

AN EXAMINATION INTO PROSPECTIVE RESEARCH AREAS CONCERNING THE SAFETY OF LEARNER TRANSPORT, SPECIFICALLY FOCUSING ON INTENTIONAL HARM

M RATHOGWA

Email: Mrathogwa@csir.co.za

CSIR, Meiring Naudé Road; Brummeria; Pretoria; South Africa

ABSTRACT

In South Africa, as of 2018, the alarming statistic of one child being abducted every five hours highlights a pressing concern for the safety of school children. What compounds this issue is the stark inadequacy of school security procedures in place to thwart potential abductions. Criminal syndicates, notorious for their meticulous and thorough operations, often exploit schools by infiltrating them under the guise of concerned parents. Kidnappings and abductions cut across socioeconomic boundaries, impacting both the underprivileged and affluent segments of society. The motives of these kidnapers encompass physical violence, financial exploitation, and even the gravest outcome, murder. In response to this disturbing trend, this research aims to highlight the existing gaps in both the research and practical measures that can be taken to fortify school security protocols, ultimately ensuring the safety of learners against kidnappings and abductions.

1. INTRODUCTION

This work builds upon research titled “*A systemic approach to scholar security risks: Malicious Intent*” (Rathogwa, 2023) that was done for the University of the Witwatersrand where the outcome was a model for determining what the child kidnapping data and statistics will look like if the business-as-usual approach is applied.

1.1 Aim of paper

The objective of the proposed research is to highlight potential strategies for addressing the current deficiencies in research and practical actions aimed at strengthening school security procedures. The ultimate goal is to safeguard students against kidnappings and abductions.

1.2 Background

The conclusion from the research done by Rathogwa (2023) is that global child abduction is a major issue that requires worldwide attention. Several countries' law

enforcement and public education measures have failed to address this issue. Various parties understand the economic and sociological aspects that contribute to human trafficking, but current anti-trafficking tactics ignore them. A high-level system dynamics model was created to improve understanding of human trafficking system operational dynamics and enable virtual policy testing. The current technique may be adjusted to the market or geographic environment in which human trafficking is investigated and addressed. In our Gauteng human trafficking research, we tried to show how varying police enforcement levels may affect the system. A considerable increase in police enforcement may eliminate human trafficking, according to sensitivity analysis. However, additional tests may have assessed the system's reaction. Other solutions may have been found by adjusting factors like "Awareness and Intervention Programmes" or "Ease of Transaction," alone or together. This human trafficking model, despite its incompleteness, is a major step towards understanding the trafficking system, finding better anti-trafficking methods, and ending human trafficking worldwide. More research is needed to improve this simulation's assumptions. Due to consumer substitutability across the three key marketplaces—Street, Front, and Internet—future research will examine their relationships. In the case where law enforcement closed the street market, clients and vulnerable minors engaging in exploitative practices may have moved to another market. These market links will be examined in future models.

Inyang and Abraham (2013, p. 532) define kidnapping as the forcible seizure, removal, and unlawful detention of an individual against their will. The offence in issue is categorized as a common law offence, distinguished by the perpetration of an action that is not desired by the victim. Abduction, as defined in the Statistics on Children in South Africa 2022, refers to the deliberate and illegal act of taking an unmarried minor away from their parents or guardians with the intention of causing harm, enabling forced marriage or sexual activity, or for the purpose of demanding ransom.

The significance of avoiding abduction instances within school grounds cannot be exaggerated, since educational institutions are designed to offer a safe atmosphere for children to gain information and skills. Unfortunately, educational institutions do not constantly ensure a safe environment for their pupils. The main determinant of children's susceptibility to abduction is the inherent danger they face within educational establishments. Studies indicate that children are more susceptible to being kidnapped by strange persons when they are at school, as opposed to other settings in their everyday routines (Grant, 2022). The significance of proactively avoiding abduction events at educational institutions cannot be exaggerated.

Based on the 2022 South African independent crime prevention reports, it was projected that almost one in every 10,000 pupils in South African public schools fell prey to abduction syndicates during the 2012-2013 academic year. The criminal category that had the most notable surge was kidnapping, with a major growth of 35.7% to reach a total of 2,605 instances in the current reporting period, as compared to the previous period. Between July and September of the school year 2021-22, that is during the

second quarter, a grand total of 2,000 abduction instances were officially recorded. As of fiscal year 2021-22, there have been a total of 6,837 reported occurrences of kidnappings (Grant, 2022).

The 2021 research carried out by the Crime Registrar's office of the South African Police Service (SAPS) is dedicated to examining the contextual elements related to cases of abductions. This inquiry is conducted by examining a representative subset of case records acquired from diverse provinces. The research findings suggest that the combined incidence of abduction for ransom and extortion constituted a small fraction, namely less than 5%, of the whole research data. Approximately 27% of the incidents included abductions specifically intended for committing sexual offences.

The amount of this proportion is significant and worrisome. Based on the statistics from the South African Police Service (SAPS), it is evident that 45% of the total sexual crime complaints investigated are related to incidents involving children. Nevertheless, the provided statistics does not provide any clarity about the proportion of these cases that also involve incidents of abduction. Armed robberies, sometimes accompanied by hijackings, are the main cause of abductions, making up about 46% of reported occurrences. Furthermore, it is important to emphasize that of the 3,024 abduction instances analyzed, only 16 of them had intentions related to human trafficking.

1.2.1. Current and Emerging threats in South Africa

There has been a significant increase in the number of kidnappings in the country throughout the year 2022. The incidence of kidnappings increased twofold, rising from 700 cases in 2021 to 1143 cases in 2022. There has been a rise in the incidents of kidnappings for the purpose of demanding money and using threats, however these cases constitute only 5% of the total number of cases. The majority of kidnappings occur in the Gauteng and KZN provinces. Low-income neighbourhoods are often targeted for kidnappings. Several situations include individuals with moderate incomes who lack any apparent means of discretionary spending.

These individuals are frequently sent to foreign nations through human trafficking. Affluent individuals have the means to get protection and resources. In contrast, syndicates frequently focus on those with smaller incomes as they are more vulnerable and less likely to attract significant media coverage or prompt a focused police reaction. Individuals with lesser incomes are frequently extorted for meagre sums of money they collect through scavenging, and they seldom disclose these crimes to the authorities. These individuals are detained for extended periods, occasionally escorted to ATMs to withdraw funds, or kept in custody until they transfer money electronically.

The study of the GI-TOC highlighted the presence of criminal organizations engaged in abductions. These syndicates intentionally prey on individuals in disadvantaged

neighbourhoods with the aim of obtaining fast profits. Additionally, there exist professional mega-syndicates that exhibit greater organization and specifically focus on high-net-worth individuals. These individuals are frequently detained for extended periods of time.

Pakistan and Bangladesh syndicates, as well as Mozambique syndicates, are now active in South Africa (Grant, 2022). The following diagram illustrates the mean monthly frequency of abductions across the nine provinces of South Africa.



Figure 1: Kidnapping cases in South Africa (SAPS crime stats 2022)

Notwithstanding worries over child safety, it is stated that a youngster from South Africa goes missing every five hours. Criminologist Bianca van Aswegen suggests that social media has the potential to initiate human trafficking. In 2022, South Africa is projected to have a child reported missing every five hours as indicated above, indicating a significant increase in kidnappings, abductions, and human trafficking.

Criminologists assist the South African Police Service (SAPS) in all instances of missing individuals and are required to be responsive and actively raise awareness. Van Aswegen describes the rescue as intricate. Elite task teams are sent to rescue victims in order to mitigate the risks associated with human-trafficking networks.

Following careful scrutiny of social media, adolescent ladies place their trust in the perpetrator. Women are typically subjected to intimate interactions as victims. Adolescent males were abducted and coerced into labour, where they endured abuse and suffered from inadequate nutrition. Unaccounted for Children Human traffickers

frequently exploit those who have been victims of drug trafficking in South Africa. Trafficking can arise as a consequence of sexual exploitation, coerced labour, illicit adoptions, and the trade of organs. Abductions related to opportunistic, parental, ransom, and human trafficking activities are also known to take place (Mndende, 2022).

According to the Department of Social Development, children are abducted for many reasons, such as for the use of traditional medicine (muthi) and for being sold to parents who are unable to conceive.

Travel analysis heavily relies on the inclusion of child travel. Their transportation and entry requirements vary from those of the general population. A tightly integrated travel destination optimizes transportation and entry for youngsters. The distance to school is a significant determinant in research on the travel patterns of school pupils.

The phenomenon of the growing distance has been elucidated by Harten and Olds (2004). The increase in distance can be ascribed to urban sprawl and the necessity for working moms to have their children close to their workplace, enabling them to conveniently combine their commute with school pick-up and drop-off. Evidence demonstrated that youngsters residing at a distance more than 2.4 kilometers from school were improbable to engage in walking as a means of transportation. Harten and Olds (2004) and Yeung, Wearing and Hills (2008) discovered that there is a non-linear correlation between the distance of commuting and the utilization of active transportation. As the distance increased, children engaged in fewer physically active journeys.

Children encounter several challenges when commuting to school such as reckless driving, deteriorating pedestrian infrastructure, lengthy commutes, fatigue, criminal activity, and inadequate safety measures. Holtmann and Van Vuuren (2007) found that children who go to school by walking or utilizing public transport are vulnerable to engaging in antisocial behaviour and criminal activities, leading to feelings of fear and anxiety. Kruger and Landman (2007) established a correlation between crime and the physical environment.

Individuals who utilized public transport and non-motorized transportation (NMT) were shown to have a higher likelihood of experiencing criminal incidents and encountering disruptive conduct compared to those who used vehicles. According to them, the considerable distances between residences increased the likelihood of being victimized when walking or using public transportation. According to Godfrey, Mazzela, Cabera and Day (1998), parents consider kidnapping and violence to be more repulsive than road traffic accidents. The majority of research has been conducted in affluent countries, disregarding the access and mobility challenges faced by kids in underdeveloped nations. This is further justification for research areas recommended in this paper. The figure below depicts the areas in Gauteng that have a high incidence of kidnappings.



Figure 2: Kidnapping Hotspots in the Gauteng Province of South Africa (Grant, 2022)

1.2.2. Why is Child Kidnapping and Abduction a Transport Safety Issue?

Child kidnappings are often not seen as a component of transportation safety, which primarily concerns the safety of transportation infrastructures in the operations of such as transportation modes as roads, trains, air travel/ aviation, and marine. Nevertheless, there exists an indirect correlation between child abductions and transportation security, as children are frequently abducted during their journeys to and from school. This underscores the need of guaranteeing the safety of children throughout their travels and adopting safety protocols and awareness initiatives. Abductions can take place when students are being transported to and from school, highlighting the importance of implementing safe protocols and providing enough monitoring in school transportation systems. Transportation safety may be improved by community awareness programmes and educational efforts that educate children and carers about personal safety while travelling. Although child kidnappings are primarily a matter of criminal activity and child safety, it is essential to focus on safety measures concerning transportation and public locations to ensure general well-being. It is imperative to address this matter in a holistic manner, taking into account both the criminal elements and the measures for ensuring transportation safety.

2. BODY OF THE PAPER

2.1 Methodology

The methodology suggested is the Threat and Security Risk Model developed by Gonçalves (2018).

2.1.1. Threat and Security Risk Model

Threats and hazards must be identified, and their potential impacts on the infrastructure must be quantified. A framework for evaluating threats, particularly those of a malicious

character as indicated below. An actor with a defined objective towards a particular resource constitutes a malicious threat (Gonçalves, 2018). An actor can be a person, a group, or a state. An actor may engage in malicious or unlawful behaviour, organised crime, or protests. The resource may include people, fear, power, money, media attention, information, privileges, and race.

The modus operandi discusses how the actor will conceal their identity; the crime is effectively committed; and the actor escapes. Hazards such as natural disasters (such as floods and fires) and accidents are included in accordance with the CIPA's definition of threats. Hazards do not apply in our case since it is malicious intent. The children may be vulnerable due to the absence of physical security measures, a delayed security response, inadequately managed information security, or low staff morale. The Swiss cheese concept is used to metaphorically describe the residual risk. The residual risk consists of threats that can penetrate various cheese slices when the holes line up. If the input risks are not effectively reduced, the residual risk may result in the manifestation of output risks. Governments may employ non-state or transnational actors to realise their strategic aims. Figure 2 and Table 1 below show the Threat and Vulnerability Model applied to the current problem.

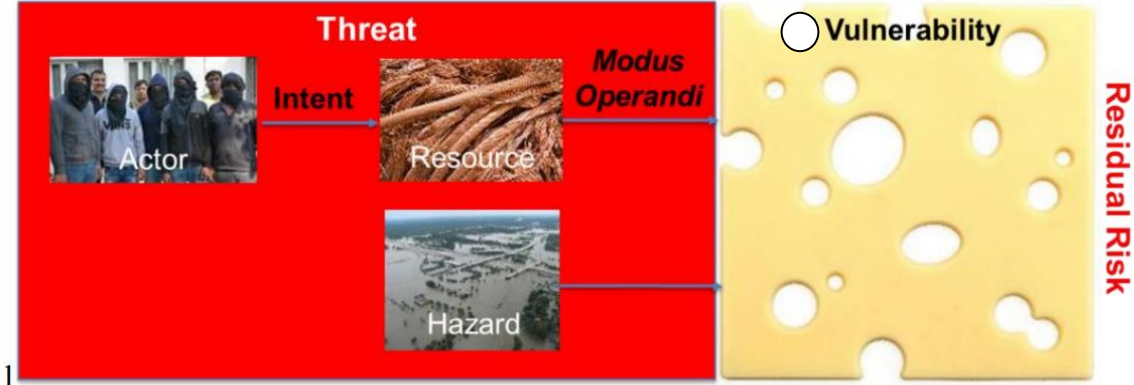


Figure 3: . Threat and vulnerability model

Table 1: Threat and vulnerability model for application to the current problem

Actors	<ul style="list-style-type: none"> -Individuals -Professional Mega-Syndicates -Small Syndicates
--------	----------------------------------------------------------------------------------------------------------------------------------

Intent	<ul style="list-style-type: none"> -Physical violence -Financial victimisation -Murder
Resource	<ul style="list-style-type: none"> -The child
Modus Operandi	<ul style="list-style-type: none"> -Deceit -Violence -Grooming in social media -High-risk lifestyle -Placing oneself at risk by going out to dangerous places resulting in the increased likelihood of victimisation
Children's Vulnerability to the threat	<ul style="list-style-type: none"> -Lack of safety systems in schools -Most studies examine the nexus between terrorism and kidnapping and investigate the mutual reinforcement between corruption and kidnapping. -Most studies only find out if kidnapping and poverty are correlated and examine the consequences of the problem. -Corruption is not strongly related to kidnapping, but they have indirect connection whereby youth political thugs served corrupt political leaders and turned out to become kidnapers, sometimes for ransom from political opponents. -Poverty is correlated with kidnapping -Most learners walk to school -Poor traffic knowledge

The pictorial below shows areas of potential research interest.

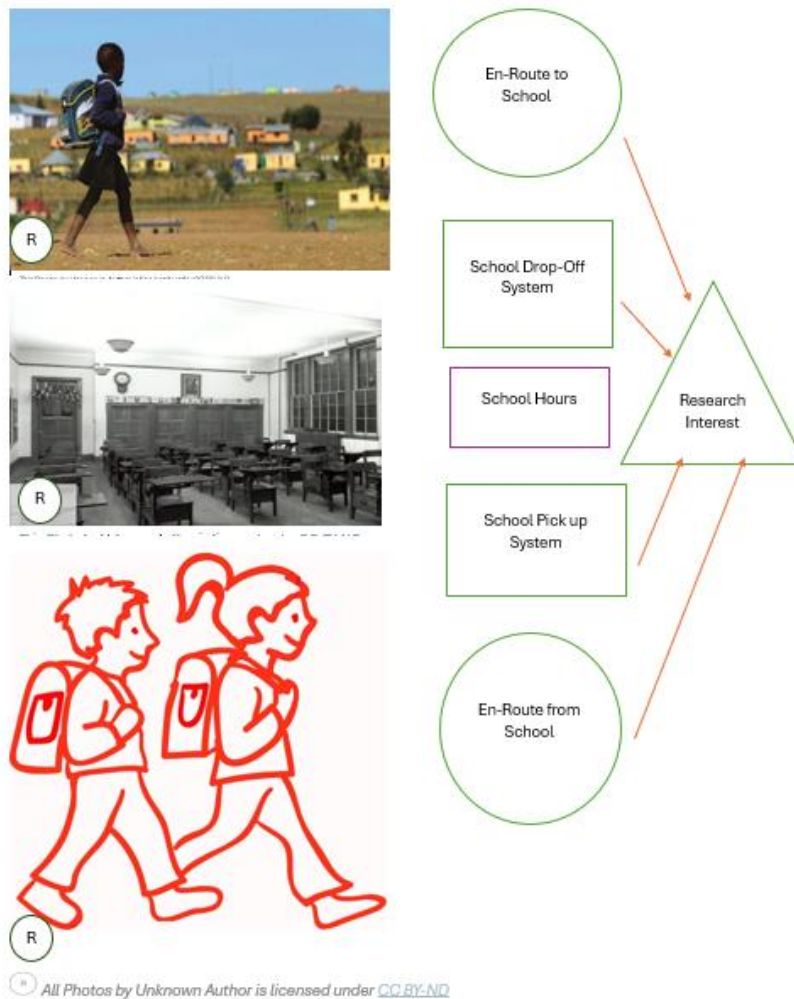


Figure 4: Potential Area of Research Interests

3. MAIN CONCLUSION AND EMERGING RECOMMENDATION

Notwithstanding these difficulties and barriers in research, there are scholars and organizations dedicated to investigating and combating child trafficking and abductions, particularly in relation to transportation to and from educational institutions. Advocacy groups, law enforcement authorities, and NGOs frequently lead efforts to enhance public consciousness, conduct research, and enforce measures for the safeguarding of children.

To effectively prevent child trafficking and abductions, it is crucial to employ a comprehensive strategy that encompasses research, policy formulation, community participation, and international collaboration. Public consciousness and the distribution of resources to facilitate investigation in this domain are pivotal for attaining a more profound comprehension and executing efficacious tactics to safeguard children.

According to the study analysis and statistics presented in the preceding chapters, it becomes evident that there is a lack of communication and information exchange regarding the regions where these criminal activities occur, which results in the victims or children not being informed about them. Hence, the demand for technology and telecommunication across different institutions is necessary to address the issue of transportation safety for our children.

To summarize, the suggested investigation on child trafficking and abductions during the journey to school tackles a crucial and sometimes disregarded facet of child security. This study seeks to enhance current knowledge by providing insights into the distinct obstacles encountered by children throughout their commutes to and from school. Through a concentrated examination of this particular environment, our aim is to reveal recurring patterns, identify elements that increase the likelihood of negative outcomes, and identify weaknesses that might guide the development of precise treatments and policy suggestions.

This study acknowledges the inherent intricacies and sensitivities involved in investigating such a delicate topic, while emphasizing the need of obtaining a thorough grasp of the situation. The objective is to cultivate a comprehensive and well-rounded viewpoint by utilizing a multidisciplinary strategy that incorporates specialists in child psychology, law enforcement, education, and social work.

This research has the potential to have an influence that goes beyond academic investigation. The results will offer significant perspectives for policymakers, educators, law enforcement agencies, and community organizations to formulate evidence-based approaches for avoiding child trafficking and abductions. The goal is to fill the gaps in existing information in order to enhance the development of preventative and intervention programmes that prioritize the safety and well-being of children.

The research places great importance on ethical issues, and utmost care will be taken to guarantee the anonymity and privacy of participants. Obtaining informed permission and adhering to the highest ethical standards will ensure the protection of the rights and dignity of all participants engaged in the study process. Moreover, the suggested research is in line with the overarching social objective of establishing more secure settings for children. The goal is to contribute to creating a safe and supportive educational environment for every kid by studying the dynamics of child trafficking and abductions on their trips to and from school.

This study is dedicated to understanding the intricate nature of child trafficking and abductions that occur when children are on their way to and from school. By doing thorough research and working together, the goal is to provide practical knowledge that may have a measurable impact on protecting the welfare of children and constructing a more secure future for everyone.

4. REFERENCES

- Beck, L. F., & Greenspan, A. I. 2008. Why don't more children walk to school. *Journal of Safety Research*, 39, 449–452
- Black, C., Collins, A., & Snell, A. 2001. Encouraging walking: The case of journey to school trips in compact urban areas. *Urban Studies*, 38(7), 1121–1141. 10.
- Dhoda, S., & Allopi, D. 2005. Travel patterns and safety of school children in the Ethekewini municipality. In *Proceedings of the 24th Southern African transport conference (SATC, 2005)*, held in Pretoria between July 11–13, 2005.
- Godfrey, D., Mazzela, T., Cabrera, I., & Day, S. 1998. Why don't children walk to school – harmonizing transportation and community goals – the challenge for today's transportation professional. ITE international conference
- Gonçalves, D. P. 2018. Understanding actors in complex security problems. *International Journal of Strategic Decision Sciences*, 9, 1-18. doi:10.4018/IJSDS.2018040101
- Grant, L. 2022. SA kidnappings surge to over 1 000 a month in 2022. [Online] Available at: <https://mq.co.za/news/2022-10-10-sa-kidnappings-surge-to-over-1-000-a-month-in-2022/> [Accessed 3 March 2023].
- Kruger, T., & Landman, K. 2007. Crime and public transport: Designing a safe journey. The challenges of implementing policy? In *Proceedings of the 26th annual SATC and exhibition Pretoria, SA, 9–12, 2007*, Tshawe.
- Macpherson, A., Roberts, I., & Pless, B. 1998. Children's exposure to traffic and pedestrian injuries. *American Journal of Public Health*, 88(12), 1840–1845.
- Masaoe, E., Mistro, R. E., & Makajuma, G. 2011. Travel behaviour in Cape Town, Dar es Salaam and Nairobi cities. In *Proceedings of the 30th Southern African transport conference*, Pretoria, 11–14 July, 2011.
- McMillan, T. E. 2007. The relative influence of urban form on a child's travel mode to school. *Transportation Research Part A*, 41(1), 69–79
- Mndende, A. 2022. News24. [Online] Available at: <https://www.news24.com/parent/child-7-12/development/health-safety/a-real-and-present-danger-missing-children-sa-shares-red-flags-to-look-out-for-and-safety-tips-20220613> [Accessed 20 February 2023].
- Muchaka, P., Behrens, R., & Abrahams, S. 2011. Learners travel behavior and parents attitude towards the use of Non-Motorized Modes: Findings from school travel surveys in Cape Town. In: *Proceedings of the 30th Southern African transport conference*, Pretoria, 11–14 July, 2011

Ogilvie, D., Egan, M., Hamilton, V., & Petticrew, M. 2004. Promoting cycling and walking as an alternative to using cars: Systematic review. *British Medical Journal*, 329, 763

Paulse, J.L. 2022. SABC News. [Online] Available at: <https://www.sabcnews.com/sabcnews/kzn-police-warns-parents-to-keep-a-close-eye-on-their-children-this-festive-season/> [Accessed 30 January 2023].

Petla, V. 2022. IOL. [Online] Available at: <https://www.iol.co.za/dailynews/opinion/theres-a-war-on-children-in-sa-statistics-show-f368914a-25a3-4880-b9ed-07f2e1b9bca0> [Accessed 21 February 2023].

Rathogwa M. 2023. A systemic approach to scholar security risks: Malicious Intent. University of the Witwatersrand Library School of Mechanical, Industrial and Aeronautical Engineering.

Yeung, J., Wearing, S., & Hills, A. P. 2008. Child transport practices and perceived barriers in active commuting to school. *Transportation Research Part A*, 42(2008), 895–900.