

Perceived solutions to curtail the surge in crimes at petrol stations in South Africa

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Abstract: The surge in crimes at petrol stations in South Africa is a fundamental concern for business owners, policymakers, researchers, and the public. If the challenge remains unaddressed, it poses serious drawbacks towards the realisation of sustainable development and community safety aspirations. The surge in crimes at petrol stations bears significant societal and economic impacts. This article explores perceived solutions to address this conundrum drawing from the views of petrol station owners, community members and fuel attendants. A qualitative research approach was adopted within the exploratory research design. A purposive sampling technique was adopted and a total of 25 respondents participated in the study. Semi-structured interviews were used as data acquisition methods. The findings revealed that to curb crime at petrol stations, there is an urgent need to enhance security and policy visibility. The findings further revealed that a multifaceted approach is required which involves stakeholder collaboration, practical implementation of Crime Prevention Through Environmental Design, embracing technology and training of fuel attendants. This article submits that addressing the underlying socioeconomic factors that contribute to the rise in criminal activities, such as poverty, unemployment, and lack of educational opportunities, may help mitigate the long-term drivers of these issues. Also, awareness raising and community engagement can stimulate crime prevention efforts and may yield positive results in curtailing the surge in crimes at petrol stations.

Keywords: *Crime, Petrol stations, Solutions, South Africa, Sustainable development.*

1. Introduction

South Africa is grappling with diverse crimes including a recent surge in crimes at petrol stations causing devastating societal and economic impacts (Mlepo, 2022). Petrol stations, often regarded as essential hubs for convenience and refuelling have unfortunately become targets for criminal activities, such as hijacking, including robbery, violence and vandalism (Nyahunda & Rakubu, 2024, forthcoming). Crime in South Africa is dynamic and ever-evolving such that criminals change their targets and ways (Qonono, 2024). The convenience offered by petrol stations to customers and the communities in general makes them a booming business enterprise (Garidzirai, 2018). In the same vein, the diversity of goods and services available at petrol stations has made them lucrative targets for criminals (Nyahunda & Rakubu, 2024 forthcoming).

This article draws from a study conducted by Rakubu et al., (2023) which revealed that there are approximately 1100 criminal incidents that occur at petrol stations every year and up to 42 people are killed at petrol stations annually across South Africa. What should be underscored is the regard for petrol stations as safe havens for customers and travellers is no longer the case owing to the proliferation of crimes at these business hubs (Qonono, 2024). Since November 2023 to date, South Africa's media outlets have been awash with harrowing criminal activities bedevilling petrol stations. In light of this, crimes such as credit card cloning, ATM bombings, cell phone robberies, car hijackings, cash in transit heists and drive-offs without paying for fuel, and scams have been on the rise (Nyahunda & Rakubu, 2024 forthcoming). It is noteworthy that the surge in crimes targeting petrol stations is

multifaceted and complex and requires a comprehensive approach to meticulously address the problem. Against the backdrop of this, the researchers posit that there is little to no evidence of studies that have examined evidence-based solutions to curtail the surge of crimes at petrol stations in South Africa.

The distinguishing feature of this study is that it is amongst the earliest efforts to document solutions to avert this new crime trend in South Africa. Chief among the importance of this study is that it unearths the solutions that can help create safer environments for customers and employees at petrol stations. On the same wavelength, this study surfaces effective strategies that can inform law enforcement agencies and policymakers on the best crime prevention strategies. Such strategies not only reduce crime but stimulate the overall safety and functionality of petrol stations as essential business ventures in communities.

2. Literature Review

The dynamism and impacts of crimes at petrol stations in South Africa remain underexplored. This connotes that literature on the subject matter is still evolving. However, the scant literature on this phenomenon points out that crimes at petrol stations have been an ongoing challenge (Graan, 2016; Mlepo, 2022). According to Masuku and Motlalekgosi (2022), crimes at petrol stations range from murder, robberies, car hijacking, credit card cloning, shoplifting, and scamming, to ATM bombings. The impact of these crimes extends beyond the immediate victims, affecting the overall sense of economic and security stability in communities where these crimes are rife (DU Toit, 2016; Mlepo, 2022). Evidence from literature points that the surge in crimes at petrol stations can be attributed to historical injustices, poverty, unemployment and lack of education which drive individuals towards crime as a means of survival (Govendor, 2020; Maluleke et al., 2020). Additionally, weak law enforcement, petrol stations' inherent vulnerabilities, such as the presence of cash, valuable goods, and isolated locations and have been identified as contributors to the problem, with a need for a more comprehensive, multidisciplinary approach to crime prevention. criminals often target petrol stations due to (Mlepo, 2022; Nyahunda & Rakubu, 2024 forthcoming).

As Thenga (2020) argues law enforcement agencies in South Africa are saddled with devising mechanisms to effectively combat these issues due to the lack of necessary skilled personnel, the flourishing of criminal syndicates, corruption and often working in silos. To combat this surge in crimes, a multifaceted strategy is required (Mlepo, 2022). Scholars such as Qonono (2024) denote that enhancing physical security measures, such as improved surveillance systems, lighting, and security personnel, can help deter and prevent criminal incidents at petrol stations. DU Toit (2016) posits that crimes at petrol stations require collaboration between the police, local businesses, and private security businesses, in addressing community safety issues. According to Maluleke et al., (2020), the surge in crimes at petrol stations calls for enhanced community participation in crime prevention endeavours. In view of this, community participation can trigger social cohesion, economic opportunities, and education that can be cardinal in addressing the underlying drivers of crime. In light of the foregoing, Graan (2016) denotes that the involvement of local communities can help in identifying and addressing the root causes of crimes at these essential business hubs. The growing literature on this subject matter converges in positing that a multifaceted approach involving multi-sector cooperation, community participation, and a focus on addressing the socioeconomic factors that contribute to crime is necessary to effectively curtail the surge in crimes at petrol stations in South Africa (Govendor, 2020; Mlepo, 2022; Qonono, 2024). This article posits that solutions to curbing the surge in crimes at petrol stations require empirical-driven measures from the targeted victims of these crimes. Evidence-based research surfaces the feasibility of the proposed solutions from the viewpoint of those who experience such kinds of crimes at their workplaces.

3. Methodology

This study used petrol stations in Gauteng Province as a case. That said, the study population of the study was drawn from petrol stations in Pretoria and Johannesburg. The selection of Gauteng Province was strategic for one main reason unearthed in a survey conducted by Mlepo (2022) that most petrol-related crimes occur at petrol stations in Johannesburg and Pretoria. Furthermore, most petrol stations

in Gauteng are open 24 hours, seven days a week (Masuku & Motlalekgosi, 2022). This study targeted petrol stations owned by Engen, Total Energies, Sasol and Shell. The researchers cogently believe that the strategies that emerged from this study are applicable to curbing crimes at petrol stations countrywide. The study targeted petrol station owners, community members and fuel attendants.

This study required a research approach that would allow the researchers to interface with the participants and establish grainy details about the subject matter under investigation. In view of this, the qualitative research design was adopted. Charmaz (2020) posits that qualitative research approaches produce data about human perspectives on any matter of interest which may include relationships, emotions, behaviours and opinions. Additionally, qualitative research is inductive, and it brings the textual descriptions of people's experiences to the fore (Rubin and Babbie, 2016). This research aspired to surface the experiences of the participants and for evidence-based solutions to crime at petrol stations to come to the fore. The study was exploratory in nature. Creswell (2017) posits that exploratory design is appropriate to use when investigating an under-researched topic or new topic where little is known about it so that precise questions are generated for future research. That said, the introduction and problem formulation of this article hinted that there is scant evidence of studies that zoomed into solutions to curtailing crimes at petrol stations. This necessitated the exploratory research design.

The targeting of petrol station owners, fuel attendants and community members necessitated the purposive sampling technique. Purposive sampling involves the selection of participants based on the needs of the study (Denzin et al., 2023). Clarke (2019) further opines that purposive sampling allows the researcher to deliberately select knowledgeable participants regarding the phenomenon under study. It should be noted that this study requires participants who had an acknowledgement of the surge in crimes at petrol stations and with insights on how the problem can be ameliorated. Since qualitative studies favour small sample sizes, a total of 25 participants shared their views on the subject matter under exploration. These were distributed as 10 community members, 10 fuel attendants and 5 petrol station owners. Semi-structured interviews were used as data acquisition methods. The Thematic Content Analysis was adopted as the data analysis method (Braun & Clarke, 2019). The data analysis process involved familiarisation with data, generation of initial codes, search and review of themes, searching, defining and naming of themes, interpretation, and compiling of information (Braun & Clarke, 2019).

4. Findings and Discussion

This section provides the findings that emerged from the qualitative data. The section further provides a discussion of major themes that emerged from the data. Direct quotes from the participants will be provided.

5. Enhancing Security

Information from all study sites converged in ascertaining that the surge in crimes at petrol stations is attributed to outdated security systems. In this view, it was established that criminals are taking advantage of outdated security systems at most petrol stations and wreaking havoc. The general sentiments from most participants converged in affirming that a multifaceted approach to security system upgrades was vital in addressing the pressing issue of crime at these business entities. The following excerpts characterise some of the responses.

"... In my view, crime is evolving and criminals are coming up with sophisticated mechanisms to walk away with their shenanigans. As business owners, we need to up our game and beef up our security measures..." (Petrol station owner, Johannesburg).

"...These criminals take advantage of weak security systems and attack. So, the best way to handle this is to enhance security at petrol stations..." (Community member, Pretoria).

Security measures suggested in this study point to the implementation of strong surveillance systems. Furthermore, the study established that modern surveillance systems are vital in providing video evidence for forensic investigations and serve as a deterrent to criminals. Another point that emerged from the study is that security systems should involve automatic number plate recognition and loop detection which enables security to monitor vehicle movements and identify potential threats. This

gives credence to DU Toit (2016) who opines that enhancement of security systems at petrol stations can assist in deterring criminal activities, as potential offenders will be aware of the heightened security measures in place. The researchers contend that enhanced security also involves barricading these police stations as a majority of them are easy to access and easy to exit. This should also be complemented by beefing up security personnel at every petrol station.

6. Police Visibility

High police visibility emerged as another possible solution to curbing the surge in crimes at petrol stations. The participants noted that police patrols have been limited or close to none in most communities where some petrol stations are in isolated locations. The study further established that criminals study the distance between police stations and their targeted hunting grounds. This instils a sense of confidence in them to strike these petrol stations, knowing very well that they will never come across any deterrence from law enforcement officers. In light of this, it was suggested that high police visibility could assist in averting a rise in crimes at petrol stations. Some of the participants had the following to say;

“... It’s very rare to see police patrolling despite reports that these criminals are taking advantage of the absence of police personnel in most communities. I think the Minister of Police needs to look into this aspect and provide resources for the police to be visible...” (Fuel attendant, Pretoria).

“... Police are well trained to detect and combat crime and when they are incapacitated as is the case, criminals take advantage. You rarely see Police vans around at the time they are needed the most. The solution to this would involve their visibility at and around petrol stations...” (Community member, Johannesburg).

The issue of police visibility as an amicable strategy for curbing crimes at petrol stations resonates with the findings by Thenga (2020) who opines that one potential strategy to address this issue is the implementation of increased police visibility at petrol stations. This approach has been explored in other contexts, with studies suggesting that a visible police presence can act as a deterrent for criminal elements and contribute to a greater sense of safety and security among the public (Mabia et al., 2016; DU Toit, 2016; Rakubu et al., 2023). However, this study infers that the effectiveness of this approach in the South African context requires further exploration. This is because the South African Police Service is riddled with a shortage of skilled police officers, resources and inadequate training which stymie effective policing (Thenga, 2020). However, this study submits that the success of police visibility as a crime-reduction strategy at South African petrol stations will depend on political will that would see the SAPS as the most resourced institution that can timeously and periodically detect and combat crimes including those at petrol stations.

7. Stakeholder Collaboration and Community Participation

Another point that emerged from the findings relates to stakeholder collaboration and community participation in addressing the pressing problem of crime at petrol stations. What emerged from the participants is that the complex and multifaceted nature of the problems calls for organisations and various stakeholders to collaborate and not work in silos. In view of this, the common thread from the interviews converged in affirming that stakeholder collaboration is vital in fostering synergistic solutions to the problem. The following narrations characterise some of the responses;

“... We now need all hands-on deck. This is no longer about petrol stations alone but all businesses and everyone is under siege in South Africa. Therefore, a collaborative approach is essential...” (Petrol station owner, Johannesburg).

“...Community involvement is vital if we are to foster sustainable solutions to thwart this big elephant in the room. Communities need to be involved...” (Community member, Pretoria)

When it comes to collaboration, the study established that this cuts across all petrol station owners, the police, private security companies commonly employed at petrol stations and the communities. The study established that stakeholder collaboration ignites complementary approaches where technical resources and expertise are channelled towards crime-fighting capabilities and develop more effective strategies to deter criminal activities. From the submissions made by most petrol station owners, their involvement is crucial as they can provide valuable insights into the specific challenges they face and

work closely with the police and private security companies to identify and implement preventative measures. This may improve robust security protocols to protect their premises and employees. The study further established that the collaborative approach should involve communities. A common thread from the interviews with community members denoted that the involvement of communities inculcates a sense of ownership and responsibility. This is supported by Chikomba (2014) who infers that involving communities in fighting crimes is vital to enhancing effective crime prevention efforts. This study argues that the involvement of communities can help the police by reporting suspicious criminal activities. Communities can also establish neighbourhood watch groups to complement police efforts in promoting awareness and exchange of information. In view of this, communities, the police, petrol station operators and local authorities can work together to create a safer and more secure environment for both employees and customers.

8. Implementation of the Crime Prevention Through Environmental Design (CPTED)

In the wake of the surge of crimes at petrol stations, this study established that another solution to curbing the flourishing of such activities hinges on the implementation of the principles of the CPTED. Most petrol station owners shared their views on this aspect. In this regard, it was established that the implementation of the CPTED is not in full swing in South Africa. As such, most physical environments where most petrol stations are located create fertile grounds for crime to flourish. The participants had the following to say:

“... The aspirations of Crime Prevention Through Environmental Design serve a good cause if they are implemented. In South Africa, we have the challenge of having good policies on paper that are devoid of implementation...” (Petrol station owner, Pretoria).

“... If we increase surveillance and revisit issues to do with access control as prescribed by the principle of the CPTED, I think we can be a step forward in curbing the surge in crimes at petrol stations...” (Petrol station owner, Johannesburg).

These findings give credence to the findings by Qonono (2024) who denotes that in the context of South Africa, where petrol station-related crimes are on the rise, the implementation of CPTED principles could potentially contribute to a more secure and sustainable environment for both staff and customers. In highlighting the significance of the CPTED in averting crimes at petrol stations, the study established that this can be achieved through strategic placement of landscaping, lighting, and building design, all of which can enhance the ability of passers-by, staff, customers, and to observe and monitor the activities within the petrol station. According to Cheng (2014), the CPTED principles can create an environment that is less conducive to criminal activities, such as robberies, theft, and vandalism. The researchers posit that the implementation of the CPTED through spatial configuration and accessibility of petrol stations can reduce the risk of criminal incidents. Furthermore, this can be accomplished through the use of physical barriers, such as fencing or bollards, as well as the strategic placement of exits and entrances. By controlling access and restricting potential escape routes, the risk of criminal activities can be reduced.

9. Role of Technology

This study further established that embracing technology could potentially reduce the surge in crimes at petrol stations in South Africa. What emerged from the study was that there is a sophistication of criminal activities which necessitates an equally dynamic and robust response through the strategic deployment of technology. In view of this, the role of technology was lauded as a measure to enhance security and deter criminal behaviour at petrol stations. The participants had the following to say.

“... After all is said and done, we cannot rule out the role of technology in assisting or taking the lead on our efforts to combatting crime. We need to take a leaf from countries such as the UAE where technology directs how they detect and respond to crime...” (Community member, Pretoria).

“.... Technology can be another potential avenue for addressing this challenge...” Fuel attendant, Pretoria).

What emerged from this study is that South Africa needs to embrace technology-driven solutions to combat crimes at petrol stations. This is consistent with the findings by Oke et al., (2020) who denote

that the utilisation of ICT-enabled devices and sensors can enable authorities to detect potential threats, monitor high-risk areas and respond swiftly. The researchers contend that technology can enhance proactive communication between communities policing forums, citizens and law enforcement agencies which ultimately facilitates timely security alerts. Through technology, Kassim et al., (2023) opine those technologies such as Radio Frequency Identification (RFID) systems can be used to monitor and control access to high-risk areas, detect suspicious activities, and facilitate the tracking of individuals or vehicles involved in criminal acts.

10. Training of Petrol Attendants

What emerged from the study was that as criminals have resorted to making petrol stations their hunting grounds, motorists, customers and petrol attendants are not safe. To worsen the situation, petrol attendants are not trained to detect and combat crime. In light of this, suggestions from the interviews pointed out that there is an urgent need to train petrol attendants on various security measures so that they can protect themselves, and motorists. The following narrations shed more light.

“... You see after 10 pm, you find us locked inside the shop because we are not safe. The only skill I have is to pour fuel and nothing else. Even if I see customers being tormented by criminals, I cannot help because I do not have the expertise...” (Petrol attendant, Pretoria)

“...We need training for self-defence because we are an easy target. These criminals know that we are defenceless...” (Petrol attendant, Johannesburg)

The preceding expositions are in tandem with the submissions by Adetula (2016) who infers that petrol attendants need to be empowered with skills and knowledge to detect and prevent criminal activities. Their training on security measures can improve the overall security at petrol stations. Webster et al., (2016) weigh in by alluding that the training for petrol attendants should encompass responding to emergency situations, safe handling of cash and identifying suspicious activities. The researchers denote that petrol attendants are key stakeholders in the collaborative approach to combating crime at petrol stations. These can easily complement police and private securities efforts in making petrol stations safe havens like before.

11. Conclusion

This study highlighted the perceived solutions to curtail the surge in crimes at petrol stations in South Africa. From the study findings and discussions, it can be posited that addressing this conundrum requires a multifaceted approach that combines collaborative efforts, preventive measures, enhanced security, implementation of the CPTED, and effective law enforcement. The take-home message from this study is that communities, law enforcement agencies, and petrol station owners need to forge a strong partnership in enhancing comprehensive security measures and contributing to safer and secure environments.

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References

- [1] Adetula, G.A., 2017. Procedural Justice and Fairness in Cases Adjudicated and Attitudes to Recidivism among Nigerian Prisoners. *Journal of Criminal Justice and Security*, (4), pp.339-362.
- [2] Braun, V. and Clarke, V., 2016. (Mis) conceptualising themes, thematic analysis, and other problems with Fugard and Potts' (2015) sample-size tool for thematic analysis. *International Journal of Social Research Methodology*, 19(6), pp.739-743.
- [3] Braun, V. and Clarke, V., 2019. Reflecting on reflexive thematic analysis. *Qualitative research in Sport, Exercise and Health*, 11(4), pp.589-597.
- [4] Cheng, T. and Chen, T., 2021. Urban crime and security. *Urban Informatics*, pp.213-228.
- [5] Chikomba, C.P., 2014. Retail shopping mall security: raising awareness of crime risks against business in Zimbabwe (a case study of Joina City shopping mall, Harare—June 2011–July 2012). *Journal of Applied Security Research*, 9(2), pp.185-220.

- [6] Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.
- [7] Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.
- [8] Creswell, J. W., 2017. *Custom: CEC edition qualitative inquiry and research design 3e*. SAGE Publications.
- [9] Denzin, N.K. and Giardina, M.D., 2024. Introduction: Qualitative Inquiry in Transition—Pasts, Presents, and Futures. In *Qualitative Inquiry in Transition—Pasts, Presents, & Futures* (pp. 1-20). Routledge.
- [10] Du Toit, D., 2016. Working in fear? managers' and petrol attendants' experiences of public-initiated violence at selected petrol stations in Johannesburg. *Acta Criminologica: African Journal of Criminology & Victimology*, 29(1), pp.143-155.
- [11] Garidzirai, R., 2022. The role of international tourism on foreign trade in the BRICS nations. *Cogent Social Sciences*, 8(1), p.2076792.
- [12] Govender, D., 2020. Reflections on community-based participation to reduce violent crimes in South Buthelezi, M.W., 2020. The state of implementation of crime prevention coordinating structures (Community Safety Forums) by municipalities in South Africa. *Just Africa*, 5(2), pp.41-50. Africa. *African Security Review*, 29(4), pp.316-329.
- [13] Masuku, S. and Motlalekgosi, P., 2022. Lack of community participation in the fight against stock theft in Dr. Pixley ka Isaka Seme Municipality, South Africa: What went wrong? *International Journal of Research in Business and Social Science* (2147-4478), 11(4), pp.267-274.
- [14] Qonono, K., 2024. Analysis of the Fire Hazard Posed by Petrol Stations in Stellenbosch and the Degree of Risk Acknowledgement in Land-Use Planning. *International Journal of Architectural and Environmental Engineering*, 18(2), pp.44-56.
- [15] Rubin, A. and Babbie, E.R., 2016. *Empowerment series: Research methods for social work*. Cengage Learning. New York.