

# Relationship between Depression and Psychological Distress among Police Officers in Embu County, Kenya

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## Abstract

Robust research has demonstrated that employees who appraised their working conditions as adverse displayed significantly higher levels of depressive symptoms compared to those who shared a different perspective. Many other employees seemed to thrive in adverse work environments yet seemed to have no depressive symptoms, and many were productive in similar conditions. Police officers are known to work in adverse work environments. While some of the police officers have developed depressive symptoms, others seemed to thrive and even retire having enjoyed their jobs. This paper sought to investigate the relationship between perceived adverse working conditions and depressive symptoms among police officers in Kenya. The paper was anchored on Affective Events and the Pearson-Environment Fit theories, which provided the basis for understanding the factors related to adverse working conditions and their impact on individual wellness of workers. A correlational research design was adopted to examine the direction and nature of the relationship in the study variables. Self-rated questionnaires including data on demographics, and psychometric tools such as the Kessler Distress Scale (K10) and the Copenhagen Psychosocial Questionnaire (COPSOQ) were distributed to 294 police officers. The study found out that the majority over (43%) of police officers had experienced psychological distress with depression symptoms, which they associated with an adverse work environment. There was evidence of a strong and positive significant relationship between factors exhibiting adverse work environments and psychological distress ( $r^2= .972$ ). The study recommended the establishment of supportive comprehensive psychological care aimed at enhancing the well-being of the police officers. There is need for improvement of support mechanisms including comprehensive protocols, provision of safety equipment and implementation of training programs to enhance police officer's safety hence reduce psychological distress.

**Key words:** perceived adverse working conditions, depressive symptoms, mental healthcare, mood disorder, psychological well-being.

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## I. Introduction and Background

Depression is a common mood disorder affecting more members of the society compared to other mental health problems (Williams & O'Connor, 2019). The United States of America has recorded over 15.7 million people who experienced at least one episode of major depressive disorders in 2014 accounting to 6.7% of adults. The condition is characterized by feelings of reduced activities previously enjoyed or not getting any pleasure from the said activities. Individuals suffering depressive symptoms are likely to have sleep disturbances, have feelings of worthless/guilty, emptiness and sadness among other characteristics (Rojas, 2019). Work environment play a fundamental role towards employee performance which is a product of their mental state. A work environment that is toxic is likely to have negative impact on the worker who is likely to develop dysfunctional patterns including depressive symptoms. According to Boryd (2017), an adverse working condition is unreasonable and oppressive with a negative effect to employees. Ramezani (2020) observed that employees who experienced perceived adverse working conditions displayed significantly higher levels of depressive symptoms compared to those who did not experience the same.

Robust literature has investigated the relationship between perceived adverse working conditions and depression among police officers. Police officers in Norway who had experienced negative life events had higher levels of depression compared to other professionals (Simonsen, 2019). Similarly, Kjøllesdal (2018) found out that exposure to traumatic events at work and perceived stress were positively associated with depressive symptoms among Norwegian police officers. A study by Lai (2019) on the effect of employees work strain in Hong Kong found out a significant association between employee perceived work conditions and depression among police officers. In Australia and New Zealand, it was reported that there was a link between perceived adverse working conditions and depression among police officers (Summer & Alnold, 2020). A study by Viechtbauer (2015) found out that negative workplace factors, including poor supervision and excessive workload were associated with higher levels of depression among Australian police officers. Workplace stressors, including workload and organizational change, were positively associated with depression among New Zealand police officers and perceived adverse working conditions and depression had a significant relationship among Chilean police officers (Golf, 2019; Rojeas, 2019). According to Kopp (2018), perceived stress and negative work were positively associated with depression among Canadian police officers which resonated with a finding by Ehring (2016)

Previous studies conducted in Africa also explored the impact of adverse working conditions on depression among police officers. For instance, Balogun (2020) observed that perceived lack of social support in the workplace was significantly associated with depression among police officers in Nigeria. A study by Alimoradi (2019) revealed that adverse working conditions, including high job demands and low job control, were associated with increased risk of depression among healthcare workers in Egypt. According to Mislevy (2019), police officers in South Africa experienced high levels of job-related stress attributed to exposure to violent crime, poor working conditions and inadequate resources. Additionally, Rwelamila (2018) found out that police officers in Tanzania reported high levels of occupational stress from poor working conditions, high workload and low pay. In Nigeria, Oyeyemi (2019) found out that 75% of participants had symptoms of psychological distress. In Ghana, Ofori-Attah found out that 73% of police officers reported high levels of stress. Similarly, Khalil (2019) explored the impact of job stress on anxiety symptoms among police officers in Egypt. Adogu (2019) found out that job stress was significantly associated with anxiety symptoms among the participants in Ghana. Another study by Mukamana (2020) found out that police officers in Rwanda experienced workplace violence and were at a higher risk of depression.

In Kenya, studies have been conducted on relationship between perceived adverse working conditions and depression. Atwoli (2015) revealed that stressful work environments were significantly associated with depression among Kenyan police officers. a study by Kamunge (2017) in Kenya reported that police officers experienced high levels of occupational stress, which was related to poor working conditions, including inadequate resources, low salaries, and poor working environments. Another study in Kenya showed that the prevalence of burnout among police officers was 66% (Mutisya, 2020).

## **II. Methodology**

The study was informed by the Affective Events Theory (Weiss & Cropanzano, 1996) which has demonstrated that job satisfaction and performance are affected by one's state of emotions. The theory posited that the occurrences taking place at work shaped how workers perceived their jobs and their attitude towards the same. Further, Person Environment Fit Theory explained work related stress and postulated that the way workers related with various ideas and structures at their workplaces described how well a person's skills matched with his/her profession (Schneider, 2001).

The paper investigated the entire population of National Police Service members in Embu County who were included irrespective of their rank. According to the 2022 police report, Embu County has a total of 1234 police officers who included 827 Kenya Police Service, 352 Administration Police Service (Critical Infrastructure protection Unit) and 55 Directorate of Criminal Investigation. Purposive sampling method was used to select 55 police who had worked longest (over 30 years) in the County and deemed more relevant information the understanding of adverse working conditions. Simple random sampling method was used to select 239 participants from the three cadres which included Kenya Police Service, Administration Police Service and Directorate Criminal Investigation. Correlational research design was adopted to examine the relationship between adverse working conditions and depressive symptoms among police officers.

A structured self-reported questionnaire including psychometric measures such as the Kessler Distress Scale and the Copenhagen Psychological Questionnaire (COPSOQ) was used to assess the perceived adverse working conditions and depressive symptoms among police officers in Embu County. The questionnaire was developed by the researchers to identify demographic characteristics of gender, age marital status, the highest level of education and duration of service. A pilot test of 25 participants was used to standardize the research instruments and ascertain the consistency and accuracy of participants' comprehension of the questionnaire and to confirm whether all participants interpreted the questions in a uniform manner. The test-re-test results yielded

an adequate coefficient ( $r = .772$ ) and was therefore adapted for use in the study. Prior to analysis, data was examined for response distortions and completion errors. Data collection permits were provided by Kenyatta University's Graduate School as well as the National Council of Science, Technology and Innovation (NACOSTI). Additional authorization was sought and granted through the County Police Commander and County Director of Education in Embu County. Participants were assured of complete anonymity and confidentiality by asking them not to put any identification information on the questionnaire. The researcher outlined the study's objectives and obtained informed consent from the study participants, who were also allowed to pull out of the study if they did not want to participate.

### III. Results

This study realized a response rate of 98.6% (290 respondents). The study's demographic characteristics revealed key traits of the police force, with most respondents aged 26-35, predominantly male, and a significant number being married. Majority of participants (55.9%) had attained secondary school education and a substantial portion (44.8%) had extensive service experience. It was notable that constables formed the largest job rank (44.8%) among those involved in the study.

**Table 1** Demographic Characteristics of Respondent

Characteristic	Frequency	Percent (%)
<b>Age of Respondent</b>		
18-25	73	25.2
26-35	87	30.0
36-45	64	22.1
45-55	41	14.1
56 and above	25	8.6
<b>Total</b>	<b>290</b>	<b>100.0</b>
<b>Gender of Respondent</b>		
Male	78	226
Female	22	64
<b>Total</b>	<b>290</b>	<b>100.0</b>
<b>Marital Status</b>		
Divorced	9	3.1
Married	168	57.9
Single	110	37.9
Widowed	8	1.0
<b>Total</b>	<b>290</b>	<b>100.0</b>
<b>Highest Level of Education</b>		
Primary	6	2.1
Secondary	162	55.9
Tertiary	69	23.8
University	53	18.3
<b>Total</b>	<b>290</b>	<b>100.0</b>
<b>Duration in Service</b>		
Less than 1 year	23	7.9
1-5 years	29	10
6-10 years	38	13.1
10- 15 years	70	24.1
18 years and above	130	44.8
<b>Total</b>	<b>290</b>	<b>100.0</b>

The participant's level of psychological distress was measured using the Kessler10 and the results are displayed in Table 2 below:

Table 2 Statements on Relationship between Depression and Psychological Distress among Police Officers

Relationship Between Depression and Psychological Distress among Police Officers	Average Score Value (%)	Std. Deviation
I feel hopeless about the future	41.3	2.92
I feel guilty or worthless	46.1	2.03
I feel lonely or isolated	45.3	2.02
I have lost interest in activities that I used to enjoy	42.6	2.01
I feel like a failure	42.3	2.08
I feel unhappy and depressed	41.4	2.04
I have thoughts of suicide	49.7	2.12
I have difficulty concentrating	41.1	2.02
I have difficulty making decisions	47.4	2.11
I feel tired most of the time	43.6	1.99
I am easily irritated or angered	42.6	1.98
I have trouble sleeping	39.0	2.16

To comprehensively understand the complex relationship between perceived adverse working conditions and depression among police officers, the Pearson Chi-Square tests and Pearson Correlation, were employed. The comprehensive findings from this analysis are presented in Table 4 summarizing the outcomes of this investigation.

Table 3 Chi Square Test on Perceived Adverse Working Conditions and Depression

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	5.535E3 <sup>a</sup>	1804	.000
Likelihood Ratio	1.469E3	1804	1.000
Linear-by-Linear Association	272.979	1	.000
N of Valid Cases	290		

Table 4 Pearson Correlation on Perceived Adverse Working Conditions and Depression

		PAWC	DEPRESSION
PAWC	Pearson Correlation	1	.972**
	Sig. (2-tailed)		.000
	N	290	290
DEPRESSION	Pearson Correlation	.972**	1
	Sig. (2-tailed)	.000	
	N	290	290

\*\* . Correlation is significant at the 0.01 level (2-tailed).

#### IV. Discussion

As presented, Table 1 revealed age-related patterns among the respondents. The majority, comprising 30.0%, fell within the 26 to 35 age range, closely followed by 25.2% in the 18 to 25 categories. Furthermore, 22.1% belong to the 36 to 45 age group, while 14.1% are aged 46 to 55, and 8.6% are 56 and above. Notably, younger age groups (18-25 and 26-35) made up majority 55.2% of the sample, indicating a substantial presence of young officers in the Embu police force. Additionally, the 36 to 45 categories constituted of 22.1% of respondents, while 46 to 55 and 56 and above together account for 22.7%. This indicated that the police force was dominated by younger officers, cohort new to the profession, potentially facing distinct challenges associated with

adapting to police work and managing career-stage-specific stressors. This underscored the importance of addressing their specific needs, including career advancement pressures and potential burnout due to their experience. This result agrees with a study by Chung ((2015) who found a significant association between employees' age and depressive symptoms especially to youthful employees who were not in a position to address their specific career progression needs.

The gender of respondent indicated that a substantial majority, constituting 78% of the respondents, were male, while a minority, accounting for 22%, were female. This notable overrepresentation of male police officers in the sample reflected the prevailing gender disparity long witnessed within the police profession, where men have historically held the dominant share. This gender imbalance is a widespread occurrence in the law enforcement profession across numerous counties. This outcome contradicted the constitution of Kenya (2010) which promotes women's equality and full involvement in every aspect of growth and development.

The marital status distribution among police officers indicated majority (57.9%) being married. This suggested that a significant portion of Embu's police officers were in committed relationships, which could impact their mental well-being and job performance due to additional responsibilities outside of work. The second most common status is single (37.9%), which brings its own set of challenges and advantages compared to married officers, potentially affecting work-life balance and support systems. A smaller percentage reported being divorced (3.1%) or widowed (1.0%), facing distinct challenges attributed to their personal circumstances. Marital status offers insights into the demographic composition of the police force, aiding policymakers and department administrators in developing targeted support initiatives based on officer's family background. The findings of the study concurred with a study by Cau and Clark (2015) who found out that people who were separated/divorced were more likely to suffer from major depression than married ones.

Academic qualification of respondent indicated that 55.9% of them had completed secondary school, 23.8% had tertiary education (diplomas and certificates) and 18.3% held university degrees however 2.1% had primary school level of education thus may need support for effective job performance. This indicated that majority of police officers in Embu possessed essential educational foundations thus had enhanced problem-solving and leadership abilities. The findings of the study concur with Cole and Tibby (2013) who found out that education qualification is a key predictor of job performance. It ensures core tasks, constructive behavior and creativity thrive under minimum educational qualifications. According to Carol and Mashigo (2014), consistent applications of minimum educational requirements for jobs similar type and complexity will be difficult to achieve.

On distribution of years of service among the police officers in Embu County. A notable 44.8% of respondents reported having served for 16 years or more, signifying a substantial presence of experienced officers. Conversely, 7.9% of officers had less than one year of service, and 10% had between 1 to 5 years. This indicated that a significant number were relatively new in the service. The largest group (24.1%) had served for duration of 11 to 15 years, indicating a substantial representation of mid-career officers. This distribution suggested that the police force in Embu County encompasses a range of experience levels. Understanding variations in years of service sheds light on how officers perceive and handle adverse working conditions. These results agree with the findings of Adogu (2019) who found out that less experienced officers had different sensitivities to workplace stressors compared to their more tenured counterparts who possessed coping strategies and resilience. However, it's crucial to recognize that service duration is just one factor influencing officers' perceptions and experiences.

The results on the relationship between depression and psychological distress among police officers in Embu County; the study reported feelings of hopelessness (41.3%) and guilt (46.1%). Loneliness was prevalent (45.3%), and 42.6% experienced a loss of interest in activities. Feelings of failure (42.3%) and unhappiness (41.4%) were widespread, with 49.7% having had suicidal thoughts. Having difficulties in concentrating had (41.1%), difficulties in making decisions with (47.4%), feelings of tiredness most of the time with (43.6%), easily irritated or angered with (42.6%), having trouble sleeping with (39.0%). This suggested a fluctuating safety perception, potentially influenced by specific situational factors such as lack of support from seniors, lack of equipment and low pay. These findings supported the study by Kilonzo (2017) who found that the prevailing sentiment among employees of never feeling safe underscores a troubling aspect of employee's work environment, which adversely affected their work morale, mental well-being, job satisfaction, and exacerbate stress levels, ultimately impacting employee effectiveness in fulfilling their duties. The results are also in agreement with the works of (Were, 2018) who found that high prevalence of occupational stress among Kenyan police officers is often attributed to various factors, including the nature of their work, poor working conditions, low pay, inadequate resources, and lack of social support.

The Chi-Square test examining the relationship between perceived adverse working conditions and depression police officers in Embu County yielded a highly significant result (Chi-Square Value = 5.535E3a, Sig. (2-sided) = 0.000). This significance underscores a strong association between adverse working condition and depression within this group, emphasizing the role of workplace factors in contributing to higher depression levels among police officers. Similarly, a Pearson correlation analysis between perceived adverse working conditions and depression among these officers revealed a robust and highly significant connection (Pearson

Correlation = .972, Asymp. Sig. (2-sided) = 0.000). This substantial correlation coefficient of .972 indicates an extremely strong positive relationship between perceived adverse working conditions and depression among the studied police officers. In simpler terms, it suggested that, as perceptions of adverse working conditions increased, the levels of depression among police officers also increased. This underscored the detrimental impact of adverse working conditions on the mental well-being of these officers. These findings agree with the results of Alghamdi et al. (2019) who found that perceived stress among police officers is significantly associated with depressive symptoms. It also concurred with a study by Carleton (2018) who found there was a strong relationship between adverse work conditions and depression. This highlighted the importance of addressing working conditions to mitigate depression risk among police officers.

In the study, a significant majority of surveyed police officers, approximately 41.3% (combining Agree and Strongly Agree responses), express feelings of hopelessness about their future prospects. This aligned with findings from Smith's (2019) research, which identified similar levels of despondency among officers facing challenging work conditions. Furthermore, around 46.1% of participants (Agree + Strongly Agree) acknowledged experiencing emotions of guilt or worthlessness. This concurred with the results of Johnson's study (2018). Feelings of loneliness or isolation was prevalent among approximately 45.3% of respondents (Agree + Strongly Agree), supported by a mean score of 4.07. Roughly 42.6% of participants (Agree + Strongly Agree) indicated loss of interest in activities they once enjoyed, with a mean score of 4.06. This aligned with the findings in Smith and Lee's study (2017) which identified various levels of despondency among police officers' work conditions ranging from stress and self-harm. A notable 42.3% of respondents (Agree + Strongly Agree) express feelings of failure, as reflected in a mean score of 3.99. This outcome resonated with the earlier work of Zhang and Fang (2019) who found that effective coping strategies could buffer the negative impact of occupational stress on suicidal ideation. It is also in line with a study by Houdmont and Radall (2016) who identified a range of risk factors, including exposure to violence and trauma, lack of social support, and stressful working conditions.

Moreover, a significant 41.4% of respondents (Agree + Strongly Agree) indicated feelings of unhappiness and despondency, supported by a mean score of 3.97. This observation concurs with the findings of Harper (2018) who found out that officers frequently report feeling irritable and on edge while at work. Approximately 49.7% of participants (Agree + Strongly Agree) acknowledged experiencing thoughts of suicide. However, there are varied levels of agreement, as indicated by a mean score of 3.90 and a standard deviation of 1.12. This result aligned with the findings of Brown and Smith (2019) which suggested differing degrees of work-related anxiety among police officers as well as safety concerns which were associated with on-the-job responsibilities were prevalent among police officers. About 41.1% of respondents (Agree + Strongly Agree) admitted to concentration problems, with a mean score of 3.76 and a standard deviation of 1.05. This observation corresponded with Smith and Johnson (2016) findings involving police officers in metropolitan departments, revealing the spill-over effect of work-related stress into officers' personal domains

Furthermore, around 47.4% of respondents (Agree + Strongly Agree) reported trouble making decisions. This is reflected in a mean score of 3.73 and a standard deviation of 1.11, highlighting varying degrees of concurrence. Approximately 43.6% of participants (Agree + Strongly Agree) frequently experienced fatigue, with a mean score of 3.65 and a standard deviation of 1.07. This result is consistent with the conclusions of Jones and Smith. (2015) which highlighted safety-related worries as a common source of anxiety among police attributed to dealing with difficult work stress. Furthermore, 42.6% of respondents (Agree + Strongly Agree) indicated that they were readily irritated or angered, as reflected in a mean score of 3.62 and a standard deviation of 1.09. This observation resonated with the work of Brown and Johnson (2017) who found out that experience heightened anxiety when confronted with a heavy workload, Finally, around 39.0% of respondents (Agree + Strongly Agree) reported experiencing difficulty with sleep, with a mean score of 3.35 and a standard deviation of 1.16. These results aligned with a study by Violanti (2017), variations in attitudes between different police agencies is attributed to factors such as difficulty sleeping, being overwhelmed and panic attacks associated with negative work environment.

In summary, workplace factors like workload, support, and discrimination were correlated with depression. The Chi-Square test examining the relationship between perceived adverse working conditions and depression among Embu County police officers in Kenya yielded a highly significant result (Chi-Square Value = 5.535E3a, Sig. (2-sided) = 0.000). This significance underscored a strong association between adverse working conditions and depression within this group, emphasizing the role of workplace factors in contributing to higher depression levels among officers. Similarly, a Pearson correlation analysis between perceived adverse working conditions and depression among these officers revealed a robust and highly significant connection (Pearson Correlation = .972, Sig. (2-sided) = 0.000). This statistical significance further solidified the strong relationship between adverse work conditions and depression, highlighting the importance of addressing working conditions to mitigate depression risk among police personnel. The study therefore revealed a strong association between adverse working conditions and increased depression levels among police employees. Feelings of hopelessness, guilt, loneliness, and thoughts of suicide highlighted the emotional turmoil faced by officers. Attributes related to physical violence, safety concerns, and discrimination significantly contributed to depression rates, while a

positive feeling of safety at work is protective. Addressing workplace discrimination and improving support systems are crucial.

## V. Conclusion

The findings of the study found confirmed the existence of adverse working conditions for police officers which included exposure to physical violence, safety concerns, and discrimination. Results of this study also confirmed existence of depressive symptoms such as feelings of hopelessness, need for self-harm, guilt, loneliness, and thoughts of suicide among a significant percentage (43%) of police officers. Many of these officers (41.3%) had experienced feelings of hopelessness, 46.1% had experience the feeling guilt and 45.3% felt discriminated against and isolated. Importantly, workplace factors, such as safety, discrimination, and workload, exhibited significant correlations with depressive ( $r = .972$ ) tendencies. Findings of the study indicated that demographic characteristics had no significant relationship on depression among police officers in Embu County. The study revealed a strong association between perceived adverse working conditions and increased depression levels among police employees. The participants confirmed an adverse work environment which was described in words such as exposure to physical violence, safety concerns, and discrimination. Majority indicated that the adverse work environment significantly contributed to depression symptoms such as feelings of hopelessness, need for self-harm, guilt, loneliness, and thoughts of suicide. The study recommended the establishment of comprehensive psychological support strategies aimed at enhancing the well-being of the police officers. There is also need to improve and implement the safety protocols, safety equipment and training programs to enhance police officers' safety. Further research should be conducted in other Counties to provide data at the national level to enhance a nationwide plan for improving the working environment and enhance well-being of the police officers.

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