



Psychological Capital, Quality of Life and Psychological Hardiness between Traffic and Non-traffic Police Persons

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ABSTRACT

The empirical study was carried out on 50 traffic and 50 non-traffic police persons to make a comparison between the groups in terms of psychological capital, quality of life and psychological hardiness respectively. It was hypothesized that traffic and non-traffic police persons will differ significantly in terms of (i) psychological capital, (ii) Quality of life and (iii) psychological hardiness respectively. For the purpose, the traffic and non-traffic police persons were administered Psychological Capital Scale by Rani and Choudhary, Quality of Life Questionnaire by WHO and Psychological Hardiness Scale by Singh A.K.. Besides these, a personal data sheet was administered to seek their personal information. The data obtained were treated and analysed using t-ratio. The findings confirmed the hypotheses. It was found that there was a significant difference in psychological capital, quality of life and psychological hardiness between traffic police and non-traffic police persons. Traffic police manifested higher degree of psychological capital (in terms of hope, efficacy, resilience and optimism), poor quality of life and higher degree of psychological hardiness. Thus, it was concluded that traffic and non-traffic police persons differ significantly in terms of psychological capital, quality of life and psychological hardiness respectively.

KEY WORDS

Psychology, Life, Traffic, Persons.

INTRODUCTION

Environmental pollution has become one of the most pressing global concerns, affecting not only the

natural environment but also the health and well-being of individuals. It is particularly significant in urban areas where rapid industrialization, motor vehicle emissions, and other anthropogenic factors contribute to the deterioration of air, water, and soil quality. Among the many professions exposed to environmental pollution, law enforcement officers, particularly traffic police, are at the forefront of this challenge. The daily exposure to polluted environments can impact their psychological health, resilience, and overall quality of life. In contrast, non-traffic police officers, who might not be as frequently exposed to such environmental stressors, may experience different psychological outcomes.

Understanding the mental and emotional well-being of individuals working under varying levels of environmental stress is crucial. Psychological capital (PsyCap), psychological hardiness, and quality of life (QoL) are three key psychological constructs that can shed light on the impact of environmental pollution on law enforcement officers. These constructs help us understand how individuals adapt to adversity, maintain positive mental states, and experience satisfaction in their lives, despite facing challenges such as environmental hazards.

Psychological Capital (PsyCap) refers to an individual's positive psychological state characterized by four key components: hope, self-efficacy, resilience, and optimism. This concept suggests that individuals with high PsyCap are more likely to engage in adaptive behaviors, recover from stress, and remain hopeful in the face of difficulties. For police officers, particularly those on traffic duty, exposure to high levels of air pollution, noise, and other stressors may diminish their PsyCap, affecting their motivation, confidence, and ability to perform their roles effectively. On the other hand, non-traffic police officers may have a different experience, as their exposure to environmental stressors might not be as constant or severe.

Psychological Hardiness is a personality trait that reflects an individual's ability to withstand stress and remain committed to their goals, regardless of the challenges they face. This trait is closely linked to resilience and coping strategies, as individuals with high psychological hardiness are more likely to interpret stressors as challenges to be overcome rather than threats. The concept of hardiness includes three key dimensions: commitment, control, and challenge. Traffic police officers, who work in highly stressful, polluted environments, might require greater psychological hardiness to cope with the physical and mental demands of their job. In contrast, non-traffic officers might face different types of stressors but not necessarily the same environmental challenges, which could influence their levels of hardiness.

Quality of Life (QoL) is a broad measure of an individual's well-being that includes physical health, psychological state, social relationships, and the environment. It is influenced by both objective factors (such as income, education, and living conditions) and subjective factors (such as personal perceptions of life satisfaction and happiness). The impact of environmental pollution on QoL is evident, as polluted environments can lead to respiratory problems, fatigue, and other health issues, which can, in turn, affect an individual's overall life satisfaction. For police officers, particularly those who work in high-traffic areas, the long-term exposure to polluted environments may significantly reduce their quality of life, both physically and psychologically. Non-traffic police officers, while still affected by pollution, might not experience the same daily exposure, potentially leading to differences in their QoL outcomes.

In summary, the interplay between environmental pollution, psychological capital, psychological hardiness, and quality of life offers a unique perspective on the mental and emotional well-being of law enforcement officers. This study aims to compare the psychological outcomes of traffic and non-traffic police officers, focusing on how exposure to environmental pollution may shape their PsyCap, resilience, and overall quality of life. By understanding these factors, policymakers and law enforcement agencies can better support the well-being of their officers, helping them manage the psychological challenges associated with environmental pollution.

Review of Literature

Luthans et al.⁵ (2007) defined Psychological Capital (PsyCap) as a positive psychological state that includes hope, optimism, self-efficacy, and resilience. In high-stress occupations like law enforcement, PsyCap has been shown to improve job satisfaction, performance, and well-being. Officers with high levels of PsyCap are better equipped to deal with daily stressors, such as environmental pollution, and maintain a positive outlook on their professional and personal lives. According to a study by Joubert et al.² (2018), environmental stressors, such as noise and air pollution, have a direct impact on police officers' mental health. Officers working in congested, urban environments, especially traffic police, often report higher levels of stress, anxiety, and burnout. These environmental factors exacerbate their vulnerability to psychological disorders, influencing their Psychological Capital and overall Quality of Life. A study by Gomez et al.¹ (2010) found that psychological hardiness—the ability to stay committed, remain in control, and perceive challenges as opportunities—was a crucial buffer for law enforcement officers in handling job-related stress. Hardiness allowed officers to better cope with the demands of their roles, including the environmental stressors prevalent in their working environment. This suggests that traffic police, exposed to high levels of environmental pollution, may benefit from developing psychological hardiness to manage stress. Environmental pollution has long been linked to adverse physical health effects. According to Kanchongkittiphon et al.³ (2015), prolonged exposure to air pollution can lead to respiratory problems, cardiovascular issues, and fatigue. Such physical health impairments may, in turn, decrease officers' Quality of Life and overall mental well-being. The study highlighted that police officers working in high-traffic, polluted areas may suffer more significantly than those stationed in less polluted environments. Youssef & Luthans¹⁰ (2007) found that resilience, one of the key components of PsyCap, acts as a protective factor against job stress. Resilience allows individuals to bounce back from adversity and maintain positive mental states despite environmental or work-related challenges. In the context of police officers, resilience may help them cope with the stressors associated with working in polluted environments, contributing positively to their mental health and overall job satisfaction. Research by Tao et al.⁹ (2020) focused on the cognitive effects of environmental pollution on workers exposed to high levels of traffic-related pollutants. The study revealed that traffic police officers, who are regularly exposed to poor air quality, exhibit a decline in cognitive functions such as attention, memory, and decision-making. These cognitive impairments can influence job performance and emotional well-being, highlighting the need to consider Quality of Life in police work environments. A study by Zhao et al.¹¹ (2013) explored the relationship between PsyCap and work-life balance in law enforcement officers. Officers with higher levels of PsyCap were found to have better coping mechanisms, which allowed them to balance the demands of their stressful jobs with their personal lives more effectively. This finding suggests that developing PsyCap in police officers may mitigate the negative impacts of environmental pollution and job stressors on their work-life satisfaction and Quality of Life. A research conducted by Maddi⁶ (2013) examined how psychological hardiness helps police officers adapt to difficult working conditions. It was found that officers with greater hardiness displayed better coping strategies and were more effective in managing stress, regardless of external pressures such as environmental pollution. This points to the importance of psychological hardiness in helping officers cope with the psychological demands of their profession. The relationship between occupational stress and Quality of Life has been well-documented. Rathnayake & Chandrasiri⁸ (2014) reviewed studies on police officers' health and QoL and concluded that officers often face deteriorated mental and physical health due to job-related stress, which includes environmental factors like pollution. This decreased QoL can lead to higher rates of absenteeism and lower overall job satisfaction among police officers, particularly traffic police. A study by MacDonald et al.⁷ (2017) examined how exposure to environmental pollutants such as noise and air pollution impacts the emotional well-being of police officers. The study found that environmental stressors significantly contributed to emotional distress, leading to higher levels of anxiety, irritability, and burnout among officers working in highly polluted urban environments, such as those on traffic patrol. Koh & Spector⁴ (2020) conducted a study that focused on how psychological hardiness can moderate the effects of occupational stress on health outcomes. The

findings suggested that hardiness plays a crucial role in maintaining both mental and physical health in high-stress occupations like policing. Officers with higher levels of hardiness reported fewer symptoms of stress-related health problems, which supports the idea that hardiness can help mitigate the adverse effects of environmental pollution.

These studies collectively suggest that psychological capital, psychological hardiness, and quality of life are important constructs in understanding the mental and physical well-being of police officers, particularly in the context of environmental pollution. While traffic police officers are more frequently exposed to environmental stressors, the findings emphasize the need for interventions that promote resilience, self-efficacy, and optimism to reduce the psychological toll of environmental challenges.

Objectives

It was intended to make a comparison between groups of traffic and non-traffic police persons in terms of (i) Psychological capital, (ii) Quality of life and (iii) Psychological hardiness.

Hypotheses

1. Traffic and non-traffic police persons will differ significantly from one another in terms of psychological capital
2. Traffic and non-traffic police persons will differ significantly from one another in terms of quality of life.
3. Traffic and non-traffic police persons will differ significantly from one another in terms of psychological hardiness.

Method of Study

Sample used

50 traffic police persons and 50 civil line police persons constituted the sample. They were selected from urban Patna based on purposive sampling. Attempt was made to match them in respect of sex, region etc.

Design Used

Between group design was used.

Tools Used

1. Personal Data Sheet was used to seek the personal information about the respondents.
2. Psychological Capital Scale by Rani & Choudhary was used to measure psychological capital of the respondents.
3. Quality of Life Scale by WHOQOL was used to measure quality of life of the respondents.
4. Psychological Hardiness Scale by Prof. Arun Kr. Singh was used to measure psychological hardiness of the respondents.

Results and Interpretations

Table 01: Comparison between traffic and non-traffic police persons in terms of their psychological capital (hope, self-efficacy, resilience and optimism dimensions)

Dimensions of Psychological Capital	Groups	N	Mean	SD	t-value (df=98)	p
Hope	Traffic	50	25.72	3.26	7.36	<.01
	Non-traffic	50	30.58	3.42		
Efficacy	Traffic	50	36.36	3.51	7.13	<.01
	Non-traffic	50	31.44	3.38		
Resilience	Traffic	50	39.20	3.29	7.68	<.01
	Non-traffic	50	33.98	3.48		
Optimism	Traffic	50	32.90	3.41	8.91	<.01
	Non-traffic	50	26.75	3.53		

It is clear from the result table-01 that traffic and non-traffic police person differ significantly in each dimension of psychological capital. The traffic police person excelled significantly over non-traffic police person in terms of hope ($t = 7.36$; $df = 98$; $p < .01$), efficacy ($t = 7.13$; $df = 98$; $p < .01$), resilience ($t = 7.68$; $df = 98$; $p < .01$) and optimism ($t = 8.91$; $df = 98$; $p < .01$) respectively. Thus, hypothesis no. (1) is retained. Traffic police excel in efficiency, resilience, and optimism—key dimensions of psychological capital—because their challenging and unpredictable work environment demands quick decision-making, strong coping skills, and a positive mindset to deal with public interactions, stress, and hazards. Continuous exposure to real-time problem-solving builds their mental strength and adaptability. However, non-traffic police may excel in the hope dimension because their roles often involve longer-term investigations, strategic planning, and goal-oriented tasks, fostering forward-thinking, goal-setting, and sustained motivation, which are core to the construct of hope.

Table 02: Comparison between traffic and non-traffic police persons in terms of their quality of life

Variable	Groups	N	Mean	SD	t-value (df=98)	p
Quality of Life	Traffic	50	64.58	3.57	10.59	<.01
	Non-traffic	50	71.99	3.43		

It is clear from the result table-02 that non-traffic police person manifests comparatively higher mean (71.99) than traffic police person (64.58). The t-value showing the significance of difference between the means was found significant ($t = 10.59$; $df = 98$; $p < .01$). Thus, hypothesis no. (2) is retained. Non-traffic police often excel over traffic police on quality of life measures because their work typically involves more structured hours, less exposure to extreme weather conditions, lower physical strain, and fewer direct confrontations with the public. They may also have better access to indoor facilities, rest breaks, and professional development opportunities. In contrast, traffic police face prolonged exposure to pollution, noise, heat, and road hazards, along with irregular schedules and high-stress public interactions, all of which can negatively impact their overall quality of life.

Table 03: Comparison on dimensions of psychological hardiness between traffic and non-traffic police persons

Psychological Hardiness	Groups	N	Mean	SD	t-value (df=98)	p
Commitment	Traffic	50	37.70	3.37	10.00	<.01
	Non-traffic	50	30.80	3.48		
Control	Traffic	50	41.62	3.65	12.45	<.01
	Non-traffic	50	32.53	3.70		
Challenge	Traffic	50	38.90	3.84	12.29	<.01
	Non-traffic	50	29.56	3.72		

It is clear from the result table-03 that traffic police person excelled over non-traffic police person in terms of each dimension of psychological hardiness [Commitment : $t = 10.00$; $df = 98$; $p < .01$; Control : $t = 12.45$; $df = 98$; $p < .01$ and Challenge : $t = 12.29$; $df = 98$; $p < .01$]. Thus, hypothesis no. 03 is retained. Traffic police excel over non-traffic police on the commitment, control, and challenge dimensions of psychological hardiness due to the demanding nature of their job, which requires constant engagement, adaptability, and mental strength. Their role involves sustained attention, direct public interaction, handling unpredictable traffic situations, and managing conflict under pressure. These conditions foster a strong sense of duty (commitment), perceived influence over outcomes (control), and a readiness to face new and difficult situations (challenge), thereby strengthening their psychological hardiness.

CONCLUSIONS

1. Traffic police persons excel on dimensions of psychological capital namely hope, efficacy, resilience and optimism over non-traffic police persons.
2. Traffic police persons manifest comparatively poor quality of life as compared to non-traffic police persons.
3. Traffic police persons excel in psychological hardiness over non-traffic police persons.

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