



Equipping Police officers with resources: perceived control of internal states and suicide tendencies among Turkish Police officers, unraveling the serial mediating roles of resilience and depression

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Abstract

Drawing from existing literature, this study highlights police officers' heightened vulnerability to depression and suicidality as a result of occupational stressors and investigates the intricate associations among Turkish police officers' perceived control of internal states (PCOIS), resilience, depression, and suicidal tendencies. The study uses a comprehensive analysis to investigate how PCOIS influences resilience and depression, which subsequently impact suicidal tendencies. A total of 628 police officers participated in the study voluntarily. The mediation analyses indicate individuals with high PCOIS levels tend to have higher resilience, thus leading to lower suicidality regardless of depression levels. High PCOIS levels have also been linked to lower depression levels, thus also leading to a decrease in suicidality independent of resilience. The study shows both resilience and depression to be affected by PCOIS levels, with resilience acting as a protective shield against suicidality, whereas depression exacerbates the likelihood of suicidality. Lastly, the study has uncovered a serial mediating effect, with higher PCOIS levels enhancing resilience and subsequently reducing depression and suicidal tendencies. Therefore, resilience and depression play crucial roles as serial mediators in the relationship between PCOIS and suicidality, underscoring PCOIS's importance in psychological interventions aimed at bolstering resilience and mitigating depression and suicidality among police officers. This study contributes uniquely to the literature by demonstrating PCOIS's protective role in a high-stress profession and provides practical implications for developing targeted mental health interventions.

Keywords Perceived control of internal states · Resilience · Depression · Suicidality

Introduction

Police officers play a vital role in establishing and maintaining public safety. They are known for their strong commitment to protect, serve, and make society safer and often put their lives on the line. Due to the demanding nature of their work conditions, however, they are frequently exposed to stressful and traumatic events that have profound psychological impacts. Many factors such as the frequency of encountering adverse events (e.g., witnessing deaths, encountering abused children), overly long work hours, irregularity of the work system, communication problems with superiors (Çakır, 2006; Korkut, 2012), and daily exposure to traumatic cases place police officers' work under the category of professions with many stress factors. These

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stress-inducing factors can lead to the onset and development of depression and, subsequently, suicidality (Violanti, 2018).

Suicide is a significant growing concern around the world, with rates that increase daily. According to the World Health Organization's (WHO, 2020) statistics, more than 800,000 people commit suicide every year, with suicide rates having escalated among practically all age groups. Meanwhile, police officers are especially vulnerable due to the nature of their work. As reported by ABC News (2020), 172 police officers in the United States committed suicide in 2018, and 228 in 2019. Similarly, data from 2001 to 2012 have revealed 217 police officer suicides in the United Kingdom (UK National Statistical Institute, 2020), as well as 341 suicides among Turkish police during the same period (Harmançı et al., 2012). Police officers are also five times more likely to experience post-traumatic stress disorder (PTSD) than the general population, with 15% of police officers experiencing depression (Police Executive Research Forum, 2019). The prevalence of depression among police has the potential to reach clinical levels and subsequently lead to suicidality (Bishopp & Boots, 2014).

Depression affects people all over the world as a common, detrimental, and severe mental health problem. It is mainly characterized by a lack of motivation, loss of interest and pleasure in previous activities, diminished sense of agency, prolonged sadness, and subjective perception of feelings of worthlessness (Pizzagali & Roberts, 2022). Although depression affects individuals from various backgrounds and across diverse demographics, police officers bear a unique vulnerability. The needs and challenges of their job also lead to chronic stress, and exposure to excessive stress causes emotional and physiological problems among police officers (Çam & Çakır, 2008).

Cognitive adaptation theory highlights the human psyche as having remarkable resilience for rapidly adapting to traumatic or stressful circumstances. This adaptability is primarily facilitated by self-control, which allows individuals to overcome challenges without external assistance (Taylor, 1986). Thomson (2002) further elucidated this phenomenon, highlighting the central role of personal control in adaptive functioning. Pallant (2000) expanded on this concept, defining it as the perceived control of internal states (PCOIS) in which individuals perceive their ability to mitigate the effects of adversity on their emotions, thoughts, and overall well-being. As defined by Wallston et al. (1987), perceived control refers to the belief in one's ability to influence internal states, behaviors, and the surrounding environment, ultimately leading to desired outcomes. In summary, PCOIS means the subjective belief in one's ability to regulate and affect one's emotions, thoughts, and physiological

responses and is a key concept in reducing or moderating the deleterious effects of aversive situations (Pallant, 2000).

A strong link between depression and suicide has been well-established in both general populations (Klonsky et al., 2016) as well as police officers (Chopko et al., 2014). Therefore, the present study seeks firstly to determine the role of PCOIS in mitigating and reducing the adverse effects of job-related factors that may lead to a decrease in both depression and suicidal tendencies and secondly to determine PCOIS's protective role in preventing depression and suicidal tendencies in police officers. Similar to PCOIS, psychological resilience is a positive personal characteristic that enhances adaptation and restores equilibrium in the face of adversity (Wagnild & Young, 1993), as well as one's ability to maintain a consistent state of psychological equilibrium (Bonanno, 2005). Psychological resilience may also mitigate the negative effects of reduced PCOIS on suicidality, potentially acting as a mediator for decreasing these negative outcomes. In addition, resilience may also mitigate the negative effect of diminished PCOIS on depression and, subsequently, suicidality. Given that the police profession has the highest incidence of suicide cases in Türkiye (Harmançı et al., 2012), giving a corresponding level of scholarly attention to this critical and pressing issue would be reasonable to expect. Regrettably, however, only a limited number of scholars have addressed suicidality and its related variables among police officers. Thus, the current study is concerned with exploring the mediating role of resilience and depression in the association of PCOIS with suicidality among police officers.

Interconnections among Police officers' PCOIS, resilience, depression, and suicide tendencies

Psychological distress is the primary risk factor associated with suicide (Bachmann, 2018), with suicide ideation being an important signal of emotional distress and a reliable predictor of suicidality. Exposure to death, human suffering, cases of child abuse, and instances of violence in the line of duty contribute significantly to depression, alcohol abuse, and suicidal tendencies among police officers (O'Hara et al., 2013). Chopko et al. (2013) highlighted depression as one of the mental health challenges closely associated with suicide within the police force. Similarly, Guerrero-Barona et al.'s (2021) on police officers in Spain found suicidal ideation to be directly related to depression. Berg et al.'s (2003) study on Norwegian police officers found those who are at risk to be more likely to have suicidal thoughts due to high levels of depression and anxiety.

Other related studies (e.g., Bishopp & Boots, 2014) have presented concurrent findings of a clear association between depression and suicide in the police. Depression has also been found to be an escalating factor in the risk of hopelessness, which Civilotti et al. (2022) also associated with suicidal ideation in police officers. Similar to police officers, Sterud et al. (2008) found first responders who experienced elevated symptoms of depression to be more likely to report suicidal thoughts.

PCOIS is an influential factor in both the onset and persistence of depression and plays an important role in maintaining overall well-being and effectively coping with life stressors (Pallant, 2000). Doering et al. (2018) found symptoms of depression and anxiousness to mediate the effect of perceived control and the perception of how much control one has over situations in their life, with depressive symptoms negatively associated with perceived control and lower perceived control associated with lower health-related quality of life. Meanwhile, Ghorbani et al. (2008) found internal and external control to be significant predictors of depression, anxiety, and perceived stress.

Similar to PCOIS's association with depression, emotional control (Ward et al., 2018) and internal locus of control have also been shown to mitigate the effects of stress on police officers, with higher emotional control also having been associated with reduced self-injurious behavior (Zelkowitz et al., 2016). The inverse relationship between internal locus of control and suicidality is evident in both the normal population and those with a mental illness (Aviad-Wilchek, 2021), in both the elderly (aged 65 to 100), and young adults (aged 28 to 28; Wilchek-Aviad & Cohen-Louck, 2022), as well as in different populations such as college students (Umphrey et al., 2020).

In addition to resilience having a protective role in the face of adversities, the literature has also highlighted its role as being crucial in shaping the relationship between depression and suicide. For example, Shahram et al. (2021) highlighted the importance of resilience as a cornerstone of suicide prevention efforts among youths, while Siegmann et al. (2018) identified resilience as a moderator of the association between depression and suicidal ideation. Furthermore, studies conducted over the last 10–15 years have suggested resilience to act as a protective shield against suicidality. Sher (2019) found building resilience to have the potential to reduce suicidality not only in the general population but also in groups and individuals at increased risk of suicide, such as police officers.

The problem and current study

Türkiye has experienced an increased trend in suicide rates in recent years, climbing from 2,584 cases in 2001 to 4,146

in 2022 (Turkish Statistical Institute, [TurkStat], 2023). Despite being so high (Korkut, 2012), TurkStat's report showed no data on the suicide rate among police officers. However, several dramatic news events were broadcast both in print and digital formats at the very start of 2024, highlighting the alarming rate of police suicides in Türkiye (Gazete Duvar, January 22, 2024; *Marmarismanset*, March 7, 2024; *Urfanatik*, February 10, 2024) and showing suicide to be requested back on the agenda.

Based on the findings mentioned above, PCOIS emerges as a pivotal factor in mitigating or alleviating the undesired effects these aversive situations have on the individuals' emotions, thoughts, and physical well-being (Pallant, 2000). More specifically in terms of influencing mental well-being and adaptive functioning, PCOIS has considerable importance and also plays a pivotal role in shaping individuals' cognitive and emotional responses to stressors. A variety of negative outcomes, including increased vulnerability to depression and suicide and a meaningful decrease in resilience, can result when individuals perceive a lack of such control. To the best of our knowledge, only one study has reported PCOIS to be a significant predictor of police officers' well-being (Padhy et al., 2023), with no study having yet examined the associations among PCOIS, resilience, depression, and suicide in both police officers and other populations. However, more needs to be done to effectively address this pressing issue globally. Thus, the current study aims to contribute to the literature by shedding light on the association of PCOIS with suicidality among police officers and to examine the serial mediating role of resilience and depression in this regard. What distinguishes and makes this study unique from others is that it extends the existing literature by using a more complex model to examine the effect of variables such as PCOIS and resilience as protective factors regarding the probability of depression and suicidality with regard to police officers as a group constantly involved in challenging and highly stressful life events in their work lives. Türkiye and other Eastern cultures are often characterized as being more collectivistic and less individualistic and as placing greater emphasis on community and interdependence compared to Western cultures (Bond, 1991). As such, conducting this study in Türkiye also has profound significance.

To this end, our first hypothesis (H1) is that a negative link exists between police officers' PCOIS and suicidality. Hypothesis 2 (H2) states resilience to be positively predicted by PCOIS and to mediate the association between PCOIS and suicidality. Hypothesis 3 (H3) states depression to be negatively predicted by PCOIS and to mediate the association between PCOIS and suicidality. Lastly, Hypothesis 4 (H4) states both resilience to be positively and depression negatively predicted by PCOIS, with resilience

and depression mediating the association between PCOIS and suicide tendencies. Namely, PCOIS is thought to exert an indirect effect on suicidality through resilience, which in turn relates to depression and links serially to suicidal tendencies.

Method

Participants

We used the Monte Carlo power analysis for indirect effects (power = 0.80, α = 0.05; Schoemann et al., 2017) prior to determining the appropriate sample size and proceeded to enter the effect sizes previous studies had obtained for the links between locus of control and suicide tendencies (r = −.49; Aviad-Wilchek, 2021), between internal locus of control and resilience (r = .77; Cazan & Dumitrescu, 2016), between PCOIS and depression (r = −.69; Pallant, 2000), between resilience and depression (r = −.38; Siegmann et al., 2018), between resilience and suicidality (r = −.30; Ponder et al., 2023), and between depression and suicidality (r = .68; Guerrero-Barona et al., 2021). The results revealed at least 77 participants to be needed to detect serial mediation. We then used convenience sampling to reach 628 police officers.

We collected data from police officers affiliated with the Police Department in Mersin province in Türkiye's Mediterranean region, with informed consent being obtained from them prior to collecting the data. The inclusion criteria are voluntary participation and being a police officer. Of the police officers, 75 were excluded from the study for not completing the dataset or not want to participate. As a result, we were able to reach 628 police officers (87 females and 541 males) who voluntarily participated in the study. The participants' ages range from 20 to 55, with a mean age of 35.31 (SD = $\pm$ 8.90). Of the participants, 412 (66%) are

married, 192 (31%) are single, and 24 (4%) are divorced. Of the participants, 351 (56%) have 10 or more years of service, 120 (19%) have just started, and the remaining have between 2 and 9 years of service. Of the police officers, 262 (42%) work 40–59 h, 282 (45%) work 60–79 h, and 84 (13.4%) work 80 h or more per week. Table 1 shows the participants' demographic characteristics.

Measures

Suicide probability scale (SPS)

The SPS, developed by Cull and Gill (1988) and adapted to Turkish by Durak Batıgün & Hisli Şahin (2018) has 36 items, all of which the current study uses to assess the probability of suicide. The scale consists of four subscales: social support/self-perception, (anger/impulsivity, hopelessness/loneliness, and suicidal thoughts. The items are rated on a 4-point Likert scale ranging from 1 (Never/rarely) to 4 (Always), with higher scores indicating greater self-perception, anger, hopelessness, and suicidal thoughts. One's general suicide probability score is obtained by adding all the item scores, with the scores obtainable from the scale ranging from 36 to 144. The present study has calculated the internal reliability for the total scale as α = 0.72, with McDonald's ω = 0.71.

Depression, anxiety and stress scale (DASS)

DASS was created by Lovibond and Lovibond (1995) and adapted to Turkish by Akin & Çetin (2007). The scale consists of three subscales (i.e., depression, anxiety, stress) and 42 items, of which the current study uses 14 from the depression subscale to determine police officers' depression levels. The items are rated on a 4-point Likert scale ranging from 0 (Did not apply to me) to 3 (Applied to me very much or most), with higher scores indicating higher depression levels. The depression score is obtained by adding all scores from the depression subscale's items. The present study calculated the internal reliability for the depression subscale as α = 0.93, with McDonald's ω = 0.94.

Perceived control of internal states scale (PCOISS)

The PCOISS was developed by Pallant (2000) and adapted to Turkish by Çelikkaleli (2018). The scale has 16 items rated on a 5-point Likert scale from 1 (Strongly disagree) to 5 (Strongly agree), with higher scores indicating greater PCOIS. The current study uses all these items to assess

Table 1 Demographic characteristics of the sample (N = 628)

Variables		<i>n</i>	%
Gender	Female	87	13.9
	Male	541	86.1
Marital status	Married	412	65.6
	Single	192	30.6
	Divorce	24	3.8
Length of Service	10 + years	351	55.9
	8–9 years	45	7.2
	6–7 years	13	2.1
	4–5 years	18	2.9
	2–3 years	81	12.9
	1 or less years	120	19.1
Hours worked per week	40–59 h	262	41.7
	60–79 h	282	44.9
	80 + hours	84	13.4

individuals' perceptions of their ability to regulate or control the effects of distressing events in terms of emotions, thoughts, well-being, and reactions. The present study has calculated PCOISS's internal reliability as $\alpha = 0.90$, with McDonald's $\omega = 0.90$.

Psychological resilience scale (PRS)

The PRS was developed by Maddi and Khoshaba (1994) and adapted to Turkish by Durak (2002). The scale has 18 items rated on a 4-point Likert scale ranging from 0 (Strongly disagree) to 3 (Strongly agree), with higher scores indicating greater psychological resilience. The current study uses all these items to assess individuals' psychological resilience. The present study calculated the internal reliability as $\alpha = 0.70$, with McDonald's $\omega = 0.70$.

Procedure

Ethical approval and permission were obtained from the Mersin Province Police Department (Decision No. 9800819-16556 (31937) dated November 1, 2019) before collecting data. Upon beginning the data collection, the participants were explained the study's purpose and scope. The researchers told the participants that they could stop completing the measuring instruments at any time, that participation in the study was optional, and that all the collected data would be utilized for research purposes. The researchers also constantly assured the participants that their privacy would be protected and that their personal information would not be shared. The researchers used in-person interviews and traditional pen and paper methods to collect the data, which took roughly 15–20 min per participant.

Data analysis

The program IBM® SPSS® (version 27) was applied for descriptive statistics, correlation, and regression analyses. The study uses the Process Macro (Model 6) extension, created by Preacher and Hayes (2008), to assess the serial mediating impact of resilience and depression on the relationship between PCOIS and suicidality. Before evaluating

the data, we conducted several processes to evaluate certain assumptions for regression analysis and examined skewness and kurtosis as the initial condition for parametric testing. Bryne (2010) stated data to be classified as normal for skewness values within the range of -2 to $+2$ and kurtosis values within the range of -7 to $+7$. Table 2 reveals the data to fulfill this premise. We then conducted an analysis to investigate the presence of multicollinearity among the variables. The basic strategies for determining multicollinearity are the correlation coefficient, variance inflation factor (VIF), and condition index (CI) methods (Shrestha, 2020). The correlation values between the variables range between -0.44 and 0.64 ($p < .001$), which are not considerably high. For PCOIS, psychological resilience, and depression, the VIF scores vary between 1.72 and 1.87 and the condition index (CI) values between 2.44 and 19.60. Evaluating the correlation, VIF, and CI values reveal all to be within appropriate limits.

Ensuring VIF values < 10 (Belsley et al., 2004) and CI values < 30 (Young, 2017) is generally accepted as a sign of having no multicollinearity issues. Moreover, an absolute value of the Pearson correlation coefficient being close to 0.8 generally indicates that multicollinearity is likely to occur (Young, 2017). As a result, this study has no evidence of multicollinearity concerns. The research on serial mediating pathways utilizes the SPSS PROCESS macro (Preacher & Hayes, 2008). To examine the importance of the mediating effects, the analysis applies the bootstrapping approach, involving 5,000 resamples and a 95% confidence interval (CI). Confidence intervals that do not cover zero are considered to indicate a significant impact according to Preacher and Hayes (2008).

Results

Descriptive statistics and the relationships between variables

Table 2 displays the relationships among the variables. The results indicate the relationships between variables to be medium in size. Table 2 presents PCOIS to be positively associated with resilience ($r = .51$, $p < .001$) and negatively

Table 2 Descriptive statistics and bivariate correlations among variables ($N = 628$)

	Correlations coefficients				Descriptive statistics		
	1	2	3	4	<i>M</i> (<i>SD</i>)	Skewness	Kurtosis
1. Perceived control	1				55.06 (10.29)	−0.15	0.08
2. Resilience	0.51***	1			30.58 (5.87)	0.04	0.04
3. Depression	−0.63***	−0.44***	1		6.31 (7.37)	1.55	2.5
4. Suicidality	−0.64***	−0.58***	0.64***	1	79.92 (7.80)	0.48	0.37

M, mean; *SD*, standard deviation

*** $p < .001$

Table 3 Regression-Based results in the serial mediation analysis ($N=628$)

Dependent variables	Predictors	R	R^2	F	B	t	95% CI
Resilience	Internal states	0.511	0.262	222.320	0.292***	14.910	[0.253, 0.330]
Depression	Internal states	0.647	0.418	225.032	-0.392***	-15.411	[-0.442, -0.342]
	Resilience				-0.206***	-4.634	[-0.294, -0.119]
Suicidality	Internal States	0.751	0.564	269.374	-0.215***	-7.853	[-0.268, -0.161]
	Resilience				-0.384***	-9.234	[-0.465, -0.302]
	Depression				0.352***	9.620	[0.280, 0.424]

CI confidence interval; *** $p < .001$

Table 4 The effect of perceived control over internal States on suicidality through resilience and depression ($N=628$)

Model paths and effect	B	SE	95% CI		Decision
			LL	UL	
Total Effect	-0.487	0.023	-0.532	-0.441	
Direct Effect	-0.215	0.027	-0.269	-0.161	
Total indirect effect	-0.272	0.025	-0.323	-0.224	
Internal States → Resilience → Suicidality	-0.112	0.017	-0.147	-0.082	Supported
Internal States → Depression → Suicidality	-0.138	0.018	-0.176	-0.104	Supported
Internal States → Resilience → Depression → Suicidality	-0.021	0.006	-0.033	-0.011	Supported

CI confidence interval; SE standard error; LL lower level, UL upper level

associated with both depression ($r = -.63, p < .001$) and suicide ($r = -.64, p < .001$), as well as resilience to be negatively associated with depression ($r = -.44, p < .001$) and suicide ($r = -.58, p < .001$). Finally, depression is shown to have a positive association with suicide ($r = .64, p < .001$).

Testing a serial mediation model

Table 3 presents the results from the regression-based analysis, and Table 4 presents the results from the serial mediation analyses. The tables show the PCOIS (X) to negatively predict suicidality (Y ; $c = -0.487, p < .001$), thus confirming greater PCOIS to be associated with reduced suicidality, which supports Hypothesis (1) PCOIS positively predict resilience ($a_1 = 0.292, p < .001$), which in turn negatively predicts suicide tendencies ($b_1 = -0.384, p < .001$). The indirect pathway through resilience (M1) is significant ($B = -0.112, 95\% \text{ CI } [-0.147, -0.082]$) and accounts for 23% of the total effect. The bootstrap results confirm the significance of this mediation, thus supporting Hypothesis (2) In addition, PCOIS negatively predict depression ($a_2 = -0.392, p < .001$), which in turn positively predicts suicidality ($b_2 = 0.353, p < .001$). The indirect pathway through depression (M2) is also significant ($B = -0.138, 95\% \text{ CI } [-0.176, -0.104]$) and explains 28.3% of the total effect. The bootstrap results confirm this mediation, thus supporting Hypothesis 3.

The serial mediation pathway (PCOIS → resilience → depression → suicidality) is significant ($B = -0.021, 95\% \text{ CI } [-0.033, -0.011]$) and contributes 4.3% to the total effect. Resilience negatively predicts depression ($d_{21} = -0.207, p < .001$), creating a sequential protective mechanism. When

testing the serial mediation effect, the direct effect of PCOIS on suicidality remains significant ($c' = -0.215, p < .001$), thus indicating partial mediation. When combined with the singular mediation effects, the total indirect effect is significant ($B = -0.272, 95\% \text{ CI } [-0.323, -0.224]$) and accounts for 55.6% of the total effect. The bootstrap results confirm the significance of this serial pathway, thus supporting Hypothesis 4. Furthermore, the model explains 56.4% of the variance in suicidality among police officers ($F = 269.374, p < .001$), highlighting its explanatory power (see Fig. 1).

Discussion

Suicide transcends the boundaries of age and has affected almost all generations throughout the history of humans. The demanding nature of police work and many other factors place police work in the category of professions with high levels of stress, which can have profound psychological consequences, such as increased levels of depression and suicide tendencies. In addition, the prolonged exposure to traumatic cases and incidents makes police officers vulnerable to the debilitating effects of depression and, consequently, to suicidality. Understanding the complex relationship between PCOIS and suicidality in police officers while also considering the serial mediating roles of resilience and depression requires a nuanced exploration of the underlying psychological mechanisms. One such mechanism is the serial mediating role of resilience and depression. For this reason, the current study has aimed to shed light on the association between PCOIS and suicidality

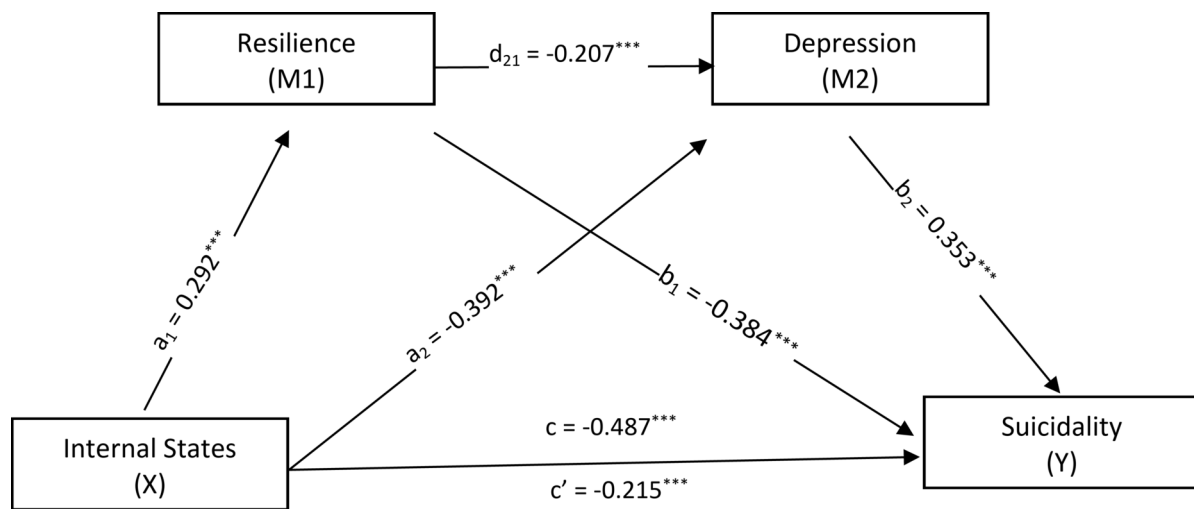


Fig. 1 The serial mediation model for resilience and depression regarding the relationship between perceived control of internal states and suicidality. Effects are reported as unstandardized values (***) $p < .001$; $N = 628$)

among police officers and on the serial mediating roles of resilience and depression.

First, a negative relationship has been shown to exist between PCOIS and suicidality among police officers, as was hypothesized. In other words, police officers with higher PCOIS levels show a significant decrease in their suicidality. Our review of previous studies on suicide did not reveal any research to have specifically examined the relationship between the variables of PCOIS and suicide probability. Indirectly related to this finding, studies have consistently demonstrated the critical role of emotional and internal locus of control in mitigating the effects of adversity and promoting well-being in diverse populations (Ward et al., 2018). Studies have shown individuals with higher emotional control have lower rates of self-injurious behaviors, thus highlighting the importance of effective emotion regulation strategies (Zelkowitz et al., 2016). Similarly, internal locus of control has been associated with lower rates of suicidality in not just individuals with mental illness but also in the general population (Aviad-Wilchek, 2021; Thorne & Ebener, 2018). This inverse association persists across different age groups, including the elderly and young adults, thus highlighting the universal importance of internal beliefs in shaping psychological outcomes (Wilchek-Aviad & Cohen-Louck, 2022). Furthermore, research findings have extended to diverse populations such as college students, which suggests that the benefits of internal locus of control transcend demographic boundaries (Umpfrey et al., 2020). In this context, identifying dysfunctional self-organization processes and enhancing self-regulation through control beliefs are essential steps in suicide prevention. These findings highlight the critical role of emotion regulation

and internal beliefs in promoting resilience and protecting against the adverse effects of stress and psychological distress.

The relevant literature has only one study indicating a positive link between police officers' increased PCOIS and well-being (Padhy et al., 2023). Similar to our findings, Padhy et al. underscored the crucial role of PCOIS in enabling police officers to effectively manage and regulate their emotions, thoughts, and behaviors. Increased PCOIS prevents them from becoming overwhelmed by the demanding situations they encounter and are surrounded by, which in turn results in a decrease in suicidality. While these findings enhance the understanding of PCOIS and suicidality in police officers, the study's generalizability has been limited by convenience sampling within a single Turkish region (Mediterranean region). Regional distinctions (e.g., urban-rural divides, geopolitical stressors such as conflict zones) and Türkiye's collectivist context, in which communal support coexists alongside a mental health stigma, may influence outcomes. Such factors could alter the pathways of PCOIS and suicidality different from those in individualistic societies where seeking help has been normalized.

The mediating effect of resilience

As also hypothesized, resilience is positively predicted by PCOIS and mediates the association between police officers' PCOIS and suicidality. In other words, police officers with higher PCOIS are more likely to have lower suicidality mediated through resilience. Similar to our findings, Shahram et al.'s (2021) comprehensive literature review of 37 studies stressed the importance of resilience as a cornerstone of suicide prevention. Findings from related studies have demonstrated low resilience to be associated with suicidal

behavior (Roy et al., 2007). Sher (2019) also underscored the importance of resilience as not only benefitting the general population but also holding promise for groups and individuals (e.g., police officers) facing an elevated risk of suicide. Taken together, the combined findings show resilience to act as a protective shield against suicidality. Our findings also indicate resilience to be able to be enhanced by higher PCOIS levels and consequently lower suicidality, thus presenting another unique contribution to literature.

The mediating effect of depression

As again hypothesized, depression negatively predicted by PCOIS and mediates the association between police officers' PCOIS and suicidality. Police officers with lower PCOIS are more likely to have higher suicidality owing to their increased depression. As Chopko et al. (2013) underscored, depression emerges within the police force as a primary mental health concern intricately linked to suicide. Depression's apparent link to suicidality has been well documented across various nations (e.g., Berg et al., 2003; Bishopp & Boots, 2014; Guerrero-Barona et al., 2021). This link has also been reported among first responders and ambulance personnel (Sterud et al., 2008). Parallel with our findings, Hua-bi's (2012) study found depression to have a role in the connection between individuals' internal or external control and thoughts of suicide. Although depression's stark association with suicidality and its mediating role across different variables has been well documented, no study to the best of our knowledge has directly examined the link between PCOIS and depression and depression's mediating role in the link between PCOIS and suicidality. As is well known and uniquely supported by our findings, the demanding nature of police officers' work heightens their vulnerability to depression, which if not addressed and left untreated, can result in profound and devastating consequences such as suicidality. Our findings significantly contribute to the literature by providing evidence that supports the idea of maintaining control over one's emotions, thoughts, and behaviors being able to prevent one from becoming overwhelmed (Pallant, 2000) and depressed, which in turn counteracts suicide. Our findings have not only discovered depression to have a deteriorating role in worsening the negative association between PCOIS and suicidal tendencies but have also shown how lower PCOIS is an influential factor in both the onset and persistence of police officers' depression and subsequent increased suicidality, as well as higher PCOIS inhibiting depression and lowering suicidality. The findings also provide evidence for the protective and buffering roles of PCOIS against suicide, as well as its role in decreasing depression, and consequently decreasing suicidality. Thus, nurturing and enhancing PCOIS provides

one with enough psychological resources that, in turn, give them the confidence to face challenges by being able to control and regulate their emotions, thoughts, and behaviors, thereby decreasing both depression and suicidality.

The serial mediating effect of resilience and depression

Lastly, evidence was also found supporting the hypothesis that PCOIS positively predicts resilience and negatively predicts depression, with resilience and depression mediating the association between police officers' PCOIS and suicidality. PCOIS exerts an indirect effect on suicidality through resilience, which in turn is related to depression and linked sequentially to suicidality. More specifically, this multiple interactional finding indicates increased PCOIS to be able to enhance resilience, which in turn plays an essential role in decreasing depression and subsequently results in sequential and significant lowering of police officers' suicidality. Resilience has been identified as a positive personal characteristic by how it increases adaptation and restores balance in the face of adversity (Wagnild & Young, 1993). Resilience has also been emphasized to be widely recognized as a crucial safeguard for police officers facing the challenges of traumatic events in their line of duty (Janssens, 2021) and to be a protective factor in mitigating the association between depression and suicidal ideation (Siegmann et al., 2018). Furthermore, resilience has also been reported to have a protective role against police officers' post-traumatic stress symptoms (Lee et al., 2016; McCanlies et al., 2014) and depression and to increase their well-being (Chitra & Karunanidhi, 2021; McCraty & Atkinson, 2012).

Resilience has also been argued to have a critical role regarding suicidal thoughts (Kyron et al., 2021) and reducing suicidal risks (Sher, 2019). Concurrent with our findings, Kim et al. (2020) uncovered depressive moods to be associated with suicidal ideation and resilience to have a pivotal role in preventing or decreasing suicidal ideation. Ponder et al. (2023) also reported direct effects from resilience and depression on suicidal ideation. Based on these findings, resilience appears to be a crucial factor in allowing individuals to cope effectively with aversive situations and stressors and in decreasing their vulnerability to depression and suicide. Thus, in order to weaken and even inversely reshape the link between depression and suicidality, resilience stands out as the primary factor. As such, it differentiates our study from other studies by providing evidence for how resilience can be enhanced through increased PCOIS and how both depression and suicidal tendencies can be decreased sequentially, thus underlining our specific and unique contribution to the related literature.

All findings from the current study should be interpreted cautiously in Türkiye's collectivist cultural context, for police officers may face pressures in areas where communal support systems are strong but that also have a persistent mental health stigma (Rogers-Sirin et al., 2017). The interactions among PCOIS, resilience, depression, and suicidality may be influenced by the unique cultural, social, and regional characteristics of Türkiye, which is marked by collectivist values and specific occupational stressors within the police force. With regard to expressing emotions as an example, asking for help and perceived control may not have the same effects in more individualistic societies (Neftçi & Barnow, 2016). Local differences and variations in workload, exposure to traumatic events, and availability and access to mental health resources may also influence the findings. For instance, cultural norms emphasizing stoicism and self-reliance may discourage police officers from seeking help, thus exacerbating depression and suicidality despite being able to access mental health workers.

Practical implications and limitations

Some of the compelling factors negatively affecting police officers are their need to respond to highly traumatic and stressful events, the strict hierarchical structure and discipline of their work, their heavy workload, irregular work hours, and night duties (Sayıl, 2008). In addition to these factors, other prominent issues that tire out police officers are insufficient sleep, malnutrition, inability to spare enough time for family and other personal life-related difficulties, administrative difficulties, duties exceeding individual capacities, compulsory watch system, and communication difficulties with superiors and co-workers. In addition to these factors, the dynamic and unpredictable nature of their work exposes police personnel to ongoing trauma that can lead to significant physical, mental, and emotional strain (Paddy et al., 2023) and increase their vulnerability to depression and suicidality. Thus, when developing prevention and intervention programs for both depression and suicidality, particular importance should be given to PCOIS, which also enhances resilience and significantly decreases both depression and suicidality. PCOIS is defined as using secondary control strategies to focus on internal processes such as emotions and thoughts rather than directly confronting stressful life events (Skinner & Zimmer-Gembeck, 2011). Therefore, the focus of intervention and prevention programs for police officers can include teaching skills that involve secondary control strategies (e.g., emotion and thought regulation). Based on our findings, we suggest that mental health workers working at the guidance and psychological counseling centers in all provinces, as well as the central organization within the police force, should carry

out training activities aimed at increasing PCOIS. Furthermore, PCOIS-based training courses and workshops should be implemented to allow all police officers to be able to effectively deal with challenges and adversities.

The present study also had some limitations. Firstly, the participants' data may have involved some biases or inaccuracies because the data collection process was based on self-reported data that can be influenced by social desirability bias. Secondly, the current study employed the convenience sampling method and collected data collected from a single region in Türkiye, which may restrict the generalizability of the findings. To improve external validity, future studies should be conducted over more diverse and representative samples from various regions and cultural contexts. Cross-cultural comparisons might also inform more tailored and effective interventions for police officers globally by providing deeper insights into the role of cultural and regional influences.

Thirdly, although the serial mediation model provides important insights into the associations among PCOIS, resilience, depression, and suicidality, the study's cross-sectional nature restricts the ability to make causal interpretations. The findings highlight links among these variables but cannot establish causality. Therefore, longitudinal studies are necessary to discover these associations over time and determine their directionality. Finally, the roles of certain critical factors such as exposure to trauma, history of mental illness, and substance use were not fully addressed, which is a significant limitation. Incorporating these variables in future studies may provide a more comprehensive understanding of the relationships explored.

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Data availability The data that support the findings of this study are available on request from the corresponding author.

Declarations

Informed consent Informed consent was obtained from all individual participants and/or their legal guardianships included in the study.

Competing interests The authors declare the paper to have no conflicts of interest.

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