

**The impact of driver behavior on accident rates in a fleet management system: A case study of Century Bottling Company**

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**UGANDA CHRISTIAN  
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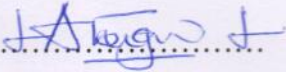
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### APPROVAL

This research work has been submitted for examination with my approval as the university supervisor.

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Date.....11/09/2023

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## **DEDICATION**

I dedicate this research to my family, friends and relatives who have loved, cared for and supported me throughout my academic journey and the process of writing this research report.

May The Almighty God bless you'll abundantly.

## **ACKNOWLEDGMENT**

I would like to express my heartfelt gratitude to all those who contributed to the successful completion of my research report titled *The Impact of Driver Behavior on Accident Rates in a Fleet Management System*, conducted at Coca-Cola Bottling Company Uganda.

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## ABSTRACT

This study investigated the impact of driver behavior on accident rates in a fleet management system, focusing on the case of Century Bottling Company Uganda. The objectives of this study were to identify effective strategies for promoting safe driving behavior, the influence of organizational safety culture on driver behavior and to examine the relationship between driver behavior and accident rates in a fleet management system.

The study employed a mixed-methods approach, which combined quantitative analysis of accident data and driver behavior metrics with qualitative insights gathered through questionnaires distributed to the fleet and distribution department of Century bottling Company. The population of our study consisted of fifty seven employees under the distribution and fleet department hence giving us a sample size of fifty two respondents who were chosen using the random sampling technique and all of them filled in the questionnaires that were distributed to them. The data collected was analyzed using MS excel and SPSS which helped in the interpretation of the findings.

The findings revealed a clear association between driver behavior and accident rates within the fleet management system identifying risky driving behaviors, such as speeding, over taking and distracted driving as significant contributors to accidents. The research findings also showed that the company had put effective strategies like rewarding of the best drivers, attaching telematics such as GPS and cameras to help with tracking of drivers' behaviors all which have helped in reducing accident rates in the company. Organizational safety culture emerged as a crucial factor in shaping driver behavior. A positive safety culture, driven by strong leadership commitment, employee involvement, effective communication, comprehensive training programs, and a system of accountability, fostered a sense of responsibility among drivers and encouraged adherence to safety guidelines. The findings also indicate a strong linear relationship between driver behavior and accident rates at century bottling company. (Correlation is significant at the 0.01 level (2-tailed)).

Based on the research findings, several recommendations were proposed to promote safe driving behaviors and these included the implementation of incentive programs to reward and reinforce safe driving practices, fostering a culture of safety through leadership commitment and involvement, enhancing communication channels to encourage the reporting of safety concerns, providing comprehensive driver training programs on defensive driving techniques and hazard perception, By adopting these strategies, the company can effectively reduce accident rates and enhance driver safety in their fleet management system.

## TABLE OF CONTENTS

|   |     |
|---|-----|
| DECLARATION.....  | i   |
| APPROVAL.....   | ii  |
| DEDICATION.....   | iii |
| ACKNOWLEDGMENT .....  | iv  |
| ABSTRACT.....   | v   |
| TABLE OF CONTENTS.....  | vi  |
| CHAPTER ONE .....   | 1   |
| INTRODUCTION.....   | 1   |
| 1.1 Introduction.....   | 1   |
| 1.2 Background of the study.....  | 1   |
| 1.3 Statement of the Problem .....  | 2   |
| 1.4 Purpose Of The Study.....   | 2   |
| 1.5 The Specific Objectives.....  | 2   |
| 1.6 Research Questions .....  | 2   |
| 1.7 Scope of the Study .....  | 3   |
| 1.8 Justifications of the Study .....   | 3   |
| CHAPTER TWO .....   | 5   |
| LITERATURE REVIEW .....   | 5   |
| 2.1 Introduction.....   | 5   |
| 2.2 Empirical review .....  | 5   |
| 2.2.1 The Effective strategies for promoting safe driving behaviors within a fleet management system at century bottling company..... | 5   |
| 2.2.2 The influence of organizational safety culture on driver behavior at Century Bottling Company.....                              | 9   |
| 2.2.3 The relationship between driver behavior and accident rates in a fleet management system at Century Bottling Company.....       | 12  |
| 2.2.3 Link between Driver Behavior and Accident Rates .....   | 17  |
| 2.3 Summary of literature .....   | 18  |
| CHAPTER THREE .....   | 19  |
| METHODOLOGY .....   | 19  |
| 3.0 Introduction.....   | 19  |
| 3.1 Research Design .....   | 19  |
| 3.2 Study Population.....   | 19  |

|       |  |           |
|-------|--|-----------|
| 3.3   | Sample size.....   | 19        |
| 3.4   | Sampling Techniques.....   | 20        |
| 3.5   | Sources of Data.....   | 20        |
| 3.6   | Methods of Data Collection.....  | 20        |
| 3.6.1 | Questionnaire.....   | 20        |
| 3.7   | Data collection instruments.....   | 20        |
| 3.8   | Data Collection Procedures.....  | 20        |
| 3.9   | Data Analysis.....   | 20        |
| 3.10  | Ethical Considerations.....  | 20        |
| 3.11  | Limitations of The Study.....  | 21        |
|       | Conclusion.....  | 21        |
|       | <b>CHAPTER FOUR.....</b>   | <b>22</b> |
|       | <b>DATA ANALYSIS, INTERPRETATION AND PRESENTATION OF THE FINDINGS.....</b>   | <b>22</b> |
| 4.0   | <b>INTRODUCTION.....</b>   | <b>22</b> |
| 4.1   | <b>FINDINGS ON BIO DATA OF THE RESPONDENTS.....</b>  | <b>22</b> |
| 4.1.1 | Findings on the gender of the respondents.....   | 22        |
| 4.1.2 | Findings on the age bracket of the respondent.....   | 23        |
| 4.1.3 | Findings on the level of education of respondents.....   | 23        |
| 4.1.4 | Findings on the marital status of Respondents.....   | 24        |
| 4.1.5 | Findings on the Employment Status of respondents.....  | 24        |
| 4.1.6 | Findings on the Years of Driving Experience of Respondents.....  | 25        |
| 4.1.7 | Findings on the department of respondents.....   | 25        |
| 4.2   | <b>FINDINGS ON THE ACCIDENT HISTORY OF RESPONDENTS.....</b>  | <b>26</b> |
| 4.2.1 | Findings on Respondents who have been involved in accidents while driving for work purposes.....                         | 26        |
| 4.2.2 | Findings on the Causes of the Accidents.....   | 26        |
| 4.2.3 | Findings on the severity of the Accidents.....   | 27        |
| 4.2.4 | Findings on the fatalities and injuries recorded.....  | 28        |
| 4.3.0 | <b>FINDINGS ON THE EFFECTIVE STRATEGIES FOR PROMOTING SAFE DRIVING BEHAVIOR.....</b>                                     | <b>29</b> |
| 4.4   | <b>FINDINGS ON THE INFLUENCE OF ORGANIZATIONAL SAFETY CULTURE ON DRIVER BEHAVIOR.....</b>                                | <b>31</b> |
| 4.5   | <b>FINDINGS ON THE RELATIONSHIP BETWEEN DRIVER BEHAVIOR AND ACCIDENT RATES.....</b>                                      | <b>33</b> |
| 4.6   | Suggestions from respondents on how their organization can improve driver safety within the fleet management system..... | 39        |
|       | <b>CHAPTER FIVE.....</b>   | <b>40</b> |

|  |           |
|--|-----------|
| <b>SUMMARY OF FINDINGS, CONCLUSION, RECOMMENDATIONS AND AREAS OF FURTHER RESEARCH.....</b> | <b>40</b> |
| <b>5.0 SUMMARY AND DISCUSSION OF THE FINDINGS.....</b>                                     | <b>40</b> |
| <b>5.1 Conclusion .....</b>  | <b>43</b> |
| <b>5.2 Recommendations .....</b>   | <b>44</b> |
| <b>5.3 Areas of further research .....</b>   | <b>46</b> |
| <b>REFERENCES.....</b>   | <b>47</b> |
| <b>APPENDIX.....</b>   | <b>50</b> |
| <b>QUESTIONNAIRE.....</b>  | <b>51</b> |

# CHAPTER ONE

## INTRODUCTION

### **1.1 Introduction**

This chapter contains the background of the study, statement of problem, objectives of study, research questions, scope of the study and significance of the study.

### **1.2 Background of the study**

In a fleet management system, understanding the impact of driver behavior on accident rates is crucial for ensuring the safety and efficiency of the fleet. Driver behavior plays a significant role in determining the likelihood of accidents and the overall risk associated with operating a fleet of vehicles. By examining how driver behavior impacts accident rates, fleet managers can implement effective strategies to promote safe driving practices, reduce accidents, and mitigate associated costs. Driver behavior encompasses a wide range of factors, including speed, adherence to traffic rules, distracted driving, aggressive maneuvers, fatigue, and the use of safety features. Each of these behaviors can directly or indirectly contribute to the occurrence of accidents within a fleet. Analyzing driver behavior data, such as telematics data, vehicle diagnostics, and driver feedback, allows fleet managers to gain insights into the driving habits and patterns of individual drivers, as well as the fleet as a whole. Accident rates, on the other hand, reflect the frequency and severity of accidents within the fleet. These rates provide a quantitative measure of the safety performance of the fleet and serve as an important indicator for evaluating the effectiveness of safety initiatives. By studying the relationship between driver behavior and accident rates, fleet managers can identify high-risk drivers, detect patterns of risky behavior, and implement targeted interventions to reduce accidents and improve overall safety. The impact of driver behavior on accident rates is complex and multifaceted. Certain driver behaviors, such as speeding or distracted driving, are well-known risk factors that increase the likelihood of accidents. Speeding, for instance, reduces the driver's ability to react to unexpected events and extends the stopping distance, increasing the severity of potential collisions. Similarly, distracted driving, which includes activities like texting, talking on the phone, or using in-vehicle technologies, diverts the driver's attention from the road and significantly raises the risk of accidents. Moreover, driver behavior can also influence other factors that contribute to accident rates, such as vehicle maintenance and fuel consumption. Aggressive driving behaviors, like harsh acceleration or braking, not only increase the likelihood of accidents but also accelerate vehicle wear and tear, leading to increased maintenance costs and decreased

reliability. Additionally, aggressive driving tends to result in poor fuel efficiency, increasing operational expenses for the fleet. In conclusion, the relationship between driver behavior and accident rates in a fleet management system is undeniable. By analyzing driver behavior data and correlating it with accident rates, fleet managers can gain valuable insights to develop targeted training programs, establish safety policies, and implement preventive measures to reduce accidents. Promoting safe driving practices and addressing risky behaviors not only enhances the safety of drivers and other road users but also contributes to cost savings, improved operational efficiency, and overall fleet performance.

### **1.3 Statement of the Problem**

Road accidents are a significant concern for fleet managers, not only due to the potential loss of lives and property damage but also because of the financial burden they impose. The World Health Organization (WHO) has ranked Uganda among the countries with the highest traffic death rates, estimated at 29 car deaths per 100,000 people. This figure is very concerning because it exceeds the 24.1 per 100,000 people for the African region and 18.0 per 100,000 people global average for deaths, respectively. Uganda as a whole has seen a marked increase in road accidents, which have greatly contributed to mortality, injury, trauma and disability (Uganda Police Force Data-base, 2022). Therefore, this research aims at investigating the impact of driver behavior on accident rates in a fleet management system.

### **1.4 Purpose Of The Study**

The purpose of the study was to investigate the impact of driver behavior on accident rates in a fleet management system at Century Bottling Company.

### **1.5 The Specific Objectives**

- i. To identify effective strategies for promoting safe driving behaviors within a fleet management system at Century Bottling Company.
- ii. To examine the influence of organizational safety culture on driver behavior at Century Bottling Company.
- iii. To assess the relationship between driver behavior and accident rates in a fleet management system at Century Bottling Company.

### **1.6 Research Questions**

- i. What are the effective strategies that should be implemented to promote safe driving behaviors in a fleet management system?

- ii. What is the influence of organizational safety culture on driver behavior at Century Bottling Company?
- iii. What is the relationship between driver behavior and accident rates in a fleet management system?

### **1.7 Scope of the Study**

The study was limited to the impacts of driver behavior on accident rates in a fleet management system with accident rates being the dependent variable and driver behavior as the independent variable. The study was conducted at Namanve Century Bottling Company plant under Coca-Cola international in central Uganda, which lies in Kira municipality, Wakiso District with portions in Mukono Municipality, in Mukono District, Located at Plot Number 2420 - Jinja road.

### **1.8 Justifications of the Study**

To the management of Century Bottling Company, This study provided valuable insights to the management of Century Bottling Company regarding the impact of driver behavior on accident rates in their fleet management system. By understanding the relationship between driver behavior and accidents, management identified the key areas for improvement and implemented targeted strategies to enhance driver safety. The findings highlighted the importance of promoting safe driving behaviors and cultivating a positive safety culture within the organization. Management can use these findings to make informed decisions regarding the implementation of technology-based interventions, the development of training programs, the establishment of incentive schemes, and the enforcement of safety policies. By adopting the recommended strategies, management can effectively reduce accident rates, minimize fleet-related costs, and protect the company's reputation.

To further researchers, this study contributed to the existing body of knowledge on driver behavior and accident rates in fleet management systems. It provided a comprehensive analysis of the specific context of Century Bottling Company, adding depth and specificity to the literature. Further researchers can build upon this study by exploring related areas such as the effectiveness of specific technology-based interventions, the role of leadership in promoting safe driving behaviors, or the impact of organizational safety culture on other performance metrics. The research findings and methodologies presented in this study serve as a foundation for future research endeavors, enabling researchers to delve deeper into the complexities of driver behavior and accident rates in fleet management systems. To future

Researchers, the study will add knowledge to the fleet management discipline, and would also help them in carrying out further and related studies.

To policy makers, The findings of this study have had implications for policy makers involved in road safety and fleet management regulations. The research highlighted the significance of driver behavior in contributing to accident rates and emphasized the need for targeted interventions to promote safe driving behaviors. Policy makers can utilize these findings to inform the development of guidelines and regulations aimed at improving road safety within fleet management systems. The study's recommendations regarding the implementation of technology-based interventions, the establishment of incentive programs, and the fostering of a positive safety culture can be incorporated into policy frameworks to enhance driver safety and reduce accident rates at a broader level. Additionally, policy makers can consider the research findings when designing training programs and initiatives to enhance driver skills and knowledge.

## CHAPTER TWO

### LITERATURE REVIEW

#### **2.1 Introduction**

This chapter provides a comprehensive review of the existing literature on the impact of driver behavior on accident rates in a fleet management system. It aims to establish a theoretical foundation for understanding the relationship between driver behavior and safety outcomes. The literature review explores key concepts, theories, and empirical studies that contribute to our understanding of this topic. By synthesizing and analyzing the relevant literature, this chapter sets the stage for the subsequent chapters of the dissertation.

#### **2.2 Empirical review**

This section covers empirical literature on the study objectives:

##### **2.2.1 The Effective strategies for promoting safe driving behaviors within a fleet management system at century bottling company.**

Promoting safe driving behaviors within a fleet management system is of paramount importance to enhance road safety, reduce accidents, and protect both drivers and other road users. This chapter presents a comprehensive literature review on effective strategies for promoting safe driving behaviors within a fleet management system. The review encompasses various dimensions, including driver training programs, technology-based interventions, incentives and rewards, and the role of organizational culture and leadership. By identifying and understanding these strategies, fleet management systems can implement targeted interventions to foster a culture of safety and encourage drivers to adopt safe driving practices.

How this can be realized can be through driver training programs. Driver training programs play a pivotal role in promoting safe driving behaviors. Such programs provide drivers with the necessary knowledge, skills, and attitudes to make informed decisions on the road. According to Clarke et al. (2017), well-designed training programs contribute to enhancing driver awareness, hazard perception, and risk management. These programs typically encompass defensive driving techniques, proper vehicle handling, understanding traffic rules and regulations, and the importance of maintaining safe distances. Research by Lu et al. (2020) emphasizes the need for comprehensive and ongoing training programs that are tailored to the specific needs of fleet drivers. Continuous training ensures that drivers remain up-to-date with the latest safety practices and reinforces the importance of safe driving behaviors.

Through Technology-Based Interventions. The integration of technology-based interventions has emerged as a promising approach to promoting safe driving behaviors within fleet management systems. Advanced Driver Assistance Systems (ADAS) and telematics technologies have proven effective in monitoring driver behavior, providing real-time feedback, and facilitating corrective actions. ADAS features such as lane departure warning systems, forward collision warning systems, and adaptive cruise control contribute to mitigating common driving risks (Haque et al., 2019). Furthermore, telematics systems enable fleet managers to monitor drivers' speed, acceleration, braking, and adherence to traffic rules. This data can be used to provide personalized feedback and coaching to drivers, promoting self-awareness and facilitating behavior modification (Clarke et al., 2017). The impact of ADAS on reducing accidents has been well-documented. Studies have shown that these technologies contribute to mitigating common driving risks, such as unintentional lane departures and rear-end collisions (Haque et al., 2019). Lane departure warning systems, for instance, alert drivers when they unintentionally drift out of their lane, thereby preventing potential collisions. Forward collision warning systems detect potential front-end collisions and provide visual and audible alerts to prompt drivers to take evasive actions. Adaptive cruise control systems, on the other hand, automatically adjust the vehicle's speed to maintain a safe distance from the preceding vehicle. These ADAS features significantly enhance driver awareness and help prevent accidents caused by driver inattention or misjudgment. Telematics systems complement ADAS by providing fleet managers with valuable insights into driver behavior and performance (Clarke et al., 2017). By monitoring parameters such as speed, acceleration, braking, and adherence to traffic rules, telematics systems offer a comprehensive view of drivers' actions and compliance with safe driving practices. The data collected through telematics systems can be used to provide personalized feedback and coaching to drivers, promoting self-awareness and facilitating behavior modification. By analyzing driving patterns and identifying areas for improvement, fleet managers can design targeted training programs and interventions to address specific driver behaviors that may increase the risk of accidents. The combination of ADAS and telematics technologies presents a powerful approach to enhancing safety within fleet management systems. ADAS features act as an immediate safety net, alerting drivers to potential hazards and helping them avoid collisions. Telematics systems, on the other hand, offer a proactive approach by providing ongoing monitoring and feedback to drivers, enabling them to develop safer driving habits and make more informed decisions on the road. So, the integration of technology-based interventions, including ADAS and telematics systems, has revolutionized

the way fleet management systems approach driver behavior and safety. These interventions have proven effective in monitoring driver behavior, providing real-time feedback, and facilitating corrective actions. The utilization of ADAS features contributes to mitigating common driving risks, while telematics systems enable fleet managers to monitor and analyze driver performance. By leveraging these technologies, fleet management systems can create a safer driving environment, reduce accident rates, and enhance overall road safety.

Incentives and rewards have been recognized as motivational tools to promote safe driving behaviors. By implementing incentive programs, fleet management systems can positively reinforce desired behaviors and create a culture of safety. Incentives can take various forms, including financial rewards, recognition, and career advancement opportunities. Studies by Vaa et al. (2017) and García-Herrero et al. (2019) indicate that well-designed incentive programs have the potential to significantly improve driver compliance with safety guidelines and reduce risky behaviors. However, it is crucial to ensure that the incentives are aligned with the organization's safety objectives and consistently applied to maintain their effectiveness. These incentives can take various forms, including financial rewards, recognition, and career advancement opportunities, aiming to encourage drivers to adhere to safety guidelines and reduce risky behaviors. Research conducted by Vaa et al. (2017) and García-Herrero et al. (2019) emphasizes the potential of incentive programs in improving driver compliance with safety measures and reducing unsafe behaviors. Financial incentives, such as bonuses or performance-based rewards, can serve as tangible rewards that motivate drivers to prioritize safety while on the road. Monetary rewards provide drivers with a tangible benefit and can be effective in promoting safer driving practices. Similarly, non-monetary incentives such as recognition programs, public acknowledgments, or awards can enhance drivers' sense of accomplishment and encourage them to maintain safe driving behaviors. However, it is essential to ensure that the incentives are carefully designed and aligned with the organization's safety objectives. The effectiveness of incentive programs depends on their relevance, fairness, and consistency in application. Incentives should be based on objective criteria and clearly communicated to drivers, emphasizing the importance of safe driving behaviors. Furthermore, it is crucial to regularly evaluate and update the incentive programs to ensure their continued effectiveness and address any potential unintended consequences. It is worth noting that while incentives can be effective in motivating drivers, they should not replace the establishment of a strong safety culture within the organization. Incentives work best when they are supported by a comprehensive safety

culture that emphasizes the value of safety, encourages open communication, and promotes a shared responsibility for safe driving practices among all stakeholders (Cooper et al., 2018). The presence of a positive safety culture provides a solid foundation for the effectiveness of incentive programs by creating an environment where safe driving behaviors are not only encouraged but also expected.

The organizational culture and leadership within a fleet management system play a pivotal role in shaping driver behavior and ultimately influencing accident rates. A positive safety culture, as highlighted by Cooper et al. (2018), emphasizes the value of safe driving practices and creates an environment where safety is a top priority. In such a culture, open communication about safety concerns is encouraged, allowing drivers to voice their opinions and report potential hazards or risks without fear of retribution. This proactive approach to safety fosters a sense of responsibility among drivers, instilling a shared commitment to safe driving practices. Effective leadership is crucial in establishing and maintaining a positive safety culture within the organization. Murray et al. (2016) underscore the significance of leadership in creating a safety-conscious environment. Strong leadership commitment, active involvement, and role modeling by managers and supervisors are essential elements for shaping driver behavior and cultivating a culture of safety. When leaders demonstrate their dedication to safety by adhering to safety protocols, engaging in safe driving practices, and actively promoting and supporting safety initiatives, they set an example for drivers to follow. On the other hand, leadership involvement extends beyond mere words and includes providing necessary resources and support for safety initiatives. Managers and supervisors should invest in comprehensive training programs that address safe driving practices, defensive driving techniques, and hazard awareness. By providing drivers with the necessary knowledge and skills, leaders empower them to make informed decisions on the road and respond effectively to challenging situations. Ongoing training and professional development opportunities also demonstrate a commitment to continuous improvement and reinforce the organization's safety culture. Furthermore, leaders should establish clear expectations and guidelines regarding safe driving behaviors. By setting performance standards, enforcing policies, and regularly monitoring driver performance, leaders send a clear message that safe driving is a priority. They can implement mechanisms to assess and provide feedback on driver behavior, such as driver performance evaluations, incident reporting systems, and regular safety meetings. These practices not only hold drivers accountable but also provide opportunities for recognition and reinforcement of safe driving behaviors.

### **2.2.2 The influence of organizational safety culture on driver behavior at Century Bottling Company**

Organizational safety culture plays a fundamental role in shaping driver behavior and has a profound impact on accident rates within fleet management systems. It encompasses shared values, beliefs, and practices regarding safety within an organization, creating an environment that prioritizes safe driving practices. This culture consists of various components that directly influence driver behavior. Leadership commitment, as highlighted by Cooper, Phillips, and Maio (2018), is a crucial component that sets the tone for safety within the organization. When leaders demonstrate a strong commitment to safety, they establish expectations and norms that promote safe driving practices among employees. Leadership commitment involves not only verbal support but also active engagement and participation in safety initiatives. By actively involving themselves in safety-related activities, leaders serve as role models for employees, influencing their behavior and reinforcing the importance of safe driving practices. When leaders consistently demonstrate safe driving behaviors, such as adhering to speed limits, wearing seat belts, and obeying traffic laws, they send a powerful message to employees that safety is a top priority. Another component of organizational safety culture that influences driver behavior is employee involvement. When employees are actively engaged in safety-related decision-making processes, they develop a sense of ownership and responsibility for their own safety and the safety of others. This involvement can take various forms, including participation in safety committees, involvement in safety training programs, and the opportunity to provide input and feedback on safety policies and procedures. By involving employees in these processes, organizations foster a culture where safety is a shared responsibility, motivating drivers to actively participate in safe driving practices. Safety policies and procedures are also integral to organizational safety culture as they provide clear guidelines and expectations for safe driving practices. Well-defined policies and procedures outline safety protocols, establish standards, and reinforce the organization's commitment to safety. These policies and procedures should be communicated effectively to all employees and consistently enforced, promoting a culture of compliance with safety regulations. Therefore, by cultivating a positive safety culture, organizations can create an environment where safe driving is valued, encouraged, and prioritized, leading to a reduction in accident rates and an overall improvement in road safety.

Research has consistently demonstrated that a positive safety culture within an organization exerts a significant influence on driver behavior and subsequently impacts accident rates in

fleet management systems. Organizations that prioritize safety and foster a strong safety culture are more likely to have drivers who consistently adhere to safety guidelines, engage in defensive driving practices, and demonstrate a heightened sense of responsibility towards road safety (Clarke et al., 2017). One crucial factor contributing to a positive safety culture is leadership commitment and involvement in safety initiatives. When leaders actively demonstrate their commitment to safety and actively engage in safety-related activities, they establish a clear expectation and set the tone for safety within the organization (Murray et al., 2016). Leaders serve as role models for employees, influencing their behavior and attitudes towards safe driving practices. By consistently displaying safe driving behaviors, such as obeying traffic laws, wearing seat belts, and following speed limits, leaders send a powerful message that safety is a top priority. Moreover, organizations with a strong safety culture prioritize continuous improvement and emphasize the importance of ongoing training and education for drivers. Comprehensive training programs that address defensive driving techniques, hazard perception, and the latest safety practices are essential for equipping drivers with the necessary knowledge and skills to make informed decisions on the road. Regular training sessions ensure that drivers stay updated on emerging safety regulations, technologies, and best practices, reinforcing a safety-conscious mindset (Haque et al., 2019). Accountability is another crucial aspect of a positive safety culture. Organizations must establish a system of accountability that holds drivers responsible for their actions on the road. This can involve regular monitoring of driver performance, conducting safety audits, and providing constructive feedback. When drivers understand that their actions have consequences and are aware of the organization's commitment to safety, they are more likely to prioritize safe driving behaviors and actively contribute to reducing accident rates (Martínez et al., 2018). Therefore, a positive safety culture within an organization significantly impacts driver behavior and plays a crucial role in reducing accident rates in fleet management systems. Leadership commitment, involvement in safety initiatives, comprehensive training programs, effective communication, and a system of accountability are all essential components of a robust safety culture. By fostering a culture that values safety, organizations can create an environment where drivers consistently adhere to safety guidelines, engage in defensive driving practices, and contribute to overall road safety.

Effective communication and comprehensive training programs are essential components of a strong safety culture within a fleet management system, as they play a crucial role in shaping driver behavior and reducing accident rates. Clear and open communication channels enable

the exchange of safety-related information, facilitate the reporting of safety concerns, and foster a sense of shared responsibility among drivers (Cooper et al., 2018). In order to promote safe driving behaviors, organizations must establish effective communication channels that enable the timely dissemination of safety policies, procedures, and updates. By providing drivers with clear and concise information about safety guidelines, organizations can ensure that drivers are well-informed and equipped to make safe decisions on the road. Regular safety meetings, safety bulletins, and safety reminders serve as valuable tools for reinforcing safe driving practices and maintaining safety as a priority (Cooper et al., 2018). Furthermore, comprehensive training programs are vital for enhancing driver skills and knowledge, ultimately leading to safer driving behaviors. Training programs that address defensive driving techniques, hazard perception, and adherence to safety measures can effectively equip drivers with the necessary tools to mitigate risks and respond appropriately in challenging driving situations (Lu et al., 2020). Through these programs, drivers can learn how to anticipate and avoid potential hazards, recognize the importance of following safety guidelines, and develop a proactive approach to road safety. The training should focus on defensive driving techniques, which emphasize anticipating and responding to potential hazards, maintaining safe following distances, and being mindful of other road users. Hazard perception training aims to enhance drivers' ability to identify potential risks and make quick decisions to avoid accidents. By increasing drivers' awareness of potential hazards, organizations can significantly reduce the occurrence of accidents caused by driver error (Lu et al., 2020). Additionally, training programs should emphasize the importance of adhering to safety measures such as wearing seat belts, obeying traffic laws, and avoiding distracted driving behaviors. Drivers need to understand the potential consequences of neglecting these safety measures and recognize their responsibility in maintaining a safe driving environment. Regular training sessions, refresher courses, and ongoing education can reinforce these messages and help drivers stay up-to-date with the latest safety regulations and best practices (Cooper et al., 2018).

Employee involvement in safety initiatives is a crucial aspect of cultivating a positive safety culture within a fleet management system, as it significantly influences driver behavior and contributes to reducing accident rates. When drivers are actively engaged in safety-related decision-making processes and have a sense of ownership, they are more likely to exhibit safe driving behaviors (Clarke et al., 2017). Organizations that prioritize employee involvement in safety initiatives recognize the value of incorporating the expertise and

perspectives of drivers into the development and implementation of safety programs. This involvement can take various forms, including soliciting feedback, conducting safety meetings, establishing safety committees, and involving drivers in the formulation of safety policies and procedures. By actively involving drivers in safety-related activities, organizations create a sense of shared responsibility and empower drivers to take an active role in promoting safe driving behaviors (Clarke et al., 2017). Furthermore, organizations that establish clear expectations, enforce safety policies, and hold drivers accountable for their actions contribute to a safer driving environment. It is essential to communicate and reinforce safety expectations to drivers, ensuring they understand the importance of adhering to safety guidelines and the potential consequences of non-compliance. By setting clear expectations, organizations provide a framework for safe driving behaviors and establish a baseline for performance evaluation (Cooper et al., 2018). Enforcing safety policies involves monitoring driver performance, conducting regular safety audits, and providing constructive feedback to drivers. By systematically evaluating driver behavior and identifying areas for improvement, organizations can proactively address potential risks and implement targeted interventions. Timely feedback and coaching are valuable tools for supporting drivers in developing and maintaining safe driving habits. Additionally, organizations that consistently hold drivers accountable for their actions demonstrate their commitment to safety and send a strong message that safety is a top priority (Cooper et al., 2018). Therefore, employee involvement in safety initiatives and clear expectations, enforcement of safety policies, and driver accountability are critical factors in promoting safe driving behaviors within a fleet management system. By actively engaging drivers in safety-related decision-making processes and establishing a culture of shared responsibility, organizations can foster a positive safety culture that significantly influences driver behavior. Furthermore, by setting clear expectations, enforcing safety policies, and holding drivers accountable, organizations create a safer driving environment and demonstrate their commitment to prioritizing safety on the road.

### **2.2.3 The relationship between driver behavior and accident rates in a fleet management system at Century Bottling Company.**

Driver behavior is a critical factor influencing accident rates in fleet management systems. Numerous studies have emphasized the significance of driver behavior in road safety and accident prevention (Smith et al., 2015; Liu et al., 2018; Zhang et al., 2020). Unsafe driving practices, such as speeding, aggressive driving, distracted driving, and fatigue, have been

identified as contributing factors to accidents (Rasouli et al., 2019; Barua et al., 2020). Driver behavior encompasses a wide range of actions, attitudes, and decision-making processes exhibited by drivers on the road (Chen et al., 2016). It can be categorized into various dimensions, including speeding, following distance, lane discipline, use of indicators, adherence to traffic rules, and compliance with safety measures (El-Basyouny et al., 2014; Jha et al., 2017).

Several factors have been identified as influencing driver behavior in fleet management systems. These include individual characteristics, such as age, gender, and experience (Murray et al., 2016), as well as environmental factors like road conditions, traffic congestion, and weather conditions (Haque et al., 2019). Organizational factors, such as management policies, training programs, and safety culture, also play a significant role in shaping driver behavior (Clarke et al., 2017; Lu et al., 2020).

Individual characteristics have been extensively studied for their significant influence on driver behavior within fleet management systems. Murray et al. (2016) conducted a comprehensive research study highlighting the role of age, gender, and experience in shaping driving practices. Younger drivers, characterized by their relative lack of experience and higher propensity for sensation-seeking, tend to exhibit riskier behaviors on the road (Barkley et al., 2017). In their quest for excitement and novelty, young drivers may engage in speeding, aggressive maneuvers, and other reckless driving practices. This behavior can be attributed to their limited driving experience, as they are still developing their skills and risk perception abilities. Furthermore, younger drivers often underestimate the potential consequences of their actions, leading to a higher likelihood of accidents. On the other hand, older drivers display distinct characteristics that influence their driving behavior. While they tend to exhibit more cautious driving patterns, they face challenges associated with reduced sensory and cognitive abilities. Evans (2019) highlights the decline in sensory functions such as vision, hearing, and reaction time, which can impact their driving performance. Older drivers may adopt compensatory strategies such as reducing driving speed and avoiding high-density traffic areas. However, these adjustments may not fully offset the age-related decline in cognitive abilities, making older drivers more vulnerable to errors and slower in responding to unexpected situations.

Gender differences have also been a subject of research in relation to driver behavior. Özkan et al. (2018) note that male drivers generally exhibit more aggressive driving tendencies

compared to their female counterparts. This gender disparity can be attributed to a combination of biological, social, and cultural factors. Biological differences, such as hormonal influences, may contribute to higher levels of aggression among males. Social and cultural factors, including societal expectations and gender roles, may also play a role in shaping gender-specific driving behaviors. However, it is important to note that individual differences within genders are significant, and not all male drivers exhibit aggressive behaviors, nor do all female drivers display cautious driving patterns. Understanding the influence of individual characteristics on driver behavior is crucial for developing targeted interventions and promoting safer driving practices within fleet management systems. By considering age-specific training programs, tailored risk communication strategies, and implementing measures to address the specific challenges faced by older drivers, fleet management companies can effectively mitigate the impact of these individual characteristics on accident rates. Similarly, addressing gender-specific driving behaviors through education, awareness campaigns, and targeted interventions can contribute to creating a safer driving environment for all road users.

Environmental factors play a significant role in influencing driver behavior within fleet management systems, ultimately affecting accident rates. Haque et al. (2019) highlight the impact of road conditions on driver behavior. Infrastructure quality, including factors such as road design, signage visibility, and maintenance, can greatly influence how drivers behave on the road. Well-maintained roads with clear signage and visible road markings contribute to safer driving practices by providing drivers with essential information and guidance. On the other hand, poorly maintained roads with inadequate signage may lead to confusion, increasing the likelihood of accidents. Hazardous weather conditions also have a profound impact on driver behavior. Sarkar et al. (2020) emphasize that adverse weather conditions, such as heavy rain, fog, or snow, demand more cautious driving practices and require drivers to be more attentive and adaptive. Reduced visibility, slippery road surfaces, and unpredictable conditions pose significant challenges to drivers, necessitating adjustments in speed, following distance, and overall driving behavior to ensure safety. Traffic congestion also significantly influences driver behavior. Zhao et al. (2019) point out that heavy traffic can lead to increased frustration and impatience among drivers, which can result in aggressive driving behaviors. Congested road conditions with frequent stop-and-go traffic create a stressful environment for drivers, potentially leading to aggressive maneuvers such as tailgating, lane weaving, and risky overtaking. Moreover, traffic congestion often leads to

longer travel times, which can further exacerbate driver frustration and impatience. Therefore, addressing these environmental factors is crucial for promoting safe driving behaviors and reducing accident rates within fleet management systems. Investments in improving road infrastructure, including regular maintenance and ensuring clear signage visibility, can contribute to creating a safer driving environment. Implementing effective traffic management strategies, such as intelligent transportation systems and congestion reduction measures, can help alleviate traffic congestion and mitigate the associated aggressive driving behaviors. Additionally, educating drivers about the importance of adjusting their driving behavior in response to adverse weather conditions and providing guidance on safe driving practices in such conditions can enhance overall road safety.

Organizational factors within fleet management systems play a crucial role in shaping driver behavior. Management policies and procedures have a significant impact on driver practices (Clarke et al., 2017). Clear guidelines regarding speed limits, rest breaks, and adherence to traffic rules contribute to a safer driving culture within the organization. Effective training programs that address defensive driving techniques, hazard perception, and the importance of following safety measures are essential in shaping driver behavior (Lu et al., 2020). Additionally, the safety culture within an organization has a profound influence on driver behavior. A positive safety culture emphasizes the value of safe driving practices, encourages open communication about safety concerns, and promotes a sense of responsibility among drivers (Cooper et al., 2018) because when drivers are provided with clear expectations and guidelines, they are more likely to adhere to safe driving practices. Effective training programs also play a vital role in shaping driver behavior within fleet management systems. Lu et al. (2020) emphasize the significance of comprehensive training in promoting safe driving practices. Training programs that address defensive driving techniques, hazard perception, and the importance of following safety measures provide drivers with the necessary knowledge and skills to make informed decisions on the road. Such programs enhance driver awareness, risk perception, and decision-making abilities, which can contribute to a reduction in accident rates. Regular and updated training programs help drivers stay up-to-date with best practices and reinforce the importance of safety. On the other hand, the safety culture within an organization is another crucial organizational factor that influences driver behavior. Cooper et al. (2018) define safety culture as the shared values, beliefs, attitudes, and norms regarding safety within an organization. A positive safety culture places a strong emphasis on safe driving practices and creates an environment that

encourages open communication about safety concerns. When drivers feel supported and empowered to voice safety-related issues, it fosters a sense of responsibility and accountability among them. A positive safety culture also promotes continuous improvement and encourages drivers to actively participate in safety initiatives and programs. Therefore, to effectively shape driver behavior and reduce accident rates, fleet management systems need to prioritize the development of clear management policies and procedures, provide comprehensive and ongoing training programs, and foster a positive safety culture. By implementing these organizational factors, companies can create an environment where safe driving practices are valued and encouraged. This, in turn, can lead to a reduction in accidents, increased driver compliance with safety guidelines, and ultimately a safer road environment for all.

Psychological factors play a significant role in shaping driver behavior within fleet management systems. Extensive research has demonstrated that factors such as personality traits, attitudes, and risk perception have a profound influence on how individuals behave on the road. Özkan et al. (2018) and Reason et al. (2010) highlight the impact of these psychological factors on driver behavior. One notable factor is personality traits, with studies indicating that individuals with a sensation-seeking personality may be more inclined to engage in risky driving behaviors (Jonah, 2014). Sensation seekers seek excitement and novel experiences, which can manifest in behaviors such as speeding, aggressive driving, and taking unnecessary risks on the road. Attitudes towards safety, traffic regulations, and risk perception also significantly influence driver behavior. Yan et al. (2021) emphasize the role of attitudes in driving behavior. Drivers' attitudes towards safety, their belief in the importance of adhering to traffic regulations, and their perception of the risks associated with certain behaviors can shape their decision-making while driving. Positive attitudes towards safety encourage drivers to prioritize cautious and responsible driving practices. Conversely, negative attitudes or disregard for traffic regulations may lead to riskier behaviors and a higher likelihood of accidents. Moreover, risk perception plays a critical role in driver behavior. Individuals differ in how they perceive and assess risks while driving. Some drivers may have a heightened perception of risks and, as a result, exhibit more cautious driving practices. Others may underestimate risks or engage in risky behaviors due to a lack of awareness or accurate risk assessment. Psychological factors, such as past experiences, beliefs, and cognitive biases, can influence how drivers perceive and respond to risks on the road. Therefore, understanding the influence of psychological factors on driver behavior is

essential for developing effective strategies to promote safe driving practices within fleet management systems. By targeting these factors, fleet management companies can implement tailored interventions to address specific psychological aspects. This can include educational campaigns to enhance risk perception and awareness, interventions to modify attitudes towards safety and traffic regulations, and strategies to provide alternative outlets for individuals with sensation-seeking tendencies.

### **2.2.3 Link between Driver Behavior and Accident Rates**

A strong correlation has been established between driver behavior and accident rates within fleet management systems. Extensive research indicates that unsafe driver behavior significantly increases the likelihood of accidents, emphasizing the crucial role of addressing driver behavior to reduce accident rates. Martínez et al. (2018) and Yan et al. (2021) have conducted studies that clearly demonstrate the association between unsafe driver behavior and increased accident risk. The findings consistently indicate that drivers who engage in risky behaviors are more prone to accidents. Wang et al. (2019) and Jia et al. (2021) have also contributed to the body of knowledge by examining the impact of driver behavior on accident rates. Their research further supports the notion that addressing driver behavior is essential for mitigating accidents within fleet management systems. Risky behaviors such as speeding, aggressive driving, distracted driving, and impaired driving have been identified as significant contributors to accidents. Speeding is a particularly prevalent risky behavior that leads to a higher likelihood of accidents. Drivers who exceed speed limits not only increase the risk of losing control of their vehicles but also reduce their ability to react to unexpected events or obstacles on the road (Wang et al., 2019). Aggressive driving, including tailgating, frequent lane changing, and disregarding traffic rules, significantly heightens the risk of collisions and endangers both the aggressive driver and other road users (Jia et al., 2021). Distracted driving, such as using mobile devices, eating, or engaging in other activities that divert attention from the road, has also been identified as a major cause of accidents (Wang et al., 2019). Furthermore, impaired driving, particularly driving under the influence of alcohol or drugs, has severe consequences for road safety. Impaired drivers experience diminished cognitive and motor functions, impaired judgment, decreased reaction times, and compromised situational awareness, all of which significantly increase the risk of accidents (Jia et al., 2021). Therefore, to reduce accident rates, it is crucial to address these risky driver behaviors within fleet management systems. Implementing comprehensive driver training programs, enforcing strict policies and regulations regarding speed limits and traffic

violations, promoting awareness campaigns on the dangers of distracted and impaired driving, and utilizing technology to monitor and discourage unsafe behaviors are effective strategies for promoting safer driver behavior and reducing accident rates. By focusing on mitigating risky behaviors and fostering a culture of safety, fleet management systems can proactively contribute to creating a safer road environment for both their drivers and other road users.

### **2.3 Summary of literature**

The literature review conducted for this study focused on examining the impact of driver behavior on accident rates in a fleet management system at Century Bottling Company Uganda. The review also explored effective strategies for promoting safe driving behaviors within such systems and the influence of organizational safety culture on driver behavior.

## CHAPTER THREE

### METHODOLOGY

#### 3.0 Introduction

This chapter presents the research methodology that was employed to investigate the impact of driver behavior on accident rates in the fleet management system at Century Bottling Company Uganda. It outlined the research design, data collection methods, sample selection, and data analysis techniques utilized in this study. The chapter aimed to provide a clear understanding of the research approach and the steps taken to achieve the research objectives.

#### 3.1 Research Design

The research design for this study was a quantitative research approach, specifically a cross-sectional study. This design allowed for the collection of data at a single point in time to examine the relationship between driver behavior and accident rates within the fleet management system. The cross-sectional design was suitable for investigating a large sample of drivers across different departments within Century Bottling Company Uganda and provided a snapshot of driver behavior and its impact on accident rates.

#### 3.2 Study Population.

The study population included employees under the Logistics department of Century Bottling Company. These included the fleet department which consisted of twenty-five automotive technicians and Distribution department which consisted of two managers and thirty drivers. Giving a total of fifty-seven respondents.

#### 3.3 Sample size.

The sample size was 52 respondents (Taro Yamane, 1967) which comprised of 23 automotive technicians from the fleet department, 2 distribution managers and 27 drivers from the distribution department as shown in the table below.

| <b>Department</b>     | <b>population</b> | <b>Sample size</b> |
|-----------------------|-------------------|--------------------|
| Automotive engineers  | 25                | 23                 |
| Distribution managers | 2                 | 2                  |
| drivers               | 30                | 27                 |
| <b>TOTAL</b>          | <b>57</b>         | <b>52</b>          |
|                       |                   |                    |

### **3.4 Sampling Techniques.**

The sampling technique used was random sampling because it allowed representative and equal chance of the element in the population that was selected.

### **3.5 Sources of Data.**

To collect data for this study, a combination of primary and secondary data sources was utilized. The primary data was collected through the distribution of structured questionnaires to drivers within Century Bottling Company Uganda. The questionnaire included items related to driver behavior, adherence to safety guidelines, and past accident history. Additionally, data on accident rates and other relevant fleet management system indicators was obtained from the company's records as secondary data.

### **3.6 Methods of Data Collection.**

#### **3.6.1 Questionnaire.**

A constructed set of questions on a form was designed to aid the collection of the required data. The questionnaire was an open ended and a closed ended one. where the researcher was required to either tick the most appropriate answer against the answer that satisfies them or to fill in the gaps which were provided by giving their opinions.

### **3.7 Data collection instruments.**

#### **3.7.1 Questionnaire.**

An open ended and closed ended questionnaire was used as an instrument of data collection. This allowed for the respondent to choose the option he considers to be the most correct and to give additional information where possible.

### **3.8 Data Collection Procedures.**

A letter of introduction was issued by the Research Coordinator of Uganda Christian University, Mukono in order to aid the researcher in the data collection process.

### **3.9 Data Analysis**

The collected data was analyzed using appropriate statistical techniques. Descriptive statistics, such as frequencies was used to summarize the findings. Statistical software, such as Microsoft Excel and SPSS was employed for data analysis.

### **3.10 Ethical Considerations**

To ensure ethical standards, informed consent was obtained from all participants before their involvement in the study.

Confidentiality and anonymity was maintained throughout the data collection and analysis process.

The research also adhered to the ethical guidelines and principles set forth by the Institutional Review Board (IRB) of Century Bottling Company Uganda and any relevant regulatory bodies.

### **3.11 Limitations of The Study**

It was important to acknowledge the limitations of this study. Firstly, the research was limited to the fleet management system at Century Bottling Company Uganda and may not be generalizable to other organizations or contexts.

Secondly, the study relied on self-reported data from drivers and fleet managers, which may have introduced response bias.

Lastly, the cross-sectional design limited the ability to establish causality between driver behavior and accident rates.

### **Conclusion**

This chapter has outlined the research methodology adopted for investigating the impact of driver behavior on accident rates in the fleet management system at Century Bottling Company Uganda. The quantitative research design, data collection methods, sample selection, and data analysis techniques have been described. The next chapter will present the findings of the study, followed by a discussion and interpretation of the results in relation to the existing literature and research objectives.

## CHAPTER FOUR

### DATA ANALYSIS, INTERPRETATION AND PRESENTATION OF THE FINDINGS.

#### 4.0 INTRODUCTION.

This chapter presents the findings of the research on The Impact Of Driver Behavior On Accident Rates In A Fleet Management System taking Century Bottling Company as the case study. It was presented in accordance with the study themes developed from the objectives of the study. The researcher used a questionnaire as a tool to obtain data from the field, and the response rate was 52 just like the sample space. Some of the characteristics considered include the gender of the respondents, academic qualifications, age, and departments of work in the organization.

#### 4.1 FINDINGS ON BIO DATA OF THE RESPONDENTS.

##### 4.1.1 Findings on the gender of the respondents.

|         |        | Gender    |         |               |                    |
|---------|--------|-----------|---------|---------------|--------------------|
|         |        | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid   | Male   | 32        | 60.4    | 61.5          | 61.5               |
|         | Female | 20        | 37.7    | 38.5          | 100.0              |
|         | Total  | 52        | 98.1    | 100.0         |                    |
| Missing | System | 1         | 1.9     |               |                    |
| Total   |        | 53        | 100.0   |               |                    |

#### INTERPRETATION.

From the information above, the distribution of respondents according to their gender shows that the majority of the respondents were males (61.5%) and the minority were female(38.5%) because the fleet and distribution departments require a lot of manual work like driving heavy trucks for long distances. The findings also indicates that there is gender inclusion and diversity in the organization.

#### 4.1.2 Findings on the age bracket of the respondent.

|         |            | Age Brackets |         |               |                    |
|---------|------------|--------------|---------|---------------|--------------------|
|         |            | Frequency    | Percent | Valid Percent | Cumulative Percent |
| Valid   | 19 – 28    | 11           | 20.8    | 21.2          | 21.2               |
|         | 29 – 38    | 28           | 52.8    | 53.8          | 75.0               |
|         | 39 – 48    | 12           | 22.6    | 23.1          | 98.1               |
|         | 49 – above | 1            | 1.9     | 1.9           | 100.0              |
|         | Total      | 52           | 98.1    | 100.0         |                    |
| Missing | System     | 1            | 1.9     |               |                    |
| Total   |            | 53           | 100.0   |               |                    |

#### INTERPRETATION

From the table above, most of the respondents are between the age bracket of 29 – 38 years (53.8%). This shows that the organization hires energetic and vibrant people in the fleet and distribution department as it requires a lot of manual work.

#### 4.1.3 Findings on the level of education of respondents.

| Level of Education | frequency | Percentage (%) |
|--------------------|-----------|----------------|
| Primary            | 0         | 0              |
| Secondary          | 11        | 21             |
| Diploma            | 23        | 44             |
| Undergraduate      | 14        | 27             |
| Masters            | 4         | 8              |
| other              | 0         | 0              |
| <b>TOTAL</b>       | <b>52</b> | <b>52</b>      |

## **INTERPRETATION.**

According to the table above, most of the employees under the distribution and fleet department are Diploma certificate holders (44%) as compared to secondary certificate (21%), undergraduate (27%) and master's degree holders (8%). This also shows that the respondents are eligible to read and identify different road signs and laws.

### **4.1.4 Findings on the marital status of Respondents.**

| <b>Marital Status</b> | <b>Frequency</b> | <b>Percentage (%)</b> |
|-----------------------|------------------|-----------------------|
| <b>Married</b>        | <b>31</b>        | <b>59</b>             |
| <b>Single</b>         | <b>14</b>        | <b>27</b>             |
| <b>Divorced</b>       | <b>3</b>         | <b>6</b>              |
| <b>other</b>          | <b>4</b>         | <b>8</b>              |
| <b>TOTAL</b>          | <b>52</b>        | <b>100</b>            |

## **INTERPRETATION.**

The findings show that most of the respondents under the Fleet and Distribution Department were Married (**59%**), 27% were single, 6% were divorced and other statuses were 8% percent. This makes the drivers more careful when driving because they have families to take care of.

### **4.1.5 Findings on the Employment Status of respondents.**

| <b>Employment status</b> | <b>Frequency</b> | <b>Percentage (%)</b> |
|--------------------------|------------------|-----------------------|
| <b>Full-time</b>         | <b>43</b>        | <b>83</b>             |
| <b>Part-time</b>         | <b>9</b>         | <b>17</b>             |
| <b>TOTAL</b>             | <b>52</b>        | <b>100</b>            |

## **INTERPRETATION.**

The findings show that most of the respondents were Full-time employees (83%) of the organization as compared to part-time (17%). This also shows that most of the respondents had deep knowledge about the organizations laws and policies hence reducing on the errors at work.

#### 4.1.6 Findings on the Years of Driving Experience of Respondents.

| <b>Years of driving experience</b> | <b>Frequency</b> | <b>Percentage (%)</b> |
|------------------------------------|------------------|-----------------------|
| <b>1 - 5</b>                       | <b>8</b>         | <b>15</b>             |
| <b>6 – 10</b>                      | <b>28</b>        | <b>54</b>             |
| <b>11 - 15</b>                     | <b>12</b>        | <b>23</b>             |
| <b>16 – 20</b>                     | <b>4</b>         | <b>8</b>              |
| <b>21 – above</b>                  | <b>0</b>         | <b>0</b>              |
| <b>TOTAL</b>                       | <b>52</b>        | <b>100</b>            |

#### INTERPRETATION.

According to the findings, Most of the respondents have a driving Experience of 6 to 10 year (54%) followed by 11 to 15 years' experience. (23%) This shows that they are well conversant with the job hence reducing errors at work that could lead to accidents.

#### 4.1.7 Findings on the department of respondents.

| <b>Department</b>              | <b>Frequency</b> | <b>Percentage (%)</b> |
|--------------------------------|------------------|-----------------------|
| <b>Fleet department</b>        | <b>23</b>        | <b>44</b>             |
| <b>Distribution Department</b> | <b>29</b>        | <b>56</b>             |
| <b>TOTAL</b>                   | <b>52</b>        | <b>100</b>            |

#### INTERPRETATION.

From the findings, it's evident that most of the respondents were from the distribution department (56 %) which consists of Distribution managers and Drivers and are the majority. The fleet department (44 %) consists of automotive technicians. These are the people who work closely with the fleet hence having knowledge about them and their history.

## 4.2 FINDINGS ON THE ACCIDENT HISTORY OF RESPONDENTS.

### 4.2.1 Findings on Respondents who have been involved in accidents while driving for work purposes.

| Involvement in an Accident | frequency | Percentage (%) |
|----------------------------|-----------|----------------|
| Yes                        | 26        | 50             |
| No                         | 26        | 50             |
| <b>TOTAL</b>               | <b>52</b> | <b>100</b>     |

### INTERPRETATION.

According to the findings, 50% of the respondents have been involved in accidents while driving for work purposes and the other .50% have never been involved in any accident while driving for work purposes.

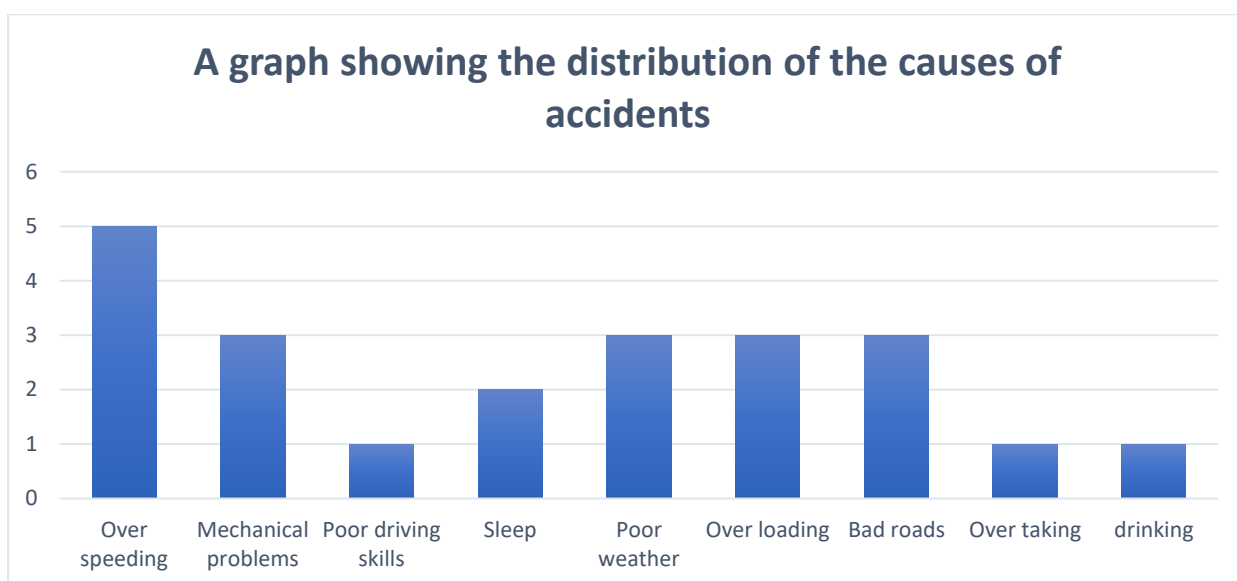
### 4.2.2 Findings on the Causes of the Accidents.

| S/N | Cause of the Accident | Frequency | Percentage (%) |
|-----|-----------------------|-----------|----------------|
| 1   | Over speeding         | 5         | 23             |
| 2   | Mechanical problems   | 3         | 14             |
| 3   | Poor driving skills   | 1         | 4              |
| 4   | Sleep                 | 2         | 9              |
| 5   | Poor weather          | 3         | 14             |
| 6   | Over loading          | 3         | 14             |
| 7   | Bad roads             | 3         | 14             |
| 8   | Over taking           | 1         | 4              |
| 9   | drinking              | 1         | 4              |
|     | <b>TOTAL</b>          | <b>22</b> | <b>100</b>     |

### INTERPRETATION.

From the research findings, it's evident that the main causes of accidents are over speeding (23%), mechanical problems, poor weather, over loading and bad roads all which consist of 14 % each. Most of the causes are linked to driver behaviors like over speeding, sleep, over taking, poor driver skills and over taking.

**Figure 1. Distribution on the Causes of Accidents.**



#### **4.2.3 Findings on the severity of the Accidents.**

| <b>Severity of the Accidents.</b> | <b>Frequency</b> | <b>Percentage (%)</b> |
|-----------------------------------|------------------|-----------------------|
| <b>Minor</b>                      | <b>15</b>        | <b>58</b>             |
| <b>Moderate</b>                   | <b>9</b>         | <b>34</b>             |
| <b>major</b>                      | <b>2</b>         | <b>8</b>              |
| <b>TOTAL</b>                      | <b>26</b>        | <b>100</b>            |

#### **INTERPRETATION.**

According to the respondents, most of their accidents were minor (58 %) meaning no injuries recorded and only minor vehicle damage, 34% of the accidents were moderate meaning some injuries were recorded and also moderate vehicle damage and 8 % of them were major meaning respondents' incurred severe injuries and vehicles damage too.

#### 4.2.4 Findings on the fatalities and injuries recorded.

| <b>Fatalities and Injuries</b> | <b>Frequency</b> | <b>Percentage (%)</b> |
|--------------------------------|------------------|-----------------------|
| <b>Fatalities</b>              | <b>6</b>         | <b>46</b>             |
| <b>Injuries</b>                | <b>7</b>         | <b>54</b>             |
| <b>TOTAL</b>                   | <b>13</b>        | <b>100</b>            |

#### **INTERPRETATION.**

Our findings show that the organization has recorded more injuries (54 %) than fatalities (46 %) in the past five years.

#### 4.3.0 FINDINGS ON THE EFFECTIVE STRATEGIES FOR PROMOTING SAFE DRIVING BEHAVIOR.

Below are the responses from the respondents in relation to the effective strategies for promoting safe driving behavior.

1 Strongly agree (S/A) 2. Agree (A) 3. Neutral (N) 4. Disagree (D) 5. Strongly disagree (S/D)

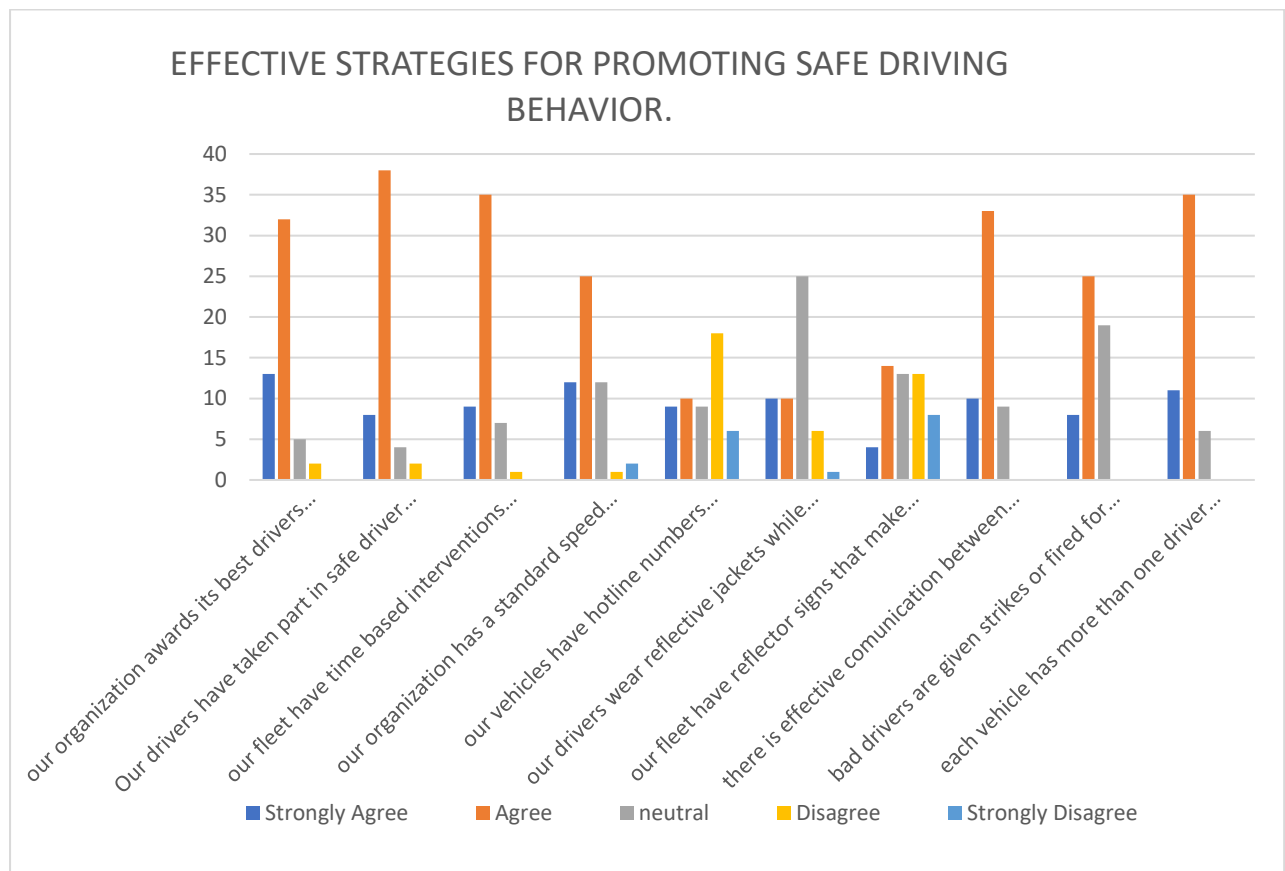
| S/N | Strategy   | S/A |    | A  |    | N  |    | D  |    | S/D |    | TOTAL |      |
|-----|--|-----|----|----|----|----|----|----|----|-----|----|-------|------|
|     |  | F   | P% | F  | P% | F  | P% | F  | P% | F   | P% | T/F   | T/P% |
| 1   | Awarding the best drivers                                  | 13  | 25 | 32 | 61 | 5  | 10 | 2  | 4  | 0   | 0  | 52    | 100  |
| 2   | Taking part in safe driver training classes                | 8   | 15 | 38 | 73 | 4  | 8  | 2  | 4  | 0   | 0  | 52    | 100  |
| 3   | Having time based interventions attached to fleet          | 9   | 17 | 35 | 67 | 7  | 13 | 1  | 2  | 0   | 0  | 52    | 100  |
| 4   | Standard speed limit for drivers to follow.                | 12  | 23 | 25 | 48 | 12 | 23 | 1  | 2  | 2   | 4  | 52    | 100  |
| 5   | Vehicles having hotline numbers                            | 9   | 17 | 10 | 19 | 9  | 17 | 18 | 34 | 6   | 11 | 52    | 100  |
| 6   | Wearing reflector jackets while driving.                   | 10  | 19 | 10 | 19 | 25 | 48 | 6  | 11 | 1   | 2  | 52    | 100  |
| 7   | Fleet have reflector signs that make them visible at night | 4   | 8  | 14 | 26 | 13 | 25 | 13 | 25 | 8   | 15 | 52    | 100  |
| 8   | Effective communication between drivers and fleet managers | 10  | 19 | 33 | 63 | 9  | 17 | 0  | 0  | 0   | 0  | 52    | 100  |
| 9   | Firing and giving strikes to bad drivers                   | 8   | 15 | 25 | 48 | 19 | 36 | 0  | 0  | 0   | 0  | 52    | 100  |
| 10  | Assigning more than one driver to a vehicle                | 11  | 21 | 35 | 67 | 6  | 11 | 0  | 0  | 0   | 0  | 52    | 100  |

## INTERPRATION

From the table above, the research reveals that the higher percentage of respondents strongly agree and agree on the Effective strategies implemented by the organization to promote safe driving behavior. Strategies like rewarding the best drivers (61%), engaging drivers in safe driving seminars(73%), Attaching of GPS to trucks(67%) and assigning of more than one driver to a vehicle(67%). With these strategies in place, the organization can easily cub down the rate at which driver behavior is responsible for accident rates in the fleet system of Coca-Cola.

The company can also implement other strategies like putting reflector signs on their fleet to make them more visible at night, placing hotline numbers on all trucks for road users to report bad driving and make wearing of seatbelts a must for all drivers. These are the strategies that have been strongly disagreed to by most respondents.

**Figure 2. A graph showing the distribution of respondents answers on the effective strategies for promoting safe driving behavior.**



#### 4.4 FINDINGS ON THE INFLUENCE OF ORGANIZATIONAL SAFETY CULTURE ON DRIVER BEHAVIOR.

Below are the responses from the respondents in relation to the influence of organizational safety culture on driver behavior.

1.Strongly agree (S/A) 2. Agree (A) 3. Neutral (N) 4. Disagree (D) 5. Strongly disagree (S/D)

| Strategy   | S/A |    | A  |    | N  |    | D |    | S/D |    | TOTAL |      |
|--|-----|----|----|----|----|----|---|----|-----|----|-------|------|
|  | F   | P% | F  | P% | F  | P% | F | P% | F   | P% | T/F   | T/P% |
| prioritizing safety in all aspects of our operation    | 22  | 42 | 26 | 50 | 3  | 5  | 1 | 2  | 0   | 0  | 52    | 100  |
| open communication about safety                        | 24  | 46 | 24 | 46 | 4  | 7  | 0 | 0  | 0   | 0  | 52    | 100  |
| managers and supervisors actively promote safe driving | 14  | 26 | 30 | 57 | 8  | 15 | 0 | 0  | 0   | 0  | 52    | 100  |
| engaging in practical safe driving seminars            | 20  | 38 | 23 | 44 | 6  | 11 | 6 | 11 | 0   | 0  | 52    | 100  |
| vehicles are always in perfect condition               | 9   | 17 | 24 | 46 | 16 | 30 | 3 | 5  | 0   | 0  | 52    | 100  |
| tracking vehicles for safety reasons                   | 19  | 36 | 26 | 50 | 7  | 13 | 0 | 0  | 0   | 0  | 52    | 100  |
| each vehicle has a first aid kit in it                 | 17  | 32 | 30 | 57 | 5  | 9  | 0 | 0  | 0   | 0  | 52    | 100  |
| Drivers have the right driver qualifications.          | 25  | 48 | 18 | 34 | 9  | 17 | 0 | 0  | 0   | 0  | 52    | 100  |
| vehicles have tool boxes in them                       | 32  | 61 | 17 | 32 | 3  | 5  | 0 | 0  | 0   | 0  | 52    | 100  |
| drivers have the basic mechanic skills                 | 23  | 44 | 25 | 48 | 4  | 7  | 0 | 0  | 0   | 0  | 52    | 100  |

## INTERPRETATION.

From the findings above, it's evident that the organizational safety culture plays a key role in influencing driver behavior. Most of the respondents strongly agree and agree that the organization prioritizes safety in the all areas of operation, that there is open communication about safety in the organization(46%), managers and supervisors actively promoting safe driving behaviors among the drivers(57%), engaging the drivers in safe driving seminars(44%) which helps them improve on their safe driving skills, also keeping the vehicles driven in perfect condition for the road(46%), tracking of vehicles(50%), hiring drivers whose qualifications meet the organizations standards and equipping all vehicles with tool boxes(61%) as well as making sure all drivers have the basic mechanic skills(48%). All these safety policies make sure that the rate of accidents are reduced.

**Figure 3. Distribution of the influence of Organizational safety culture on driver behavior.**



#### 4. 5 FINDINGS ON THE RELATIONSHIP BETWEEN DRIVER BEHAVIOR AND ACCIDENT RATES.

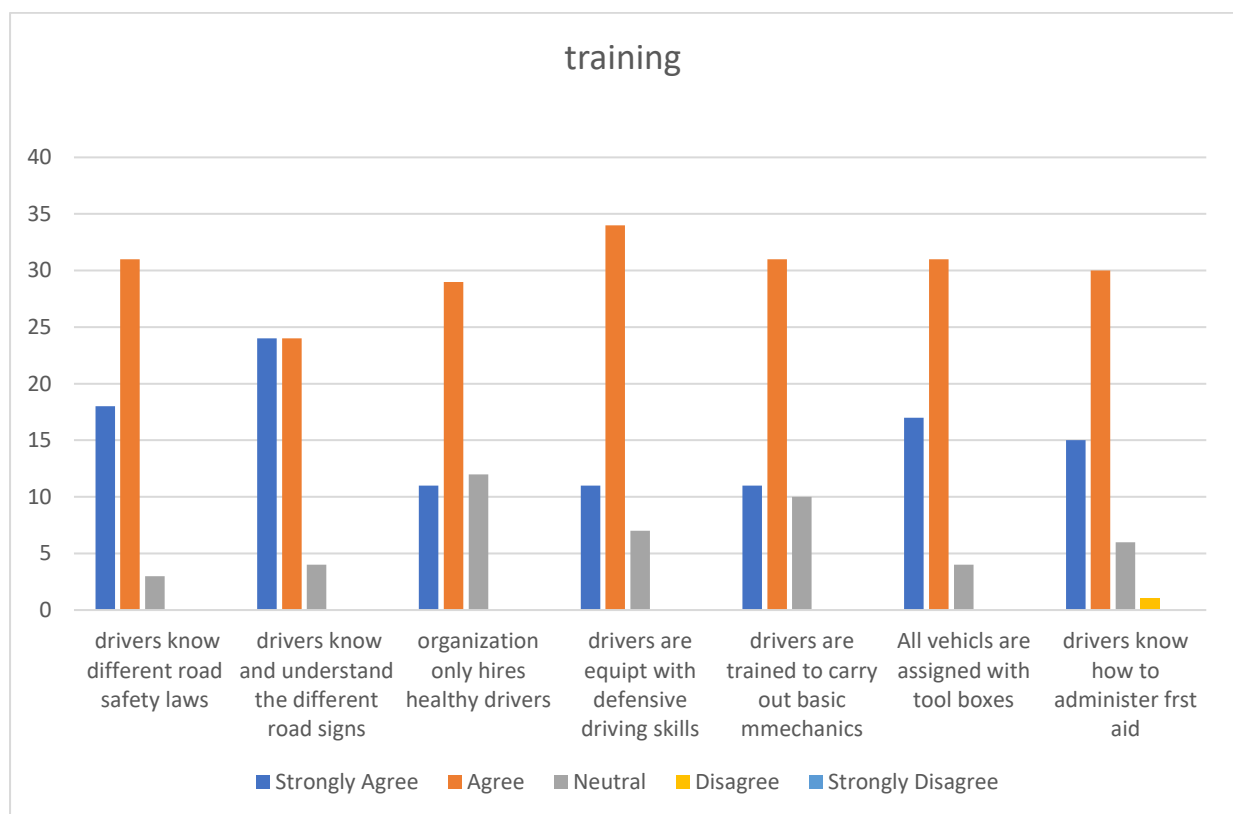
A table showing the correlations on the relationship between driver behavior and accident rates (driver training)

|                |                     | Correlations |                |
|----------------|---------------------|--------------|----------------|
|                |                     | Training     | Accident rates |
| Training       | Pearson Correlation | 1            | .961**         |
|                | Sig. (2-tailed)     |              | .000           |
|                | N                   | 27           | 22             |
| Accident rates | Pearson Correlation | .961**       | 1              |
|                | Sig. (2-tailed)     | .000         |                |
|                | N                   | 22           | 22             |

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

The correlation efficiency 0.961 at 0.01 significant level shows that there is a strong linear relationship between training and accident rates. Increasing the level of training on drivers reduces the accidents among drivers.

**Figure 4. A graph showing the respondents responses on the relationship between driver behavior and accident rates (driver training)**



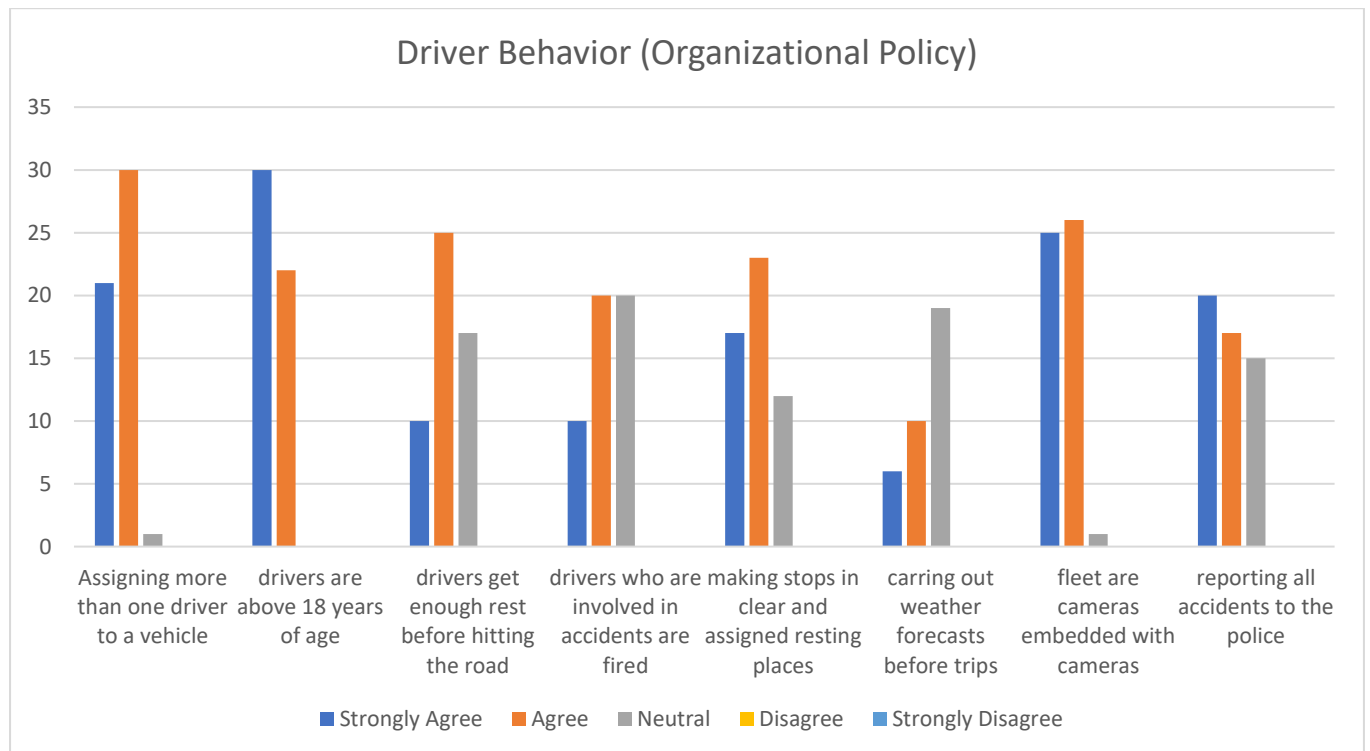
**A table showing the correlations on the relationship between driver behavior and accident rates (organizational Policy)**

|                       |                     | Accident rates | ORGANIZATIONAL POLICY |
|-----------------------|---------------------|----------------|-----------------------|
| Accident rates        | Pearson Correlation | 1              | .930**                |
|                       | Sig. (2-tailed)     |                | .000                  |
|                       | N                   | 22             | 22                    |
| ORGANIZATIONAL POLICY | Pearson Correlation | .930**         | 1                     |
|                       | Sig. (2-tailed)     | .000           |                       |
|                       | N                   | 22             | 27                    |

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

The correlation efficiency 0.930 at 0.01 significant level shows that there is a strong linear relationship between organization policies and accident rates. Implementing the organizational policies on drivers reduces the accidents among drivers.

**Figure 5. A graph showing the respondents responses on the relationship between driver behavior and accident rates (organizational Policy)**



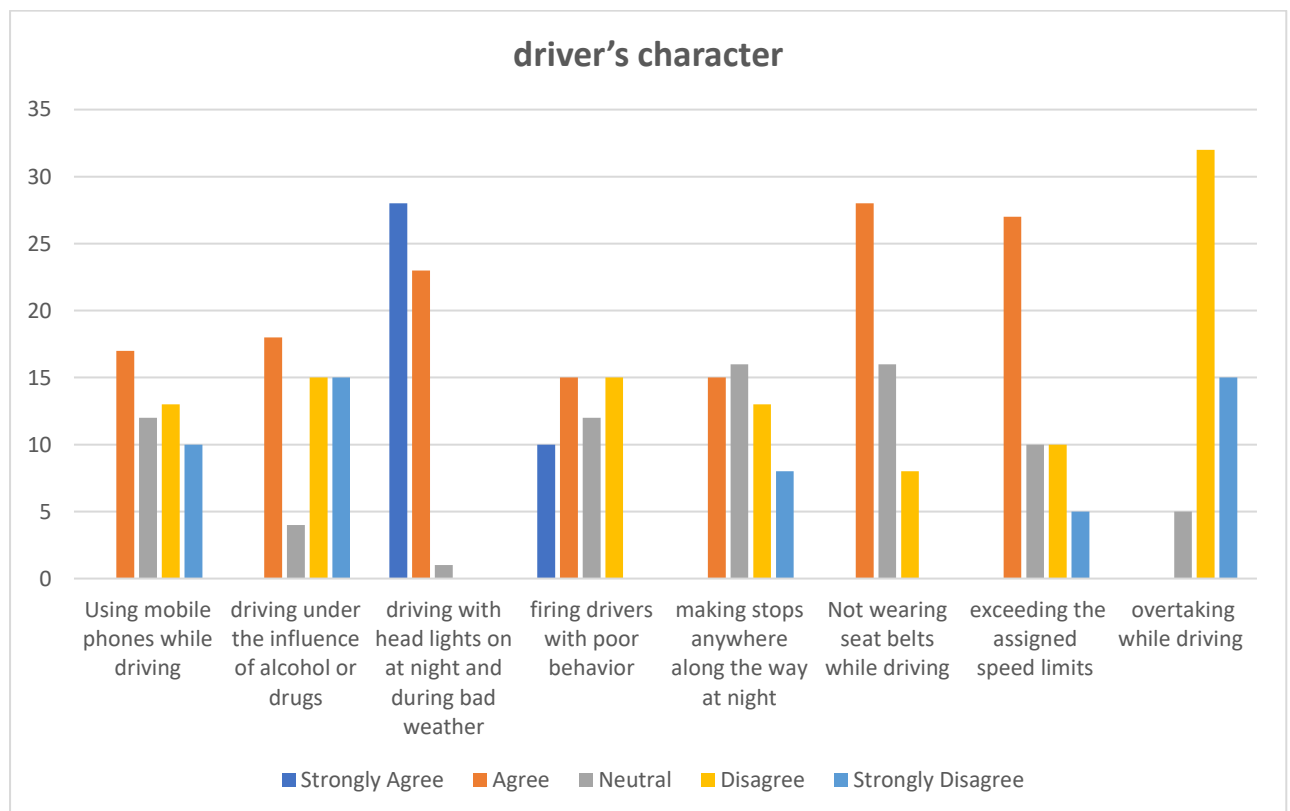
**A table showing the correlations on the relationship between driver behavior and accident rates (driver behavior)**

|                   |                     | Correlations   |                   |
|-------------------|---------------------|----------------|-------------------|
|                   |                     | Accident rates | Driver Characters |
| Accident rates    | Pearson Correlation | 1              | .727**            |
|                   | Sig. (2-tailed)     |                | .000              |
|                   | N                   | 22             | 22                |
| Driver Characters | Pearson Correlation | .727**         | 1                 |
|                   | Sig. (2-tailed)     | .000           |                   |
|                   | N                   | 22             | 27                |

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

The correlation efficiency 0.727 at 0.01 significant level shows that there is a strong linear relationship between driver characters and accident rates. The drivers character increases the accidents rates among drivers.

**Figure 6. A graph showing the respondents responses on the relationship between driver behavior and accident rates (driver characters)**



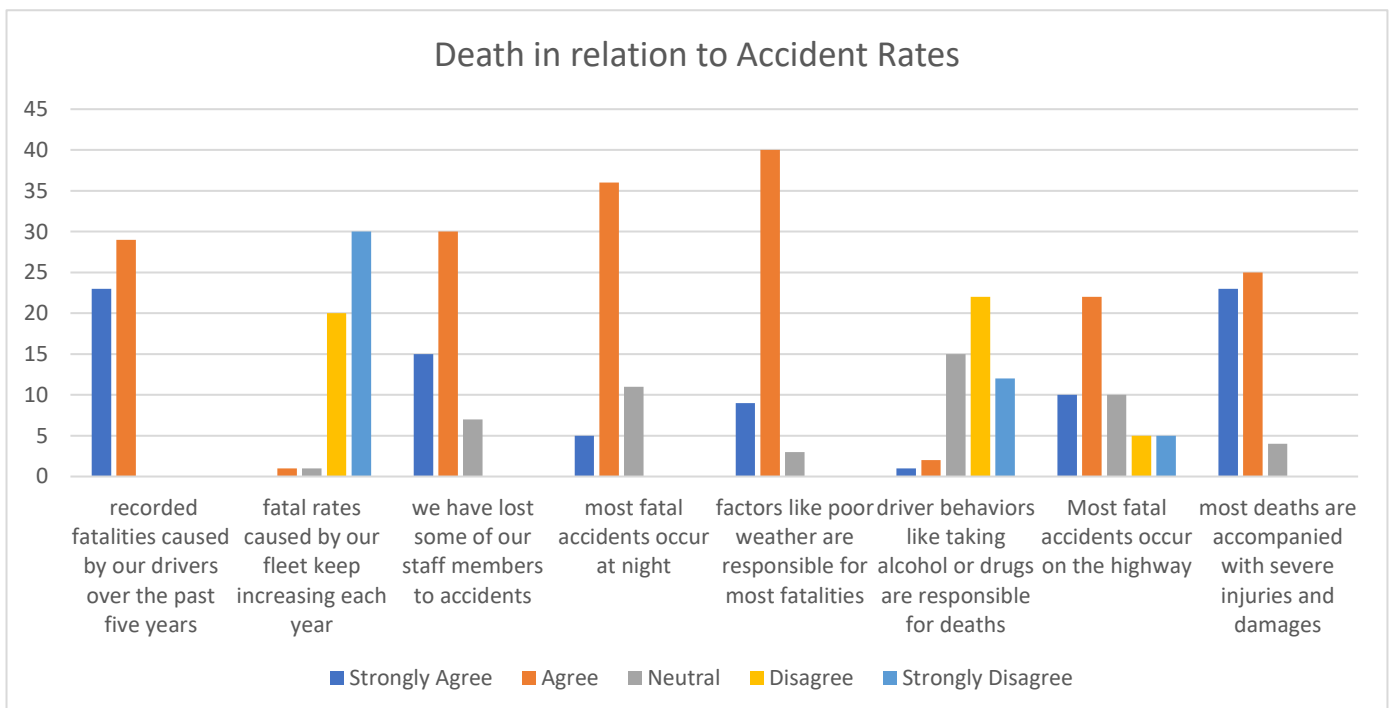
**A table showing the correlations on the relationship between driver behavior and accident rates (deaths)**

|                |                     | Correlations   |        |
|----------------|---------------------|----------------|--------|
|                |                     | Accident rates | Deaths |
| Accident rates | Pearson Correlation | 1              | .987** |
|                | Sig. (2-tailed)     |                | .000   |
|                | N                   | 22             | 22     |
| Deaths         | Pearson Correlation | .987**         | 1      |
|                | Sig. (2-tailed)     | .000           |        |
|                | N                   | 22             | 27     |

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

The correlation efficiency 0.987 at 0.01 significant level shows that there is a weak linear relationship between deaths and accident rates. There are few deaths caused by drivers.

**Figure 7. A graph showing the respondents responses on the relationship between driver behavior and accident rates (Deaths)**



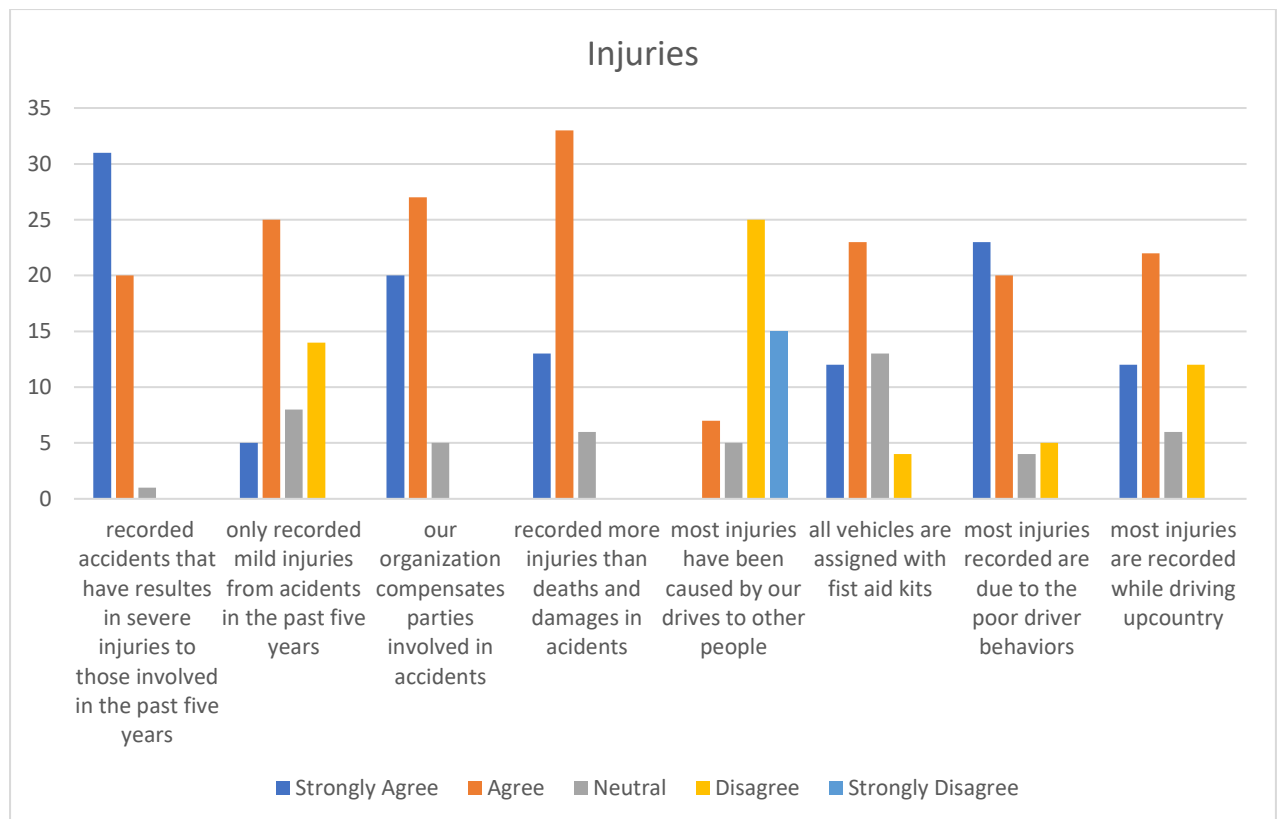
**A table showing the correlations on the relationship between driver behavior and accident rates (injuries)**

|                |                     | Correlations   |          |
|----------------|---------------------|----------------|----------|
|                |                     | Accident rates | Injuries |
| Accident rates | Pearson Correlation | 1              | .777**   |
|                | Sig. (2-tailed)     |                | .000     |
|                | N                   | 22             | 22       |
| Injuries       | Pearson Correlation | .777**         | 1        |
|                | Sig. (2-tailed)     | .000           |          |
|                | N                   | 22             | 27       |

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

The correlation efficiency 0.777 at 0.01 significant level shows that there is a strong linear relationship between injuries and accident rates. There are more accidents caused by drivers that have resulted into injuries.

**Figure 8. A graph showing the respondents responses on the relationship between driver behavior and accident rates (Injuries)**



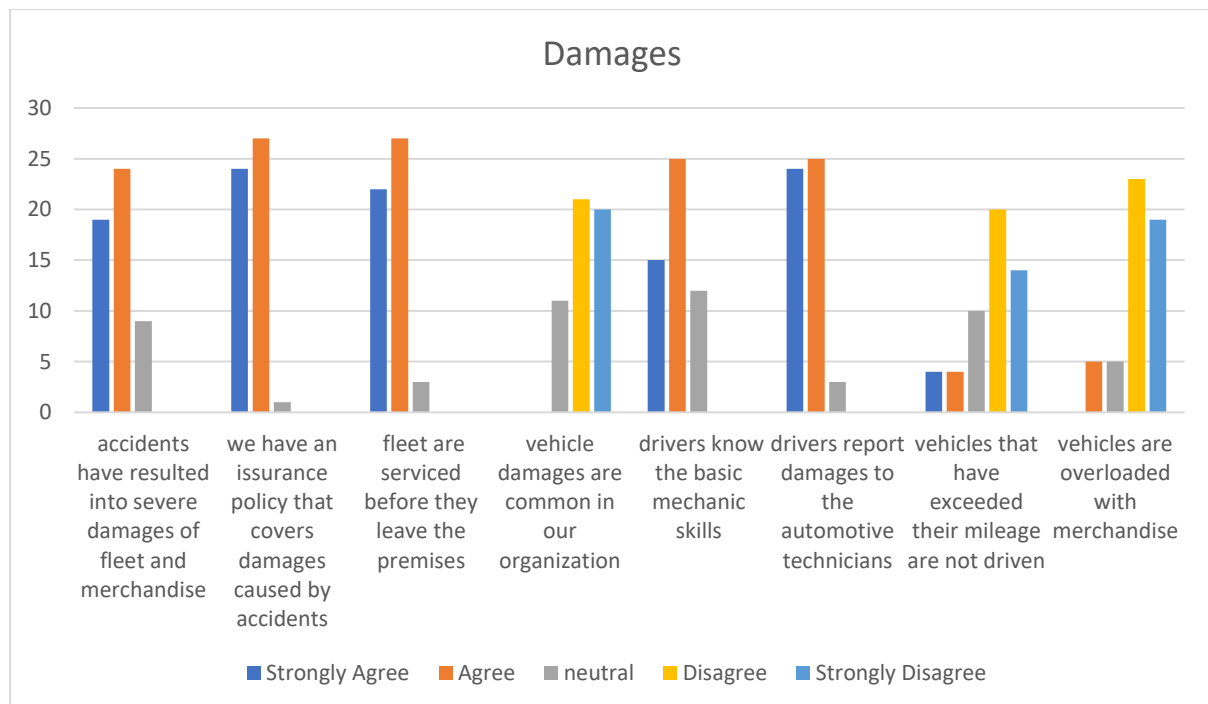
**A table showing the correlations on the relationship between driver behavior and accident rates (damages)**

|                |                     | Correlations   |         |
|----------------|---------------------|----------------|---------|
|                |                     | Accident rates | Damages |
| Accident rates | Pearson Correlation | 1              | .936**  |
|                | Sig. (2-tailed)     |                | .000    |
|                | N                   | 22             | 22      |
| Damages        | Pearson Correlation | .936**         | 1       |
|                | Sig. (2-tailed)     | .000           |         |
|                | N                   | 22             | 27      |

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

The correlation efficiency 0.936 at 0.01 significant level shows that there is a strong linear relationship between damages and accident rates. There are more accidents caused by drivers that have resulted into damages

**Figure 9. A graph showing the respondents responses on the relationship between driver behavior and accident rates (damages)**



**4.6 Suggestions from respondents on how their organization can improve driver safety within the fleet management system.**

- Labeling trucks with numbers for easy identification.
- Putting reflector signs on vehicles.
- Constantly tracking vehicles.
- Leave days for drivers.

## **CHAPTER FIVE**

### **SUMMARY OF FINDINGS, CONCLUSION, RECOMMENDATIONS AND AREAS OF FURTHER RESEARCH.**

#### **5.0 SUMMARY AND DISCUSSION OF THE FINDINGS**

This chapter presents the summary, discussions, conclusion and recommendations of the findings, and areas of further research.

The effective strategies put in place by Coca-Cola Bottling company to curb down accident rates like providing incentives to its best drivers, giving strikes and firing bad drivers, having time based interventions like cameras and GPS to track the fleet have proven to be a positive way in influencing safe driver behavior hence reducing on the rates of accidents caused by its drivers.

According to the research findings on the effective strategies for promoting safe driving behavior, it was found out that Coca-Cola company implements a number of effective strategies and in turn these strategies have helped to regulate driver behavior and keep them in check hence reducing on the rate of accidents in the organization like use of cameras and GPS to track their fleet and drivers, engaging drivers in safe driving seminars, among others. According to Clarke et al. (2017), well-designed training programs contribute to enhancing driver awareness, hazard perception, and risk management. These programs typically encompass defensive driving techniques, proper vehicle handling, understanding traffic rules and regulations, and the importance of maintaining safe distances.

The organizational safety culture of Coca-Cola Bottling Company has a positive influence on driver behavior. By tracking of vehicles, having open communication between managers and drivers about safety, reporting of damages and issues on the vehicles to the automotive technicians, and hiring drivers who are above the age of 18 and meet the right driver qualifications. Also the organization needs to put toll free numbers on all its trucks to enable road users report bad driving.

The research findings indicate that there is a positive organizational safety culture at Coca-Cola bottling Company as most of the findings showed that drivers adhere to the different organizational policies in regards to safety or they could risk losing their jobs. Having an open and running safety culture in the organization has also helped to reduce the rates of

accidents recorded in the past five years hence improving the brand name of the company as well. Organizational safety culture plays a fundamental role in shaping driver behavior and has a profound impact on accident rates within fleet management systems. It encompasses shared values, beliefs, and practices regarding safety within an organization, creating an environment that prioritizes safe driving practices. This culture consists of various components that directly influence driver behavior like having open communication about safety in the organization, engaging drivers in practical safe driving seminars, teaching employees how to administer first aid in case of accidents, tracking of vehicles for safety reasons. Organizations that prioritize safety and foster a strong safety culture are more likely to have drivers who consistently adhere to safety guidelines, engage in defensive driving practices, and demonstrate a heightened sense of responsibility towards road safety (Clarke et al., 2017).

There is a strong relationship between driver behavior and accident rates at Coca-Cola Bottling Company. Our findings show that drivers engage in activities like over speeding, overtaking, distractive driving like use of mobile phones while driving and these have resulted into deaths, injuries of people involved and damages of fleet and goods. (Correlation is significant at the 0.01 level (2-tailed)).

According to the research findings, it's evident that there is a strong linear relationship of between driver behavior and accident rates at Coca-Cola bottling company, especially drivers' character being a strong contributor to accident rates. Drivers who engage in practices like using mobile phones while driving, over speeding, overtaking other trucks, lack of enough rest before hitting the road all which make them prone to the risk of getting into accidents. The research findings also show that most of the accidents caused by driver behavior have resulted into deaths, injuries and major damages on the fleet and merchandise all within the past five years which is a significant loss to the company.

According to Martínez et al. (2018) and Yan et al. (2021) , A strong correlation has been established between driver behavior and accident rates within fleet management systems. Extensive research indicates that unsafe driver behavior significantly increases the likelihood of accidents, emphasizing the crucial role of addressing driver behavior to reduce accident rates. Martínez et al. (2018) and Yan et al. (2021) have conducted studies that clearly demonstrate the association between unsafe driver behavior and increased accident risk. The findings consistently indicate that drivers who engage in risky behaviors are more prone to

accidents. Other contributing factors that influence driver behavior include poor weather, bad roads all which increase the risks of accidents occurring.

## 5.1 Conclusion

In conclusion, this comprehensive study on the impact of driver behavior on accident rates in a fleet management system at Century Bottling Company Uganda has shed light on several key findings.

Firstly, the integration of technology-based interventions, including Advanced Driver Assistance Systems (ADAS) and telematics, has proven to be effective in monitoring driver behavior, providing real-time feedback, and facilitating corrective actions. These interventions contribute to mitigating driving risks and promoting safer behaviors. Implementing incentive programs aligned with safety objectives can positively reinforce desired behaviors and create a culture of safety among drivers. Financial rewards, recognition, and career advancement opportunities are effective motivational tools for encouraging safe driving practices.

Secondly, organizational safety culture and leadership commitment play a vital role in shaping driver behavior. A positive safety culture emphasizes the value of safe driving practices, encourages open communication about safety concerns, and promotes a sense of responsibility among drivers. Strong leadership commitment and active involvement by managers and supervisors serve as role models and create a safety-conscious environment.

Lastly, it is evident that driver behavior plays a crucial role in determining accident rates within the fleet. Risky behaviors such as speeding, aggressive driving, and failure to adhere to safety regulations significantly increase the likelihood of accidents.

Overall, these findings provide valuable insights for Century Bottling Company Uganda and other organizations seeking to improve their fleet management systems and prioritize road safety. By implementing the identified strategies and interventions, organizations can create a safer driving environment, reduce accidents, and protect both their drivers and the public.

## 5.2 Recommendations

Based on the extensive research conducted on the impact of driver behavior on accident rates in a fleet management system at Century Bottling Company Uganda, several comprehensive recommendations can be made.

Firstly, it is crucial for the company to prioritize driver training and education programs. By providing comprehensive training on defensive driving techniques, hazard perception, and adherence to safety measures, drivers can enhance their skills and knowledge, thereby reducing the likelihood of accidents. These training programs should be regularly updated to incorporate the latest best practices and technologies.

Secondly, the integration of technology-based interventions should be further explored. Advanced Driver Assistance Systems (ADAS) and telematics can play a vital role in monitoring driver behavior, providing real-time feedback, and facilitating corrective actions. Century Bottling Company should consider investing in ADAS features such as lane departure warning systems, forward collision warning systems, and adaptive cruise control to mitigate driving risks and promote safer behaviors. Telematics systems should be utilized to monitor drivers' speed, acceleration, braking, and adherence to traffic rules, enabling personalized feedback and coaching to drivers.

Furthermore, the company should focus on developing a positive safety culture. This can be achieved through strong leadership commitment and active involvement of managers and supervisors. Leaders should serve as role models by consistently demonstrating safe driving practices and emphasizing the importance of safety. Open communication channels should be established to encourage drivers to report safety concerns and share best practices. Century Bottling Company should also consider implementing incentive programs that align with safety objectives to positively reinforce desired behaviors and create a culture of safety.

Additionally, regular performance evaluations and monitoring systems should be in place to ensure drivers are held accountable for their actions. Compliance with safety policies and procedures should be enforced, and consequences for unsafe behavior should be clearly communicated. This will further contribute to creating a safer driving environment and reducing accident rates.

Lastly, it is recommended that Century Bottling Company regularly assess and evaluate the effectiveness of the implemented strategies and interventions. This can be done through data analysis, driver feedback, and periodic safety audits. By continuously monitoring and

reviewing the impact of these initiatives, necessary adjustments and improvements can be made to ensure long-term success in promoting safe driving behaviors and reducing accident rates.

By implementing these recommendations, Century Bottling Company Uganda can significantly enhance its fleet management system, prioritize road safety, and create a safer environment for its drivers and the public. These measures will not only reduce accidents but also improve operational efficiency and protect the company's reputation.

### **5.3 Areas of further research**

This study focused on examining the immediate relationship between driver behavior and accident rates. Further research could explore the long-term impact of driver behavior on accident rates over an extended period. This would provide valuable insights into the sustainability of safe driving behaviors and their cumulative effect on accident reduction.

While this research touched upon the importance of training programs, further investigation could delve into evaluating the effectiveness of specific driver training interventions. Comparative studies that assess the outcomes of different training methods, duration, and content could help identify the most impactful training strategies for promoting safe driving behaviors. As technology continues to evolve, it is important to investigate the effectiveness of emerging technologies in promoting safe driving behaviors.

Research could explore the impact of advanced driver-assistance systems, artificial intelligence, and predictive analytics on driver behavior and accident rates within fleet management systems. This study briefly mentioned the influence of organizational safety culture on driver behavior.

Further research could examine the role of cultural factors, such as national culture or organizational subcultures, in shaping driver behavior and their impact on accident rates. Understanding cultural influences can help tailor interventions to specific cultural contexts and enhance their effectiveness.

While this research focused primarily on driver behavior, future studies could explore the impact of external factors on accident rates in fleet management systems. Factors such as road conditions, weather, and traffic congestion can interact with driver behavior and influence accident rates. Investigating these external factors and their interplay with driver behavior would provide a more comprehensive understanding of accident causation.

By addressing these areas of further research, we can expand our knowledge and improve strategies for promoting safe driving behaviors within fleet management systems, ultimately leading to a reduction in accident rates and improved road safety.

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**APPENDIX**



**UGANDA CHRISTIAN  
UNIVERSITY**

A Centre of Excellence in the Heart of Africa

School of Business

July 10<sup>th</sup> 2023

To whom it may concern

Name: ABER DENICE FORTUNATE Reg. No. 520B12/001

A bachelor's student who is seeking permission from your office to collect data for his/her dissertation titled

"THE IMPACT OF ACCIDENT RATES ON A FLEET MANAGEMENT SYSTEM"

We shall be grateful if you could render assistance to him/her in collecting the necessary data for his/her dissertation

The Uganda Christian University School of Business thanks you in advance

A handwritten signature in black ink, appearing to read 'Mukisa Simon Peter'.

Mukisa Simon Peter  
Research coordinator

# QUESTIONNAIRE

UGANDA CHRISTIAN UNIVERSITY  
SCHOOL OF BUSINESS  
DEPARTMENT OF UNDERGRADUTE.

**A QUESTIONNAIRE FOR THE STAFF CENTURY BOTTLING COMPANY ON THE  
IMPACT OF DRIVER BEHAVIOR ON ACCIDENT RATES IN A FLEET  
MANAGEMENT SYSTEM.**

I am Aber Denise Fortunate, a third year Student of Uganda Christian University carrying out a study on the Impact of driver behavior on accident rates on a fleet management system with the case of Century Bottling Company Uganda in partial fulfillment of the award of bachelor's degree in Procurement and Logistics Management.

You have been selected to participate in the study by filling in this questionnaire. Your response shall be kept anonymous and will never be linked to you and everything is strictly for academic purposes.

Thank you for your cooperation.

## SECTION A

### DEMOGRAPHIC INFORMATION.

*Please tick the most appropriate response.*

**1. Gender of the Respondent.**

Male  Female

**2. Age Bracket of the respondent.**

19 – 28  29 – 38  39 – 48  49 – above

**3. Level of Education of the respondent.**

Primary  Secondary  Diploma  Undergraduate  Masters  other

**4. Marital status of the respondent.**

Married  Single  Divorced  Other

**5. Employment Status of the respondent.**

Full- time  Part- time

**6. Years of driving experience.**

1 -5  6 – 10  11 – 15  16 – 20  21 and above

**7. DEPARTMENT.**

Fleet Department  Distribution Department

**SECTION B. ACCIDENT HISTORY.**

1. In the past 5 years, have you been involved in any accidents while driving for work purposes?

Yes  No

If yes, what was the cause of the accidents?

.....

2. How would you rate the severity of your accident?

- Minor (no injuries, minor vehicle damage)
- moderate (some injuries, moderate vehicle damage)
- major (severe injuries, significant vehicle damage)

3. Were there any fatalities recorded in the accident?

Yes  No

If yes, how many were recorded? -----

**SECTION C**

**EFFECTIVE STRATEGIES FOR PROMOTING SAFE DRIVING BEHAVIOR.**

In the table below, please tick the number that corresponds with the most appropriate answer.

**1. Strongly agree 2. Agree 3. Neutral 4. Disagree 5. Strongly disagree**

|           | <b>Effective strategies for promoting safe driving behavior.</b>                          | <b>1</b> | <b>2</b> | <b>3</b> | <b>4</b> | <b>5</b> |
|-----------|---|----------|----------|----------|----------|----------|
| <b>1</b>  | Our organization awards its best drivers as a way of motivating the rest                  |          |          |          |          |          |
| <b>2</b>  | Our drivers have taken part in safe driver training classes.                              |          |          |          |          |          |
| <b>3</b>  | Our fleet have time based interventions attached to them like GPS's for tracking drivers. |          |          |          |          |          |
| <b>4</b>  | Our organization has a standard speed limit for drivers to follow                         |          |          |          |          |          |
| <b>5</b>  | Our vehicles have hotline numbers people can use for reporting aggressive driving.        |          |          |          |          |          |
| <b>6</b>  | Our drivers wear reflector jackets while driving.   |          |          |          |          |          |
| <b>7</b>  | Our fleet have reflector sings that make them visible to other drivers at night.          |          |          |          |          |          |
| <b>8</b>  | There is effective communication between drivers and fleet managers.                      |          |          |          |          |          |
| <b>9</b>  | Bad drivers are given strikes or fired for their behavior                                 |          |          |          |          |          |
| <b>10</b> | Each vehicle has more than one driver assigned to it                                      |          |          |          |          |          |

|  |                |  |  |  |  |  |
|--|----------------|--|--|--|--|--|
|  | for each trip. |  |  |  |  |  |
|--|----------------|--|--|--|--|--|

**SECTION D**  
**THE INFLUENCE OF ORGANIZATIONAL SAFTY CULTURE ON DRIVER BEHAVIOR.**

In the table below, please tick the number that corresponds with the most appropriate answer.

1. Strongly agree 2. Agree 3. Neutral 4. Disagree 5. Strongly disagree

|    | The influence of organizational safety culture on driver behavior.           | 1 | 2 | 3 | 4 | 5 |
|----|--|---|---|---|---|---|
| 1  | Our organization prioritizes safety in all aspects of our operation          |   |   |   |   |   |
| 2  | There is open communication about safety in our organization.                |   |   |   |   |   |
| 3  | Managers and supervisors actively promote safe driving behaviors.            |   |   |   |   |   |
| 4  | Our organization engages us in practical safe driving seminars.              |   |   |   |   |   |
| 5  | The vehicles we drive are always in perfect condition.                       |   |   |   |   |   |
| 6  | Our vehicles are always tracked for safety reasons.                          |   |   |   |   |   |
| 7  | Each vehicle has a first aid kit in it.                                      |   |   |   |   |   |
| 8  | Our drivers have the right driver qualifications for the vehicles they drive |   |   |   |   |   |
| 9  | All vehicles have tool boxes in them.  |   |   |   |   |   |
| 10 | Our drivers have the basic mechanics skills                                  |   |   |   |   |   |

**SECTION E**  
**THE RELATIONSHIP BETWEEN DRIVER BEHAVIOR AND ACCIDENT RATES.**

In the table below, please tick the number that corresponds with the most appropriate answer.

1. Strongly Agree. 2. Agree 3. Neutral 4. Disagree 5. Strongly Disagree

| 1 | DRIVER BEHAVIOR   | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|
| A | <b>TRAINING</b>   |   |   |   |   |   |
| 1 | Our drivers are well vast with different road safety laws.        |   |   |   |   |   |
| 2 | Our drivers know and understand the different road signs.         |   |   |   |   |   |
| 3 | Our organization only hires healthy drivers.                      |   |   |   |   |   |
| 4 | Our drivers are equipped with defensive driving skills            |   |   |   |   |   |
| 5 | Our drivers are trained to carry out basic mechanics on the fleet |   |   |   |   |   |
| 6 | All vehicles are assigned with tool boxes                         |   |   |   |   |   |
| 7 | Our drivers know how to administer first aid                      |   |   |   |   |   |
| 8 | We take part in annual driver training programs                   |   |   |   |   |   |
|   |   |   |   |   |   |   |
| B | <b>ORGANIZATIONAL POLICY</b>                                      |   |   |   |   |   |
| 1 | All vehicles are assigned more than one driver.                   |   |   |   |   |   |

|          |   |  |  |  |  |  |
|----------|---|--|--|--|--|--|
| 2        | Drivers have to meet a minimum age requirement of 18 years.   |  |  |  |  |  |
| 3        | Drivers get enough rest before hitting the road.  |  |  |  |  |  |
| 4        | Drivers who are involved in accidents are fired   |  |  |  |  |  |
| 5        | Our drivers only make stops in clear and assigned resting places  |  |  |  |  |  |
| 6        | We carry out weather forecast before sending drivers on the road  |  |  |  |  |  |
| 7        | Our fleet have cameras embedded in them.  |  |  |  |  |  |
| 8        | Our organization reports all accidents to the Police  |  |  |  |  |  |
|          |   |  |  |  |  |  |
| <b>C</b> | <b>DRIVERS' CHARACTER</b>   |  |  |  |  |  |
| 1        | Drives use mobile phones while driving.   |  |  |  |  |  |
| 2        | Drivers drive under the influence of alcohol and drugs.   |  |  |  |  |  |
| 3        | Our drivers drive with headlights on at night and during bad weather.                                     |  |  |  |  |  |
| 4        | Drivers with poor driving behavior are fired  |  |  |  |  |  |
| 5        | Drivers make stops anywhere along the way at night  |  |  |  |  |  |
| 6        | Drivers don't wear seatbelts while driving.   |  |  |  |  |  |
| 7        | Drivers exceed the assigned speed limits  |  |  |  |  |  |
| 8        | Our drivers are allowed to overtake while driving   |  |  |  |  |  |
|          |   |  |  |  |  |  |
| 2        | <b>ACCIDENT RATES</b>   |  |  |  |  |  |
|          | <b>DEATH</b>  |  |  |  |  |  |
| 1        | We have recorded fatalities caused by our drivers over the past five years.                               |  |  |  |  |  |
| 2        | The fatal rates caused by our fleet keep increasing each year.  |  |  |  |  |  |
| 3        | We have lost some of our staff members to accidents.  |  |  |  |  |  |
| 4        | Most fatal accidents occur in the night   |  |  |  |  |  |
| 5        | Factors like poor weather are responsible for most fatalities   |  |  |  |  |  |
| 6        | Driver behaviors like taking alcohol or drugs are responsible for deaths                                  |  |  |  |  |  |
| 7        | Most fatal accidents occur on the highway   |  |  |  |  |  |
| 8        | Most deaths are accompanied with severe injuries and damages  |  |  |  |  |  |
|          |   |  |  |  |  |  |
|          | <b>INJURIES</b>   |  |  |  |  |  |
| 1        | We have recorded accidents that have resulted in severe injuries to those involved in the past five years |  |  |  |  |  |
| 2        | We have only recorded mild injuries from accidents in the past five years                                 |  |  |  |  |  |
| 3        | Our organization compensates parties involved in accidents.   |  |  |  |  |  |
| 4        | We have recorded more injuries than deaths and damages in accidents                                       |  |  |  |  |  |
| 5        | Most injuries have been caused by our drivers to other people.  |  |  |  |  |  |
| 6        | All vehicles are assigned with first aid kits   |  |  |  |  |  |

|                |  |  |  |  |  |  |  |
|----------------|--|--|--|--|--|--|--|
| 7              | Most injuries recorded are due to the poor driver behaviors.             |  |  |  |  |  |  |
| 8              | Most injuries are recorded while driving upcountry                       |  |  |  |  |  |  |
| <b>DAMAGES</b> |  |  |  |  |  |  |  |
| 1              | Our accidents have resulted into severe damages of fleet and merchandise |  |  |  |  |  |  |
| 2              | We have an insurance policy that covers damages caused by accidents      |  |  |  |  |  |  |
| 3              | Our fleet are serviced before they leave our premises.                   |  |  |  |  |  |  |
| 4              | Vehicle damages are common in our organization                           |  |  |  |  |  |  |
| 5              | Our drivers know the basic mechanic skills                               |  |  |  |  |  |  |
| 6              | Drivers report vehicle damages to the automotive technicians             |  |  |  |  |  |  |
| 7              | Vehicles that have exceed their mileage are not driven                   |  |  |  |  |  |  |
| 8              | Our vehicles are overloaded with merchandise                             |  |  |  |  |  |  |

**ADDITIONAL INFORMATION**

1. Please suggest ways on how your organization can improve driver safety within the fleet management system?

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Thank you for participating in this survey, your responses are valuable and will contribute to our research on the impact of driver behavior on accident rates in a fleet management system.



# UGANDA CHRISTIAN UNIVERSITY

A Centre of Excellence in the Heart of Africa

School of Business

July 10<sup>th</sup> 2023

To whom it may concern

Name: ABER DENICE FORTUNATE Reg. No. S20B12/001

A bachelor's student who is seeking permission from your office to collect data for his/her dissertation titled

"THE IMPACT OF ACCIDENT RATES ON A FLEET MANAGEMENT SYSTEM"

We shall be grateful if you could render assistance to him/her in collecting the necessary data for his/her dissertation

The Uganda Christian University School of Business thanks you in advance

Mukisa Simon Peter  
Research coordinator