, especially in high-demand professions like emergency services (Afshari et al., 2021; Brais et al., 2023). Institutional betrayal emerged as a damaging organizational

TABLE III Workplace incivility and mental wellness

WIS-7 Score	
PCL-5	
Probable PTSD (cut-off score of 31)	4.1
Does not have probable PTSD	2.5
OLBI	
Low burnout	2.6
Moderate burnout	4.3
High burnout	4.8
PHQ-9	
No or minimal depression	2.2
Mild depression	3.2
Moderate depression	4.2
Moderately severe depression	4.0
Severe depression	4.6

DSM-5 = Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition; OLBI = Oldenburg Burnout Inventory; PCL-5 = PTSD Checklist for DSM-5; PHQ-9 = Patient Health Questionnaire-9; PTSD = posttraumatic stress disorder; WIS-7 = Workplace Incivility Scale.

TABLE IV Supervisor PSS and mental wellness

Supervisor	
PCL-5	
Probable PTSD (cut-off score of 31)	33.7
Does not have probable PTSD	43.6
OLBI	
Low burnout	43.2
Moderate burnout	34.4
High burnout	26.6
PHQ-9	
No or minimal depression	45.7
Mild depression	39.7
Moderate depression	35.1
Moderately severe depression	31.9
Severe depression	32.7

DSM-5 = Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition; OLBI = Oldenburg Burnout Inventory; PCL-5 = PTSD Checklist for DSM-5; PHQ-9 = Patient Health Questionnaire-9; PSS = Psychological Safety Scale; PTSD = posttraumatic stress disorder.

dynamic. Over half of respondents reported at least one form of betrayal by their agency. Those who experienced institutional betrayal were significantly more likely to meet criteria for probable PTSD and report higher levels of depression and burnout, along with lower resilience. These findings align with prior research showing that perceived organizational neglect or failure to support employees post-trauma can

TABLE V Command staff PSS results

Command	
PCL-5	
Probable PTSD (cut-off score of 31)	25.3
Does not have probable PTSD	36.5
OLBI	
Low burnout	36.7
Moderate burnout	23.9
High burnout	16.8
PHQ-9	
No or minimal depression	39.1
Mild depression	30.8
Moderate depression	26.8
Moderately severe depression	23.4
Severe depression	25.1

DSM-5 = Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition; OLBI = Oldenburg Burnout Inventory; PCL-5 = PTSD Checklist for DSM-5; PHQ-9 = Patient Health Questionnaire-9; PSS = Psychological Safety Scale; PTSD = posttraumatic stress disorder.

TABLE VI Peer PSS results

Peer	
PCL-5	
Probable PTSD (cut-off score of 31)	34.1
Does not have probable PTSD	40.4
OLBI	
Low burnout	39.7
Moderate burnout	35.5
High burnout	31.6
PHQ-9	
No or minimal depression	41.8
Mild depression	37.5
Moderate depression	34.9
Moderately severe depression	33.8
Severe depression	33.1

DSM-5 = Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition; OLBI = Oldenburg Burnout Inventory; PCL-5 = PTSD Checklist for DSM-5; PHQ-9 = Patient Health Questionnaire-9; PSS = Psychological Safety Scale; PTSD = posttraumatic stress disorder.

compound the effects of operational stress and contribute to moral injury (Auth et al., 2022; Cogan et al., 2024).

Across all analyses, resilience appeared as a mitigating factor, positively correlated with psychological safety and inversely correlated with incivility and betrayal. This underscores the importance of fostering resilience not just at the individual level, but within the broader organizational

climate. While the cross-sectional design limits causal inference, the consistency of these associations suggest a need for attention to workplace culture in first responder organizations. Efforts to build psychological safety, reduce incivility, and restore trust in leadership may yield meaningful improvements in mental health outcomes and organizational functioning.

This study offers insights into organizational factors and mental health among first responders; however, several limitations should be considered when interpreting the findings. Because data are cross-sectional, causality or temporal ordering cannot be inferred (e.g., whether low psychological safety leads to depression or vice versa). Longitudinal designs are needed to test causal pathways and change over time. All variables were measured via self-report in the same survey session, which may inflate associations. The convenience sample may not represent all first responder populations. Nonresponse bias is possible, and individuals with strong views or symptoms may have been more likely to participate. This research did not fully account for confounding factors such as cumulative trauma exposure, recent critical incidents, sleep disruption, shift length, overtime, call volume, organizational size/structure, unionization, compensation, or access to benefits. Demographic and role differences (e.g., age, gender, rank, years of service) may moderate associations. Without multivariable models that include these covariates, and potential interactions, residual confounding remains likely. This research did not link survey data to administrative indicators (e.g., sick leave, employee assistance program utilization, workers' compensation, turnover/retention, performance, or safety events). Such linkage would help validate findings and clarify operational impact.

To address these limitations, future studies should employ longitudinal and multilevel designs; include richer covariate sets (trauma exposure, work schedules, organizational characteristics); report full psychometrics and measurement invariance; integrate qualitative methods to capture lived experience; and link survey data to administrative outcomes. Randomized or quasi-experimental evaluations of organizational interventions (e.g., leadership training, peer support restructuring, accountability policies) are especially needed to determine causal impact on mental health, retention, and operational performance.

CONCLUSIONS

This study reinforces that organizational culture is not peripheral, it is central to the mental wellness of first responders. Psychological safety, workplace incivility, and institutional betrayal are powerful, interrelated factors that may shape how personnel experience their work and manage the cumulative stress of their roles. Respondents who reported negative organizational experiences consistently demonstrated higher levels of PTSD, depression, and burnout, as well as lower resilience. These outcomes were not limited to interactions with leadership but extended across all levels of workplace relationships, from peers to supervisors to command staff.

These findings emphasize that mental health interventions should not focus solely on individual coping or clinical treatment. Organizational-level strategies such as

leadership development, proactive wellness programming, peer support, and systems for transparent communication and accountability are essential for building safer, more supportive workplaces. Agencies can take meaningful steps to shift culture and reduce risk. Training supervisors and command staff in psychological safety, trauma-informed leadership, and recognizing early warning signs of distress fosters trust and healthier team dynamics. Building and sustaining well-trained, confidential peer support teams provides a critical layer of connection and occupationally competent support. Establishing regular opportunities for anonymous feedback and open communication, like pulse surveys or listening sessions, ensures that personnel feel heard and valued. Importantly, the focus must shift from solely reactive approaches to proactive, preventative efforts that promote resilience, connectedness, and psychological health before problems escalate. Making mental wellness a visible, leadership-endorsed priority helps normalize help-seeking and embeds support into the organizational culture. Future research should explore these relationships over time and evaluate how organizational interventions reduce mental health risk. In the meantime, fire and emergency medical services agencies can lead by example, acknowledging the impact of organizational culture, listening to their people, and building environments where respect, trust, and psychological safety are foundational.

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ETHICS APPROVAL AND INFORMED CONSENT

IRB approval obtained.

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REFERENCES

- Afshari, A., Borzou, S. R., Shamsaei, F., Mohammadi, E., & Tapak, L. (2021). Perceived occupational stressors among emergency medical service providers: A qualitative study. *BMC Emergency Medicine*, 21(1), 35. <https://doi.org/10.1186/s12873-021-00430-6>
- Ahmadi, A., Galusha, J. M., Ponder, W. N., Carbajal, J., Schuman, D. L., Whitworth, J., & Yockey, R. A. (2023). Validation of the PCL-5, PHQ-9, and GAD-7 in a sample of first responders. *Journal of Occupational and Environmental Medicine*, 65(6), 467–476. <https://doi.org/10.1097/JOM.0000000000002823>
- Andersson, L. M., & Pearson, C. M. (1999). Tit for tat? The spiraling effect of incivility in the workplace. *Academy of management review*, 24(3), 452–471. <https://doi.org/10.2307/259136>
- Auth, N. M., Booker, M. J., Wild, J., & Riley, R. (2022). Mental health and help seeking among trauma-exposed emergency service staff: a qualitative evidence synthesis. *BMJ Open*, 12(2), e047814. <https://doi.org/10.1136/bmjopen-2020-047814>
- Berner, M., & Hetzel-Riggan, M. D. (2025). Do negative cognitions influence first responders' coping and attitudes toward others? *Traumatology*, 31(2), 285–294. <https://doi.org/10.1037/trm0000506>

- Blake, C. (2022). Depression screening implementation: Quality improvement project in a primary care clinic for first responders. *Workplace Health & Safety*, *70*(12), 543–550. <https://doi.org/10.1177/21650799221119147>
- Bovin, M. J., Marx, B. P., Weathers, F. W., Gallagher, M. W., Rodriguez, P., Schnurr, P. P., & Keane, T. M. (2016). Psychometric properties of the PTSD Checklist for Diagnostic and Statistical Manual of Mental Disorders-Fifth Edition (PCL-5) in veterans. *Psychological Assessment*, *28*(11), 1379–1391. <https://doi.org/10.1037/pas0000254>
- Brais, N., Setlack, J., Keough, M. T., & Johnson, E. A. (2023). Perceived coworker social support: A protective factor against workplace violence and psychopathologies in paramedics and firefighters. *Journal of Aggression, Maltreatment & Trauma*, *32*(3), 346–364. <https://doi.org/10.1080/10926771.2022.2082905>
- Cash, R. E., White-Mills, K., Crowe, R. P., Rivard, M. K., & Panchal, A. R. (2019). Workplace incivility among nationally certified EMS professionals and associations with workforce-reducing factors and organizational culture. *Prehospital Emergency Care*, *23*(3), 346–355. <https://doi.org/10.1080/10903127.2018.1502383>
- Cogan, N., Craig, A., Milligan, L., McCluskey, R., Burns, T., Ptak, W., Kirk, A., Graf, C., Goodman, J., & De Kock, J. (2024). 'I've got no PPE to protect my mind': Understanding the needs and experiences of first responders exposed to trauma in the workplace. *European Journal of Psychotraumatology*, *15*(1), 2395113. <https://doi.org/10.1080/20008066.2024.2395113>
- Connor, K. M., & Davidson, J. R. T. (2003). Development of a new resilience scale: The Connor-Davidson Resilience Scale (CD-RISC). *Depression and Anxiety*, *18*(2), 76–82. <https://doi.org/10.1002/da.10113>
- Cortina, L. M., Magley, V. J., Williams, J. H., & Langhout, R. D. (2001). Incivility in the workplace: Incidence and impact. *Journal of Occupational Health Psychology*, *6*(1), 64–80. <https://doi.org/10.1037/1076-8998.6.1.64>
- Edmondson, A. (1999). Psychological safety and learning behavior in work teams. *Administrative Science Quarterly*, *44*(2), 350–383. <https://doi.org/10.2307/2666999>
- Edmondson, A. C., & Lei, Z. (2014). Psychological safety: The history, renaissance, and future of an interpersonal construct. *Annual Review of Organizational Psychology and Organizational Behavior*, *1*(1), 23–43. <https://doi.org/10.1146/annurev-orgpsych-031413-091305>
- Fleagle, B. (2023). Exploring the role of psychological safety and trust in the lived experiences of women in the fire service. In *Executive fire officer program applied research project*. U.S. Fire Administration/National Fire Academy.
- Grailey, K. E., Murray, E., Reader, T., & Brett, S. J. (2021). The presence and potential impact of psychological safety in the healthcare setting: An evidence synthesis. *BMC Health Services Research*, *21*(1), 773. <https://doi.org/10.1186/s12913-021-06740-6>
- Hoegh, J., Rice, G., Shetty, S., Ure, A., Cogan, N., & Peddie, N. (2024). Health and social care professionals' experience of psychological safety within their occupational setting: A thematic synthesis scoping review protocol. *COJ Nursing & Healthcare*, *8*(5), 915–920. <https://doi.org/10.31031/COJNH.2024.08.000700>
- Huang, E., Edgar, N. E., MacLean, S. E., & Hatcher, S. (2022). Workplace assessment scale: Pilot validation study. *International Journal of Environmental Research and Public Health*, *19*(19), 12408. <https://doi.org/10.3390/ijerph191912408>
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, *33*(4), 692–724. <https://doi.org/10.2307/256287>
- Kaplan, J. B., Bergman, A. L., Christopher, M., Bowen, S., & Hunsinger, M. (2017). Role of resilience in mindfulness training for first responders. *Mindfulness*, *8*, 1373–1380. <https://doi.org/10.1007/s12671-017-0713-2>
- Kroenke, K., Spitzer, R. L., & Williams, J. B. (2001). The PHQ-9: Validity of a brief depression severity measure. *Journal of General Internal Medicine*, *16*(9), 606–613. <https://doi.org/10.1046/j.1525-1497.2001.016009606.x>
- Lentz, L. M., Smith-MacDonald, L., Malloy, D., Carleton, R. N., & Brémault-Phillips, S. (2021). Compromised conscience: A scoping review of Moral Injury among firefighters, paramedics, and police officers. *Frontiers in Psychology*, *12*, 639781. <https://doi.org/10.3389/fpsyg.2021.639781>
- Lu, D. W., Shin, J., Wan, C., Rea, T. D., Crowe, R. P., Meischke, H. W., & Counts, C. R. (2023). Burnout and workplace incivility among emergency medical services practitioners: A preliminary report. *Prehospital Emergency Care*, *27*(4), 413–417. <https://doi.org/10.1080/10903127.2023.2175088>
- Miller, A., & Brown, L. (2021). Coping mechanism and professional quality of life in northeast Texas EMS personnel during the COVID-19 pandemic: An exploratory study. *Australasian Journal of Paramedicine*, *18*, 1–8. <https://doi.org/10.33151/ajp.18.925>
- Morrison, K., Su, S., Keck, M., & Beidel, D. C. (2021). Psychometric properties of the PCL-5 in a sample of first responders. *Journal of Anxiety Disorders*, *77*, 102339. <https://doi.org/10.1016/j.janxdis.2020.102339>
- Newman, A., Donohue, R., & Eva, N. (2017). Psychological safety: A systematic review of the literature. *Human Resource Management Review*, *27*(3), 521–535. <https://doi.org/10.1016/j.hrmr.2017.01.001>
- Peddie, N., Hoegh, J., Rice, G., Shetty, S., Ure, A., & Cogan, N. (2025). Health and social care professionals' experience of psychological safety within their occupational setting: A thematic synthesis review. *Nursing reports (Pavia, Italy)*, *15*(4), 131. <https://doi.org/10.3390/nursrep15040131>
- Shadwick, J. L., & Kuchinka, D. G. (2018). Workplace incivility and burnout among professional firefighters. *International Journal of Strategic Management*, *18*(2), 45–56. <https://doi.org/10.18374/IJSM-18-2.4>
- Shoji, K., Lesnierowska, M., Smoktunowicz, E., Bock, J., Luszczynska, A., Benight, C. C., & Cieslak, R. (2015). What comes first, job burnout or secondary traumatic stress? Findings from two longitudinal studies from the U.S. and Poland. *PLoS One*, *10*(8), e0136730. <https://doi.org/10.1371/journal.pone.0136730>
- Smith, C. P., & Freyd, J. J. (2013). Dangerous safe havens: Institutional betrayal exacerbates sexual trauma. *Journal of Traumatic Stress*, *26*(1), 119–124. <https://doi.org/10.1002/jts.21778>
- Stanley, I. H., Hom, M. A., Chu, C., Dougherty, S. P., Gallyer, A. J., Spencer-Thomas, S., Shelef, L., Fruchter, E., Comtois, K. A., Gutierrez, P. M., Sachs-Ericsson, N. J., & Joiner, T. E. (2019). Perceptions of belongingness and social support attenuate PTSD symptom severity among firefighters: A multistudy investigation. *Psychological Services*, *16*(4), 543–555. <https://doi.org/10.1037/ser0000240>
- Straud, C., Henderson, S. N., Vega, L., Black, R., & Van Hasselt, V. (2018). Resiliency and posttraumatic stress symptoms in firefighter paramedics: The mediating role of depression, anxiety, and sleep. *Traumatology*, *24*(2), 140–147. <https://doi.org/10.1037/trm0000142>
- Wild, J., Smith, K. V., Thompson, E., Béar, F., Lommen, M. J. J., & Ehlers, A. (2016). A prospective study of pre-trauma risk factors for post-traumatic stress disorder and depression. *Psychological Medicine*, *46*(12), 2571–2582. <https://doi.org/10.1017/S0033291716000532>