

## THE MODERATING ROLE OF NEUROTIC PERSONALITY IN POLICE WORK STRESS AND MALADAPTIVE COPING

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### ABSTRACT

*This study explores the interplay between the perception of stress, maladaptive coping strategies, and the personality trait of neuroticism among police officers. The researchers investigate whether neuroticism acts as a moderator, influencing the association between stress perception and maladaptive coping behaviours in this population. Through the utilisation of quantitative methods, data were collected from a sample of 230 police officers. Statistical analyses were done with PROCESS, model 1. The findings showed that stress and neuroticism directly led to more maladaptive coping among police officers. Also, the findings indicated that neuroticism does indeed act as a moderator in the relationship between stress perception and maladaptive coping among police officers. Interestingly, however, the result showed police officers high in the perception of stress and neuroticism exhibited lower levels of maladaptive coping. This unexpected direction of the relationship suggests that there may be confounding factors or alternative mechanisms at play, warranting further investigation. This study partially supports the theoretical framework proposed by Mark and Smith (2008). However, the counterintuitive findings highlight the complexity of understanding stress and coping behaviours in police officers and underscore the need for future research to delve deeper into the underlying factors contributing to these results.*

**Keywords:** Neurotic personality, Maladaptive coping, Police work stress,

### INTRODUCTION

According to Carver (2020), coping is the endeavour to avoid or reduce hazards, injury and loss or decrease the distress that is often related to those experiences. The world of work most times presents these stressful occurrences. Therefore, workers and organisations are actively engaging in varying coping strategies to combat stressful work conditions (Havermans et al., 2018; Wang et al., 2020). A workgroup that has been depicted as facing enormous and high levels of work stress is the police (Violanti et al., 2017; Korre et al., 2014; Raju et al., 2020). Police work is undoubtedly one of the most demanding and stressful professions. Law enforcement officers face numerous challenges daily, including exposure to violence, life-threatening situations, long working hours, and the constant pressure to maintain public safety and order. Such stressors can take a significant toll on their mental and emotional wellbeing. In response to these stressors, police officers often resort to coping strategies to manage their feelings and reactions.

Some attempts have been made to identify and categorise the sources of the stressors that pervade the policing profession (e.g., McCreary & Thompson, 2006; Suresh et al., 2013; Violanti et al., 2016; Nelson, 2017). Police officers regularly encounter critical incidents, such as violent crimes, accidents, and fatalities, which can lead to acute stress reactions and trauma. Also, the high demands of the job, including tight schedules, shift work, and limited control over assignments, contribute to chronic stress. Negative public perception, media scrutiny, and the challenge of maintaining public trust can add to officers' stress levels. Lastly, administrative



stressors such as performance evaluations, paperwork, and bureaucratic responsibilities can cause stress and burnout among officers.

Consequently, it is germane that there is a continuous investigation of the coping strategies engaged by members of this profession to deal with the variety of stressors confronting them. Just as there are different stressors, this paper argues that there are different coping strategies. Coping strategies refers to particular behavioural and psychological attempts that individuals engage in to subdue, accommodate and minimise impact of stressful events (Drapeau et al., 2017). These strategies have long been classified as either problem-focused or emotion-focused coping (Gurung, 2019). The debate as to which is functional and adaptive or maladaptive and harmful is still ongoing (Revenson & Lepore, 2012).

Some previous studies have shown that police officers do engage positive and adaptive coping strategies to deal with police work stressors. For instance, officers use problem-focused strategies such as planning and taking steps to tackle the stressor (Mushwana et al., 2019); approach coping (Mrevlje & Erčulj, 2021) and exercise (Ermasova et al., 2020). Singo and Shilubane (2022) also found exercise, interacting with family and friends, and religion to constitute other adaptive coping strategies employed by police officers. Singh (2017) observed that the use of these adaptive strategies was related to lower level of reported work stress while maladaptive strategies was associated with higher levels of work stress among police officer.

However, police officers do not always adopt positive and adaptive coping strategies. Some of them engage in maladaptive coping strategies such as drinking, aggressive behaviour, substance use etc. to deal with work stress (Pastwa-Wojciechowska & Piotrowski, 2016; Singo & Shilubane, 2022; Violanti et al., 2011). Wakil (2015) made the same observation among a sample of Nigerian police officers. Nonetheless, investigation on the relationship between police stressors and maladaptive coping strategies is scarce in the literature, particularly in Nigeria, hence this study.

Lastly, personality factors have been found to buffer the relationship between the perception of stress and several mental health outcomes. Invariably, personality differences also could inform the choice of coping in the advent of a stressful experience. The relationship between personality and coping strategies is a well-researched area in psychology. Personality refers to stable patterns of thoughts, feelings, and behaviours that characterise an individual. Research (e.g., Carver & Connor-Smith, 2010; Gashi et al., 2022; Leszko et al., 2020) has consistently shown that personality traits play a significant role in shaping the coping strategies people employ to deal with stress and life's difficulties. Similarly, research (e.g., Liu et al., 2021; Luo et al., 2022; Saksvik & Hetland, 2011) has shown that personality influences responses to stress and stressors.

Moreso, personality traits have been found to influence emerging adults' coping with academic stress (Jacob et al., 2022), but these traits did not include neuroticism. Lucas et al. (2012) particularly identified neurotic personality as an individual difference factor in police officers' perception of stress. Consequently, Naik and Kacker (2019) associated neuroticism with high perception of stress and maladaptive coping strategies such as self-distraction, denial, self-blame, venting and behavioural disengagement in an Indian police sample. However, investigating the moderating influence of neurotic personality on the relationship between stress and maladaptive coping strategies is yet to be examined in police stress literature, particularly using a Nigerian police sample. We hope in this paper to fill this gap in knowledge by examining the relationship between stress and maladaptive coping strategy moderated by neurotic personality trait, as depicted in Figure 1.

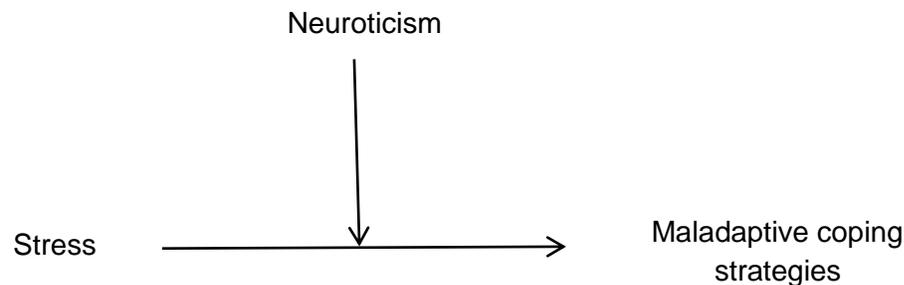


Figure 1. Conceptual framework

## Theoretical Framework

### The Demands-Resources-Individual-Effects (DRIVE) model

The DRIVE model is a theoretical framework that explains how work demands, resources, and individual differences affect employee health outcomes. It emphasises the role of perceived job stress as a mediator between work demands and health outcomes. The model proposes that individual differences in the form of personal resources and demands can have main effects on perceived job stress and health outcomes. They can also moderate the relationship between environmental factors and perceived stress and the relationship between perceived stress and outcomes. The DRIVE model is intended as a general framework into which study-relevant variables could be added. The DRIVE model includes factors from the Demand-Control-Support model (DCS) model, attributional explanatory styles, coping behaviours, and outcomes such as anxiety, depression, and job satisfaction. The simple DRIVE model proposed direct effects of the predictor variables on outcomes and moderation of the effects of demands by individual differences and resources. The enhanced DRIVE model included perceived stress and other interactive effects.

### The relationship between police stress and maladaptive coping strategy

Stress occurs when there is a disequilibrium between the individual and the environment. The disequilibrium could result from the individual expending more energy or depleting resources to the extent that his/her psychological wellbeing is negatively impacted (Lazarus & Folkman, (1984).). Work environments whose physical environments are noisy, toxic, hazardous etc., are sources of stress to the workers. Psychological stressors in the organisation could be work overload, tight schedules, etc. In the police force, there are two major sources of stress (Abdollahi, 2002; Anderson et al., 2002; Gutschmidt & Vera, 2020a). The first is the organisational stressors, which include: performance evaluations, paperwork, bureaucratic responsibilities, conflict with coworkers/ superiors, non-payment allowances, delayed payment of salaries, etc. On the other hand, operational stress includes: shift work, negative public perception of the police, traumatic events, media scrutiny, and the challenge of maintaining public trust can add to officers' stress levels. The impact of these on officers' mental health outcomes has also been investigated (Queiros et al., 2020; Mumford et al., 2015; Setti & Argentero, 2013).

Maladaptive coping strategies are dysfunctional ways by which police officers cope with the stress of the job (Folkman & Moskowitz, 2004; Gutschmidt & Vera, 2021). Coping strategies could vary depending on the nature of stressors that precedes their adoption, and that personal disposition, to a great extent, does influence coping (Blum et al., 2012). Examples of such maladaptive coping strategies include drinking (Burke, 1993), smoking or abuse of substances, social withdrawal, aggressive behaviour, emotional suppression etc. Such maladaptive coping strategies lead to negative health and mental wellbeing, deviant work behaviour etc. (Singo & Shilubane, 2022). Research has shown that there are individual differences in the method of coping techniques that are employed when under stressful conditions. For instance, Gutschmidt and Vera (2021) argued most maladaptive coping techniques are fostered by male value orientation. The Nigerian police force is a male-dominated organisation. Therefore, this study argues that police officers' high perception of stress will be high in maladaptive coping strategies.

**Hypothesis 1.** Police officers high in the perception of stress will be high in maladaptive coping strategies, that is, a positive relationship between perception of stress and maladaptive coping.

### **The moderating influence of personality**

Personality traits have been found to be relevant in many fields, from career/vocation-related fields to organisational behaviour fields and mental health. For instance, personality is posited to, directly and indirectly relate to self-efficacy and outcome expectations in the Lent et al. (1994) social cognitive career theory. The theory also argues that personality moderates the relationship between self-efficacy and goals and actions (Lent & Brown, 2013). In the context of this study, Margrove & Smith (2022) postulated that personal characteristics (e.g., personality) could moderate the relationship between perceived job stress and health and job outcomes. On this basis, this paper argues that personality characteristics will moderate the relationship between police job stress and maladaptive coping technique. More specifically, this paper narrows down on the neuroticism personality trait, defined as an experience of negative affect which include anger, irritability, anxiety, etc. Since this study investigates the relationship between job stress and maladaptive coping techniques, this paper argues that police officers high in neuroticism and perception of stress will be high in maladaptive coping strategies, as presented in Figure 1.

**Hypothesis 2.** The relationship between perception of stress and maladaptive coping techniques will be moderated by the neuroticism personality trait.

## **METHOD**

### **Design**

The study is a cross-sectional quantitative survey which adopts a correlational design.

### **Population**

The population for this study were members of the Nigerian Police Force (NPF) in Edo state police command, Southern Nigeria.

### **Participants**

The sample size is 230, with men being 143 (62.2%) and women being 87 (37.8%). In terms of rank, 12 were constable (5.2%), 30 (13%) were corporal, 95 (41.3%) were sergeant, 67 (29.1%) Inspectors, 4 (1.7%) were ASP I, 5 (2.2%) were ASP II, 5 (2.2%) were DSP, and 12 (5.2%) were SP. Their mean years in service was 15.94, the standard deviation was 8.07, and they ranged

from one year to 34 years in service. Similarly, their mean age is 38.64, the standard deviation is 9.71 and ranges from 20 to 63 years.

### **Sampling technique and procedure**

The sampling technique for this study is a combination of snowball and convenience sampling techniques. It is snowball and convenient because the authors met with a few police officers who introduced them and directed them to other police officers as civilians conducting research. The reassurance from their colleagues encouraged the officers to be part of the study. As a result of the nature of the job, data were collected in a paper-and-pencil format. Research assistance was also employed with the data collection exercise. After the data was collected, the properly filled questionnaires were then entered into SPSS version 21.

### **Research Instruments**

**Police Work Stress:** The police operational and organisation stress questionnaire developed by McCreary and Thompson (2006) was used to assess police stress. This is a 40-item scale which has 20 items assessing each of operational and organisational stressors. Officers were asked to respond to the level of stress 20 operational aspects of policing has caused them on a 7-point Likert scale ranging from 1 (*No Stress at all*) to 7 (*A lot of stress*); these same response patterns were required on 20 organisational aspects of policing. The Cronbach's alpha ( $\alpha$ ) coefficients of operational dimension of stress for this study was .84 and that for organisational dimension of stress is .85, suggesting that the internal consistency of these two dimensions of police work stressors is at acceptable level. The responses were summed up to have a composite score for police stress.

**Maladaptive Coping:** This study adopted six of the 14 coping strategies of the Brief Coping Orientation to Problem Experienced (COPE) developed by Carver (1997). These are: denial ( $\alpha = .65$ ), substance use ( $\alpha = .89$ ), behavioural disengagement ( $\alpha = .74$ ), venting ( $\alpha = .69$ ), self-distraction ( $\alpha = .63$ ), and self-blame ( $\alpha = .70$ ) coping strategies which have been identified as maladaptive form of coping. Each coping strategy has two items which requires the respondent police officer to indicate whether they have been engaging in these types of coping strategies with responses ranging from '*I have not been doing this at all*' (1) to '*I have been doing this a lot*' (4). These responses were summed up to have a composite score for maladaptive coping.

**Neurotic Personality:** This was measured using the 8-items of neuroticism sub-scale of the Big Five Personality Inventory by John et al. (1991) and reflected in John and Srivastava (1999). This sub-scale consists of statements such as: *I see myself as someone who is relaxed, handles stress well; and I see myself as someone who can be tense*. Responses to these items are in Likert scale ranging from *Disagree strongly* (1) to *Agree strongly* (5). Three of the items are reverse scored. The Cronbach' alpha ( $\alpha$ ) obtained as a measure of internal consistency for this sub-scale is .79.

### **Covariates**

In order to more thoroughly tease out the unique relationship investigated in this study, age, gender, and years in service were included as covariates. For instance, Gutschmidt and Vera (2021) argued that gender had been implicated as playing a role in employing maladaptive coping techniques.

### **Data analysis**

Since the data were collected in a paper and pencil format, we checked the data for extreme values using boxplots for each item. After that, the data were checked for normality using

histogram, normality curve, Kolmogorov-Sminov and Shapiro Wilk's test to ascertain that the data can use parametric analytical test.

## RESULTS

From Table 1, most of the covariates did not significantly correlate with the variables under investigation in this study. Gender significantly correlates with only maladaptive coping, while age correlates significantly with only stress. Meanwhile, there was a significant positive correlation between stress, neuroticism, and maladaptive coping.

**Table 1. The zero-order correlation, mean and standard deviation of the variables in this study**

Variables	Mean	SD	Sex	Tenure of Officers	Age	Stress	Neuroticism
Sex	.38	.49	-				
Tenure of Officers	15.94	8.07	-.049	-			
Age of Officer	38.64	9.71	-.009	.846**	-		
Stress	61.83	17.59	-.067	-.097	-.158*	-	
Neuroticism	13.07	4.57	.048	-.098	-.124	.321**	-
Maladaptive Coping	6.26	2.37	.141*	-.077	-.018	.196**	.206**

## Hypotheses testing

Hypothesis 1 argued that there would be a positive relationship between police officers' perception of stress and maladaptive coping, such that officers who perceived high stress engaged more maladaptive coping while those who perceives low stress engaged less maladaptive coping strategies. As shown in Table 2, the result showed a significant positive relationship. Hypothesis 2 argued that the relationship between stress and maladaptive coping would be moderated by neuroticism. The result in Table 2 showed that neuroticism moderated the relationship. However, the result showed a negative sign, indicating that the result, even though significant, is not in the hypothesised direction.

**Table 2. Result of the relationship between Stress and maladaptive coping moderated by neuroticism**

Outcome variable	Predictor variable	B	SE	t	p	LL	UL
Maladaptive coping	Stress	.021	.009	2.302	.022	.003	.039
	Neuroticism	.087	.035	2.490	.014	.018	.156
	Stress* Neuroticism	-.004	.002	-2.404	.017	-.008	-.001

## DISCUSSION

The result of Hypothesis 1 showed that the police officers' perceptions of stress level was positively associated with the level of maladaptive coping strategies they adopted to deal with the ensuing stress. That is, police officers who perceived high level of stress also engaged in high maladaptive coping strategies, and this was not the same for police officers who were low in perceptions of stress, they engaged less maladaptive coping strategies. This result is in consonance with prior studies (e.g., Gutschmidt & Vera, 2020a; Singh & Pandey, 2013; Singh, 2013; Singh, 2017; Singo & Shilubane, 2022) that also demonstrated that stressed-out police officers are more likely to employ maladaptive coping strategy to cope with the stressors. This result suggests that police stakeholders and policymakers should pay more attention to the needs of police officers by removing/minimising stressors both at the organisational and operational levels of the policing profession. Also, the services of professional counsellors and psychotherapists should be employed to deal with different negative outcomes of the policing job.



This is very crucial since a maladaptive coping strategy is self-destructive and deviant work behaviour.

The result of Hypothesis 2 showed that the neuroticism personality trait moderates the relationship between police officers' stress and maladaptive coping behaviour. In fact, from Table 2, police officers that are high in neuroticism personality traits engaged highly in maladaptive coping strategies. However, the result is not in the hypothesised direction, implying that when high levels of stress perception and high levels of neuroticism trait interact (moderation) the employment of maladaptive coping strategies are reduced. This is as indicated by the negative sign of the interaction term of stress and neuroticism. This result partially supports Mark and Smith's (2008) DRIVE theoretical framework about the moderating role of personal characteristics on the relationship between stress and health and job outcomes. Nonetheless, it is important to discuss the counterintuitive direction of the result. One possible explanation could be the existence of confounding variables or other moderating factors that were not accounted for in the study. These uncontrolled variables might have influenced the relationship between neuroticism, stress, and maladaptive coping behaviour, leading to unexpected findings.

To gain a deeper understanding of the unexpected findings, further research and replications of the study should be conducted. Examining larger and more diverse samples and employing more comprehensive measurement tools could help clarify the relationship between neuroticism, stress, and coping behaviours in police officers. Additionally, qualitative studies and in-depth interviews with participants could provide valuable insights into their coping experiences and shed light on potential factors that might explain the counterintuitive results. Overall, it is essential to interpret the findings with caution and consider all potential explanations before drawing definitive conclusions about the role of neuroticism as a moderator of the relationship between stress and maladaptive coping behaviours in police officers. The field of psychology and research often yields complex and nuanced results, and further investigation is crucial to enhance our understanding of these relationships.

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