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#### **RESEARCH ARTICLE**

The Impact of Demographic Factors on Job Stress Among Police Officers: An Analysis of Gender, Marital Status, Education, Positions, Institutions, and Job Types

Kantima Pongnairat<sup>1,\*</sup> Passanan Phuangthuean<sup>2</sup>

<sup>1</sup>Burapha University, Chonburi, Thailand, kantimap@go.buu.ac.th <sup>2</sup>Burapha University, Chonburi, Thailand; passanan@buu.ac.th \*Correspondence: kantimap@go.buu.ac.th

#### **Abstract**

This research aims to explore the connection between various demographic factors (such as gender, marital status, educational background, institution of graduation, job type, and rank) and the levels of job stress experienced by police officers in Chonburi, Thailand. A total of 386 officers were randomly chosen to participate in this study, completing a survey that assessed their job stress levels. Through the application of t-tests and one-way ANOVA for data analysis, the results revealed that educational background and job type significantly affect job stress levels among police officers. Conversely, factors like gender, marital status, rank, and the institution from which the officers graduated did not show a significant impact on job stress. The implications of these findings for the Royal Thai Police are further discussed within the study.

**Keywords:** demographic factors; job stress; police officers; Chonburi; Thailand



#### 1. Introduction

The profession of law enforcement is inherently fraught with challenges and stressors unique to its nature. Police officers are routinely exposed to high-risk situations, life-threatening incidents, and the emotional toll of dealing with victims of crime, which collectively contribute to elevated levels of occupational stress. Violanti et al. (2017) highlights the psychological impact of these stressors on law enforcement personnel, noting the significant mental health risks associated with the profession. While extensive research has been conducted on the psychological impacts of these stressors, there is a growing recognition of the role demographic factors play in modulating job stress among police officers. A study by Andersen et al. (2015) begins to explore this, suggesting that demographic variables such as age, marital status, and years of service may influence perceptions of job stress. Occupational stress in policing not only affects the well-being and mental health of the officers but also has significant implications for job performance, decision-making, and, ultimately, public safety. Shane (2010) discusses how stress can impair cognitive functions critical for effective policing, such as decision-making and emotional regulation. Previous studies have highlighted various sources of stress in policing, including organizational practices, job demands, and public scrutiny. However, the interaction between these external stressors and internal demographic characteristics of officers has received comparatively less attention. Kurtz (2012) emphasizes the need for a deeper understanding of how demographic factors influence stress levels to develop targeted interventions aimed at mitigating stress and enhancing the overall health and effectiveness of police forces. Marital status, for instance, may offer either a source of support or an additional layer of personal stress, which can compound occupational stressors. Research by Ramey (2012) indicates that marital status can significantly impact how officers cope with jobrelated stress, with married officers often reporting higher levels of support but also additional stressors related to work-life balance. Similarly, the level of education and the nature of the institution from which an officer graduated may influence their coping mechanisms, resilience, and perspectives towards the stressors encountered on the job. Education level, as explored by Jetelina et al. (2020), can affect an officer's approach to stress, with higher education levels potentially offering better-coping strategies. Furthermore, the role or position held within the police force, along with the specific type of job duties (e.g., general affairs, crime prevention and suppression, investigation, traffic), can significantly vary in their stress profiles, potentially leading to different stress outcomes among officers. A study by McCarty et al. (2009) found that officers in roles with higher public interaction and danger, such as patrol and investigations, reported higher levels of stress compared to those in administrative positions. This article endeavors to explore these dimensions, drawing on a comprehensive review of the literature and empirical analysis to elucidate the complex interplay between demographic factors and job stress among police officers. By shedding light on these relationships, the study aims to contribute valuable insights for policymakers, law enforcement agencies, and mental health professionals in crafting strategies that address the nuanced needs of police personnel, thereby fostering a healthier, more resilient police force.

### 2. Literature Review

# 2.1 Defining Job Stress

The scholarly definitions of job stress emphasize its complex nature and the dynamic interplay between job demands and individual capacities. Yadav and Kiran (2015) describe occupational stress as the physical and emotional responses that arise when the requirements of the job do not match the worker's abilities, resources, or needs, underlining the significance of this mismatch in contributing to both adverse and potentially positive outcomes. Paul E. Spector (2002) identifies occupational stress as a major health concern in modern work organizations, pointing out that workplace conditions lead to negative emotional reactions, physical health problems, and counterproductive behavior at work. The perception of control is highlighted as a key factor in this context, with enhanced control at work being an essential element in employees' health and well-being. Gunasekra and Perera (2023) undertake a systematic literature review to develop a more comprehensive definition of occupational stress. They conceptualize it by identifying key themes and constructs within existing definitions, distinguishing occupational stress from general stress by its specific link to work, job, or workplace factors. These scholarly efforts to define occupational stress underscore its recognition as a critical health issue, necessitating ongoing research and effective interventions to mitigate its impacts on individuals and organizations.

# 2.2 Consequences of Job Stress

Job stress among police officers has been extensively studied in recent years, with research highlighting the various sources of stress and their significant consequences on both personal and professional aspects of officers' lives. Qureshi, Lambert, and Frank (2019) demonstrated that job stressors, including role overload, role underload, repetitiveness, role ambiguity, fear of victimization, and role conflict, negatively affect police job involvement, suggesting that reducing workplace stressors could improve the work environment and officer engagement (Qureshi, Lambert, & Frank, 2019). Frank, Lambert, and Qureshi (2017) further explored the job demandsresources model, finding that role ambiguity, role conflict, and role overload are associated with higher levels of officer stress, while organizational support and employee input in decision-making are linked to lower stress levels, indicating the importance of organizational support structures in mitigating stress (Frank, Lambert, & Qureshi, 2017). Moreover, Sayed, Sanford, and Kerley (2019) highlighted the unique and high-volume stressors faced by federal law enforcement officers, with in-depth interviews revealing key stressors related to the evolving socio-political environment, increased scrutiny, and the impact of media portrayal on officers' fear and stress levels (Sayed, Sanford, & Kerley, 2019). Tsai, Nolasco, and Vaughn (2018) utilized structural equation modeling to show that negative working environments and lack of counseling support directly impact police job stress, emphasizing the need for a supportive work environment and adequate mental health resources for officers (Tsai, Nolasco, & Vaughn, 2018).

# 2.3 Antecedents of Job Stress

Research on job stress among police officers highlights a multifaceted issue influenced by organizational structure, job experience, health outcomes, and sociodemographic factors. Studies have found that organizational stressors, including structure and climate, significantly impact officers' job satisfaction and performance, suggesting a need for organizational reform (Brown, Cooper, & Kirkcaldy, 1996); (Shane, 2010). The relationship between job tenure and stress indicates varying stress levels throughout an officer's career, with both physical and psychological health being significantly affected, including risks of depression, anxiety, and maladaptive coping mechanisms like substance abuse (Patterson, 1992); (Gershon, Lin, & Li, 2002). Additionally, younger, more educated officers, especially those in urban settings and with less experience, report higher stress levels, underscoring the need for targeted interventions to address these challenges (Joseph & Nagarajamurthy, 2014). This body of work suggests that effectively minimizing job stress in law enforcement requires comprehensive strategies that include organizational changes, support for mental health, and tailored approaches based on demographic and career-stage specifics.

# 2.4 Demographic Factors and Job Stress

### 2.4.1 Gender

Recent research has highlighted the critical role of gender in how job stress is experienced and handled among law enforcement personnel. Violanti et al. (2016) uncovered differences in stressors by gender, noting that female officers often report a greater lack of supervisory support. Bonner and Brimhall (2021) discovered that women in policing face increased stress concerning safety issues and tend to utilize more constructive coping mechanisms. In South Korea, Kim et al. (2016) observed that female officers suffer from higher levels of somatization and anxiety, attributed to the organizational hierarchy. Rostami et al. (2023) examined the connection between gender-based harassment and stress, finding Swedish female officers report heightened stress levels. Furthermore, Ogungbamila and Fajemirokun (2016) examined how gender and marital status moderate the link between job stress and burnout, revealing that female officers are more susceptible to burnout due to job stress. Together, these studies indicate that gender profoundly affects stress perception and management in law enforcement, underscoring the need for interventions and support systems tailored to the distinct experiences of male and female officers. This leads to the formulation of the first hypothesis:



H1: Gender significantly influences job stress among police officers.

# 2.4.2 Marital Status

Recent investigations into the interplay between marital status and occupational stress among police officers have shed light on the intricate ways in which their work and personal lives are intertwined. Research by Ogungbamila and Fajemirokun (2016) indicates that marital status plays a crucial role in influencing stress levels, with married officers reporting greater occupational burnout compared to their single peers, pointing to the additional pressures arising from balancing work and family responsibilities. Karaffa et al. (2015) brought attention to the specific marital challenges faced by police officers, such as irregular work schedules and extended hours, leading to conflicts between work and family life and subsequently affecting marital stability. Additionally, the study by Tuttle, Giano, and Merten (2018) demonstrated that work-related demands and the transfer of stress from the workplace to the home significantly affect the quality of marital relationships, showing how job stress negatively affects marital contentment. These insights emphasize the necessity for comprehensive intervention strategies that consider both the professional duties and personal lives of police officers to improve their overall well-being and marital contentment. This leads to the formulation of the second hypothesis.

H2: Marital status significantly influences job stress among police officers.

### 2.4.3 Education

Recent research has highlighted the intricate relationship between education and job stress among police officers, suggesting that educational background plays a significant role in stress perception, coping mechanisms, and occupational attitudes. Studies by Tsai, Nolasco, and Vaughn (2018) indicate that education affects how officers interact with their support networks and perceive their work environment, which in turn influences their stress management strategies. Papazoglou and Andersen (2014) emphasize the potential of police training, an extension of formal education, to enhance resilience and health outcomes by addressing the chronic stress and traumatic events officers face. Additionally, Paoline, Terrill, and Rossler (2015) explore the impact of education levels on job satisfaction and views of management, suggesting that higher education can positively shape officers' perspectives on their roles and satisfaction with their work. Together, these findings underscore the importance of incorporating educational and training considerations into strategies aimed at managing job stress among police officers, pointing towards the need for tailored interventions that leverage educational insights to improve officer well-being and effectiveness in stress management. This leads to the formulation of the third hypothesis.

H3: Education significantly influences job stress among police officers.

#### 2.4.4 Institution

The correlation between the educational institutions from which police officers graduate and their subsequent experience of job stress underscores the pivotal role of academic and training environments in shaping officers' stress management capabilities and resilience. Studies such as those by Wang Zheyua (2015) highlight the unique stressors faced by students in police institutions, pointing towards the necessity of moderate stress management strategies within these militarized and enclosed training environments to enhance officers' competence and well-being. Moreover, research by Bruns and Bruns (2015) delves into the perceived impact of college degrees on police performance, suggesting that the educational level and the nature of the training institution significantly influence job satisfaction, performance, and stress levels among law enforcement personnel. Papazoglou and Andersen (2014) further advocate for the instrumental role of police training programs in promoting resilience and improving health outcomes, indicating that the curriculum and pedagogical approaches of police training institutions are crucial in equipping officers with the necessary tools to effectively handle job-related stress and traumatic events. Collectively, these findings emphasize the importance of integrating comprehensive stress management strategies within police education and training programs to improve the psychological and physical well-being of officers, highlighting the significant impact of educational backgrounds on their ability to manage job stress. This leads to the formulation of the fourth hypothesis.

H4: Institution significantly influences job stress among police officers.

## 2.4.5 *Job Type*

Research exploring the relationship between job type and job stress among police officers has underscored the complexities of law enforcement roles and their impact on stress levels. Studies by Frank, Lambert, and Qureshi (2017) demonstrate the relevance of the job demands-resources model in policing, highlighting how role ambiguity, conflict, and overload elevate stress, whereas organizational support mechanisms can alleviate it, suggesting the importance of clear role definitions and supportive structures for stress mitigation (Frank et al., 2017). Further, Qureshi, Lambert, and Frank (2019) identify specific job stressors like role overload and ambiguity that negatively impact job involvement, pointing to the effects of stress on officers' engagement and productivity (Qureshi et al., 2019). Tsai, Nolasco, and Vaughn (2018) delve into the nuances of how the work environment and support systems interact with personal factors, indicating that while direct impacts on total job stress might be elusive, these elements significantly shape officers' perceptions and coping strategies within their roles (Tsai et al., 2018). Collectively, these findings emphasize the need for targeted interventions and organizational supports tailored to the unique demands of various policing roles, underlining the critical role of organizational context in managing and reducing job stress among police officers. This leads to the formulation of the fifth hypothesis.

H5: Job type significantly influences job stress among police officers.

### 2.4.6 Position

Recent research highlights the significant impact of position and rank on job stress among police officers. Studies by Tsai, Nolasco, and Vaughn (2018) reveal that an officer's rank directly influences their total job stress, with negative work environments and lack of counseling support exacerbating this effect, suggesting that officers in higher ranks face distinct stressors related to their leadership roles. Complementing this, Frank, Lambert, and Qureshi (2017) applied the job demandsresources model, finding that role ambiguity, conflict, and overload contribute to higher stress levels, while organizational support and decision-making involvement reduce stress, indicating that clear role expectations and support systems are crucial in mitigating stress across different positions. Moreover, Qureshi, Lambert, and Frank (2019) showed that job stressors negatively affect job involvement, underscoring the importance of addressing specific stressors inherent to various policing roles to enhance overall job satisfaction and engagement. These findings collectively emphasize the necessity for police departments to tailor support and intervention strategies to the unique challenges and stressors faced by officers at different ranks, focusing on clarifying role expectations and enhancing organizational support to improve officers' well-being and job performance.

H6: Position significantly influences job stress among police officers.

### 3. Methods

## 3.1 Participants

In this research, 386 police officers from Chonburi, Thailand, were chosen through a random selection process. Before participating, the officers were briefed on the study's objectives and guaranteed that their responses would remain confidential. Upon giving their informed consent, they were requested to complete surveys that captured sociodemographic information and utilized the Job Stress Scale to assess the job stress levels among police officers. Research assistants were responsible for collecting the completed surveys on the day they were filled out. The demographic characteristics revealed a predominant male participation (88.9%), with a significant majority being married (70.7%). The educational background of the participants varied, with over half (53.6%) holding a high school diploma or equivalent, and a notable portion (30.3%) possessing a bachelor's degree. The majority of officers (74.6%) graduated from police training schools, indicating a strong representation from formal police education institutions. Regarding job types, the roles were diverse, with crime



prevention and suppression being the most common (35.2%), followed by inquiry duties (28.0%). In terms of positions within the police force, a substantial majority served as Squad Leaders (65.5%), highlighting a skew towards leadership roles among the respondents. This demographic snapshot underscores the varied educational and professional backgrounds of police officers in the region, reflecting a broad spectrum of experiences and roles within the law enforcement community.

**Table 1.** Demographic characteristics (n = 386)

Demographic characteristics (11 – 300)	Frequency	Percentage
Gender		
Male	343	88.9
Female	43	11.1
Marital status		
Single	97	25.1
Married	273	70.7
Widowed	5	1.3
Divorced	11	2.8
Educational background		
Secondary school or lower	22	5.7
High school or equivalent	207	53.6
High vocational or equivalent	19	4.9
Bachelor degree	117	30.3
Master's degree or higher	21	5.4
Institutions		
Police training school	288	74.6
Police cadet school	22	5.7
College	55	14.2
University	14	3.6
Others	7	1.8
Job types		
Traffic	66	17.1
Inquiry	108	28.0
Investigation	39	10.1
Crime prevention and suppression	136	35.2
General affairs	37	9.6
Position		
Squad Leader	253	65.5
Sub Inspector	91	23.6
Inspector or higher	42	10.9

#### 3.2 Measures

In this study, job stress was measured using a scale consisting of 7 items. Participants rated each item on a scale from 1 to 5, with 1 being 'strongly disagree' and 5 'strongly agree', to determine their level of job stress. A higher score indicated greater stress. Examples of statements included "The safety and respectability of your work environment are lacking," "Your job often conflicts with your personal family time," and "You frequently experience conflicts with supervisors and colleagues." The reliability of the scale was confirmed by an excellent Cronbach's alpha of 0.96, demonstrating strong internal consistency.

### 3.3 Data Collection

In December 2023, a group of skilled research assistants undertook the task of handing out questionnaires to police officers in Chonburi. These assistants were meticulously trained to communicate to each participant the following: (1) the specific objectives of the study, (2) the advantages of taking part in the research along with a firm assurance of privacy, and (3) the participants' absolute right to decline participation or withdraw from the survey whenever they wished. The process of distributing the questionnaires was facilitated by the cooperation of the superintendents at each police station, who played a crucial role in linking the research assistants with potential participants in the study.

# 3.4 Data Analysis

In this study, the collected data underwent analysis through t-Test and One-way ANOVA (Analysis of Variance) techniques, a statistical method used to examine the differences between the means of three or more independent groups. This approach was specifically applied to assess variations in job stress levels among police officers, categorized by several demographic characteristics such as gender, marital status, education, positions within the police force, the institutions from which they graduated, and the types of jobs they performed. The objective was to determine whether these demographic factors significantly influenced the officers' reported levels of job stress.

To conduct this analysis, the author chose Jamovi, a statistical software that is both free and open-source, embodying an ideal blend of accessibility and capability for conducting advanced data analysis. Jamovi's foundation in the R statistical programming language allows it to leverage R's extensive analytical functions while offering a graphical user interface that is intuitive and straightforward. This dual nature of Jamovi makes it a compelling tool for a wide range of users — from those new to statistical analysis to seasoned researchers seeking a more efficient way to process their data.

The choice of Jamovi for this analysis underscores the study's commitment to employing robust and sophisticated statistical tools without incurring the costs associated with many commercial software packages. Its user-friendly interface facilitates the seamless execution of complex statistical tests, such as the t-Test and One-way ANOVA, enabling researchers to focus more on interpreting their data rather than navigating through the intricacies of software operation. Moreover, Jamovi's integration with R provides an avenue for extending its capabilities, allowing for custom analyses that are tailored to the specific needs of the research.

Furthermore, Jamovi's design principles align with the contemporary emphasis on reproducibility and transparency in scientific research. By using this software, the author can easily share the analysis scripts and results, ensuring that other researchers can replicate the study or explore the data further. This openness contributes to the broader scientific community by facilitating peer review, collaboration, and the cumulative advancement of knowledge.

### 3.5 Ethical Considerations

Upholding stringent ethical principles was paramount in this research. Participants received detailed information about the study and provided their written consent, clearly understanding their right to withdraw at any moment. The presentation of results was conducted with full transparency, and any limitations of the study were candidly disclosed. Efforts were made to identify and manage any potential conflicts of interest to safeguard the research's credibility. The study was conducted with profound respect for the dignity, cultural backgrounds, and values of the participants, particularly those from vulnerable populations, guaranteeing their participation was voluntary and well-informed.

## 4. Results

Based on the statistical analysis conducted, the findings are interpreted concerning the research hypothesis as outlined below:

# 4.1 Gender and Job Stress

To examine the association between gender and levels of job stress (JS), the researchers conducted a t-test analysis, the results of which are detailed in Table 2. This statistical approach was chosen to determine if there were significant differences in job stress scores between male and female police officers. The t-test, a method commonly used to compare the means of two groups, allowed for an in-depth analysis of whether gender plays a role in the experience of job stress within the law enforcement profession. By applying this analysis, the study aimed to uncover any disparities in stress levels that could be attributed specifically to gender differences among the officers. The findings presented in Table 2 are crucial for understanding the dynamics

of job stress concerning gender, offering insights that could inform targeted stress management and support strategies within police forces.

Table 2. Independent Samples T-Test

		Statistic	df	р
JS	Student's t	0.953	384	0.341

Table 2 showcases the outcomes of an Independent Samples T-Test aimed at evaluating the difference in job stress levels between male and female police officers, with the analysis yielding a student's t statistic of 0.953 across 384 degrees of freedom and resulting in a *p*-value of 0.341. This statistical outcome indicates that the difference in job stress levels between the genders is not statistically significant, as the p-value exceeds the commonly accepted threshold of 0.05. Consequently, the data suggests that gender does not have a meaningful impact on the job stress experienced by police officers in this study, implying that any observed variance in stress levels between male and female officers is likely due to random variation rather than a systematic gender-based difference.

## 4.2 Marital Status and Job Stress

The researchers used a one-way ANOVA to assess if marital status impacts police officers' job stress levels, comparing groups based on their marital status — single, married, widowed, or divorced. The analysis, summarized in Table 3, aimed to identify significant differences in stress levels among these groups by examining the F-statistic, degrees of freedom, and *p*-value. This approach helped determine whether marital status is a significant factor in job stress among officers, with the p-value indicating the likelihood of any observed differences occurring by chance.

**Table 3.** One-way ANOVA (Welch's)

	F	df1	df2	р
JS	2.39	3	15.8	0.108

The ANOVA test results, with an F-value of 2.39 and a *p*-value of 0.108, suggest that while there may be some differences in job stress levels among police officers based on marital status, these differences are not statistically significant at the conventional 0.05 threshold. This means that any observed variations in job stress across different marital statuses could likely be due to chance, and there isn't enough

evidence to conclude that marital status significantly affects job stress levels among the officers in this study.

# 4.3 Education and Job Stress

The researchers used a one-way ANOVA to assess if educational level impacts police officers' job stress levels, comparing groups based on their educational background—secondary school or lower, high school/vocational school, high vocational school, bachelor's degree, and master's degree or higher. The analysis, summarized in Table 4-5, aimed to identify significant differences in stress levels among these groups by examining the F-statistic, degrees of freedom, and *p*-value.

Table 4. One-way ANOVA (Welch's)

	F	df1	df2	р
JS	5.98	4	59.6	<.001

The results from Table 4 indicate that there are statistically significant differences in job stress levels among police officers with different educational backgrounds. The very low p-value (< .001) strongly suggests that educational level is a significant factor influencing job stress. This means that the hypothesis that educational background affects job stress levels among police officers is supported by the data, with the analysis revealing that officers' stress levels vary significantly based on their level of education. Given that the p-value suggests a significant relationship between education and job stress among police officers, the author conducted a post hoc analysis to examine the mean differences across various educational levels, as shown in Table 5.

**Table 5.** Games-Howell Post-Hoc Test – JS

		1	2	3	4	5
Secondary school or lower	Mean difference	-	0.623	1.055	0.254	0.790
(1)	<i>p</i> -value	-	0.249	0.019	0.914	0.281
High school/Vocational	Mean difference			0.432	-0.368	0.167
school (2)	<i>p</i> -value			0.115	0.060	0.977
High vocational school (3)	Mean difference				-0.800	-0.265
	<i>p</i> -value				<.001	0.913
Bachelor's Degree (4)	Mean difference				-	0.535
	<i>p-</i> value				-	0.383
Master's degree or higher (5)	Mean difference	•			-	-
	<i>p</i> -value				_	-

Table 5 presents findings from a Games-Howell post-hoc analysis that examines differences in job stress levels (JS) among police officers based on their educational attainment. This analysis compares stress levels across five educational categories: Secondary school or lower, High school/Vocational school, High vocational school, bachelor's degree, and master's degree or higher. Notably, there is a significant difference in stress levels between officers with a Secondary school or lower education and those with a High vocational school education, with a mean difference of 1.055 and a *p*-value of 0.019. Additionally, officers with a High vocational school education show significantly lower stress levels compared to those with a Secondary school or lower education, indicated by a mean difference of -0.800 and a *p*-value of less than .001. Comparisons among other educational levels did not show statistically significant differences, as their *p*-values were above the 0.05 threshold, indicating no marked differences in job stress levels between these groups.

## 4.4 Position and Job Stress

The researchers employed a one-way ANOVA to evaluate whether an officer's position affects their job stress levels, by comparing the stress levels across different ranks—squad leader, sub-inspector, and inspector or above. This analysis, detailed in Table 6, sought to detect any notable differences in stress levels between these groups through the examination of the F-statistic, degrees of freedom, and *p*-value.

Table 6. One-way ANOVA (Welch's)

	F	df1	df2	р
JS	1.59	2	97.3	0.209

Table 6 presents the results of a one-way ANOVA (Welch's), analyzing if officer position affects job stress levels among squad leaders, sub-inspectors, and inspectors or higher. The F-statistic of 1.59 with degrees of freedom (df) of 2 (between groups) and 97.3 (within groups) resulted in a p-value of 0.209. This indicates no statistically significant difference in stress levels across the ranks, as the p-value exceeds the common threshold of 0.05 for significance.

# 4.5 Institution and Job Stress

The researchers utilized a one-way ANOVA to assess if the educational institutions from which police officers graduated—such as police training schools, police cadet schools, colleges, universities, and other institutions—have an impact on their job stress levels. This was done by comparing the stress levels among these different groups. The analysis, presented in Table 7, aimed to identify significant

differences in stress levels among the groups by examining the F-statistic, degrees of freedom, and *p*-value.

Table 7. One-way ANOVA (Welch's)

	F	df1	df2	р
JS	0.818	4	29.8	0.524

This table presents the results of a one-way ANOVA (Welch's) analysis examining the impact of educational institutions (police training schools, police cadet schools, colleges, universities, and others) on police officers' job stress levels. The analysis did not reveal significant differences in stress levels among the groups, as indicated by an F-value of 0.818, degrees of freedom (df1 = 4, df2 = 29.8), and a p-value of 0.524.

# 4.6 Type of Job and Job Stress

The study conducted a one-way ANOVA to determine whether different job roles—Traffic, Inquiry, Investigation, Crime Prevention and Suppression, and General Affairs—affect job stress levels among employees. By comparing stress levels across these categories, the analysis, detailed in Tables 8 and 9, sought to uncover any significant variances in stress levels by analyzing the F-statistic, degrees of freedom, and *p*-value.

Table 8. One-way ANOVA (Welch's)

	F	df1	df2	p
JS	4.74	4	130	0.001

Table 8 presents the results of a one-way ANOVA (Welch's) analysis that investigated the impact of different job roles — Traffic, Inquiry, Investigation, Crime Prevention and Suppression, and General Affairs — on job stress levels (JS). The analysis revealed a significant difference in stress levels across these job categories, as indicated by an F-statistic of 4.74, with 4 degrees of freedom for the numerator (df1) and 130 degrees of freedom for the denominator (df2), and a *p*-value of 0.001. This suggests that job role significantly affects job stress levels among employees. Given that the *p*-value suggests a significant relationship between the type of job and job stress among police officers, the author conducted a post hoc analysis to examine the mean differences across various job types, as shown in Table 9.



Table 9. Games-Howell Post-Hoc Test - JS

		1	2	3	4	5
Traffic (1)	Mean difference	-	-0.0117	-0.213	-0.563	-0.5902
	<i>p</i> -value	-	1.00	0.901	0.013	0.083
Investigation (2)	Mean difference			-0.201	-0.552	-0.5785
	<i>p</i> -value			0.905	0.006	0.070
Inquiry (3)	Mean difference				-0.351	-0.3776
	<i>p</i> -value				0.518	0.619
Prevention and	Mean difference				-	-0.0268
Suppression (4)	<i>p</i> -value				-	1.000
General Affairs (5)	Mean difference	·		·	-	-
	<i>p-</i> value				-	-

The table summarizes pairwise comparisons of job stress levels across various job roles-Traffic, Investigation, Inquiry, Crime Prevention and Suppression, and General Affairs – using a one-way ANOVA analysis. It reveals that Traffic roles do not significantly differ in stress levels from Investigation (p = 1.00) and Inquiry (p = 0.901) roles but show significant differences compared to Crime Prevention and Suppression (p = 0.013) and a marginal difference with General Affairs (p = 0.083). Investigation roles exhibit no significant difference from Inquiry (p = 0.905) but have significant stress level differences with Crime Prevention and Suppression (p = 0.006) and a marginal difference with General Affairs (p = 0.070). Inquiry roles do not significantly differ from Crime Prevention and Suppression (p = 0.518) and General Affairs (p =0.619). Additionally, there is no significant difference in stress levels between Crime Prevention and Suppression and General Affairs (p = 1.000). The mean differences indicate the relative stress levels between roles, with negative values suggesting higher stress in the first group compared to the second, and the *p*-values indicate the statistical significance of these differences, with values below 0.05 generally considered significant.

### 5. Discussion

The present study aimed to explore the influence of demographic factors, including gender, marital status, educational background, institutions, job types, and positions, on job stress among police officers in Chonburi, Thailand. Our findings contribute to the existing literature by providing a nuanced understanding of how these factors interact to influence job stress in a specific regional context. Contrary to expectations and existing research indicating significant differences in job stress levels based on gender (Violanti et al., 2016; Bonner & Brimhall, 2021) and marital status (Ogungbamila & Fajemirokun, 2016; Karaffa et al., 2015), our study did not find these demographic factors to significantly affect job stress among police officers in Chonburi, Thailand. This discrepancy could be attributed to cultural differences, the

specific working conditions in Chonburi, or perhaps a changing landscape of law enforcement that has begun to address these traditional stressors more effectively. Interestingly, our study identified education and job type as significant predictors of job stress, aligning with studies by Tsai, Nolasco, and Vaughn (2018) and Frank, Lambert, and Qureshi (2017), which highlighted how educational background influences stress management strategies and how job demands-resources model applies to policing. The significance of education in our findings suggests that higher educational attainment may equip officers with better coping mechanisms, potentially due to exposure to stress management strategies during their training. Furthermore, the impact of job type on job stress underscores the diversity within policing roles and the unique challenges they present, necessitating targeted interventions to address the specific stressors associated with different policing duties. The lack of significant findings related to the influence of position and institution on job stress contradicts some of the existing literature (Tsai et al., 2018; Frank et al., 2017), possibly indicating that within the context of the Royal Thai Police, these factors do not vary enough to significantly impact stress levels or that the institution's efforts to standardize experiences across ranks and institutions have been somewhat successful. These findings have several implications for the Royal Thai Police, suggesting a need to focus on educational and job-specific interventions to manage job stress effectively. Tailored stress management and resilience training, particularly for officers in roles identified as high stress, could be beneficial. Additionally, considering the significant role of education in influencing job stress, incorporating stress management strategies into police training curricula could help prepare recruits to handle job-related stress more effectively. In conclusion, our study highlights the complexity of job stress among police officers and the need for a multifaceted approach to address it. By understanding the specific demographic factors that influence job stress, law enforcement agencies can better tailor their support and intervention strategies to meet the needs of their officers, ultimately enhancing their well-being and job performance. Further research is needed to explore these relationships in different cultural and organizational contexts to develop a more comprehensive understanding of job stress in law enforcement.

### 6. Conclusion

This study aimed to examine the relationship between various demographic factors and job stress among police officers in Chonburi, Thailand. Through the analysis of data collected from 386 officers, we found that educational background and job type significantly influence job stress levels, while gender, marital status, position, and the institution from which officers graduated do not. These findings offer valuable insights into the specific factors contributing to job stress within this population, challenging some traditional assumptions about the universal impact of certain demographic variables on stress. The lack of significant impact of gender, marital status, position, and institution on job stress suggests that there may be unique aspects

of the policing environment in Chonburi or broader cultural factors at play that mitigate the influence of these variables. On the other hand, the significant roles of education and job type in influencing stress levels underscore the importance of considering the nature of police work and the skills and strategies officers acquire through their training and education. Implications for the Royal Thai Police include the potential benefits of integrating comprehensive stress management and resilience training within police education and ongoing professional development programs, particularly focusing on the unique challenges posed by different job types. Such initiatives could not only improve officers' well-being and job satisfaction but also enhance their performance and effectiveness in serving the community. Our study contributes to the broader discourse on occupational stress in law enforcement, highlighting the need for targeted interventions that are sensitive to the specific contexts and cultures within which officers operate. Further research is encouraged to explore these dynamics in other regions and within different law enforcement frameworks to build a more global understanding of job stress in policing. In conclusion, while certain demographic factors may not universally predict job stress among police officers, understanding the specific conditions that contribute to stress in different contexts is crucial. This knowledge can inform targeted strategies to support police officers' mental health and occupational well-being, ultimately benefiting the individuals, the police force, and the communities they serve.

**Author Contributions:** KP served as the principal investigator, contributing to conceptualization, methodology, software development, validation, formal analysis, data curation, writing (both original draft and review/editing), visualization, supervision, project administration, and funding acquisition. PP significantly contributed to methodology development, data analysis, and drafting of the research findings. Both KP and PP participated in data collection, management, and manuscript revision, alongside supervision tasks. KP played a pivotal role in conceptualization and manuscript revision. PP specializes in software development, validation, and formal analysis. All authors have reviewed and approved the final manuscript for publication.

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