

Trait Emotional Intelligence as a Predictor of Well-Being: The Mediating Effects of Positive and Negative Affect in Firefighters

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Purpose

Firefighting is widely recognized as a high-risk and high-stress profession, with firefighters facing significantly greater mental health risks compared to the general population. Research shows that firefighters' anxiety disorder rates are twice those of the general public, while major depressive disorder is nearly three times higher. Psychological well-being serves as a protective factor, reducing the risk of mental health issues. However, research on how to enhance firefighters' psychological well-being remains limited.

This study aims to examine how trait emotional intelligence (TEI) influences firefighters' well-being (WB) through positive (PA) and negative affect (NA). Using a longitudinal design with three measurement time points, this study seeks to validate a sequential double mediation model, providing empirical evidence for the psychological adaptation process of firefighters.

Methods

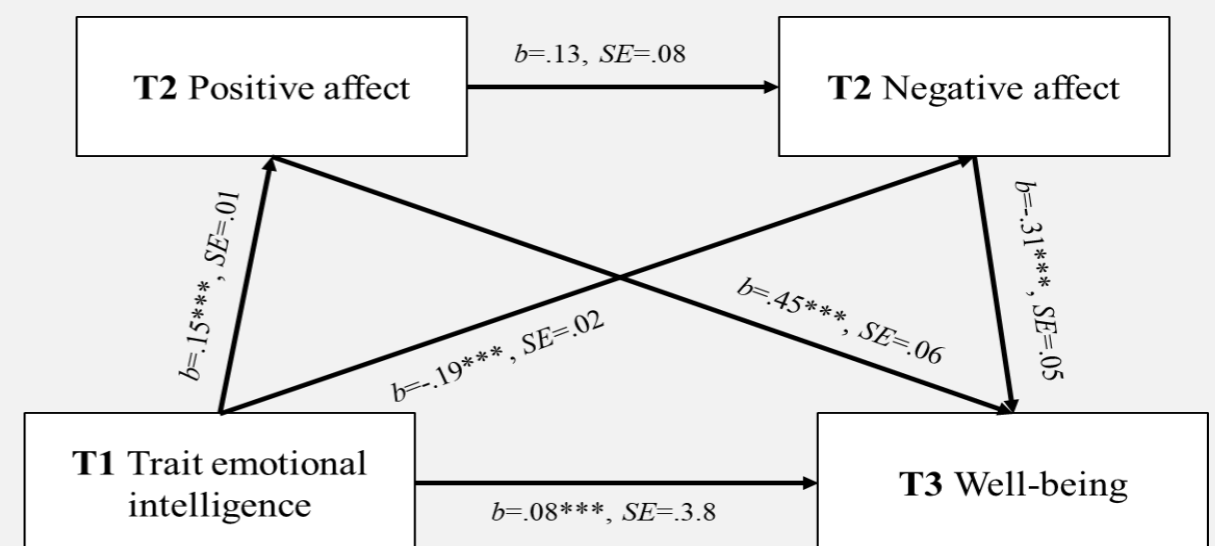
This study recruited firefighters from the Training Center of the Taiwan Fire Agency as research participants. Participants were required to be 20–65 years old and fluent in Mandarin Chinese. The study utilized the following instrument: Positive and Negative Affect Schedule (PANAS), Trait Emotional Intelligence Questionnaire – Short Form (TEIQue-SF) and Subjective Well-Being Scale. Data were collected at three different time points, with intervals of three months between each. Sequential double mediation effects were analyzed using SPSS PROCESS Model 6.

Results

	Effect	CI LLCI ~ ULCI
Total effect	0.20	.17~.24
Direct effect	0.08	.03~.13
Indirect effects		
TEI→PN→WB	0.06	.04~.09
TEI→NA→WB	0.06	.03~.09
TEI→PA→NA→WB	0.00	-.01~.00

Note. Level of confidence is 95%. TEI= trait emotional intelligence, WB=well-being, PA= positive affect, NA= negative affect

Results



A total of 190 participants were recruited, including 166 males (87.37%) and 24 females (12.63%), with a mean age of 27.19 years ($SD = 3.92$). The results indicated the following: Mediating effect of positive affect: PA at T2 significantly mediated the relationship between TEI at T1 and WB at T3 (95% CI [0.04, 0.09]). This finding suggests that firefighters with higher TEI are more likely to enhance their WB by increasing PA. Mediating effect of negative affect: TEI at T1 significantly reduced NA at T2, which in turn increased WB at T3 (95% CI [0.03, 0.09]). This result highlights the importance of managing NA as a crucial mechanism for promoting WB. Examination of the sequential double mediation pathway: The sequential mediation effect of PA on NA did not reach statistical significance (95% CI [-0.01, 0.00]).

Discussion

This study confirms the positive impact of TEI on firefighters' WB, demonstrating that this effect occurs not only directly but also indirectly through enhancing PA and reducing NA. Unlike previous studies that predominantly used cross-sectional designs, this study adopted a longitudinal approach, providing further empirical support for the mechanism through which TEI influences WB over time. The findings suggest that enhancing TEI may be an effective strategy to help firefighters better regulate their emotions, thereby improving WB and reducing the risk of mental health.

References

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Disclosure of conflict of interest name of first author:
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I have no COI with regard to the presentation

