False confessions among suspects in police custody: Implications of anxiety and perceived stress



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ABSTRACT

Purpose: The purpose of the study was to examine the effect of anxiety and stress on false confessions among police suspects in custody.

Design/Methodology/Approach: The study adopted an ex post facto design. Participants were one hundred and nine (N 109) suspects in custody at the State Criminal Investigation Department of Kaduna State Police Command, Kaduna State, Nigeria. The present study included three measurement tools to assess different constructs: The Gudjonsson Confession Questionnaire-Revised (GCQ-R) was utilized to evaluate false confession, the State-Trait Anxiety Inventory (STAI) was employed to assess anxiety levels, and the Perceived Stress Scale (PSS) was utilized to measure perceived stress.

Findings: Results revealed that state anxiety positively predicted false confession (β =0.191, p < 0.05), whereas trait anxiety has no significant effect on false confession (β =- 0.050, p > 0.05), while perceived stress positively predicted false confession (β =0.273, p < 0.05).

Conclusion: The study concluded that state anxiety and perceived stress contribute to a suspect's predisposition to make a false confession. It was recommended that police officers be more cognizant of when and under what conditions they use interrogation methods in view of the level of anxiety and stress the suspect might be in.

Keywords: False confession, Interrogation, Perceived stress, Police custody, Police officers, State anxiety, Suspects, Trait anxiety.

1. INTRODUCTION

Scholarly literature (Gudjonsson, Sigurdsson, & Sigfusdottir, 2009; Puzzanchera, 2021) has demonstrated the potential scope of the problem of coerced and false confessions. It is common knowledge that security personnel have been known to coerce confessions from suspects in Nigeria. Ironically, despite the fact that the country's Constitution guarantees the right to silence, in Nigerian courts, the admissibility of confessions is determined by the Judges Rules and Evidence Act 2011, Okunoye (2011), which is based on common law. However, this act does not explicitly link the constitution's right to silence to the admission of confessions. By giving confessions constitutional weight without intending to do so, the Nigerian legislature and courts unwittingly lay the foundation for the systematic extraction of confessions from suspects in custody (Allely & Mukherjee, 2019; Onoja, 2014).

The closest people to crime in Nigeria is the police. In addition, it has the authority and discretion to decide who is detained, how they are handled in the police station, and occasionally whether a case is brought before a judge or resolved at the police station (Arisukwu, 2012). According to Olorunyomi (2020), the pre-trial investigation of crimes and the prosecution of offenders are two of the police's crucial responsibilities. During questioning, a suspect may confess to a crime, and the prosecution may then ask the court to find the defendant guilty of the offense for which he was charged. Insofar as the confession is affirmative, direct, clear-cut, voluntary, and compliant with the admission requirements, he may be found guilty.

Understanding false confessions is crucial because, in addition to helping to uphold justice, they have long-lasting psychological repercussions for the confessor (Grounds, 2004). According to Leo (2018), a false confession is defined as an admission that is followed by a post-admission narrative of a crime that the confessor was not responsible for committing. Studies have evaluated whether being young is a predictor of false confessions, as well

as how aggressive police interrogation techniques affect the likelihood that a false confession would occur. While these might be important elements that influence false confessions.

Even though there are numerous, more in-depth explanations for why people confess to crimes they did not commit, the vast majority of people do so for a few, fairly common reasons, such as mental illness (Parekh, 2018), external pressures brought on by police interrogation techniques (Honse, 2022; Redlich, Kulish, & Steadman, 2011), and psychological trauma (Cleary, Guarnera, Aaron, & Crane, 2021). Furthermore, correlations between self-reported negative life events and self-reported false confessions have been found repeatedly(Gudjonsson et al., 2009). These related lines of research imply a relationship between unfavourable interrogation outcomes and false confessions. These studies, however, are currently unable to shed light on the functions of stress and anxiety in predicting false confessions.

2. STATEMENT OF THE PROBLEM

False confessions are amajor problem for police investigations and the administration of justice. Interviewing victims, witnesses, and suspects is an important part of the investigation that the police do into criminal behaviour (Williamson, 2017). The quality and impartiality of such interviews frequently end up being the decisive factors in determining whether people feel that justice has been done. Psychological vulnerabilities, such as anxiety and stress, of interviewees during police questioning are crucial components of dynamic and complex processes (Gudjonsson, 2016). In Nigeria, only a few studies haveinvestigated the influence of personality factors such as anxiety. This scarcity of research poses problems in understanding and preventingfalse confessions during investigations. It is based on this that the researcher intends to investigate the influence of anxiety and stress on false confessions among suspects in police custody at the state criminal investigation department, Kaduna State Police Command.

3. LITERATURE REVIEW

The issue of false confessions among suspects in police custody has received significant attention in the fields of law and psychology. The potential implications of anxiety and perceived stress in the elicitation of false admissions have gained attention in recent years. This literature review seeks to provide a critical analysis of current research on the correlation between anxiety, perceived stress, and false confessions. This review aims to explore the complexities and gaps in understanding regarding the interplay between psychological states and confession outcomes in police custody. By examining existing knowledge, it seeks to pave the way for a comprehensive investigation of this phenomenon.

3.1. Anxiety and False Confession

A prior study explored the impact of personality variables and interrogation techniques on false confession rates. The study involved 219 undergraduate students, assessing compliance, self-esteem, locus of control, and interrogative suggestibility. Results showed higher scores on the Gudjonsson Suggestibility Scale, minimization of interrogation techniques, increased plausibility of alleged transgressions, and increased false confession behaviour. The study found that females tend to falsely confess more than males in high-plausibility situations, but no significant difference was found between Caucasian and Asian participants. Compliance was the most influential personality variable. The study highlighted the risks of minimization interrogation techniques.

The study by Noriega (2020) addresses racial and gender disparities in false confession statistics by utilizing artificial intelligence (AI) as an interrogator in police interrogations. This research holds significant implications for criminal justice policy and interrogation practices. The Bias-Uncooperative Loop, a dynamic where human interrogators' implicit biases can escalate suspect resistance, has long been a challenge in the criminal justice system. By introducing AI as an alternative interrogator, Noriega's research offers an innovative approach to disrupting this cycle of bias, potentially resulting in more equitable and accurate outcomes. The study's findings suggest that AI's ability to mimic racial, ethnic, and cultural similarities can foster rapport and cooperation between AI interrogators and suspects. The concept of programmable similarity, derived from human-computer interaction, appears promising for enhancing comfortability and engagement with AI systems. This could herald a paradigm shift in interrogation conduct, reducing bias and promoting a more objective and transparent process. The study contributes to the growing discourse on the role of AI in reshaping societal norms and institutions,

bridging the gap between technology and criminal justice. It also aligns with broader discussions on the ethical implications of AI deployment in sensitive contexts, prompting reflections on accountability, data privacy, and human-machine collaboration. In conclusion, Noriega (2020) study on AI's potential to counteract racial and gender biases in false confessions is a seminal contribution to the criminal justice system. The potential of AI to break the Bias-Uncooperative Loop, foster cooperation through programmable similarity, and enhance the overall fairness and effectiveness of interrogations has far-reaching implications for transforming law enforcement practices and aligning with the evolving role of technology in promoting justice and equality.

May, Gewehr, Zimmermann, Raible, and Volbert (2021) examined the correlation between suspects' perceptions of interviews and their self-reported guilt or innocence. The study comprised 250 individuals with previous criminal records who completed a questionnaire. The dataset comprised 334 police interviews, wherein 223 participants confessed guilt and 111 participants claimed innocence. The study identified three latent factors: Respectful-Open Behaviours, Confession-Oriented Tactics, and Suspects' Psychological Distress. The study found that suspects who claimed their innocence showed reduced psychological distress and engaged in fewer respectful-open behaviours. In instances where individuals expressed feelings of guilt, confessing was found to be linked with the occurrence of respectful and open behaviours, as well as increased psychological distress among the suspects. In contrast, there was a positive association between instances of denial and the use of confession-oriented tactics by interviewers. These findings highlight the significance of adopting an unbiased and non-coercive interviewing approach while also raising doubts about the efficacy of an interrogation strategy that relies on eliciting confessions. This study provides evidence in favour of using respectful and non-confrontational interview techniques, as they have the potential to improve the accuracy and reliability of information obtained during investigative procedures. The correlation between confession-oriented tactics and denials, especially in guilty scenarios, indicates a need to reassess current interrogation methods that prioritise obtaining confessions.

In another study, Schneider et al. (2021) conducted two separate experiments to test the hypothesis that guilt would lead to an increased probability of making a false confession. In the initial experiment, a confederate encouraged participants to cheat while performing task to induce guilt. Subsequently, the experimenter falsely accused the participants of activating a prohibited key, leading to a malfunction in the computer. In the second experiment, participants observed a confederate being punished for providing incorrect answers to quiz questions. Subsequently, the confederate proceeded to engage in cheating during a game and actively encouraged participants to assume responsibility for their actions. In the first experiment, around 68.5% of participants provided false confessions regarding their involvement in pressing the forbidden key. Similarly, in the second experiment, approximately 36.1% of participants falsely confessed to engaging in cheating. Contrary to expectations, the manipulations aimed at inducing guilt did not result in significant changes in the rates of false confessions. An extensive analysis of the impact of guilt feelings found that, out of eight tests conducted, five did not yield statistically significant results. Currently, the existing evidence is insufficient to substantiate the claim that feelings of guilt play a significant role in the occurrence of false confessions.

Iliya, Chukwuma, and Friday (2022) in their study examined the relationship between anxiety, stress, and false confessions among suspects in police custody in the Nsukka Local Government Area of Enugu State, Nigeria. The study utilised a survey design and applied Krejcie and Morgan (1970) formula to calculate the sample size required from a population of 108 participants. A Likert-scale questionnaire was administered to collect data, which was then analysed using the product-moment correlation. The findings revealed a notable association between anxiety and false confessions in individuals detained by the police. Additionally, the study found a significant correlation between stress and false confessions in the same context. In conclusion, this research highlights the significant correlation between anxiety, stress, and the occurrence of false confessions among suspects in police custody. The study concluded that there is a significant correlation between anxiety and false confessions among individuals detained by the study and false confessions among individuals detained in police custody in the Nsukka Local Government Area of Enugu State. The researchers emphasised the importance of promoting sensitivity among police officers towards emotional factors that may influence suspect confessions. This would help improve the integrity and fairness of the interrogation process.

3.2. Stress and False Confession

Mackinnon (2016) examined the impact of various forms of evidence on rates of false confessions. There was a belief that the higher the level of concreteness in the evidence, the greater the likelihood of a person making a

false confession. Participants were accused of cheating by accessing an answer key that appeared on the computer screen during a recall test, which was claimed to be accidental. The researcher presented participants with four conditions, including three types of evidence and a control condition. The frequency of false confessions among individuals was documented across all conditions. The binary logistic regression analysis showed that there were no significant differences in the rates of false confessions between any of the evidence conditions and the control condition. However, it is important to note that a high overall percentage (85%) of participants falsely confessed. Davis and Leo (2012) suggest that individuals may feel the need to escape from a situation that is both ambiguous and stressful. This explanation could be used to understand the observed pattern of results.

In a separate investigation, Frenda, Berkowitz, Loftus, and Fenn (2016) examined the complex relationship between sleep deprivation and the likelihood of making false confessions. To analyse this phenomenon, participants performed computer tasks in multiple sessions. Each session included repeated warnings about the possible loss of study data if the "Escape" key on their keyboards was pressed. During the final session, participants were divided into two groups: one group received a full night of sleep-in laboratory bedrooms, while the other group stayed awake throughout the night. After the designated period, participants were asked to confirm a statement outlining their activities in the laboratory. This statement included a false assertion that they had pressed the Escape key in a prior session. The study's findings exhibited a notable pattern. After a single request, participants who had experienced sleep deprivation were significantly more likely to sign the statement compared to their well-rested counterparts, with a 4.5 times higher likelihood. These findings highlight the significant impact of sleep deprivation on the vulnerability to making inaccurate admissions of guilt. Additionally, these findings highlight the significance of further exploring the various factors that impact both accurate and inaccurate confessions. The increased likelihood of making false statements among participants who are sleep-deprived highlights the complex relationship between psychological states and the tendency to provide unreliable admissions. This study offers important insights and highlights the need for further research to understand the complex factors that influence the occurrence of both accurate and inaccurate confessions.

Madon et al. (2017) conducted two experiments to examine the potential biphasic resistance process triggered by police interrogation of suspects. This process suggests that when suspects are initially threatened with police interrogation, they react by resisting interrogative influence, like a fight or flight response. However, as the questioning continues, their prolonged self-regulation of behaviour makes them more susceptible to interrogative influence over time. In Experiment 1, participants who faced an accusation of misconduct showed signs of mobilisation and displayed greater resistance to social pressure to comply with suggestive questioning compared to participants who were not accused. Experiment 2 found that participants' ability to resist suggestive questioning was undermined by a decline in self-regulation induced during questioning about misconduct. These findings provide support for a theoretical explanation of how suspects' responses to police interrogation change over time during the questioning process.

Normile and Scherr (2018) conducted a study to explore the connection between individuals' physiological reactivity and their decision to confess. They examined the relationships between various interrogation tactics, suspects' resistance to confess, and their physiological reactivity in a simulated interrogation. Participants were subjected to manipulation of their innocence and guilt, followed by accusations and interrogations utilising either a minimization or false evidence strategy. The participants' systolic blood pressure served as a gauge of their physiological reactivity, and the number of times they refused to confess served as a gauge of their resistance to confess. The findings indicated that participants showed greater physiological reactivity when presented with false evidence ploys compared to minimization techniques. In addition, it was found that innocent participants showed greater resistance to confessing compared to guilty participants. Moreover, innocent individuals who were presented with false evidence exhibited even stronger resistance to confessing than those who were presented with minimization tactics. Furthermore, a moderated-mediation analysis revealed that innocents exhibited greater resistance to confessing when presented with false evidence compared to those who were presented with minimization techniques. However, these innocents experienced significantly higher levels of physiological reactivity. The findings of the study indicate that individuals who are falsely presented with evidence may exhibit strong resistance, but this resistance may have negative consequences. Specifically, their heightened resistance may lead to exhaustion and impair their ability to make subsequent decisions.

The study by Guyll, Yang, Madon, Smalarz, and Lannin (2019) explored the impact of perceived threats during police interrogation on suspects' ability to cope and resist self-incrimination. The study found that innocent participants displayed lower cardiovascular reactions to high-threat situations compared to guilty participants. This suggests that suspects who perceive a higher level of threat are more likely to respond to interrogation demands and resist self-incrimination.

Gudjonsson, Gonzalez, and Young (2021) investigated to examine significant factors associated with self-reported false confessions. The study examined a wide range of conditions, including mild intellectual disability (ID), autism spectrum disorders (ASD), attention-deficit/hyperactivity disorder (ADHD), conduct disorder (CD), psychiatric symptoms, and compliance. The study included 386 male inmates from Scotland. Each participant went through a comprehensive process that involved a diagnostic interview for ADHD, psychometric assessments, and a detailed questionnaire about false confessions made to law enforcement at any point in their lives. The results of this investigation revealed a significantly high prevalence of reported false confessions, amounting to 33.4% of the participants. Most false confessions (62.2%) were found to be motivated by a desire to protect someone else. Several predictive factors for false confessions have been identified through careful analysis. The factors included conduct disorder (CD), attention-deficit/hyperactivity disorder (ADHD), psychological distress, psychiatric symptoms, and compliance. Further investigation into the fundamental domains of ADHD has led to a significant discovery. After controlling for the presence of conduct disorder, it was found that the link between false confessions and ADHD was mainly influenced by the hyperactivity/impulsivity aspect of the disorder. The study found a notable occurrence of false confessions, primarily driven by the intention to safeguard others. The study conducted a comprehensive analysis and found several factors that can predict the likelihood of individuals giving false confessions. These factors include conditions like ADHD and CD, as well as psychological distress, psychiatric symptoms, and compliance. Additionally, the study conducted a detailed analysis of ADHD, emphasising the significant role of hyperactivity and impulsivity in this context. The existing literature has made significant strides in understanding the psychological dynamics underlying false confessions. However, a noticeable gap remains within this domain. While previous research has explored various factors contributing to false confessions, there exists a notable void in the literature concerning the specific impact of state and trait anxiety on the likelihood of suspects providing inaccurate admissions of guilt. By delving into this unexplored area, the study seeks to offer valuable insights into the interplay between anxiety and the propensity for false confessions, thereby enhancing our understanding of the psychological mechanisms influencing suspects' decision-making during interrogations in this jurisdiction. Furthermore, while the general influence of stress on decision-making processes has been studied to some extent, a comprehensive exploration of how stress specifically relates to the likelihood of making false confessions within the context of police custody in Kaduna State remains largely unaddressed. This study intends to bridge this gap by shedding light on the intricate interconnection between stress and false confessions, contributing to a more nuanced understanding of the factors that drive individuals to provide unreliable admissions. By focusing on this specific context, the study aims to provide insights that are both regionally relevant and globally applicable, thereby advancing our comprehension of the complex dynamics surrounding false confessions in the criminal justice system.

4. OBJECTIVE OF THE STUDY

This study is aimed at achieving the following objectives:

1. To examine the predictive role of anxiety on false confession among suspects in police custody at the Kaduna State Police command's department of state criminal investigation.

To determine the predictive relationship between stress and false confession among suspects in police custody at the Kaduna State Police command's department of state criminal investigation.

5. HYPOTHESES

The following hypotheses were tested in the study:

- 1. State anxiety will significantly predict false confessions among suspects in police custody at the Kaduna State Police command's department of state criminal investigation.
- 2. Trait anxiety will significantly predict false confessions among suspects in police custody at the Kaduna State Police Command's Department of State Criminal Investigation

3. Perceived stress will significantly predict false confessions among suspects in police custody at Kaduna State Police Command's Department of State Criminal Investigation.

6. SIGNIFICANCE OF STUDY

This research holds significance in various aspects, making contributions to the domains of policy, practise, and theory in the criminal justice system. This study has significant policy implications for the criminal justice system and law enforcement agencies. By examining the correlation between anxiety, perceived stress, and false confessions, policymakers can obtain valuable insights into the factors that contribute to coerced or involuntary admissions of guilt. The results can guide the creation of evidence-based interrogation protocols and guidelines that reduce the likelihood of false confessions. Moreover, this study supports the adoption of video recording during interrogations to improve transparency and accountability in police-custody interactions. This study identifies the risks associated with aggressive and stressful interrogation methods, providing a basis for revising current policies and practises to protect the rights of suspects and ensure fair and equitable outcomes.

This research has practical implications for law enforcement agencies and professionals involved in the interrogation process. Interrogators can modify their techniques to establish a less intimidating and stress-inducing environment by acknowledging the negative impact of anxiety and perceived stress on suspects' decision-making abilities. This may entail implementing rapport-building techniques, utilising open-ended questioning, and ensuring suspects are sufficiently informed of their rights throughout the interrogation procedure. Additionally, the research findings could be integrated into police training programmes to enhance officers' understanding of the potential dangers linked to coercive tactics and promote a more empathetic and knowledgeable approach to obtaining confessions. These practical implications can ultimately improve the quality of evidence obtained during interrogations and decrease the occurrence of false confessions. This research has theoretical implications for a broader comprehension of the psychological mechanisms involved in false confessions. This study expands the current body of research on the factors that influence suspects' decision-making during interrogations by examining the mediating effects of anxiety and perceived stress. Theoretical frameworks in psychology and criminology can be further developed to incorporate the complex relationship between emotional states and cognitive processes that contribute to false confessions. This study highlights the importance of a multidisciplinary approach, incorporating knowledge from various fields like psychology, sociology, and law, to effectively tackle the intricate nature of false confessions. The study's findings contribute to the ongoing discourse on the reliability of confessions as evidence in the legal system. This prompts scholars and researchers to critically evaluate the validity of admissions of guilt obtained under stressful conditions. This study addresses a gap in the existing literature and contributes to the social community's understanding of the impact of anxiety and stress on false confessions among detainees in police custody. Moreover, these findings serve as a foundation for enhancing police investigations and the administration of justice in Nigeria. Additionally, this study offers empirical findings that contribute to the understanding of anxiety, stress, and the most effective techniques for eliciting genuine confessions.

7. METHOD

7.1. Research Design

The ex post facto research was adopted in this study. This approach implies that the data collected in the study was obtained from the participants, and the independent variables were not manipulated. The independent variables in the study are anxiety (State and trait), and perceived stress. The dependent variable is false confession.

7.2. Participants

The participants were one hundred and nine (N = 109) randomly selected suspects that were in detention cells under the Kaduna State Police command's department of state criminal investigation. These were comprised of 74 males and 35 females.

7.3. Instrument

This study administered three sets of research instruments for data collection. They are described below:

The Gudjonsson Confession Questionnaire-Revised (GCQ-R):Gudjonsson and Petursson (1991)created the GCQ-R, a 36-item measure. It evaluates offenders' alleged reasons for confessing to the police as well as their attitude towards the confession. A seven-point Likert scale ranging from "not at all" to "very much so" is included in the questionnaire. According to Gudjonsson and Sigurdsson (1999), the Cronbach alpha coefficients for each of the six components ranged anywhere from 0.63 to 0.85.

State-Trait Anxiety Inventory (STAI): Both trait and state anxiety were evaluated with the use of Spielberger, Gorsuch, Lushene, Vagg, and Jacobs (1983) State-Trait Anxiety Inventory (STAI). On this scale, there are a total of 40 questions, 20 of which are used to evaluate trait anxiety and 20 of which are used to evaluate state anxiety. Each of these 40 questions is scored on a 4-point scale, ranging from 1 (meaning "almost never") to 4 (meaning "almost always"). The higher the score, the higher the level of anxiety. According to Spielberger et al. (1983), the internal consistency coefficients of the scale have varied from 0.86 to 0.95, and the test-retest reliability coefficients have, over a period of two months, ranged from 0.65 to 0.75.

Perceived Stress Scale (PSS): The instrument was developed by Cohen (2014). Using a 5-point Likert scale, the tool assesses perceived stress. It gauges how stressful certain circumstances are perceived to be in one's life. The scale has a Cronbach alpha of.75 (Cohen, 2014).

7.4. Procedure

The Krejcie and Morgan (1970) cited in the Bukhari (2021) table was used to determine the sample size of the participants from a total population of one hundred and fifty suspects in detention cells under the Kaduna State Police command's department of state criminal investigation. Kaduna State Police Command has detention cells that are subcategorized into seven (7) police detention units. In respect to this research, seven detention facilities were used with the total population of suspects that covers the command. Simple random and stratified random sampling techniques were the sampling procedures used in selecting the sample. Table 1 gives a summary of the population and sample.

Table 1. Population and sample of the study.				
Detention cell	Number of suspects	Sample		
State CID 1 police cell	20	14		
State CID 2 police cell	26	19		
State CID 3 police cell	07	06		
State CID 4 police cell	29	21		
State CID 5 p0lice cell	22	16		
State CID 6 police cell	14	10		
State CID 7 police cell	32	23		
Total	150	109		

Note: CID – Criminal investigation department.

7.5. Method of Data Analysis

Multiple regression statistics were used to test the stated hypotheses in the study. Multiple Linear Regressions (MLR) are a type of statistical analysis that makes use of several explanatory or independent factors to forecast the result of a response or dependent variable. The goal of the MLR is to model the link that exists between the response and explanatory factors. The regression model for the study hypotheses is stated below:

Regression Model 1: FalseConf= bo +b1StateAnx + b2TraitAnx + b3PerStress + U (1)Where FalseConf = False confession. StateAnx = State anxiety. TraitAnx = Trait anxiety. PerStress = Perceived stress. bo = Constant. U = Error term.

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8. RESULTS

8.1. Regression Analysis

The hypotheses were tested with the multiple regression statistics and the results presented below.

Variables	В	SE	t	р	95% CI
(Constant)	69.552	25.200	2.760	0.007	(19.565, 119.520)
State anxiety	0.610	0.295	2.069	0.041	(0.026, 1.196)
Trait anxiety	-0.168	0.308	-0.545	0.587	(-0 .778, 0.442)
Perceived stress	1.773	0.599	2.960	0.004	(0.585, 2.960)

Table 2. Regression coefficients of anxiety and perceived stress as predictors of false confession.

Note: CI = Confidence interval.

Table 2 shows the impact of state anxiety, trait anxiety, and perceived stress on false confessions among suspects in police custody. The R^2 value of .082 revealed that the predictors explained 8.2% of the variance in the outcome variable [F (3, 105) = 4.220, p< 0.05]. The findings revealed that state anxiety positively predicted false confession (β = .191, p < 0.05), whereas trait anxiety has no significant effect on false confession (β = - 0.050, p > 0.05), while perceived stress positively predicted false confession (β = 0.273, p < 0.05).

9. DISCUSSION OF FINDINGS

The findings showed a positive correlation between state anxiety and false confession, but trait anxiety did not show any correlation at all with false confession. Studies have shown that internal factors such as anxiety are capable of making suspects give false confessions during interrogation (Horgan, Russano, Meissner, & Evans, 2016; Narchet, Meissner, & Russano, 2011). These results agree with the research findings of Meissner, Russano, and Narchet (2016), which found that anxiety leads to false confessions by the suspects. Additionally, studies have shown that internal factors such as anxiety can make suspects give false confessions during interrogation. However, Drake, Sheffield, and Shingler (2011)contend that a lower level of attachment anxiety is actually associated with a lower risk of making a false confession. In contrast to anticipated outcomes, there was no statistically significant relationship found between trait anxiety and false confessions. This finding indicates that innate anxiety tendencies may not be the main factor contributing to false confessions in police interrogations. Trait anxiety represents an individual's inherent vulnerability to anxiety, but various situational and contextual factors may have a stronger impact on the choice to make a false confession. The finding that perceived stress predicts false confession is consistent with those of Wrightsman, Greene, Nietzel, and Fortune (2016), who found that stress can also lead to incorrect information encoding by causing people to unintentionally narrow their focus while witnessing an event. Furthermore, as Drake, Gudjonsson, Sigfusdottir, and Sigurdsson (2015) showed, people who witness violent acts remember less information than those who witness non-violent acts. According to Forrest, Wadkins, and Miller (2002), people who are under stress are more likely to sign a written confession. The fact that police frequently question witnesses and suspects right away after an incident may help to explain the study's findings. It's possible that during that time, the stress and anxiety related to seeing or experiencing the event will be at their highest. As a result, make false confessions or sign a written confession.

9.1. Study Limitations

The study's findings provide insight into the possible impact of anxiety and perceived stress on false confessions. However, it is important to acknowledge and consider several limitations associated with the study. The generalizability of the findings may be limited due to potential sampling bias, which could have resulted from the study's focus on specific demographics or regions. This limitation may affect the generalizability of the findings to larger populations. Additionally, the use of the ex post facto design in the study limits the ability to establish causal relationships between anxiety, perceived stress, and false confessions. Longitudinal approaches or experimental designs may provide more robust insights into the temporal dynamics and causal pathways. Moreover, the use of self-report measures to evaluate anxiety, perceived stress, and false confessions raises concerns about social desirability bias and memory recall problems, which may compromise the reliability of the assessments. To improve the validity of future research, it is recommended to include additional objective measures, such as physiological markers or behavioural observations. Although the study considers anxiety and perceived stress, it does not fully address other potential factors that could influence the results, such as personality traits, cognitive abilities, and the intricacies of interrogation methods. Further research is needed to address these limitations and enhance our understanding of the complex relationship between anxiety, perceived stress, and false confessions among suspects in police custody.

9.2. Policy Implications of Findings

The research findings have significant policy implications for the criminal justice system. The recognition that state anxiety is a reliable indicator of false confessions highlights the importance of establishing a low-anxiety environment during police interrogations. The implementation of policies that prioritise non-coercive and psychologically supportive techniques during questioning sessions may reduce the likelihood of anxiety-induced false confessions. Moreover, the existing research suggests that trait anxiety does not have a substantial impact on false confessions. This implies that relying solely on an individual's inherent anxiety traits may not be an effective approach for identifying false admissions. Policy recommendations could propose conducting comprehensive assessments of suspects' psychological states during questioning, which would consider situational state anxiety as well as broader personality traits. The significant positive correlation between perceived stress and false confessions emphasizes the need to alter interrogation techniques to lessen the stress that suspects in custody experience. Policymakers may consider implementing guidelines that require breaks, access to legal counsel, and transparent communication to reduce the impact of increased stress levels on the accuracy of confessions. These findings support the need to adopt interrogation techniques that prioritise empathy, evidence-based approaches, and stress reduction. This shift is necessary to prevent false confessions and ensure a fairer criminal justice system.

10. CONCLUSION

In conclusion, this study offers valuable insights into the intricate dynamics of confession outcomes in the criminal justice system. The correlation between state anxiety and false confessions emphasises the importance of creating interrogation settings that prioritise anxiety reduction, fairness, and the prevention of inaccurate admissions. Trait anxiety did not have a significant impact on false confessions. However, this finding highlights the need to consider broader psychological states when conducting police interrogations.

The strong link between stress and false confessions shows that interrogation methods need to be revaluated to get rid of stress factors that can cause suspects to give false confessions. These results also show how important it is to make policy changes based on evidence to improve the mental health of suspects in jail and make sure they give honest confessions. This study helps make the criminal justice system fairer and more well-informed.

11. RECOMMENDATIONS

The following recommendations are made based on the findings of the study:

- Law enforcement agencies should reassess their interrogation protocols and training procedures to enhance effectiveness. To mitigate the likelihood of false confessions, it is imperative to establish and employ strategies that cultivate a supportive and low-anxiety atmosphere during the interrogation process, considering the observed positive correlation between state anxiety and false confessions. Reducing the impact of anxiety on confession outcomes may require the inclusion of mental health professionals, effective communication, and empathetic strategies.
- 2. To address the connection between perceived stress and false confessions, policymakers and practitioners should implement stress mitigation strategies. Creating comprehensive guidelines that include regular breaks, access to legal counsel and stress-reduction techniques during interrogations can prevent stress from unintentionally leading to unreliable admissions. Establishing a stress-reducing environment for suspects can enhance the accuracy of confession outcomes.
- 3. Holistic Psychological Assessment: Further investigation is needed to gain a deeper understanding of the overall psychological state of suspects in police custody, as trait anxiety has been found to have minimal influence on false confessions. Policymakers should promote the use of comprehensive psychological assessments to evaluate a suspect's psychological state, including situational anxiety and broader personality traits. This would offer a more nuanced context for assessing the accuracy of confessions.

Law enforcement agencies should introduce educational initiatives that specifically address the psychological consequences of interrogation techniques. This may involve training officers to identify indicators of anxiety and stress, providing them with proficient communication abilities, and cultivating an understanding of the possibility of false confessions. By improving officers' comprehension of the psychological elements involved, they can make better-informed decisions during interrogations, resulting in enhanced outcomes.

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INSTITUTIONAL REVIEW BOARD STATEMENT

The Ethical Committee of the University of Fort Hare, South Africa has granted approval for this study on 9 September 2022 (Ref. No. KHE041SOK001).

TRANSPARENCY

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

COMPETING INTERESTS

The authors declare that they have no competing interests.

AUTHORS' CONTRIBUTIONS

Both authors contributed equally to the conception and design of the study. Both authors have read and agreed to the published version of the manuscript.

ARTICLE HISTORY

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