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in low- and middle-income African countries**

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Document information

Authors:

Alex P. Lubida (*University of Dar es Salaam, Tanzania*)
Enoch F. Sam (*University of Education, Ghana*)
Jaqueline E. Masaki (*University of Dar es Salaam, Tanzania*)
John-Fredrik Ehrenhofer Grönvall (*Chalmers Industriteknik, Sweden*)
Prince Kwame Odame (*University of Education, Ghana*)
Salma Makuti (*University of Dar es Salaam, Tanzania*)
Sonja E. Forward (*National Swedish Road and Transport Research Institute, Sweden*)
Tejas Chandran (*Autoliv, Sweden*)
Thomas Osman Miyoba (*Zambia Road Safety Trust, Zambia*)

Reviewer: Mats Rosenquist (*Volvo Technology, Sweden*)

Project Coordinator

Aliaksei Laureshyn
Department of Technology and Society
Faculty of Engineering, LTH
Lund University
Box 118
221 00 Lund, Sweden
Phone: +46 46 222 91 31
Email: aliaksei.laureshyn@tft.lth.se
Web: www.ictct.net/afrosafe/project
Project email: afrosafe@ictct.net

Coordinator of WP4

John-Fredrik Ehrenhofer Grönvall
Chalmers Industriteknik
Box 8077
402 78 Gothenburg, Sweden
Phone: +46 (0)707 970 7440
Email: john-fredrik.gronvall@chalmersindustriteknik.se

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1 Executive Summary

This report presents findings from the AfroSAFE project on vehicle safety awareness in Africa, with a focus on Zambia, Ghana and Tanzania. It looks at how consumers understand vehicle safety, what influences their vehicle-purchasing decisions, and whether targeted awareness activities, including crash-test videos and information on New Car Assessment Programmes (NCAPs), can make safety a more visible part of those decisions.

Road crashes continue to cause substantial loss of life and major economic costs in African countries. According to the WHO Global Status report for road safety 2021, the estimated fatalities for Zambia was 3,338, Ghana was 8,494 and Tanzania was 10,052. Improving vehicle safety is therefore not only a health priority, but also an economic and social one. Vehicle safety includes both systems that help prevent crashes, such as ABS, ESC and other driver-assistance technologies, and systems that protect people when crashes occur, such as seat belts, airbags and strong vehicle structures. NCAPs provide independent crash-test and safety ratings that help consumers compare vehicles and encourage manufacturers to improve safety performance.

Used imported vehicles create a particular challenge in African markets. Vehicles may differ in safety specification between regions, and age, brand name or visual appearance alone do not guarantee crash protection. This makes accessible vehicle-safety information and effective regulatory oversight especially important.

The aim of this task was to increase awareness of vehicle safety among vehicle owners and prospective buyers participating in the study in Ghana, Tanzania, and Zambia, and to assess whether targeted information on crash protection and NCAP safety ratings could influence vehicle purchasing priorities. Through focus groups, pre- and post-intervention surveys, crash-test demonstrations, and discussions of independent vehicle safety ratings, the study examined participants' understanding of vehicle safety, how they prioritised safety relative to other vehicle purchasing factors, and whether exposure to crash-test material and information about NCAP ratings influenced their stated future vehicle purchase intentions. The main conclusions from the qualitative and quantitative analyses were as follows:

1. The pre-survey demonstrated that participants possessed limited knowledge of vehicle safety ratings and the importance of key safety features in reducing crash-related injuries and fatalities. Vehicle purchasing decisions were largely influenced by affordability, maintenance requirements, and vehicle longevity, while internationally recognized safety indicators such as airbags, rear seat belts, and crashworthiness received considerably less emphasis
2. Vehicle choice is strongly shaped by practical and economic factors. Purchase price, fuel consumption, durability and spare-parts availability are often the most important concerns. Brand reputation and social influences also matter, but mainly because they are linked to reliability, ease of maintenance and confidence in long-term ownership. Safety is valued, but it is not always well understood or actively checked before purchase.
3. There are several gaps and misconceptions in consumers' understanding of vehicle safety. Some participants had concerns that airbags could injure occupants or that seat belts could trap people in a crash. The crash-test demonstrations helped challenge these views and made the protective role of seat belts, airbags and vehicle structure much clearer.

4. The crash videos substantially reshaped participants' understanding of vehicle safety, shifting perceptions from the mere presence of safety features to a deeper appreciation of how those systems perform in a crash. Rather than simply reinforcing existing beliefs, the videos provoked emotional reactions, challenged assumptions about vehicle quality, heightened awareness of differences in safety standards, and fostered a greater appreciation of the role of passive safety systems, such as airbags and vehicle structural integrity.
5. Before the intervention, awareness of NCAP ratings was generally low. After the sessions, participants described NCAP information as useful and said they would be more likely to check safety ratings when buying a vehicle in the future. This suggests that independent safety information can help reduce the information gap between buyers, dealers and manufacturers.
6. In general, the focus group discussions had a clear effect on how participants understanding of safety. After the focus group discussions and visual crash demonstrations, participants gave more weight to features such as seat belts, airbags and structural integrity. Safety moved higher in stated purchasing priorities across different vehicle-age groups.

The findings in this study suggest that policymakers should require clearer disclosure of vehicle safety specifications, promote NCAP ratings at the point of sale, and strengthen public education on vehicle safety. Dealers should provide safety information alongside price, mileage and other standard vehicle details. Road safety organisations can use validated crash-test material in campaigns, while insurers, importers and public institutions can support safer purchasing and procurement practices.

Further research is needed to see whether increased awareness leads to safer real-world vehicle purchases. Follow-up studies should test whether participants retain and use safety information over time. The emerging electric-vehicle segment also deserves attention because consumers may show higher safety awareness, while still facing barriers related to infrastructure, insurance and market confidence. Scaling NCAP awareness will require communication that connects safety with the practical concerns buyers already prioritise, including long-term value, reliability and affordability.

2 Background

The World Health Organization estimates that about 1.19 million people die in road crashes every year. Choosing a safer vehicle, and making sure it has the right safety features, can contribute to reduce that number.

Vehicle safety refers to the extent to which a vehicle helps prevent crashes and protects occupants and other road users before, during and after a crash. Independent crash-test ratings provide a practical way for consumers and policymakers to compare vehicle safety performance where such information is available.

This is especially important in Zambia, Ghana and Tanzania, where road crashes have a serious impact on families and communities. 3,338 people were killed in road traffic accidents in Zambia, 8,494 in Ghana and 10,052 in Tanzania. Safer vehicles are not only a health issue; they also matter for national economies and people's livelihoods.

For drivers, passengers, and families, a safer car can make a life-saving difference. When it comes to purchasing a car, studies have found that price, brand loyalty and product quality are important factors. Psychological factors, and sociocultural influences also play significant roles. Other studies have also found that road users in many African countries are aware of traffic risk, but the link between vehicle safety features and crash outcomes is not always well understood.

Vehicle safety means how well a car protects people before, during, and after a crash. It is also a good idea to choose a vehicle with a strong independent crash test rating, ideally five stars where available. Vehicle safety encompasses technologies and design features that help prevent crashes and reduce injury severity when crashes occur. These include both active safety systems, such as Anti-lock Braking Systems (ABS), Electronic Stability Control (ESC), Automated Emergency Braking (AEB), and lane support technologies, as well as passive safety systems such as seat belts, airbags, and crashworthy vehicle structures. Research over the past several decades has demonstrated that improvements in vehicle design and occupant protection systems have significantly reduced the risk of death and serious injury in road traffic crashes.

Despite these advances, the safety performance of vehicles available to consumers differs considerably across markets. In many African countries, a large proportion of the vehicle fleet consists of imported used vehicles, often originating from markets with different regulatory requirements and safety standards. Furthermore, vehicle buyers may have limited access to independent information regarding crashworthiness and the effectiveness of safety systems. As a result, consumers frequently rely on factors such as purchase price, fuel economy, durability, vehicle appearance, and brand reputation when selecting a vehicle, while objective safety performance receives less attention.

Kullgren, Stigson and Axelsson (2020) provide an important empirical foundation for understanding the progress made in passenger-car safety over the past four decades. Using real-world crash data from Sweden, the study examined cars introduced from the 1980s onward and assessed changes in injury risk across several outcome levels, including any injury, fatal and serious injury, fatality, and injuries leading to permanent medical impairment. A key strength of the paper is that it does not rely only on controlled crash-test performance or regulatory assumptions but evaluates how successive generations of vehicles have performed in actual crashes. The results show a steady improvement in crashworthiness, with the largest gains observed for fatal and serious injuries and for injuries associated with permanent medical impairment. At the same time, the paper is careful to show that safety progress has not been

uniform across all occupant groups or injury types, with women and older occupants remaining at higher risk for several injury outcomes.

For the AfroSAFE context, the significance of the study is that it demonstrates vehicle safety as a measurable and cumulative outcome of engineering development, regulation, consumer information and market pressure, rather than as a vague attribute associated with brand, age or appearance. The paper therefore provides a strong basis for explaining why NCAPs matter. If newer vehicle generations can deliver substantially lower risks of fatal, serious and permanently impairing injuries, consumers need a reliable way to distinguish vehicles that embody this progress from those that do not. NCAPs help make these differences visible by translating complex crashworthiness and safety-system performance into information that buyers, fleet operators and policymakers can use. This is particularly relevant in import-dependent markets, where similar-looking vehicles may differ considerably in specification, structural performance and safety technology depending on the market for which they were built (Kullgren et al., 2020).

To address this information gap, New Car Assessment Programmes (NCAPs) have been established in many regions of the world. Programmes such as Euro NCAP, Japan NCAP (JNCAP), and the United States NCAP provide independent assessments of vehicle safety through a combination of crash testing and evaluations of crash avoidance technologies. Their star-rating systems enable consumers to compare vehicles objectively and have played a significant role in encouraging manufacturers to improve vehicle safety performance. In Africa, consumer information on vehicle safety remains comparatively limited. Initiatives such as the Automobile Association of South Africa's Entry-Level Vehicle Safety (ELVS) reports and Global NCAP's Safer Cars for Africa programme have begun to address this gap by evaluating vehicles sold in African markets and communicating safety performance to consumers. These initiatives have demonstrated substantial differences in crash protection between vehicles and have highlighted the potential of consumer information to influence both purchasing behaviour and manufacturer practices. However, awareness and understanding of NCAP ratings among consumers in many African countries remain low. Previous studies have suggested that while road users generally recognise the importance of safety, they often associate safety with vehicle reliability, tyre condition, or driver behaviour rather than crashworthiness and occupant protection. Consequently, there is a need to better understand how consumers perceive vehicle safety and whether increased awareness of vehicle crash performance can influence vehicle purchasing priorities.

Within this context, the AfroSAFE project seeks to contribute to safer vehicle choices in Africa by examining consumers' understanding of vehicle safety and by evaluating the effectiveness of targeted awareness interventions. Through activities conducted in Ghana, Tanzania, and Zambia, the project investigates how vehicle buyers make purchasing decisions, how they interpret vehicle safety information, and whether exposure to crash-test demonstrations and NCAP ratings can increase the importance attached to vehicle safety during the purchasing process. The findings are intended to support policymakers, road safety organisations, vehicle dealers, and other stakeholders in developing strategies that promote informed consumer choices and accelerate the adoption of safer vehicles across Africa.

3 Introduction to New car Assessment Programmes (NCAP's)

New Car Assessment Programmes provide independent information on how well vehicles protect occupants and other road users in crashes, and how effectively they help prevent crashes from occurring. They are important because minimum vehicle regulations do not always show consumers which vehicles offer higher levels of protection, especially when similar-looking models are sold with different safety specifications in different markets. This section introduces the main consumer rating programmes used internationally and explains how their testing and rating systems help consumers, policymakers and manufacturers compare vehicle safety performance in a more transparent way.

3.1 Consumer Rating Programs in Europe

The European New Car Assessment Programme (Euro NCAP) provides independent safety information for vehicles sold in Europe. Its ratings are based on a broad set of crash protection and crash avoidance tests, including assessments of adult occupant protection, child occupant protection, vulnerable road users and safety assist technologies (Euro NCAP, n.d.-a, n.d.-b).

Crashworthiness is assessed through controlled laboratory tests that reflect common real-world crash scenarios. The main areas assessed include (Euro NCAP, n.d.-a):

- Frontal impact tests.
- Side impact tests.
- Rear-impact and whiplash protection assessments.
- Vulnerable road-user protection, including pedestrian and cyclist protection.
- Safety assist technologies, such as autonomous emergency braking, lane support and speed assistance.

The results are presented as a star rating from zero to five stars, making it easier for consumers to compare vehicles. Euro NCAP also updates its assessment protocols as vehicle technology and crash data evolve, which means the rating system continues to push manufacturers towards higher levels of safety performance (Euro NCAP, n.d.-b).



Figure 1: Euro NCAP testing for crash safety

3.2 Consumer Rating Programs in Japan

The Japan New Car Assessment Program (JNCAP) is Japan's official vehicle safety assessment programme. It is jointly implemented by the Ministry of Land, Infrastructure, Transport and Tourism and the National Agency for Automotive Safety and Victims' Aid, with the aim of giving consumers clearer safety information and encouraging manufacturers to develop safer vehicles (National Agency for Automotive Safety and Victims' Aid [NASVA], n.d.).

JNCAP covers both preventive safety and collision safety. Its assessments include the following main areas (NASVA, n.d.):

- Preventive safety technologies, including autonomous emergency braking and lane departure prevention.
- Collision safety for vehicle occupants.
- Pedestrian protection.
- High-performance headlight assessments.
- Automatic accident emergency call systems.

The programme combines scores for preventive safety, collision safety and automatic emergency call performance into an overall star rating from one to five stars. This makes JNCAP useful not only for comparing vehicle crash protection, but also for understanding how well a vehicle can help avoid crashes in the first place (NASVA, n.d.).

3.3 Consumer Rating Programmes in the United States

In the United States, the official vehicle safety rating programme is the National Highway Traffic Safety Administration's New Car Assessment Program. It is best known for its 5-Star Safety Ratings, which help consumers compare the safety performance of vehicles when making purchase decisions (National Highway Traffic Safety Administration [NHTSA], n.d.).

U.S. consumers also commonly refer to ratings from the Insurance Institute for Highway Safety (IIHS), an independent organisation whose Top Safety Pick and Top Safety Pick+ awards are based on crashworthiness, crash avoidance and headlight performance. While IIHS is not a government NCAP, its ratings are influential because they often set demanding requirements for both occupant protection and crash prevention (Insurance Institute for Highway Safety [IIHS], 2026). Table 1 provides an overview of both these programmes.

Table 1: Safety rating programmes in the USA

Organization	Type	Most Known For
NHTSA NCAP	Government	5-Star Safety Rating
IIHS	Independent/Insurance Industry	Top Safety Pick and Top Safety Pick+

3.3.1 NHTSA NCAP Tests

NHTSA's 5-Star Safety Ratings focus on crash outcomes that account for a large share of serious crashes on U.S. roads. The programme includes the following assessments (NHTSA, n.d.):

- Frontal crash test.
- Side barrier crash test.
- Side pole crash test.

- Rollover resistance assessment.

3.3.2 IIHS Tests

IIHS assessments cover both crashworthiness and crash-avoidance performance. The main tests and rating areas include (IIHS, 2026):

- Small overlap frontal crash tests.
- Moderate overlap frontal crash tests.
- Side crash tests.
- Pedestrian front-crash prevention.
- Vehicle-to-vehicle front-crash prevention.
- Headlight performance.

3.4 Consumer Rating Programs for Africa

A simple first step in the African context is to provide consumers with clear information about the safety features in cars already on the market. The Automobile Association of South Africa (AA) has done this through its Entry-Level Vehicle Safety (ELVS) reports. In 2022, the AA reviewed 38 vehicles priced below R270,000. Information on safety equipment was taken from published vehicle specifications and checked with manufacturers, importers or dealers. Points were awarded for anti-lock braking systems, electronic stability control and airbags. Additional points were given if the vehicle had been tested under Global NCAP's Safer Cars for Africa programme. Based on the total score, four vehicles were rated poor, 23 moderate and 11 acceptable (Automobile Association of South Africa [AA], 2022a). This is a low-hanging fruit for African countries because it can be applied to vehicles that are already being sold and does not require a domestic crash-test facility. It allows consumers and fleet buyers to compare basic safety equipment. However, it does not assess how well a vehicle protects its occupants in a crash and cannot replace independent crash testing (AA, 2022a, 2022b).

Global NCAP and the AA launched the Safer Cars for Africa consumer crash-testing programme in 2017. The first test series included five popular entry-level cars, with adult occupant protection ratings ranging from zero to four stars. At the time, the programme was described as the first crashworthiness consumer-testing programme for Africa and an important step towards safer cars across the continent (Global New Car Assessment Programme [Global NCAP], 2017). Under the current protocol, vehicles are assessed for frontal and side impact protection and electronic stability control. Pedestrian protection and a side-pole impact assessment are required for the highest ratings (Global NCAP, 2024). The results show that high levels of protection are possible in cars sold in Africa. In 2021, the Mahindra XUV300 became the first vehicle tested under Safer Cars for Africa to achieve five stars for adult occupant protection. At the same time, the Kia Pegas and Renault Triber tested in 2024 received two stars, while the Maruti Suzuki Ertiga received one star for adult occupant protection (Global NCAP, 2021, 2024).

Safer Cars for Africa is sometimes discussed as a possible basis for an African NCAP. However, no official source identified in this review indicates that an independent, African-governed NCAP has been formally established. Safer Cars for Africa remains a Global NCAP programme, run in collaboration with the AA and supported by the FIA Foundation and Bloomberg Philanthropies (Global NCAP, 2024). The programme carries out several functions normally associated with an NCAP. Vehicles available in the local market are purchased for independent testing, and the results are published to inform consumers, and support calls for improved vehicle safety standards. The results have also supported concerns raised by Global

NCAP about differences in the level of safety offered by manufacturers in African and other global markets. The programme can therefore provide experience and evidence relevant to a future African-led NCAP, but it is not a continental NCAP in its present form.

Two Nissan examples show how consumer testing can expose differences between markets and encourage manufacturers to improve. In 2020, Global NCAP carried out a car-to-car test between a new 2019 Nissan NP300 Hardbody sold in South Africa and a second-hand Nissan Navara NP300 manufactured for the European market in 2015. Global NCAP reported that the driver of the new South African vehicle would probably have sustained fatal injuries, while the driver of the five-year-old European vehicle would probably have walked away. Global NCAP used the test to highlight the double standards in vehicle safety applied by some manufacturers, with vehicles sold in African markets providing lower levels of crash protection than those offered in markets with stronger safety requirements (Global NCAP, 2020).



Figure 2: Crash test by Global NCAP for the African market. This car received a 5-star rating.

The Nissan Magnite provides a different example of how NCAP testing can encourage a manufacturer to improve the safety of a vehicle already on the market. The initial two-airbag specification received two stars for both adult and child occupant protection. Nissan subsequently made six airbags and electronic stability control standard and voluntarily submitted an updated specification for further assessment. This version achieved four stars for both adult and child occupant protection. After further improvements to the restraint systems, pedestrian protection and three-point seat belts, Nissan submitted another updated specification for voluntary testing. In 2025, the latest Magnite specification achieved five stars for adult occupant protection and three stars for child occupant protection. It was the first vehicle sold in South Africa to achieve five stars under Global NCAP's current protocol. The Magnite therefore shows how published NCAP results can lead directly to voluntary design and equipment changes by a manufacturer (Global NCAP, 2025).

Together, the NP300 and Magnite examples show the two main ways in which NCAP testing can influence vehicle safety: by exposing differences in crash protection between markets and

by encouraging manufacturers to improve the vehicles they sell. To deliver these benefits consistently across Africa, however, a future African-led NCAP would require a clear institutional framework. Based on the operation of established NCAPs, such a programme would need clear ownership, long-term funding and independent governance. It would also need transparent procedures for selecting and purchasing vehicles, carrying out or commissioning tests, checking the quality of the results and managing conflicts of interest. The test protocols should reflect the vehicles and crash conditions found in African countries while remaining comparable with other NCAPs. Ratings should apply to the vehicle versions sold in each market and should be communicated in a form that consumers can understand. Governments and fleet operators could also consider the ratings when purchasing vehicles. An NCAP should complement, rather than replace, vehicle regulation. The Global Plan for the Decade of Action for Road Safety 2021–2030 calls for countries to apply minimum standards for occupant and vulnerable road-user protection, seat belts and child restraints, together with technologies such as electronic stability control (World Health Organization [WHO], 2021). The African Road Safety Charter, which entered into force in March 2026, provides a broader policy basis by calling for safer vehicles and vehicle safety standards, but it does not establish an NCAP (WHO, 2026). In the short term, the AA's equipment-based assessment and continued testing under Safer Cars for Africa offer two practical ways to improve the information available to consumers. In the longer term, the experience gained through these activities could support an African-led NCAP if political support, technical capacity and stable funding are secured.

3.5 Consumer Rating Programmes for Trucks

Heavy-duty trucks play a critical role in the economic development of African countries and has a disproportionate impact in severe road crashes due to their size, mass, and interaction with vulnerable road users. While consumer safety rating programmes for passenger cars are well established through initiatives such as Euro NCAP, JNCAP, and Global NCAP, equivalent systems for commercial vehicles have only recently emerged. These programmes aim to evaluate and communicate the safety performance of trucks, thereby encouraging manufacturers, fleet operators, and regulators to prioritize vehicle safety.

Truck consumer rating programmes assess a range of safety technologies and performance characteristics, including direct vision for drivers, advanced driver assistance systems (ADAS), autonomous emergency braking, lane support systems, speed assistance technologies, and measures to protect pedestrians and cyclists. Unlike traditional vehicle regulations that establish minimum requirements, consumer rating schemes provide comparative information that rewards manufacturers exceeding regulatory standards and supports informed procurement decisions by fleet operators.



Figure 3: Euro NCAP for heavy goods vehicles.

Increasing awareness of truck safety ratings has the potential to accelerate the adoption of safer commercial vehicles, reduce collisions involving heavy goods vehicles, and improve the protection of both vehicle occupants and vulnerable road users. For African countries, where commercial transport is expanding rapidly, truck rating programmes could complement existing road safety initiatives by creating incentives for safer fleet renewal and procurement practices. As demonstrated by passenger vehicle NCAP programmes, transparent safety information can drive market demand for safer vehicles and contribute to long-term reductions in road traffic deaths and serious injuries.

Incorporating truck safety rating systems into national road safety strategies may therefore represent an important opportunity to improve freight transport safety, support evidence-based vehicle procurement, and promote higher safety standards across the commercial vehicle sector.

4 Customer Preferences for Vehicle Brand and Model When Purchasing New Vehicle

This chapter uses a small desk study to hypothesise how vehicle purchase decisions appear to differ between Sweden and the three partner African countries: Zambia, Ghana and Tanzania, to guide the study presented later in this report. The purpose is to understand where safety fits into the decision, and whether the role of safety looks different in a mature European vehicle market compared with African markets where affordability, used imports and maintenance conditions are more central.

In Sweden, vehicle safety is supported by a long-established regulatory and consumer-information environment. New vehicles are normally sold with a high basic level of safety equipment, and Euro NCAP ratings are widely available for many models. This does not mean that Swedish consumers choose cars only because they are safe. Studies on vehicle choice in Sweden, especially for electric vehicles, still show that price, running costs, maintenance cost and access to charging infrastructure are important. Safety is therefore not the only concern, but it is part of a market where minimum expectations are already relatively high and where independent safety information is easier to find.

The situation in Zambia, Ghana and Tanzania is different. The desk study suggests that car buyers in these markets often start from practical questions. How much does the car cost? How much fuel will it use? Is it durable? Are spare parts available? Can it handle local road conditions? These questions are part of the basic calculation of whether a vehicle can be owned and kept running. This is particularly important where many vehicles are bought used, where repair costs can be difficult to absorb, and where the availability of parts may influence the choice of brand or model. The desk study indicates that safety is valued in all three countries, but it does not show clearly how consumers interpret safety, or how much weight they give it when choosing between vehicles.

The material reviewed for Ghana also shows that vehicle choice is shaped by several factors, including interior features, safety, value for money, modernity and economy. Safety is therefore part of the purchase decision, but it sits alongside more immediate ownership concerns such as cost, comfort, fuel use, perceived value, durability and maintenance. This is similar to what appears in the material from Zambia and Tanzania, where practical ownership factors are often raised before safety when people discuss vehicle choice.

The material reviewed for Tanzania points to similar ownership concerns, but with particular emphasis on the role of used imports and spare parts availability. Available market information points to low overall car ownership and a strong presence of used vehicles, many of them imported. Toyota is reported to dominate the household vehicle fleet, partly because of its reputation for reliability and because spare parts are easier to find. In such a market, brand choice is closely tied to confidence that the car can be maintained over time. Safety may still be valued, but it has to compete with the more visible advantages of reliability, familiarity and parts availability.

The early Zambian pilot findings reported later in this document point in the same direction. When vehicle choice was discussed, fuel efficiency, durability, price and spare parts were commonly mentioned. Safety was also considered important, but it was less likely to come forward on its own when people were thinking about the everyday cost and practicality of owning a car.

In Sweden, safety information sits inside a system where consumers can often assume a relatively high safety baseline, even if they do not actively check every safety rating. However, in

Zambia, Ghana and Tanzania, this cannot be assumed to be the same. The same brand or model name may not mean the same safety specification across markets. A vehicle that looks familiar or has a strong reputation for reliability may still have fewer airbags, weaker crash protection or less advanced safety equipment than a version sold elsewhere, as described in Section 3.4.

Overall, the desk study suggests that the main difference is not that Swedish consumers care about safety while consumers in Zambia, Ghana and Tanzania do not. The difference is the context in which the purchase decision is made. Swedish buyers operate with stronger regulation, more standardised safety equipment and more accessible consumer ratings. In the three African countries, used imports, affordability, spare parts and brand reputation appear to play a larger role. For NCAP awareness work, this means safety information should not be presented as a separate technical subject. It should be linked to the choices buyers are already making: value for money, long-term use, confidence in the vehicle, and the actual protection offered by the version sold in their country. The Table 2 below lists our hypotheses and assumptions for this study.

Table 2: Hypothesis on factors driving vehicle purchasing motivators in the three African countries

Selection criteria	Ghana	Tanzania	Zambia
Affordability / Price	Top priority due to high import taxes; most buyers choose used cars	Dominant factor; used cars far cheaper than new cars	Very important; affordability and financing options matter
Fuel Efficiency	Important but secondary to price	Critical due to high fuel costs	Critical; rising fuel prices drive demand for efficient cars
Safety Features	Desired but often compromised for cost	Important but secondary to affordability	Important for families; durability also matters
Technology & Features	Modern features desired but limited by cost	Basic features (AC, power windows) are key; advanced tech less relevant	Growing interest in infotainment and comfort features
Environmental Impact	Low priority; EV adoption negligible	Low priority; EV adoption negligible	Emerging interest in EVs and hybrids, but still early stage
Brand Reputation	Preference for foreign brands (Toyota, Nissan)	Japanese brands dominate (Toyota, Nissan)	Toyota dominates due to reliability and resale value
Government Incentives	No significant incentives; high taxes on imports	No major incentives; high duties on new cars	Some tax reductions and financing options for new cars
Road Conditions	Not a major factor	Major factor; SUVs/pickups preferred for rural roads	Important; durability and ground clearance valued
Resale Value	Important due to high depreciation on new cars	Important; used cars retain value better	Important; Toyota and Japanese brands have strong resale value

5 Method

5.1 Objective of the Customer Awareness Study

The objective of this study was to increase participants' awareness of vehicle safety features through face-to-face workshops and related discussion activities. Focus groups were conducted in Zambia, Ghana and Tanzania to examine how participants understood vehicle safety, how they prioritised safety in relation to other purchasing factors, and whether visual crash-test material and NCAP information influenced their stated future purchase intentions.

5.2 Participants

5.2.1 Ghana

Participants were aged 35 to 56 years, with a mean age of 42 years. Table 3 shows their age and gender.

Table 3: Age and gender distribution in Ghana

Age	Range; 1970 to 2000; Mean 42 years old
Gender	25% female

The participants represented a diverse range of professions, including university administrators, lecturers, architects, institutional drivers, automobile dealers, medical doctors, local government employees, and other professionals. This diversity provided a broad range of perspectives on vehicle purchasing decisions and experiences.

Almost all the participants (n=26) reported that their current vehicle had been imported, mostly from the USA (62%). Driving was predominantly urban driving frequency of 6 (SD¹ 1,19), against a rural area mean of 3,59 (SD 1,66).

5.2.2 Tanzania

In Tanzania 34 people participated in the focus group, shown in Table 4.

Table 4: Age and gender distribution in Tanzania

	New car (n=6)	Second-hand car (n=28)	Total (n=34)
Age	Range 1966 to 1986; Mean 52 years old	Range 1956 to 2006; Mean 44 years old	45 years old
Gender	0% female	18% female	15% female

All 34 participants reported that their current vehicle had been imported, with Japan the source market for 26 of them (76.5%). Driving was predominantly urban, with a mean urban driving frequency of 6.09 of 7 (SD 1.50) against a rural mean of 3.71 (SD 1.80).

¹ SD= Standard Deviation which describes how much members of a group differ from the mean value for the same group.

5.2.3 Zambia

A total of 58 participants took part in the Zambia arm of the study. . The distribution of age and gender was slightly different when controlling for the vehicle they drive, see Table 5.

Table 5: Age and gender distribution in Zambia

	New car (n=10)	Second-hand car (n=48)	Total
Age	Range; 1965 to 1991; Mean 47 years old	Range; 1969 to 2003; Mean 34 years old	36 years old
Gender	60% female	25% female	31% female

This spans three distinct generational cohorts within the sample: a younger group in their twenties entering the vehicle-owning population for the first time, a core group in their thirties, likely to be established professionals and mid-career buyers, and an older cohort in their forties and fifties with longer purchasing histories and, plausibly, more accumulated experience of Zambia's second-hand vehicle market. This age spread is a methodological strength: it means the study's findings on purchase priorities and safety awareness are not an artefact of a narrow generational viewpoint but reflect a reasonably broad cross-section of adult vehicle owners.

Only 31 of the participants indicated if their current vehicle was imported or not. The most frequent country was Japan (n=26). Driving was predominantly urban, with a mean urban driving frequency of 6.36 (SD 1.05) against a rural mean of 3.55 (SD 1.62).

5.3 Procedure

A common participant-selection approach was applied across Ghana, Tanzania and Zambia. Participants were purposively recruited to capture a range of experiences and perspectives related to vehicle purchasing and ownership.

The study sought representation from three vehicle owner categories:

- Group 1: Buyers or owners of brand-new imported vehicles;
- Group 2: Buyers or owners of almost-new vehicles, generally one to two years old; and
- Group 3: Buyers or owners of used vehicles, generally five to ten years old.

However, the final distribution varied between countries because of differences in vehicle ownership patterns and the availability of eligible participants. As a result it was only possible to divide the participants into two groups, those who were driving a new car and those who were driving a second-hand car.

Participants were recruited through local professional, institutional and community networks. The participants were invited to take part in focus group discussions about their choice of vehicle purchases.

Each session lasted approximately one hour. In total, 10 individual interviews (Zambia 10) and 16 face-to-face focus groups (Ghana 5; Tanzania 2; Zambia 9) were conducted, with approximately six participants in each group and two facilitators. In addition to these ten individuals were interviewed separately, some of them online. After providing consent, all sessions were audio recorded.

A questionnaire was administered to participants upon arrival and prior to the start of the session (see Appendix 1: Pre-Campaign Questionnaire). At the end of the session, a second survey

was distributed and completed by the participants (see Appendix 3: Post-Campaign Questionnaire).

5.3.1 Interview guide and questionnaire

Prior to the design of the interview guide and the survey a small pilot interview was conducted in Ghana, Tanzania, and Zambia to test and to obtain an early indication of the factors shaping vehicle purchase decisions. The interviews were face-to face and combined open-ended questions on past and prospective car-buying behaviour.

Interview guide

Semi-structured qualitative interviews were carried out and for this an interview guide was developed (Forward & Levin, 2021). The guide included ten questions, see Appendix 2: Interview Guide, allowing the interviewer to tailor their questions to the interviewee rather than following a strict protocol. The guide also included a number of prompts which would be used to probe pre-planned specifics they did not mention.

Questionnaire

The final pre-session survey included items measuring 11 different aspects that was found to be important when purchasing a car (e.g., style and design, ease of access, availability of spare parts, seat belts in the back and airbags). These items were rated on a 7-point scale (1 = Not important at all, 7 = Very important). Participants were then asked to select the three aspects they considered most important.

The survey included questions about participants' favourite car brand and the reasons for their preference. Additional questions gathered information about their current car and whether it was imported. This was followed by two questions assessing how frequently they drive in urban and rural areas. Finally, demographic information, including age and gender, was collected.

The post-session survey included the same questions as the pre-session survey. Because Global NCAP was discussed during the focus group, additional questions relating to NCAP awareness and perceived usefulness were incorporated. Participants were asked to rate the usefulness of Global NCAP and to assess whether such a system would be feasible in Africa.

They were also asked whether, the next time they purchase a car, they would consider the car's safety rating. Response options were "Yes," "Not sure," and "No".

The survey concluded with an open-ended question inviting participants to share their comments on safe cars and their reflections on the focus group discussion.

A follow-up web survey was planned after the focus group discussions to assess whether participants retained the information and whether their stated purchasing priorities changed over time. However, there was a very limited response to this follow-up survey and the results will therefore not be presented in this deliverable.

5.3.2 Intervention

The sessions began with questions about participants' own cars and what influenced their choices. They were then asked to elaborate on why these factors were important. If safety features were not mentioned, participants were prompted to discuss them and explain what safety

meant to them. Seat belts in the back were also discussed, starting with participants' own views, followed by a short film illustrating what would happen to a driver and passenger if they were not wearing seat belts, see Figure 4.



Figure 4: Crash-test video showing an unbelted occupant in a 30 km/h impact.

The second part of the session discussed safety features and if the same car made in Europe would be different from a car made in another country. A film was shown comparing a second-hand car made in Europe with a high star rating and the same car, but new, made in South Africa, see Figure 5.



Figure 5: A crash test between a second-hand car (grey) from Europe and a new car made in South Africa (white).

The crash test demonstrated that the second-hand car performed much better. Participants were then introduced to the rating systems used by Global NCAP. The sessions concluded with participants' reflections on the discussion. Participants also received a vehicle safety information brochure at the end of the session, shown in Appendix 4: Vehicle Safety Awareness Leaflet.

5.3.3 Data analysis

The results from the focus group discussion were first transcribed and then categorised according to concepts. This was done adopting a thematic analysis which meant that various themes with relevance to the research goals were identified and coded. This resulted in 3 overarching topics: 1) Vehicle Purchase Priorities, 2) Understanding vehicle safety and 3) The attitude towards NCAP ratings. Under theme number 1, 10 sub-themes were identified: Economic considerations, Spare parts availability, Purchase cost, Fuel consumption, Functional vehicle characteristics and durability, Country of import, Influence of design and aesthetics, Influence of family and Friends, Role of Social Status in Influencing Vehicle Purchasing Intentions, Role of Brand Preference. Under theme number 2, 5 sub-themes were identified: Existing misconceptions, Connotation of safety, Airbags as a consideration for vehicle purchase, Seat belt as priority, Effect of visual demonstrations. Under theme number 3, 3 sub-themes were identified: Awareness of NCAP, Perceived usefulness, Intention to use NCAP.

Analyses of the surveys were carried out with the help of the statistical program Statistical Package for the Social Sciences (SPSS). The tests consisted of: frequency analyses, t tests to investigate differences between the pre- and post-study and Anova to compare the responses from the different countries. The significance level was set at 5 percent ($\alpha = 0.05$).

6 Results: Focus group discussions

6.1 Vehicle Purchase Priorities

6.1.1 Ghana

Economic considerations.

Regarding vehicle purchasing behaviour, economic considerations were the most influential priority, reflecting the need to balance vehicle ownership with broader household financial responsibilities. Participants consistently evaluated vehicle-related costs in the context of their overall living conditions, prioritising options that would minimise ongoing financial burdens while preserving income for other essential household needs.

Regarding associations, participants frequently linked the availability and affordability of spare parts to specific vehicle brands. Popular brands such as Toyota, Honda, and Nissan were repeatedly identified as preferred choices because their widespread presence in the Ghanaian market ensures easier access to replacement parts at relatively lower costs. Notably, these perceptions were consistent among participants who purchased both new and second-hand vehicles, indicating broad agreement on the importance of long-term maintenance costs in vehicle purchase decisions.

Spare parts availability

The availability of spare parts remained the dominant issue, as this was seen as a preventive strategy against prolonged vehicle downtime and excessive maintenance costs. This was made clear in the following narratives.

- *“I believe, by all means, the car will get spoilt // if the spare parts are [not] available... you will end up parking the car because of small things that are spoilt on the car. So that becomes a major factor when you have to purchase a car.”*
- *“Yes, I considered the cost of spare parts. When I was using a Toyota, the spare parts were readily available, easy to get, and affordable. But I was told that Honda lasts longer and is durable. When it breaks down, getting spare parts is very difficult and expensive. However, we went ahead and bought it just because of the durability of the //.”*
- *“Well, I would say the availability of the parts. Even if you are using it and it breaks down, you need a part to get it back on the road. So if it's not available, that should have been another issue.”*

Brand preferences were strongly shaped by participants' perceptions of spare parts accessibility. Japanese brands, particularly Toyota and Honda, were consistently seen as practical and economically viable due to the widespread availability of replacement parts across Ghana. One participant noted:

- *“Looking at Toyota, it's easy to get their parts... with other brands like Mercedes, it is difficult to get a part here in Ghana... that was one of the key reasons why I had to opt for Toyota.”*
- *“Toyota // Anywhere, any corner, you can get a part.”*

These accounts suggest that participants perceived Toyota not merely as a reliable vehicle but as one supported by an extensive and accessible aftermarket network. Such accessibility reduces maintenance-related uncertainty and increases buyers' confidence in the brand.

Purchase cost

Regarding cost, participants consistently reported that their preferred vehicles often differed from those they ultimately purchased due to financial constraints. Some participants explained:

- *“The cost of the car. So, I went for a used car in Ghana. At the time, I had a budget constraint, so I had to choose from a list of more affordable cars.”*
- *“My money was not enough for the CR-V // he told me he has a Ford Fusion at the port in Ghana if I'm interested.”*
- *“For me, it was affordability. That was what I was thinking about most of the time.”*

Beyond affordability, participants assessed purchase cost within a broader value-for-money framework. Rather than selecting the cheapest vehicle, respondents sought vehicles that balanced purchase price, future ownership costs, and practical utility. One participant explained that multiple economic considerations informed the decision to purchase a Honda CR-V:

- *“I wanted a Toyota RAV4 // but the engine capacity and fuel consumption are high. I considered fuel consumption, the cost of the car, and the number of seats. Those factors informed my choice.”*

Another important nuance emerging from the findings is that vehicle purchasing intentions shifted as participants' financial circumstances changed. One participant indicated that earlier purchasing decisions were driven by financial necessity, whereas subsequent purchases enabled them to pursue long-held preferences. One participant reflected:

- *“At that time, my money was small // I could afford the Toyota. This time I said, no. Let me go for my dream car.”*

This narrative suggests that purchasing intentions are not static but closely tied to an individual's economic trajectory. Financial improvement expanded participants' choice sets, enabling them to prioritise personal aspirations and perceived vehicle quality over affordability alone.

Fuel consumption

While closely related to one's economic standing, fuel consumption also remained a major economic consideration. However, participants associated fuel consumption with the long-term affordability of vehicle ownership and overall operational costs. A central theme from the interviews was that participants regarded fuel consumption as a long-term economic investment rather than a short-term operational issue. While these issues were unanimous across all participant groups, some participants revealed the following:

- *“For Toyota, when it comes to fuel consumption, it's better than other brands. So it all still boils down to cost, even though not directly in purchase, but extra cost in usage.”*
- *“Buying a car is one thing, but fuel will remain forever. I consider a smaller car, as it will spare me from paying so much on fuel”.*
- *“I wanted a Toyota RAV4, but the RAV4's fuel consumption is high. Therefore, I had to change my mind and consider something with lower consumption. I considered fuel consumption, the cost of the car, and the number of seats. Those factors informed my choice to buy the Honda CR-V.”*

Functional vehicle characteristics and durability

Regarding the characteristics of the vehicle and durability, the qualitative findings demonstrate that it is a central attribute influencing participants' vehicle purchasing intentions, as it encompasses perceptions of mechanical strength, reliability, terrain adaptability, operational continuity, and long-term value. This is evident in quotations like:

- *“As a university / /. we cover distances and travel to places. So, the Toyota Hilux informed our choice.”*
- *“It's robust. It's strong. It lasts, yes, compared with other pickups.”*
- *“I was looking for something that would not break down on the way. At the time I was buying the car, I was living in the Oti region and travelling often from that end towards Accra. I was looking for something I could depend on, for journeys from Oti to Winneba, Oti to Accra, and to Tamale and those areas. I was looking at the road network, so I was not going to buy a saloon car that is low and could cause some challenges on some of our roads. So I was looking at all of that before settling on this type of car.”*

Participants assessed durability according to the functional demands of their daily activities and work environments. Rather than selecting vehicles based solely on brand reputation or appearance, respondents prioritized vehicles that could reliably perform under demanding operating conditions, including those capable of withstanding Ghana's challenging road conditions, supporting occupational demands, and reducing the likelihood of breakdowns and costly repairs. Consequently, durability was perceived not merely as a desirable vehicle characteristic but as a practical investment that enhanced mobility, productivity, and ownership confidence. For participants who travel longer distances, such as to the University of Education, Winneba, durable vehicles were essential tools for fulfilling professional responsibilities, particularly where long-distance travel and poor road networks were part of routine activities.

Another important nuance emerging from the discussions is that participants viewed durability as a trade-off against other vehicle attributes, particularly operating costs. While respondents acknowledged that highly durable vehicles often consumed more fuel, many considered the additional expense acceptable given the reliability and versatility they offered. One participant reflected:

- *“If money were not an issue, we would have gone for a Land Cruiser / /. Very durable... it can move on every terrain.”*

An important finding concerns the relationship between durability and brand perception. Toyota was repeatedly identified as a durable vehicle, capable of withstanding Ghana's road conditions while remaining easy to maintain. One participant observed:

- *“Toyota can be used on most of the rough roads we have here... it lasts for a period... any mechanic in any village... can fix it.”*
- *“Ghanaians will tell you that Toyota / /. will not leave you stranded on the road. Even if there is a fault, it will take you to your destination.”*

These quotations reveal that perceptions of durability were shaped not only by individual experiences but also by shared social beliefs about vehicle brands. Toyota's reputation for reliability and resilience appeared to strengthen participants' confidence in its long-term performance, making it a preferred choice for many respondents.

Unfortunately, visibility and vehicle age were rarely discussed as determinants of vehicle purchase intentions, whereas reliability was consistently framed in participants' discussions of durability rather than as a distinct vehicle attribute. In contrast, the qualitative findings indicate

that a vehicle's country or market of origin played a relatively limited yet nuanced role in shaping participants' vehicle-purchasing intentions.

Country of import

Unlike factors such as durability, fuel consumption, or spare parts availability, participants generally did not prioritize whether a vehicle was manufactured or imported for a particular geographical market. This was evident in the following narratives.

- *“I believe that most of the time, geography itself is not given much consideration because the focus is on the kind of work you want to use the vehicle for // if it is going to do farm work, then the pickup will be used for farm work, not necessarily taking the geographical environment into account.”*
- *“When we are purchasing the vehicle, we are purchasing it for the university. We go to the showroom with our specifications and do not really consider which market the car comes from.”*
- *“Whether this vehicle was actually built for this market or that market is not an issue. It wasn't a factor I considered at the time of purchase, since my budget was the main issue for me.”*

Another important finding was that participants expressed considerable confidence in vehicle manufacturers and authorised distributors to supply vehicles appropriate for Ghanaian conditions. Rather than personally evaluating whether a vehicle had been designed for a specific market, respondents assumed that importers had already considered local environmental and operational requirements. This was evident among participants who purchase brand-new cars, as seen below:

- *“The companies that actually sell these cars... they themselves look at what will work in the country or meet the conditions of Ghana.”*
- *“We deal directly with car dealers. If they don't have our specifications, they have to import, but we don't really think about where the car is coming from. Our main focus is meeting our technical specifications.”*

A notable finding was that participants who recognised differences between vehicle markets often associated American imports with advanced safety technologies and higher equipment specifications. Rather than focusing on the country itself, respondents viewed market-specific vehicles as offering additional functional benefits. This idea was expressed in the following

- *“My car was imported from America // it has some unique features that are quite different from those of the normal Toyota cars in other markets.”*
- *“Looking at the safety features, European cars have higher standards and include features such as an automatic braking system, lane detection and the latest technology. You'll notice that this is not meant for our market because it stands out.”*
- *“Most of the American cars // consider safety features better than in any other market // safety would always be my top priority.”*

These narratives reveal that the country of import became important when participants associated particular markets with superior technological innovation and occupant protection. In this context, imported vehicles from the American market were perceived as offering enhanced safety systems, which increased their attractiveness despite not being specifically designed for Ghanaian conditions.

Influence of design and aesthetics

While providing context and explanation, the discussion indicate that participants viewed vehicle design primarily as an expression of personal taste and aesthetic preference rather than merely a physical characteristic of the vehicle. Respondents consistently described purchasing decisions as being influenced by how attractive a vehicle appeared to them, suggesting that design generated an emotional connection that often preceded considerations of functionality. This finding demonstrates that although economic considerations dominated purchasing decisions, aesthetic appeal remained an important symbolic attribute that differentiated acceptable vehicles from desirable ones. These expressions were revealed in the following narratives.

- *“I looked at design as well. Sometimes I see some cars and laugh. They are pleasant to my eyes //.”*
- *“It should be attractive. In my eyes, it should be appealing // It's like buying a dress. When you wear it, everybody will think.”*
- *“I didn't want the older version with the tyre at the back. I didn't like that type of design // I didn't want it so small // For me, design.//.”*

Beyond aesthetics, participants evaluated vehicle design by how well it met practical mobility requirements. Rather than favouring vehicles solely because they looked attractive, respondents considered how design complemented their everyday travel needs, preferred driving experience, and lifestyle. Such expressions were evident in the following remarks;

- *“It's not too big... Looking at 4 by 4, it doesn't look too big compared to American cars, but it allows me to drive in style. I just don't like big cars.”*
- *“I just wanted a cute car // not something big // something small to start with.”*
- *“For a lady, something neither too big nor too small, but in between. The car should be cute.”*

These findings demonstrate that participants did not separate aesthetics from practicality. Instead, vehicle design influenced purchasing intentions by communicating both visual appeal and the ability to meet everyday mobility needs.

The findings further reveal that vehicle design carried significant symbolic meaning, relating to social status, professional identity, and personal aspirations. While participants generally downplayed the influence of others' opinions, they acknowledged that vehicle appearance shaped how they were perceived in professional and social settings. Consequently, design was seen as a means of projecting competence, success, and credibility. These views were echoed in the following narratives.

- *“// came to the council meeting, and he was driving that type of car. So when I saw the car, I said, no, I like this car.”*
- *“Sometimes, when going to such meetings, the people you are going to meet also just look at the kind of car you drive // especially in business. It was one key thing I considered.”*
- *“Even though this is an old model // people tell me it stands out // the appearance and aesthetic still seem appealing //. They are more robust.”*

Influence of family and Friends

Regarding social influence from family and friends, the findings indicate that friends played an active informational role in participants' vehicle purchasing decisions, although this influence rarely translated into direct pressure to purchase a particular vehicle. Instead, participants relied on friends as trusted sources of experiential knowledge, using their advice to compare

vehicle brands, identify potential mechanical problems, and reduce uncertainty before making purchasing decisions. Such opinions were expressed as follows.

- *“I asked a few people //. Nearly everybody was giving negative comments about Nissan //. A friend of mine said, ‘Ford means ‘fix or repair daily’. But the main deciding factor is always the money.”*
- *“I heard from all of them. I sat down and scrutinised... when I compared the prices, the consumption, and the durability //. I settled on a car I wanted. Their information helped, but it wasn’t a key priority.”*
- *“Not the pressure, but advice from friends // they recommended it, but there was no pressure at all.”*

These findings suggest that social influence operated primarily through knowledge sharing and risk reduction rather than through conformity or peer pressure. Participants critically evaluated the information they received and combined it with independent research before reaching a final decision.

The findings further reveal that family members and close personal relationships influenced vehicle purchasing intentions through familiarity, trust, and direct exposure to specific vehicle brands. Unlike broader social influence, family members shaped perceptions because participants had first-hand experience with the vehicles owned by relatives, or because trust reduced perceived purchasing risks. This influence was therefore experiential rather than normative.

One participant explained how a sibling's vehicle influenced future aspirations:

- *“My younger brother uses a Toyota //. I told myself that if I had to buy a car, I would start with the Toyota.”*
- *“The first time I used my uncle’s car, I enjoyed it. I just said, if I get money //. I’ll start with it.”*
- *“A friend had used a Toyota Corolla, so the trust was there, as it had not given him any problems. I believed that the car I was buying was a good car, although it was a used car from Ghana.”*

These findings demonstrate that trusted relationships influenced vehicle purchasing intentions primarily by increasing confidence, reducing uncertainty, and providing credible experiential knowledge.

Role of Social Status in Influencing Vehicle Purchasing Intentions

The findings reveal that social status was a key symbolic factor shaping participants' vehicle purchase intentions. Participants frequently associated vehicle ownership with upward social mobility and personal achievement. Purchasing a vehicle was not merely about replacing an old car but signalled progression to a higher social position. In this regard, participants viewed certain vehicle categories, particularly SUVs, as symbols of advancement and improved status. Some participants explicitly linked the decision to upgrade from a sedan to an SUV with the desire for social progression, as seen below:

- *“Yes, I was using a Toyota Corolla. I used it for more than 10 years. I wanted a higher car than a Corolla, like a 4x4.”*
- *“Over the past three years, in December, we were going to church. I prophesied that next December we would have this car in the house.”*
- *“Well, for me, my attraction to the CRV goes back to 2008. Owning it now shows how far I have come in life.”*

These accounts indicate that vehicle purchasing intentions were closely linked to aspirations for social mobility and to the desire to project an identity consistent with personal success and upward progression.

A second, more pronounced theme was the role of vehicles in signalling professional credibility and facilitating access to business opportunities. Participants perceived that the type of vehicle they drove influenced how others evaluated their competence, status, and legitimacy, especially in urban business environments. These sentiments were echoed below:

- *“For me, it was a big deal because of the locations I go to and the kind of engagements I have. You need to show up in a car that suits the occasion.”*
- *“Sometimes, when going to such meetings, the people you are going to meet also just look at the kind of car you drive... especially in business.”*
- *“I went to a meeting somewhere, and travelled in a friend's Land Cruiser. As soon as I arrived, I found an easy way to that place.”*
- *“A Land Cruiser gives you the edge in doing business in Accra more than smaller cars.”*

These narratives reveal how social hierarchies and class perceptions become embedded in vehicle ownership. In this context, certain vehicle models convey authority, prestige, and economic power, thereby influencing interpersonal interactions and access to opportunities. Vehicle purchasing intentions were therefore shaped not only by mobility needs but also by the perceived advantages of social recognition and professional acceptance.

Role of Brand Preference

The study demonstrates that brand played a multidimensional role in shaping participants' intentions to purchase vehicles. Rather than serving merely as a product label, vehicle brands embodied accumulated perceptions of reliability, durability, maintenance costs, spare-part availability, reputation, and personal aspirations. However, the influence of brands was not uniform across participants.

A dominant finding was that participants associated established vehicle brands with expected levels of quality, durability, and long-term reliability. Brand reputation reduced uncertainty during the purchasing process by giving participants confidence in vehicle performance and the ownership experience. Toyota, in particular, emerged as the benchmark against which other brands were evaluated. These sentiments were reflected in the following narratives.

- *“For me, the brand was an issue because I actually needed a Toyota // I've heard and read that Toyota cars are more durable, so any Toyota model was okay for me. That's why I chose Toyota.”*
- *“Oh, we have been using Toyota for quite a number of years, and I think Toyota is good.”*
- *“Once I knew the brand was Toyota and the model was a Yaris, I was good to go.”*

This statement illustrates the powerful heuristic function of brand and suggests that reputable brands served as signals of expected product quality, reducing uncertainty and increasing buyers' confidence during vehicle selection. Brand reputation therefore acted as an important mechanism through which consumers managed perceived purchasing risk.

Beyond symbolic reputation, participants evaluated brands based on the long-term economic implications of ownership. Purchasing intentions were strongly influenced by expectations regarding fuel efficiency, maintenance costs, spare-part availability, repair convenience and suitability for Ghana's operating environment. A few of these considerations are shared below.

- *“If the Toyota I bought has cost me a lot to maintain, I will not want to go for it again.”*
- *“Looking at Toyota, it's easy to get their parts... that was one of the key reasons I had to opt for Toyota.”*
- *“Toyota can be used on most of the rough roads we have here // any mechanic in any village, anywhere, can fix it for you.”*

These findings highlight an important contextual nuance, as participants did not evaluate brands solely on manufacturer reputation but on how well they aligned with Ghana's transport infrastructure, repair ecosystem and operating environment. Consequently, purchasing intentions reflected a combination of brand image and practical context.

Finally, brand perceptions were found to be dynamic rather than fixed. Participants' initial preferences were shaped by childhood aspirations, family members, friends, online searches and public opinion. However, these socially constructed perceptions were frequently reassessed through independent research and personal experience before final purchasing decisions were made. A few of these notions are shared below:

- *“Honda has been my choice of car since childhood // it was my dream car... when I had the opportunity to buy it, I said, ‘let me go for my dream car.’”*
- *“Nearly everybody was making negative comments about Nissan // A friend of mine said, ‘fix or repair daily Ford.’”*
- *“When I put it all together, I realised that the basic point was about how you take care of your car // I have come to believe that it is not solely about the make or the brand, but also about how you take care of the car.”*

These quotations demonstrate a critical shift from reliance on brand stereotypes towards a more balanced evaluation based on ownership practices, value for money and personal judgement. They suggest that while brand influences initial purchasing intentions, informed decision-making may moderate its ultimate importance.

6.1.2 Tanzania

Economic considerations.

Before the information session, cost or value for money appeared among the leading priorities for the respondents.

Economic considerations dominated participants' accounts of how they had chosen their current vehicle and how they would choose the next one, but they were expressed less as a concern with the purchase price alone than as a concern with the total cost of keeping a vehicle on the road.

A recurring feature of the Tanzanian accounts is that affordability was defined over the ownership period rather than at the point of sale. Several participants explicitly distinguished the money required to acquire a vehicle from the money required to keep it running and treated the second as the more binding constraint.

- *“For me, maintenance and operating costs still come first. I need a vehicle that I can afford to keep on the road; knowing more about safety does not remove that reality.”*
- *“I know safety is important, but when I bought my vehicle, I was thinking more about the brand, price, maintenance and whether I could easily find spare parts.”*

This framing matters for the design of a safety-awareness campaign. Participants were not weighing safety against cost as two comparable attributes of a single transaction; they were

weighing a visible, immediate and verifiable set of ownership costs against a benefit that is deferred, probabilistic and difficult to verify before purchase. Messages that ask consumers to trade cost against safety are therefore likely to be less persuasive than messages that present a safer vehicle as part of the same long-term value calculation participants already perform.

Spare parts availability

Participants linked spare-parts availability directly to brand choice, and specifically to the density of the mechanic network. The reasoning was rarely about brand loyalty in the abstract; it was about whether a fault could be diagnosed and repaired locally, quickly and affordably.

- *“For me, spare parts are more practical. I would still choose a vehicle that has spare parts available. I don't want a safe car that stays parked because I cannot find a part or a mechanic who understands it.”*
- *“I would still choose Toyota because the parts are everywhere and almost every mechanic knows it. That gives me confidence.”*
- *“Toyota servicing, especially in Tanzania, it's cheap, and you can find a mechanic everywhere, even in rural areas.”*

The first of these quotations' states, in the participant's own terms, the objection that a safety campaign has to answer. A vehicle that cannot be maintained is not a safe vehicle in practice, because it will either be off the road or repaired informally with parts of unknown provenance. Several participants extended this reasoning to safety systems themselves, observing after the session that airbags, restraint systems and electronic aids are only protective if they can be inspected and, where necessary, properly restored.

Purchase cost

Participants frequently described a gap between the vehicle they wanted and the vehicle they could afford and resolved it in favour of affordability.

- *“Most of us are not buying cars from the showroom. We are buying used cars, so the first thing is to find one that is in good condition and within our budget.”*
- *“I bought an almost-new vehicle because I wanted value for money.”*

Fuel consumption

Fuel consumption was regarded as very important before the session. However, it was consistently framed as a recurring operating cost rather than a vehicle characteristic and was frequently mentioned in the same breath as maintenance cost.

One participant, an owner of a battery-electric vehicle, extended the same logic to energy efficiency and running cost more generally, indicating that the underlying concern is the cost per kilometre rather than fuel as such. This is relevant to future work, since the reasoning that currently favours a small-engined used import would, on the same terms, favour an efficient electrified vehicle if purchase price and charging access allowed.

Functional vehicle characteristics and durability

Participants assessed durability against the operating environment: unpaved and poorly maintained roads, long up-country journeys, and in several cases the demands of construction and consultancy fieldwork.

- *“For me the car must be durable and strong. If it lasts and can withstand our conditions, that is what I consider most important.”*

- *“Durability, engine power, ground clearance, carrying capacity, brand and availability of spare parts.”*

Durability was also the attribute through which several participants first made sense of vehicle safety. Rather than treating crash protection as a competing requirement, they folded it into an idea they already held, describing structural strength and occupant protection as part of what makes a vehicle robust.

- *“Reliability is still very important to me, but I now see safety as part of reliability. A vehicle should not only keep running; it should also protect me when something goes wrong.”*

Reliability and vehicle condition were closely linked to the vehicle groups represented in the sample. Owners of vehicles older than five years, who made up 22 of the 34 participants, emphasised mileage, service history, evidence that the vehicle had not been seriously damaged, and the ease of obtaining parts. Owners of new and almost-new vehicles more often emphasised durability, carrying capacity, ground clearance, warranty and suitability for local operating conditions, reflecting a greater representation of construction, consultancy and fleet use in that group.

This is an important finding for communication strategy. In this sample, the most readily accepted framing of vehicle safety was not as a new criterion added to an existing list, but as a component of an attribute participants already prioritised.

Country of import

All participants reported that their current vehicle had been imported. No participant reported buying a vehicle assembled or first sold in Tanzania. Japan was by far the dominant source market, followed by South Africa and the United Kingdom and Germany, Thailand, the United Arab Emirates and China.

This distribution is the single most important structural fact about the Tanzanian sample, and it shapes how safety information must be delivered. Because effectively the whole fleet enters the country second-hand and from markets with different regulatory requirements, the safety specification of a vehicle is determined abroad, before any Tanzanian consumer sees it. A model name therefore carries no reliable information about the equipment fitted to the particular unit on offer. Tanzania applies no maximum age limit to used light-duty vehicle imports, relying instead on higher excise duty on older vehicles, and is classified among the countries with weak regulation of used-vehicle import quality (Ayeter et al., 2021; United Nations Environment Programme, 2020).

Where participants raised vehicle origin unprompted, they associated European and Japanese vehicles with stronger engineering and better safety content, in terms closely paralleling the Ghanaian findings.

- *“Brand name; preference for European cars.”*
- *“Yes, most European cars are comfortable with more safety features.”*
- *“Japanese and German cars would be considered, mainly because of their strong design.”*

The concentration of imports from Japan has a practical implication for consumer information. Japan NCAP publishes assessments for the domestic-market models that make up the majority of Tanzanian imports, so for most vehicles entering the country a rating already exists; the obstacle is that consumers do not know it exists, cannot match it to the exact model year and grade in front of them, and have no way of confirming that the individual unit still meets that

specification after years of service. The crash-test comparison used in the intervention addressed exactly this point, and participants' responses to it are reported in section 6.2.2.

Social and symbolic influences

The qualitative material shows that participants distinguished sharply between being influenced by others' opinions, which most rejected, and relying on others' practical experience, which most accepted. The three subsections below separate design and aesthetics, the influence of family and friends, and social status.

Influence of design and aesthetics

Appearance mattered to a substantial minority of participants, who described design as an expression of personal taste that made a vehicle desirable rather than merely acceptable. As in Ghana, aesthetic appeal was discussed alongside, not instead of, the economic reasoning above.

- *“Design, technology, comfort, and brand image.”*
- *“Appearance, comfort, mileage, price.”*

After the session, several participants described appearance as something they would now subordinate to evidence of protection. The shift was expressed as a change in the order in which they would ask questions, rather than as a loss of interest in how a vehicle looks.

- *“I used to be attracted mainly by technology and design, but now I would ask whether that technology actually improves safety.”*
- *“I was attracted mainly by technology and appearance. Now I would first check whether those technologies actually include systems that can prevent a crash.”*
- *“Child protection, airbags, emergency braking and the crash rating would come before appearance.”*

Influence of family and Friends

Advice from family members, mechanics and professional colleagues was widely acknowledged, and was described as a source of practical knowledge rather than social pressure. Mechanics occupied a particularly influential position, consistent with the weight participants placed on serviceability.

- *“Yes. I normally consult my husband and our local mechanics who have experience with the particular vehicle.”*
- *“Yes, local perceptions regarding easy-to-maintain Japanese vehicles always influence my decision.”*
- *“Yes; influenced by people who already own vehicles and have good experience with particular cars or brands.”*

The session did not remove this reliance on advice. What changed was what participants said they would do with the advice: several described moving from accepting a recommendation to verifying it, which is a more realistic and more durable outcome than displacing the adviser altogether.

- *“I would still consult them, but I would also verify the vehicle's safety information and inspection history myself.”*
- *“Still influenced, but I will also be checking safety ratings.”*

Role of Social Status in Influencing Vehicle Purchasing Intentions

Social status was raised by a minority, and most often by participants in the higher-income individual interviews rather than in the focus groups, a pattern that also appears in the Zambian data. Where status was acknowledged, it was tied to professional image and client-facing credibility rather than to peer approval as such.

- *“Yes, good cars reflect social status of a buyer.”*
- *“Yes, to some extent. Vehicle appearance and brand affect professional image among friends and clients.”*
- *“Yes. Business and social environment influence preference for premium vehicles.”*

Two participants explicitly demoted status after the session, describing safety performance as the criterion that should now take precedence over image. Given that both were senior figures with purchasing authority, this is a more consequential shift than the small number suggests.

- *“Social image would become less important than demonstrated safety performance and technology that prevents crashes.”*
- *“Social influence remains, but safety would now be a stronger criterion.”*

Role of Brand Preference

Their favourite brand they would buy if cost were not a problem, the responses were overwhelmingly concentrated on Toyota. When asked why, participants cited spare parts, mechanic familiarity and resale value far more often than performance, comfort or prestige.

- *“Toyota, because of availability of spare parts.”*
- *“Toyota, availability of spare parts and mechanics.”*
- *“Toyota, due to durability and low maintenance cost.”*

In Tanzania, Toyota is trusted on serviceability, it tends to be assumed safe without any specific feature being checked. After the session several participants moved from a brand-led to a safety-led statement of preference, and two named Volvo specifically, a brand not mentioned by any participant beforehand.

- *“Volvo, because I have now seen it has strong safety reputation.”*
- *“Toyota Land Cruiser Prado or another SUV with a high safety rating.”*

It should be noted that this represents a change in stated preference under hypothetical conditions in which cost is removed. Given the strength of the serviceability constraint documented above, a shift of actual purchasing towards brands with a thinner local service network would require either an expansion of that network or safety improvements within the brands already served by it.

6.1.3 Zambia

Economic considerations.

Purchase price, fuel economy, and spare-parts availability were, by a wide margin, the most frequently and spontaneously cited factors across all four focus groups. Toyota's dominance of the Zambian second-hand market was explained almost entirely in these terms rather than in terms of brand loyalty as such.

- *“If you own a BMW or another European vehicle, spare parts often have to be imported, while Toyota parts are readily available.”*

- *“The spare parts and maintenance -there are a lot of garages that can maintain it.”*
- *“Fuel consumption, that was good for me.”*

Ease of access to a vehicle, informal Facebook marketplaces, a single trusted dealer or specialist, or word-of-mouth referral, also recurred as a practical economic factor shaping which vehicles were realistically considered at all, rather than a wide, informed market search.

- *“There's just one person on Facebook // he specializes in Mark X.”*

Spare parts availability

Spare parts availability emerged as one of the most decisive practical factors shaping vehicle choice among Zambian participants, closely tied to — and often discussed in the same breath as — maintenance cost and fuel consumption. The dominant pattern across the data is that Toyota's market saturation in Zambia is explained almost entirely through this lens:

- *“Availability of spare parts. For most Toyota brands, it's very easy to get spare parts.”*
- *“The spare parts and maintenance — there are a lot of garages that can maintain it.”*

Because so many Toyotas are already on the road, parts are locally stocked, affordable, and serviceable by a wide network of mechanics, whereas less common brands carry a real logistical penalty. Participants who owned or had owned non-Toyota vehicles were the most vocal on this point, framing spare-parts access as a genuine deterrent rather than a minor inconvenience:

- *“If you own a BMW or another European vehicle, spare parts often have to be imported, while Toyota parts are readily available.”*
- *“For a spare part, you have to import it — it can take months.”*

A similar comparison was drawn against a previous Nissan, which one of the participants described as harder to live with specifically because of spare-parts cost, alongside fuel consumption:

- *“It's easy to live with, compared to any other... it was expensive with the spare parts, like he said, and fuel consumption.”*

A further, more nuanced finding from yet another of the participants who distinguish between genuine (original/OEM) and copied spare parts, and expressed a preference for the former specifically on safety grounds, despite copies being cheaper and more readily available second-hand:

- *“It's better to get the original ones — for safety, very much. You need to take care of yourself.”*

This suggests that, for at least some buyers, the spare-parts conversation is not purely about cost and convenience but intersects directly with safety reasoning. Access channels for parts were also informal rather than systematic:

- *“There's just one person on Facebook... he specializes in Mark X.”*

This illustrates that even well-resourced professional buyers navigate the same informal, word-of-mouth parts economy as the general public.

Purchase cost

Purchase price was the single most frequently and spontaneously cited factor across the dataset, functioning less as one consideration among several and more as a hard filter that determined which vehicles were realistically considered at all. When asked directly what shaped their last vehicle purchase, participants' first answers were overwhelmingly framed in terms of affordability:

- *“Something I can afford.”*

Beyond the sticker price itself, several participants reasoned about cost in total-ownership terms rather than purchase price alone — weighing a vehicle's durability and repair frequency against its upfront cost:

- *“A durable engine means less repair — you spend less. One that easily gives up, you have to replace it completely, and that costs a lot of money.”*

This total-cost framing was one of the more sophisticated pieces of financial reasoning to emerge from the general-public focus groups. A related, cost-versus-safety trade-off surfaced in FGD 4 specifically around tyre purchases: participants candidly acknowledged that buying decisions are frequently driven by what money is available at the time of purchase rather than a calculation of long-term value:

- *“A lot of times, people buy something because of the money they have here and now, not how long it will last.”*

Against this pattern, one participant was a notable exception, explicitly stating a willingness to pay more for a vehicle from a trusted source specifically because it would be safer:

- *“It's safer to get it from trusted sources... even if it's more expensive, it will be safer.”*

The one clear departure from this cost logic comes from the electric-vehicle segment. One participant described their BYD's higher upfront price as a deliberate trade-off against the complete elimination of fuel costs over time:

- *“Initially, it's expensive, but in the long run, I eliminate fuel costs.”*

Fuel consumption

Fuel consumption was consistently named as a top-tier purchase factor, almost always discussed in direct comparative terms — one brand or vehicle set against another — rather than as an abstract preference. Toyota's reputation for fuel efficiency was repeatedly cited as a core reason for its market dominance:

- *“Fuel consumption — that was good for me.”*

Less fuel-efficient alternatives, even prestigious ones, were marked down specifically on this basis. The clearest illustration of this comparative reasoning came from a participant weighing a BMW against a Toyota:

- *“When it comes to fuel consumption, the BMW is different.”*

A parallel comparison emerged in another focus group, where a previous Nissan was judged unfavourably against a current Toyota on the combined grounds of fuel consumption and spare-parts cost:

- *“// it was expensive with the spare parts, like he said, and fuel consumption.”*

The two factors were not discussed separately by this participant, suggesting that in practice, Zambian buyers may treat running costs as a single bundled consideration rather than distinct line items. As with purchase cost, the electric-vehicle interviews offer a structural break from this pattern — for an EV owner, fuel consumption is not minimized but eliminated outright:

- *“Initially, it's expensive, but in the long run, I eliminate fuel costs.”*

This suggests that, as EV adoption grows in Zambia, “fuel consumption” as a comparative purchase factor may eventually bifurcate into a completely different calculus for a subset of buyers, rather than simply becoming a smaller number on the same scale.

Functional vehicle characteristics and durability

Beyond cost, participants weighed durability and mechanical reliability—specifically, how much a vehicle would cost to keep running over time, not just to acquire—alongside practical usability features such as adequate lighting/signal visibility and suspension suited to poor road conditions.

- *“A durable engine means less repair—you spend less. One that easily gives up, you have to replace it completely, and that costs a lot of money.”*
- *“A strong, working headlight and lighting system... functioning indicators/signal lights- described as essential, not optional.”*

Poor road conditions were also raised specifically in relation to suspension durability, reflecting the practical reality of driving on Zambia's road network rather than a safety consideration as such.

Country of import

Country of manufacture emerged as one of the most consequential findings in the entire dataset — not because participants raised it unprompted at the start of their purchase story, but because of how dramatically their views shifted once shown evidence. Before any demonstration, the operating assumption across the general-public focus groups was that a newer vehicle, or one bearing a familiar badge, was inherently safer than an older one, regardless of where it was actually built:

- *“A newer vehicle is not necessarily safer/ /. Manufacturing standards vary by market.”*

That assumption was directly challenged by the crash-test comparison shown in every FGD: a new vehicle assembled for the African market crashed against an older, second-hand European-market vehicle of the same era. The reaction was consistent and visceral:

- *“It's completely collapsed — the steering wheel is crushing the driver.”*
- *“The best choice for the consumer, for sure, is the second-hand one.”*

FGD 3 arrived at the same conclusion through a slightly different route — reasoning aloud, before being shown the footage, about why a locally assembled vehicle might differ from the same model built elsewhere:

- *“I'm thinking it would be something compromised — like the quality of the materials they use.”*
- *“It's not just a name, then, is it? // if you cut costs on the metal and the electronics, they can make more money — and if nobody inspects it, they get away with it.”*

FGD 1 also produced the dataset's clearest anecdotal illustration of this dynamic, independent of any crash-test footage: a participant's account of owning a Rover originally built in Britain, before the brand's production moved to China under the same name and appearance, but with visibly cheaper materials and a compromised structure:

- *“It looked exactly like a Rover, but it wasn't — it was made in China, and they cut costs.”*
- *“Steel is expensive, and the safety systems are expensive — so they cut corners to make more profit.”*

Country of import also surfaced in a more mundane, practical form: trust in recorded mileage on vehicles imported from Japan was treated by several participants as one of the few semi-reliable signals available to a second-hand buyer, even though few had ever independently verified it. Senika Cheta's own vehicle — a 2015 Mazda Axela imported second-hand from Japan — reflects the same pattern in miniature: a Japan-import history was treated as a quiet mark of reliability, without being explicitly interrogated as a safety factor.

Social and symbolic influences

This theme sits at an interesting fault line in the data: the general-public focus groups largely denied being influenced by social or symbolic factors, while the professional key informant interviews openly embraced them — a genuine divergence rather than a contradiction. Across the FGDs, the default self-reported position was indifference to outside opinion:

- *“I'm not too bothered about what other people say.”*

Yet some of the participants refined their comments acknowledging — once pressed — that a vehicle does say something about its owner, even while insisting this wasn't their primary motivation:

- *“It's a bit about the reflection of yourself, in some ways.”*
- *“It can make me look good at the end of the day.”*

Among the KIIs, this influence was described far more directly, without the same hedging:

- *“When I drove a Toyota, I didn't get the same respect... With a BMW, people assume you have money.”*
- *“People would relate to me when they see me stepping out of a Mercedes... now you don't get that attention — the status is different.”*

Set against this, two of the individual interviewees described a deliberate resistance to social influence, distinct from the others blanket denials in that both explicitly acknowledged the presence of outside pressure or opinion, and then described actively disregarding it:

- *“I prefer making my own decisions rather than being influenced by too many opinions.”*
- *“Even at work, people questioned why I bought an electric car, but that didn't influence me.”*

Read together, this suggests status-driven purchasing and status-indifferent purchasing coexist within the same higher-income professional segment, rather than income level predicting one pattern uniformly — see Role of Social Status, below, for the fuller picture.

Influence of design and aesthetics

This is the thinnest of the five themes in this section of the dataset — raised only briefly and never developed into an extended exchange in the way cost, fuel, or manufacturing origin were. When directly asked about the importance of a vehicle's look, participants in one of the focus groups gave short, non-committal answers rather than elaborating:

- *“It depends.”*
- *“I'm not too bothered about what other people say.”*

Design and aesthetics also surfaced indirectly, in a safety-relevant rather than purely stylistic sense — the recurring finding that a vehicle's outward appearance was an unreliable guide to its actual safety performance, which functions almost as an inversion of a design-influence theme (appearance as something to be distrusted, rather than valued):

- *“It looks really good — but it only got one star.”*
- *“It looks safe and sturdy and has a good structure // but it's got one star. One star.”*

This is a genuine gap worth flagging on its own terms: design and aesthetics as a positive purchase driver — colour, body style, interior finish, badge design — was never substantively explored in any session. What exists here is closer to an absence of interest than a documented finding either way and would need a targeted follow-up question if this theme needs to be well-populated for the multi-country comparison.

Influence of family and Friends

Family need — rather than family or friend opinion — was the stronger and more concrete thread in this dataset. One of the focus groups offered the clearest example: a participant's purchase was driven by the practical requirement to carry children and farm produce, explicitly framed as a family-functional need rather than a response to what family members thought of the car itself:

- *“It's user-friendly — I can carry whatever I want to carry from the farm.”*

Peer and friend opinion, by contrast, was consistently downplayed as a decision factor across the general-public groups:

- *“I'm not too bothered about what other people say.”*

The clearest counter-example — friend influence operating through direct experience rather than opinion — came from Senika Cheta, whose decision was changed not by a friend's advice, but by physically test-driving a friend's car:

- *“I had the opportunity to drive a friend's Mazda Axela. I found it very comfortable, stable on the road, and fast and responsive... after that experience, I changed my mind.”*

As with design/aesthetics, this theme is thinly populated relative to cost, fuel, and parts. What exists points toward family needs (space, practicality) mattering far more than family or friend opinion — but the dataset does not currently contain a clear instance of someone naming a specific person's advice as decisive, aside from Senika Cheta's test-drive.

Role of Social Status in Influencing Vehicle Purchasing Intentions

This theme draws together threads from Social and Symbolic Influences above but is worth stating on its own, since it is one of the more analytically interesting divergences in the dataset.

Social status was almost entirely absent as a stated factor in the general-public focus groups, and prominent — openly acknowledged — among the professional key informants.

- *“When I drove a Toyota, I didn't get the same respect... With a BMW, people assume you have money.”*
- *“People would relate to me when they see me stepping out of a Mercedes... now you don't get that attention — the status is different.”*
- *“It can make me look good at the end of the day.”*

The most useful analytical point here is not simply that status matters more to wealthier buyers — it might be that some of the participants may be under-reporting status motivation rather than lacking it, given that admitting to status-driven spending is arguably less socially acceptable in a group discussion setting than in a one-on-one interview. The quote above is the one moment a focus group participant came close to admitting this directly, and even then, only after discussing practical needs first. This is worth treating as a methodological observation as much as a substantive finding: status may be under-represented in this data.

Role of Brand Preference

Brand preference, style, and status featured much more prominently among the individually interviewed professionals than in the general-public focus groups, though FGD participants were not entirely unaffected either.

- *“When I drove a Toyota, I didn't get the same respect... With a BMW, people assume you have money.”*
- *“People would relate to me when they see me stepping out of a Mercedes... now you don't get that attention, the status is different.”*

By contrast, most of the participants explicitly downplayed the influence of friends or peers on their choice, describing their decisions as independent, though this self-report should be read alongside the strong economic constraints already discussed, which may leave less genuine discretion for status-driven choice among general-public participants than among the higher-income interviewees.

- *“I'm not too bothered about what other people say.”*

A distinct sub-pattern also emerged: purchase decisions driven by direct, lived experience of a specific vehicle (a test drive of a friend's car) rather than by brand reputation or peer opinion at all.

- *“I had the opportunity to drive a friend's Mazda Axela. I found it very comfortable, stable on the road, and fast and responsive... after that experience, I changed my mind.”*

6.2 Understanding of Vehicle Safety

This section examines how participants understood vehicle safety before and after the awareness intervention. It focuses on the ideas, assumptions and misconceptions that participants brought into the discussions, including how they interpreted seat belts, airbags, vehicle structure, brand reputation and market-specific safety standards. It then considers how the visual crash-test demonstrations influenced this understanding by making the consequences of inadequate safety performance more concrete and by encouraging participants to think beyond visible features, vehicle age or brand name when assessing whether a vehicle is truly safe.

6.2.1 Ghana

Connotation of safety

When asked about what they regard as safety, participants consistently highlighted the presence of both fundamental and advanced safety technologies that actively protect occupants and support safer driving. In the first instance, participants rarely discussed safety in abstract terms. Instead, they identified specific vehicle components that provide protection during driving and in crash situations. A few of such views are expressed below.

- *“Well, if it is a brand-new car, then we have what we call safety systems in the vehicle. They are what we'll be looking at. The strong body, good brakes, lane detection and others.”*
- *“I also believe that the braking system is one of the safety factors you have to consider... because if you are driving without brakes, or the brakes are not functioning, you can head anywhere without even stopping.”*
- *“It has some specific automatic systems when it comes to speeding... and all its airbag systems, everything is functioning properly with all seat belts intact... Those other things are very, very, very key.”*

These findings suggest that vehicle buyers view safety as a combination of essential mechanical systems and modern electronic safety technologies that work together to minimise the risk of a crash.

Participants also interpreted safety in terms of the vehicle's ability to provide reliable transport under local conditions. Rather than focusing solely on crash protection, safety also encompassed reliability, confidence, and peace of mind that the vehicle would complete journeys without mechanical failure. This perspective reflects the realities of driving in environments where road infrastructure, repair services, and access to replacement parts may be limited. These perspectives are shared in the following narratives:

- *“I was looking at a car that can take me where I'm going and bring me back safely, without breaking down on the way.”*
- *“Even if it's a seat belt with a fault, I'm not taking it // Everything on the car should be complete, because a faulty car part may lead me to my grave.”*

These quotations show that buyers seek reassurance through trusted intermediaries and remote verification when direct inspection is not possible. Visual evidence and trusted social networks have become mechanisms to reduce uncertainty and increase confidence in the vehicle's safety.

Airbags as a consideration for vehicle purchase

Participants generally regarded airbags as an essential component of modern vehicles. However, because airbags were assumed to be standard equipment, they rarely emerged as a distinguishing factor in the vehicle selection process. Rather than actively comparing vehicles for airbag availability, participants assumed that the vehicles under consideration would already include functioning airbags. Consequently, purchasing decisions were more strongly influenced by other considerations, with airbags remaining an implicit expectation of vehicle safety. These sentiments were expressed in the following narratives.

- *“Yes, I knew that all these things needed to be there before, but it didn't occur to me.”*
- *“I also knew that all those things would be in the car, so it wasn't my immediate concern.”*
- *“I don't think I checked that because I bought a Ghanaian-use, localised car.”*

These quotations highlight how assumptions about airbags varied by the type of vehicle purchased. In this case, participants did not actively verify the presence or condition of airbags before purchase, suggesting that other practical considerations outweighed explicit attention to passive safety systems.

Although participants regarded airbags as important safety devices, they also recognised the practical difficulty of verifying their functionality before purchase. Unlike brakes or seat belts, airbags cannot be easily inspected without specialised equipment. Consequently, participants relied on indirect indicators such as dashboard warning lights, vehicle sensors, inspection reports, insurance documentation, and third-party verification to establish confidence in the airbag system. A few such narratives include:

- *“I think the airbag system's sensor tells us everything. If the light is on, it means it's not in good condition. Yes, but apart from that, I don't think we can inspect the airbag and see.”*
- *“When I got it, I checked because these current cars have sensors that detect issues and you can read them on the dashboard. I realised that everything was functioning... there wasn't any indication that it had a fault.”*
- *“The insurance company has all those things checked... when you check the report they issued, you can distinguish between those that work and those that don't... at the Ghana port too, I've seen that this one works, this one doesn't work.”*

These findings suggest that airbags influence purchasing decisions indirectly by shaping the perceived need for verification and trust. Because buyers cannot independently assess the system, they rely on technological and institutional mechanisms to reduce uncertainty about vehicle safety.

Finally, the data revealed that participants' immediate transportation needs often outweighed careful consideration of airbags when acquiring a vehicle. While respondents recognised the benefits of airbags, urgent economic and mobility needs often took precedence over the evaluation of passive safety technologies. Airbags therefore became a secondary consideration, revisited only after the vehicle had been purchased. These notions are reflected in the following remark.

- *“Not really, I was rather thinking about getting a car.”*
- *“At the time, I didn't // mine was just to get something moving around.”*
- *“It wasn't something I even considered whether the airbag was // but when I got it, I checked //. I realised that everything was functioning // and I felt that everything was good for me to use.”*

These findings indicate that purchasing decisions are shaped by a balance between immediate transport needs and longer-term safety considerations. While airbags remain recognised as valuable occupant protection devices, pressing practical needs, such as obtaining affordable and reliable transport, often reduce their influence at the initial purchasing stage.

Seat belt as priority

Participants consistently described seat belts as one of the most fundamental safety features influencing vehicle purchase decisions. Unlike more advanced technologies, which participants occasionally viewed as optional, seat belts were regarded as essential occupant protection systems, and their absence or malfunction rendered a vehicle unacceptable. Their importance reflects participants' understanding of seat belts as the first line of protection in road traffic crashes. Common ideas shared in this regard include the following

- *“I check to ensure that everything is functioning properly, including all seat belts. As much as the car’s aesthetics look nice, these things are very, very, very key.”*
- *“Even if it's a seat belt with a fault, I'm not taking it. Because everything needs to come in complete.”*
- *“Because the manufacturer says seat belts are present, they may be faulty. I check seat belt functionality before taking a car”*

These findings indicate that seat belts served as a baseline safety requirement that significantly influenced purchasing decisions. Participants regarded functional seat belts as indispensable for protecting occupants and for ensuring that a vehicle met acceptable safety standards.

Beyond their direct protective function, participants viewed seat belts as indicators of a vehicle's overall quality and reliability. Functional seat belts increased confidence that the vehicle had been properly maintained and that other safety systems were likely to be in good working order. This perception was particularly evident when participants discussed imported vehicles and concerns about future repairs. A few participants shared the following.

- *“He was there in person and carried out all the inspections, even sending me videos and images //.”*
- *“Because everything needs to arrive complete. Because I don't know how I can fix it here in Ghana // Everything should be intact before coming down.”*
- *“All its airbag system is functioning properly, with all seat belts intact //. Those other things are very, very, very key.”*

These findings suggest that seat belts served as a visible indicator of vehicle quality, helping participants judge whether a vehicle was trustworthy, well maintained, and suitable for long-term use in local conditions.

Effect of visual demonstrations

The Crash-test video showing an unbelted occupant in a 30 km/h impact

The data show that exposure to a crash-test video can disrupt often taken-for-granted assumptions about low-speed driving and prompt reflection on vehicle safety. Rather than merely indicating that participants were “concerned” about crashes, the responses reveal several interconnected themes: heightened risk perception, recognition of the severity of low-speed crashes, embodied fear and vulnerability, reassessment of safety-device use, uncertainty about vehicle safety systems, and calls for safety education and preventive action. A dominant reaction was the recognition that 30km/h, commonly associated with urban or town riding, can still produce serious consequences.

A crash test between a second-hand car from Europe and a new car

Participants' initial reactions to the crash videos were overwhelmingly emotional. The visual demonstration of the collisions evoked sadness, disappointment, and concern about the implications for African road users. The videos also conveyed participants' frustration at the possibility that consumers in African markets might receive vehicles with lower safety standards. Such sentiments were revealed in the following narratives.

- *“In fact, it's heart-breaking; we cannot get the short end of the bargain //.”*
- *“It's sad, but everything boils down to politics // they see the African continent as less inferior //. But how will I ascertain whether this car is made for the African continent or for the European world?”*

The brevity of these statements is revealing. Rather than offering a technical assessment of vehicle performance, participants responded emotionally, suggesting that the crash videos transformed road safety from an abstract engineering issue into a personal and moral concern. Participants not only reacted emotionally to the crash outcomes but also questioned global inequalities in manufacturing standards and consumer protection. The uncertainty over whether vehicles destined for different markets differ in quality created a sense of vulnerability, as consumers perceived themselves as lacking the information needed to make informed purchasing decisions.

The crash videos also generated considerable surprise by challenging participants' assumptions about vehicle quality and safety standards worldwide. Some participants appeared to be unaware of varying vehicle standards or had previously believed that vehicles of the same make and model would provide comparable levels of protection irrespective of where they were sold. Clearly, this crash test suggested otherwise, prompting participants to reconsider earlier assumptions. One participant explained:

- *“With the airbag, you cannot test it. You only see that the light is not blinking // It's only in a situation like this that you'll be able to tell. Since we depend on these indicators, I expected the airbags to perform in the same way for both cars. Clearly, I was surprised //.”*

From the data, the element of surprise was the realisation that vehicle safety cannot be judged by visual inspection alone, which illustrates an important shift in understanding. Participants often assume that these systems (airbags) will function correctly, despite having no practical means of verifying their effectiveness before a crash. These assumptions are even harder to substantiate, as critical safety systems like airbags remain hidden until the moment of a collision. The videos therefore exposed an important knowledge gap. Participants appeared surprised that safety performance depends not merely on the presence of safety technologies but on the quality of their design, calibration, and structural integration within the vehicle. This realisation challenged long-held assumptions that purchasing a recognised vehicle brand automatically guarantees comparable safety across different markets.

The dominant theme emerging from the discussions was heightened awareness. The crash video prompted participants to critically examine the economic, regulatory, and market factors that influence vehicle safety in African countries. Many participants attributed the presence of lower-specification vehicles to consumers' purchasing power. One participant used a manufacturing analogy to explain this relationship:

- *“If I take this (referring to a bottle of water) to the market and people are looking to buy the same bottle of water for 10 Cedis // I will reduce the quality of the materials I use //, so they will produce something for Africa.”*

This analogy reflects participants' belief that manufacturers adjust product quality to align with consumers' willingness and ability to pay. Rather than viewing reduced safety as corporate negligence alone, participants acknowledged the influence of market demand and affordability constraints. Some participants also extended this argument, linking vehicle safety to broader consumer behaviour. As one participant remarked.

- *“We usually want a specific brand, but we want it at a lower price // they also try to reduce the quality a bit to get you the price you want.”*

This perspective also suggests that participants increasingly viewed safety as an economic trade-off. Demand for lower-priced vehicles may unintentionally prompt manufacturers to compromise certain specifications while maintaining brand appeal. The video also heightened

awareness of weaknesses in regulatory oversight, as participants argued that stronger import standards could reduce the circulation of potentially less safe vehicles. One participant observed:

- *“If we had a regulatory body // they would not come to the country... our regulatory systems... are not actually paying attention.”*

This narrative illustrates how the videos shifted participants' thinking beyond individual purchasing decisions towards institutional responsibility. Vehicle safety came to be seen as a shared responsibility involving manufacturers, regulators, policymakers, and consumers, rather than simply a matter of personal choice.

Finally, the crash video fostered a more nuanced understanding of vehicle safety systems. Participants recognised that safety technologies such as airbags cannot be evaluated merely by their presence, but by their actual performance during crashes. The discussion of airbags was particularly illustrative. Participants acknowledged that consumers generally rely on dashboard warning lights as evidence that airbags are functioning correctly. However, the video demonstrated that real protection can only be assessed under crash conditions. As one participant explained:

- *“You can't test it. It's only in a situation like this that you'll be able to tell.”*

This realisation marks an important shift in safety literacy. Participants moved from viewing airbags as simple accessories to recognising them as complex systems whose effectiveness depends on engineering quality, structural compatibility, and crash performance. The finding therefore suggests that the crash video enhanced participants' appreciation of passive safety systems by illustrating that vehicle safety extends well beyond visible features or brand reputation. Instead, participants came to understand that effective occupant protection depends on rigorous engineering standards, robust regulatory oversight, and transparent information that enables consumers to distinguish between vehicles based on actual crash performance rather than appearance alone.

6.2.2 Tanzania

Existing misconceptions

Three recurring limitations appeared in participants' understanding of vehicle safety before the session. First, a trusted brand was frequently treated as a substitute for verifying the safety of the specific model, year and market specification, the brand-halo pattern described in section 6.1.2. Second, safety was understood almost entirely in terms of the presence of seat belts, airbags and brakes, with little reference to crashworthiness, energy-absorbing structure, or technologies that prevent a driver from losing control. Third, and specific to a fleet in which every participant was driving a used import, participants did not generally consider that safety equipment may have been deployed, damaged, removed or poorly repaired after an earlier crash in the exporting country.

The most striking pre-session response treated safety equipment as a possible source of harm rather than protection, a misconception that suggests that these beliefs are not confined to one national market.

- *“I have heard of accidents where people were seriously injured by the seat belt itself, so I am not fully convinced that it is always safer.”*

A second pattern, less dramatic but more widespread, was the assumption that safety is a problem already solved by the manufacturer and therefore not a purchasing criterion at all. One

participant, when asked what safety features meant to her, replied simply that she had assumed every car came with the safety equipment its maker had fitted. Another separated the principle from the decision entirely.

- *“Important, but not considered when buying a vehicle.”*

This second pattern is arguably the more serious obstacle, because it does not present as ignorance or as resistance. A consumer who regards safety as important, but who believes it requires no verification, will not seek out a rating, ask a dealer a question, or inspect a restraint system. In a market supplied almost entirely by used imports the assumption is also the least well founded, because the condition of the safety systems in any individual vehicle depends on what has happened to it since it left the factory.

The third limitation surfaced only after the session, when several participants began to describe checks they had not previously thought to make. That they framed these as new suggests the used-import risk had not occurred to them beforehand.

- *“I would check airbags, ABS, ESC, seat belts, crumple zones, tyre condition and the NCAP safety rating.”*

Connotation of safety

Initial descriptions of safety focused on visible and familiar features, principally seat belts, airbags and brakes. Electronic stability control was mentioned unprompted by two participants, both engineers; autonomous emergency braking, child-restraint compatibility, crumple-zone behaviour and the integrity of previously repaired safety systems were not mentioned by any participant before the session. When participants were asked specifically what safety features meant to them, the vocabulary before the session was narrow. Seat belts and airbags accounted for the majority of specific mentions, sometimes with brakes or anti-lock braking, and only two participants, both engineers by profession, referred to electronic stability control unprompted. Structural or crashworthiness language appeared in only a handful of cases, usually as general references to a vehicle being strong or able to withstand impact rather than to designed deformation behaviour.

- *“Safety is important; I only am aware of seat belts and airbags because they reduce fatalities during crashes.”*
- *“The car should be strong and able to withstand impacts or accidents.”*
- *“ESC, ABS, seat belts and airbags.”*

The first of these quotations is the clearest statement of the baseline position. The participant does not doubt that safety matters and can explain why the two features are protective; the knowledge simply stops where the visible equipment stops. This is a knowledge gap rather than an attitude problem, and it is the gap the intervention was designed to address.

A second and distinctly Tanzanian meaning also emerged. Alongside crash protection, several participants interpreted safety as the assurance that a vehicle would complete a journey without failing, particularly on long up-country trips and poorly maintained roads. Safety in this sense overlapped with reliability, and one participant linked safety features directly to the working life of the vehicle rather than to occupant protection.

- *“Yes; safety features are important for safety purposes and maintaining long vehicle life.”*
- *“Stability on the road.”*

This second connotation matters for how a campaign should be framed. It shows that safety was not an unfamiliar or unwelcome idea, but that the word was already occupied by a meaning closer to dependability. Messages that introduce crash protection as an extension of that existing concern are likely to be more readily accepted than messages that treat safety as a wholly new consideration.

Airbags as a consideration for vehicle purchase

Before the session airbags were named more often than any safety feature except seat belts, but almost always as one item in a list of equipment a good vehicle ought to have. Participants rarely discussed how airbags work, what they require in order to deploy it correctly, or how their presence might be confirmed. Airbags functioned as a marker of a well-equipped vehicle rather than as a criterion on which two vehicles might be compared.

- *“ABS, seat belts and airbags; these can protect travellers during accidents or help prevent crashes.”*
- *“Toyota Land Cruiser or Prado, new model, with airbags, seat belts, brakes, ABS, safe tyres and no TV or video distraction.”*

Only one participant placed airbags among the three factors that mattered most to him, and he did so alongside four-wheel drive, which indicates that the item was being treated as part of a specification rather than as a safety judgement in its own right. For the rest, airbags were expected to be present and were not investigated further.

This expectation is difficult to satisfy in the Tanzanian market. Unlike brakes, tyres or seat belts, an airbag cannot be assessed by looking at it, and in a fleet composed of used imports the more relevant question is not whether the vehicle was built with airbags but whether they are still in place and still capable of deploying. A vehicle repaired after a crash abroad may arrive with the warning light cleared and the module missing. None of the participants raised this possibility before the session, and several raised it afterwards.

- *“I already cared about safety, but now I know I should look beyond airbags and check things like the NCAP rating and other safety systems.”*
- *“Child protection, airbags, emergency braking and the crash rating would come before appearance.”*

The change is one of specificity rather than enthusiasm. Participants already believed airbags were valuable; what they gained was the understanding that the value depends on the individual vehicle, and that it is something a buyer can and should try to establish before purchase.

Airbags were mentioned alongside seat belts as a generic marker of a well-equipped vehicle rather than discussed in terms of how they function or what they require to work.

Seat belt as priority

Seat belts were the safety feature participants mentioned most frequently, and the one they treated with the least deliberation. They were named as something a vehicle should have, in the same breath as brakes and airbags, but they were seldom described as a feature on which a purchase might turn. Only one participant placed seat belts among the three factors that mattered most when choosing a vehicle.

- *“Important. I mainly know about seat belts, airbags and brakes.”*

The first of these was a participant's complete answer to the question of what safety features meant to her. The brevity is characteristic. Where Ghanaian participants described inspecting belts, refusing vehicles with faulty belts and treating belt condition as a signal of how well a

vehicle had been looked after, the Tanzanian accounts stopped at naming the item. No participant described checking a seat belt before buying, and no participant distinguished between belts in the front and belts in the rear, although the survey asked specifically about rear-seat belts.

That silence about the rear seat is itself a finding. Rear-seat belts are the restraint most often left unused in the region, and the group most likely to occupy the rear seats of these vehicles, including children and older family members, are the least able to insist on them. Consumer messaging that refers to seat belts in general is therefore likely to be heard as being about the driver.

One participant went further than indifference and expressed an explicit doubt about whether wearing a belt is protective at all, repeating a belief that circulates widely in the region.

- *“I have heard of accidents where people were seriously injured by the seat belt itself, so I am not fully convinced that it is always safer.”*

This is the same misconception that surfaced independently and unprompted in the Zambian focus groups, where participants described seat belts as capable of trapping an occupant. Its appearance in two national samples collected separately suggests it is reasonably widespread rather than an isolated view, and that it will not be displaced by general encouragement to buckle up. It requires a message built specifically to answer it.

Against this background, seat belts were the feature the intervention affected most. The crash-test film showing an unbelted occupant addressed the item participants had been most willing to take for granted, and after the session belts were described in the concrete terms of protection rather than as a box to be ticked. One participant who had listed only seat belts before the session returned to the question afterwards with a wider set of systems, and others began to place restraint condition alongside the checks they already made on tyres and brakes.

- *“Very important. I would check airbags, ABS, ESC, seat belts, crumple zones, tyre condition and the NCAP safety rating.”*

Effect of visual demonstrations

The Crash-test video showing an unbelted occupant in a 30 km/h impact

The crash-test film showing an unbelted occupant in a 30 km/h impact was the element of the intervention most directly aimed at this attribute, and the magnitude and consistency of the change suggest it was the most effective single component of the session. One participant nevertheless retained an explicit doubt about restraint safety, and that view should be treated as a target for a specific myth-correction message rather than as an outlier to be discounted.

A crash test between a second-hand car from Europe and a new car

The comparison between a vehicle built for the European market and one built for an African market was particularly relevant to Tanzania, because every participant's vehicle was a used import and three-quarters came from a single source market. It addressed directly the assumption that a familiar model name guarantees a given level of protection and demonstrated that a well-specified older vehicle may protect occupants better than a newer vehicle built to a weaker specification.

- *“Because the vehicle is only a few years old, I now realise that I should take advantage of the newer safety technologies available. I will start considering safety rating.”*

- *“After understanding the safety ratings, I would now put safety first. I would check the NCAP rating, airbags, ESC, ABS and child protection before choosing between vehicles.”*

Emotional responses after the session

The strength of reaction was not uniform, and the dissenting accounts are as informative as the enthusiastic ones. A small number of participants accepted that they had learned something while declining to accept that their behaviour would follow, and their reasons were practical rather than dismissive. One pointed to a long and untroubled history with his existing vehicle; another to the maintenance and parts constraints described in section 6.1.2, which he regarded as unchanged by anything he had been shown.

- *“The training has increased my knowledge, but that does not mean my purchasing decision will automatically change.”*
- *“My current car is more than twenty years old and I have never had a serious problem with it. So it is difficult for me to say I will change just because another vehicle has five stars.”*
- *“For me, maintenance, spare parts and whether the vehicle works well on our roads are still more important. The session did not really change my main priorities.”*

These responses identify the limits of what a single session can achieve. Personal experience of a vehicle that has never failed is a powerful counterweight to a statistical argument about risk, and the participants making it were not rejecting the evidence so much as weighing it against many years of their own. Any campaign designed to reach this group will need to work through repetition and through the practical constraints they named, rather than through a single demonstration.

Before the session, participants who valued safety typically expressed this as a preference for a strong or well-built vehicle. Afterwards, the same participants described comparison criteria that could in principle be checked against a published rating or an inspection.

- *“Safety rating, affordability, vehicle condition.”*
- *“Active and passive safety, reliability and technology.”*
- *“Vehicle stability and safety, durability, service and spare-parts support.”*

Several participants also extended the reasoning beyond their own purchase to organisational procurement, an outcome not anticipated in the session design and one that offers a faster route to fleet change than individual consumer choice.

- *“For a new company vehicle, safety should be part of the procurement specification. Having a vehicle with a strong safety rating protects the driver and also protects the business.”*
- *“If I am already paying for a new car, there is no reason to buy one without the best safety specification I can get.”*

A distinct and analytically important outcome was the integration of safety into attributes participants already valued, rather than its addition as a separate criterion. This is visible in the ratings as well as the transcripts: durability, already the second highest-rated attribute, rose to joint first while structural features rose by more than a full point, so that the two most highly rated attributes after the session were one traditional ownership concern and one occupant-protection feature. Three participants described crash protection explicitly as an aspect of reliability or durability.

- *“I now see safety as part of reliability.”*

- *“I still need durability and a vehicle that can work in difficult conditions, but safety would now be a minimum specification.”*

This integration is the mechanism most likely to survive contact with everyday budget pressure, because it does not require the consumer to sacrifice a priority in order to accommodate safety.

6.2.3 Zambia

Existing Misconceptions

Before the demonstration, two specific and unprompted misconceptions surfaced independently in two separate focus groups: that airbags can suffocate or injure occupants, and that seat belts can "trap" or otherwise cause harm in a crash. Because these beliefs arose spontaneously in more than one group rather than being introduced by the moderator, they should be treated as reasonably widespread rather than isolated anecdotes.

- *“I've heard a lot of people say airbags could injure you, but it's not true, it's there to protect you.”*
- *“There are a lot of myths going around that make people not want to wear seat belts or want airbags.”*

Baseline seat belt use itself was described as driven overwhelmingly by fear of a police fine rather than by a genuine belief in its protective value, a rule-compliance pattern rather than a risk-belief pattern, and one that is itself a form of "understanding" worth tracking separately from factual misconceptions.

- *“Do you only put on the seat belt because of the police? // Not for safety.”*

Connotation of safety

The importance of safety did not come up in the discussion until the facilitators asked a specific question about that. Then the response was features such as; seat belts, airbags, and general structural strength. It was therefore not surprising that this did not, in practice, translate into active verification behaviour before purchase. Instead, a recurring "brand halo" pattern emerged: participants — across both the general-public FGDs and the more resourced individual interviewees, assumed a car was safe simply because it was a well-known make, without checking any specific feature.

- *“You just take it for granted that it will be a safe car, because it's a Toyota or a Honda.”*
- *“Not explicitly. I assumed that the car already met basic safety standards.”*

This convergence across a general-public focus group and an independently researched, financially comfortable individual buyer suggests the brand-halo assumption is a general default that even safety-conscious buyers fall into unless specifically prompted otherwise, an important baseline finding for interpreting the shift documented in Theme 3: Changes in Vehicle Purchase Priorities After the Intervention.

Airbags as a consideration for vehicle purchase

Airbags were named readily when participants were asked in the abstract what makes a car "safe": but the data shows this stated importance sitting on shakier ground than it first appears, undermined by both misinformation and passive assumption.

Importance is stated but often assumed rather than verified. Several participants named airbags as essential, sometimes framing them almost fatalistically, safety features matter precisely because a crash can't be predicted:

- *“The car that doesn't have an airbag, an accident is not something you can predict, it just comes.”*

But when pressed on whether they'd actually checked for this before buying, the more common pattern was assumption rather than verification, the same "brand halo" effect that shows up across this dataset:

- *“Not explicitly. I assumed that the car already met basic safety standards.”*

A specific, persistent myth actively works against airbags. Unprompted, in more than one session, participants raised the belief that airbags can injure or even suffocate an occupant; a misconception directly and explicitly rebutted in the room:

- *“I've heard a lot of people say airbags could injure you, but it's not true, it's there to protect you.”*

Second-hand vehicles raise a distinct, harder question: can a deployed airbag be trusted? This is a more sophisticated concern than simple myth-vs-fact, and one participant wasn't confident about resolving, whether a replaced airbag performs as well as an original, and whether a good-looking respray can hide prior damage:

- *“It could look very good on the outside ... but actually the inside has been damaged.”*

The crash-test demonstration exposed a gap between “has an airbag” and “is actually safe.” Two distinct realizations emerged from watching the footage. First, that a vehicle's overall safety can't be judged by a single feature:

- *“And this one didn't even have an airbag.” (reacting to the 30 km/h crash test)*

Second, and more strikingly, that airbags alone don't guarantee good crash performance, a point one interviewee arrived at only after the session, reassessing a long-held assumption:

- *“I assumed that having airbags was sufficient, but now I understand that structural integrity is equally important, some vehicles with airbags still perform poorly in crash tests.”*

One EV owner encountered airbag-adjacent technology differently-as a selling point, not a checklist item. Rather than airbags being assumed or investigated after the fact, active safety technology (automatic braking, driving alerts) was something she directly experienced as a feature during the sales process itself:

- *“What impressed me with the BYD is that it has advanced features, for example, if someone suddenly crosses the road, the car can brake automatically. It also gives alerts and warnings while driving, which my previous cars didn't have.”*

Seat belt as priority

The seat-belt findings split cleanly into two layers: what participants say about seat belts as a safety feature, and what actually drives whether they wear one and the dataset shows a real gap between the two.

Baseline behaviour is rule-compliance, not risk-belief. Across multiple sessions, participants were, once pushed, clear that their seat-belt habit is about avoiding a fine, not about believing it protects them:

- *“Do you only put on the seat belt because of the police? // Not for safety.”*
- *“Some people say the only reason is to avoid the penalty, // if you're caught by the police.”*

Rear-seat belts are the weakest point of all. This was the single most consistently neglected safety behaviour across every source in the study, enforcement rarely reaches the back seat, and habits reflect that:

- *“I've never seen anybody wear [a rear seat belt] // maybe average.”*

However, by the end of several sessions, participants weren't just agreeing seat belts matter — they were stating intent to actively verify safety before their next purchase, a genuine shift in framing from "wear it because of the law" to "check for it because it saves lives":

- *“Before I buy my next car, I need to make sure it's been crash-tested and rated for safety.”*

Effect of Visual Demonstrations

The Crash-test video showing an unbelted occupant in a 30 km/h impact

The reaction to the crash-test video was a genuine surprise that a "slow" 30 km/h impact could cause serious injury, followed by an immediate, spontaneous re-framing of seat belts from a compliance issue to a lifesaving one.

- *“I was shocked. I didn't think a crash at 30 km/h could be so serious.”*
- *“Very low speed though // wow.”*
- *“Oh, seriously!”*

A crash test between a second-hand car from Europe and a new car

The Africa-vs-Europe crash comparison produced an even stronger reaction, independently resonating across all the focus groups. Participants moved from assuming a new, locally assembled vehicle was inherently safer than an older imported one, to recognising that manufacturing standards, not age or badge, determine real-world crash performance.

- *“It's not just a name, then, is it? ... If you cut costs on the metal and the electronics, they can make more money — and if nobody inspects it, they get away with it.”*

A comparable, though not identical, mechanism appeared in one individual interview: a genuine personal near miss (an airbag deployment during emergency braking) produced the same kind of durable attitude shift as the video demonstration, suggesting that both witnessed and lived evidence operate on the same underlying pathway, moving safety from an abstract, assumed quality to a concretely appreciated one.

- *“I once experienced emergency braking where the airbag deployed. Although it was not a severe accident, it made me realize how critical safety features are... Now, safety is a top priority for me.”*

Emotional responses after the session

Although this dataset cannot quantify the shift before and after the intervention, several sources show a clear within-session, before/after change in how participants talked about safety, moving from passive assumption to active stated intent to verify safety before a future purchase.

- *“Before I buy my next car, I need to make sure it's been crash-tested and rated for safety.”*

- *“I assumed that having airbags was sufficient, but now I understand that structural integrity is equally important, some vehicles with airbags still perform poorly in crash tests.”*
- *“The discussion has raised my curiosity about car safety.”*
- *“It was insightful to learn about knowing the manufacturer.”*
- *“It is important to consider the safety of the car through the ratings.”*
- *“This session has been an eye-opener for my car purchase plans.”*

Whether this stated shift corresponds to safety actually entering participants' top three purchase priorities, as opposed to remaining a secondary consideration behind price and fuel economy, which dominated Theme 1, is precisely the question the quantitative pre/post ranking exercise is designed to answer, and cannot be reliably inferred from qualitative self-report alone.

6.3 The attitude towards NCAP ratings.

This section examines how participants responded to the introduction of NCAP ratings during the intervention. It focuses on three related issues: participants' baseline awareness of NCAP or comparable crash-test rating systems, their assessment of the usefulness of these ratings after they were introduced, and their stated intention to consult safety ratings before future vehicle purchases. The section therefore considers whether NCAP information helped participants move from a general concern for safety towards a more concrete and verifiable way of comparing vehicles, particularly in markets where buyers often rely on brand reputation, dealer assurances or visible vehicle condition rather than independent safety evidence.

6.3.1 Ghana

Awareness of NCAP

Results from the study indicate that participants had little to no knowledge of the NCAP ratings. Participants described the intervention as informative, transformative, and practical, indicating a shift from prioritising conventional purchasing factors such as price and aesthetics towards considering scientifically validated safety information

Perceived usefulness.

The intervention enhanced participants' understanding of vehicle safety, with many acknowledging they had previously overlooked critical safety indicators when purchasing vehicles. Exposure to vehicle crash ratings broadened participants' perspectives on what constitutes a safe vehicle. Participants described the NCAP rating as an eye-opening experience that reshaped their understanding of vehicle quality beyond outward appearance. Rather than relying solely on brand reputation or affordability, participants reported becoming more attuned to objective safety indicators. These comments are illustrated in the following narratives.

- *“This discussion has been educational for me; now I know what to look out for when buying a car.”*
- *“This experience is worth my time at this meeting. I am now informed about what to look out for.”*

Additional participants reinforced this learning outcome:

- *“Exposure to the Global NCAP broadened my perspective on considering car ratings before purchase.”*

- *“I have been educated. The safety of the car is crucial, from the exterior to the interior security features.”*

Intention to use NCAP

The NCAP rating also stimulated behavioural intentions by encouraging participants to integrate newly acquired safety knowledge into future vehicle purchase decisions. Participants indicated that they would actively assess safety ratings, structural integrity, tyre quality, and other protective features before purchasing a vehicle. Some participants further demonstrated that the intervention expanded their evaluation criteria beyond traditional concerns to include long-term ownership considerations. These issues were evident in the following narrative.

- *“The information on the car tyres from the video shown is very useful to UEW staff and the transport unit.”*

6.3.2 Tanzania

Awareness of NCAP

NCAP ratings did not appear spontaneously among the main pre-intervention priorities in the 34 respondents. No participant referred to NCAP, Global NCAP or any equivalent crash-test rating programme before the intervention. This suggests that general concern about safety does not necessarily translate into awareness of an independent system for comparing the crash protection and crash-avoidance performance of different vehicles.

The finding is notable given the composition of the Tanzanian sample, which was drawn largely from engineers, consultants, academics and senior managers. If independent safety ratings are unknown to a selected professional group of this kind, awareness in the wider vehicle-buying population is unlikely to be higher.

Perceived usefulness

Participants accepted the value of the information while doubting that it could be delivered and acted upon in their market, for two distinct reasons: the price of highly rated vehicles, and their availability.

- *“What are the cost of these 5 rating safety vehicles? I want to consider safety from now onwards but still be conscious of cost.”*
- *“Moderately important. I need a safer vehicle which may not be available in Tanzania.”*
- *“A five-star car that I cannot afford is not an option for me.”*

Participants in a Tanzanian campaign are therefore likely to find rating information most useful when it is tied to the exact model year and market specification of vehicles actually on offer, expressed in plain language, and paired with an inspection checklist for used vehicles, since an original rating cannot confirm the condition of restraint and structural systems after years of service or previous crash repair. Given that 26 of the 34 vehicles in this sample were imported from Japan, linking consumer guidance to Japan NCAP records would cover the majority of the fleet entering the country.

Intention to use NCAP

When asked whether they would consult a vehicle's safety rating before their next purchase, 28 of the 34 participants (82.4%) answered yes and 6 (17.6%) were not sure. No participant answered no. The intention was therefore strong but not unanimous, and the reservations expressed by the six who did not commit are informative.

- *“The training has increased my knowledge, but that does not mean my purchasing decision will automatically change.”*
- *“My current car is more than twenty years old and I have never had a serious problem with it. So it is difficult for me to say I will change just because another vehicle has five stars.”*
- *“For me, maintenance, spare parts and whether the vehicle works well on our roads are still more important. The session did not really change my main priorities.”*

These responses represent a change in stated intention measured immediately after exposure, not demonstrated purchasing behaviour. A follow-up web survey was attempted after the sessions but attracted too few responses to report. Follow-up at three to six months, or at the participant's next vehicle purchase, remains necessary before any behavioural claim can be made.

6.3.3 Zambia

Awareness of NCAP

NCAP ratings did not appear spontaneously among the pre-intervention priorities of the 10 respondents interviewed at the Radisson Blu, Lusaka. No participant referred to NCAP, Global NCAP, or any equivalent crash-test rating programme before the intervention. Several respondents did rate "safety features" highly important even at this pre-intervention stage, but this general concern for safety did not translate into awareness of an independent system for comparing the crash protection of different vehicles.

Perceived usefulness

Participants responded very positively to NCAP once it was introduced, with most rating it 6 or 7 out of 7 for usefulness. The main theme in their comments was not cost or availability, as in Tanzania, but a simple lack of prior exposure to the concept:

- *“Very enlightening. Previously had no real understanding of ratings, thought they were only for car shows. They affect our real life, so more education around the same is needed.”*
- *“Car users need more sensitization on NCAP. It is a very useful tool when it comes to vehicle purchase and decision making.”*
- *“The research has opened and deepened my knowledge towards safety being an important component of a car, rather than just style and brand of a car.”*

Feasibility ratings were slightly more mixed than usefulness ratings, with a couple of respondents scoring feasibility as low as 4 out of 7, suggesting that even where the value of the information is accepted, some doubt remains about how easily it can be applied when actually buying a car in Zambia.

Intention to use NCAP

When asked whether they would consult a vehicle's safety rating before their next purchase, all participants who were asked this question answered yes. None answered no, and none said they were unsure. Written comments from participants did not raise the kind of reservations seen elsewhere, such as attachment to a current vehicle or a belief that other priorities like maintenance and spare parts would still dominate the decision. Instead, comments consistently reflected increased awareness and support for wider public education on vehicle safety ratings.

As with any pre/post intervention measure, this reflects stated intention immediately after the session rather than demonstrated purchasing behaviour, and a follow-up closer to participants' next vehicle purchase would be needed to confirm whether this intention holds.

7 Results: Survey

This chapter presents the results from the survey and will start with questions dealing with how important various aspects are when buying a car. It will also compare participants who drive a new car with those who drive a second-hand car.

7.1.1 Ghana

Economic considerations

Figure 6 shows that spare parts availability recorded the highest mean score (6.8) for both new and second-hand cars, making it the most influential economic consideration and suggesting that respondents place considerable emphasis on long-term maintainability and the ease of obtaining replacement parts. Fuel consumption ranked second, with mean scores of 6.3 for new cars and 6.7 for second-hand cars, indicating strong concern about recurrent operating costs, particularly among second-hand vehicle buyers. Cost also emerged as an important consideration, with mean scores of 5.8 for new cars and 6.1 for second-hand cars, while access recorded the lowest mean scores, at 5.5 for new cars and 5.0 for second-hand cars.

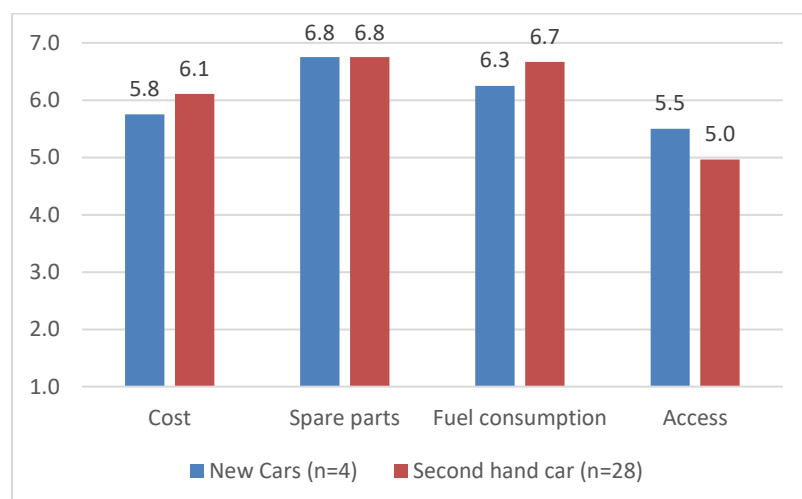


Figure 6: Economic consideration by brand-new and second-hand vehicles

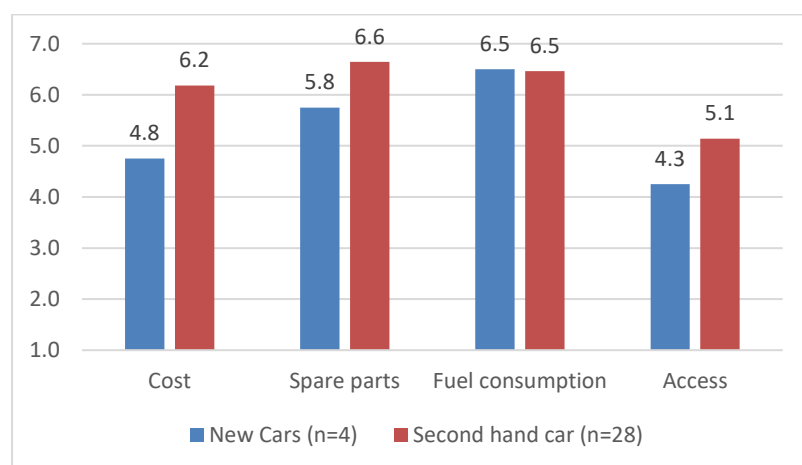


Figure 7: Economic consideration by brand-new and second-hand vehicles, after the intervention

Following the intervention (Figure 7), the pattern changed notably for new-car respondents, with fuel consumption becoming the highest-rated consideration ($M = 6.5$), whereas access

recorded the lowest mean ($M = 4.3$). Cost and spare-parts availability also declined to $M = 4.8$ and $M = 5.8$, respectively. Overall, the intervention appears to have reduced the salience of cost and spare-parts availability among new-car buyers, while increasing the importance of fuel consumption, suggesting greater attention to recurrent operating expenses. For second-hand vehicle buyers, by contrast, cost increased marginally from $M = 6.1$ to $M = 6.2$, while spare-parts availability declined from $M = 6.8$ to $M = 6.6$ and fuel consumption from $M = 6.7$ to $M = 6.5$. Access increased marginally from $M = 5.0$ to $M = 5.1$ but remained the least influential factor.

Functional characteristics

Regarding vehicle functionality, the following observations were drawn from Figure 8. Among respondents who purchased new cars ($n=4$), durability and visibility recorded the joint-highest mean score of 6.5, indicating that respondents placed considerable emphasis on a vehicle's expected longevity and the extent to which it provides adequate visibility for safe and effective driving. Structural features recorded the lowest mean of 6.3, although the relatively small difference suggests that structural attributes remained highly valued in the purchasing decision. For second-hand cars ($n=28$), durability emerged as the most influential functional characteristic, with the highest mean score of 6.8, suggesting that buyers of used vehicles are particularly concerned with reliability, longevity, and the vehicle's ability to remain functional over time. Structural features followed with a mean of 6.6, reinforcing the importance attached to the vehicle's physical integrity and construction, while visibility recorded the lowest mean of 6.1.

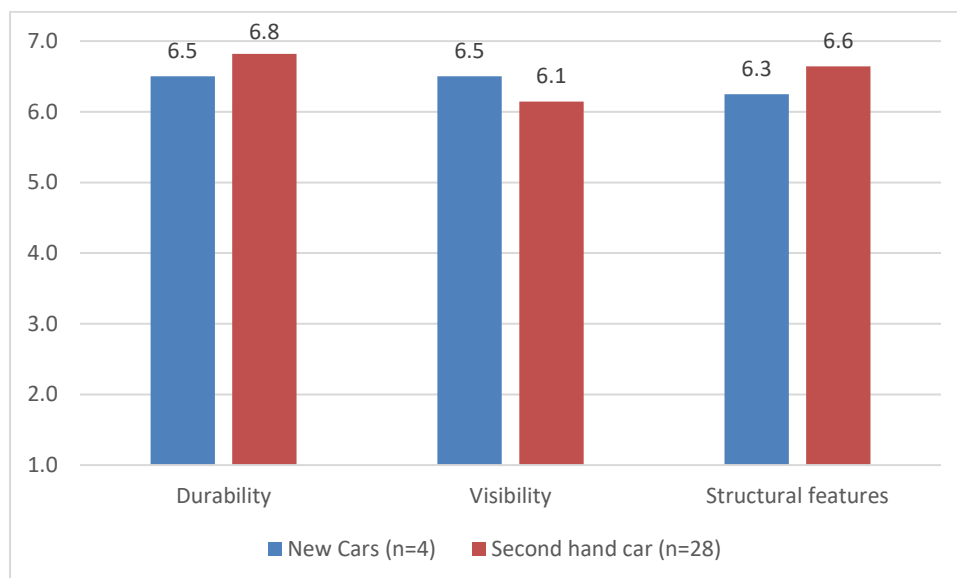


Figure 8: Functional characteristics by brand-new and second-hand vehicles, before the intervention

Following the intervention, the findings (Figure 9) indicate that durability remained the most highly rated attribute for second-hand cars, rising to $M = 7.0$, the highest mean across all categories, while structural features also increased slightly from $M = 6.6$ to $M = 6.8$. In contrast, visibility among second-hand cars increased from $M = 6.1$ to $M = 6.4$, indicating a modest strengthening of its perceived relevance. For new cars, durability declined from $M = 6.5$ to $M = 5.5$, making it the lowest mean in the post-intervention assessment, whereas structural features increased from $M = 6.3$ to $M = 6.5$ and visibility remained unchanged at $M = 6.5$.

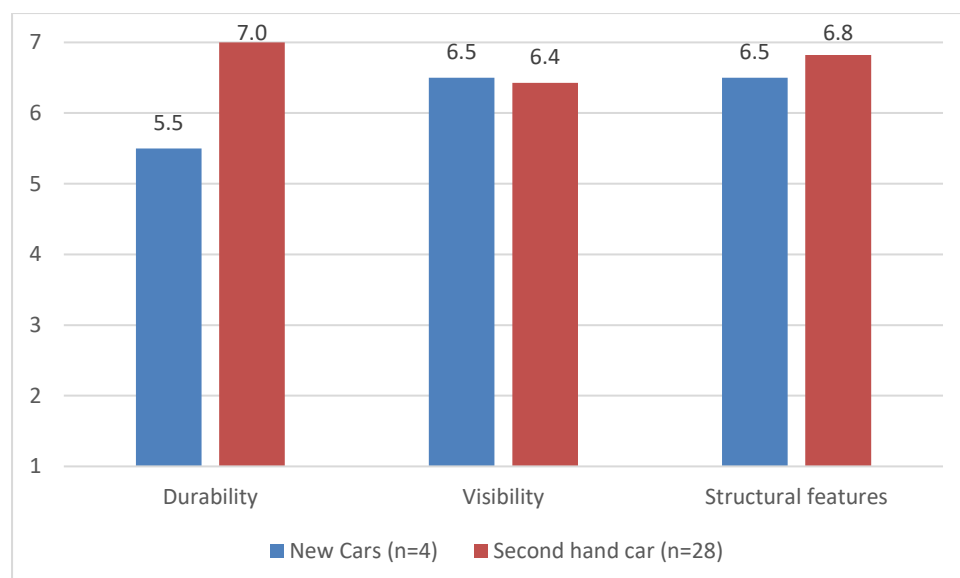


Figure 9: Functional characteristics by brand-new and second-hand vehicles, after the intervention

Social and symbolic characteristic

Regarding social and symbolic characteristics, the following observations were drawn from Figure 10. Among respondents who intended to purchase second-hand cars (n=28), style and design recorded the highest mean score of 5.6, suggesting that a vehicle's visual appeal, perceived status, and symbolic value are important considerations in their purchasing decisions. In contrast, other people recorded a considerably lower mean of 3.7, indicating that peer, family, or social influence was relatively less important. A similar but weaker pattern emerged among respondents intending to purchase new cars (n=4), where style and design had a mean of 4.5, compared with 3.8 for other people. Across all indicators, the highest mean value was 5.6 for style and design among second-hand car buyers, while the lowest was 3.7 for the influence of other people among second-hand car buyers.

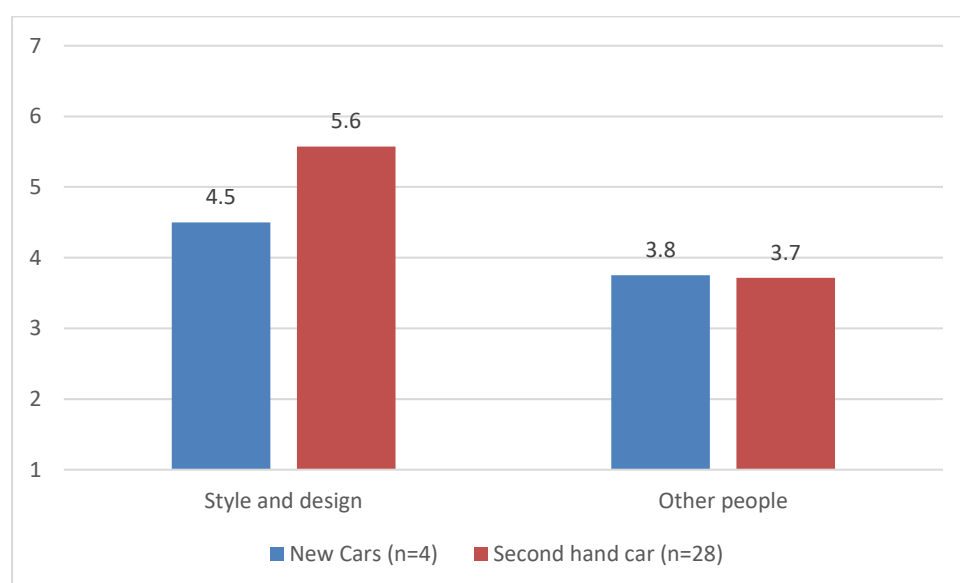


Figure 10: Social and symbolic characteristics by brand-new and second-hand vehicles, before the intervention

Following the intervention, the same general pattern persisted (Figure 11). Although the mean for style and design among second-hand car purchasers declined slightly from 5.6 to 5.4, the

mean for style and design decreased from 4.5 to 4.3. In contrast, the influence of other people among new-car purchasers increased marginally from 3.8 to 4.0, whereas it remained unchanged at 3.7 among second-hand car purchasers. The results suggest that respondents' purchasing intentions were driven more strongly by symbolic and aesthetic considerations associated with the vehicle itself, particularly style and design, than by interpersonal or social influence.

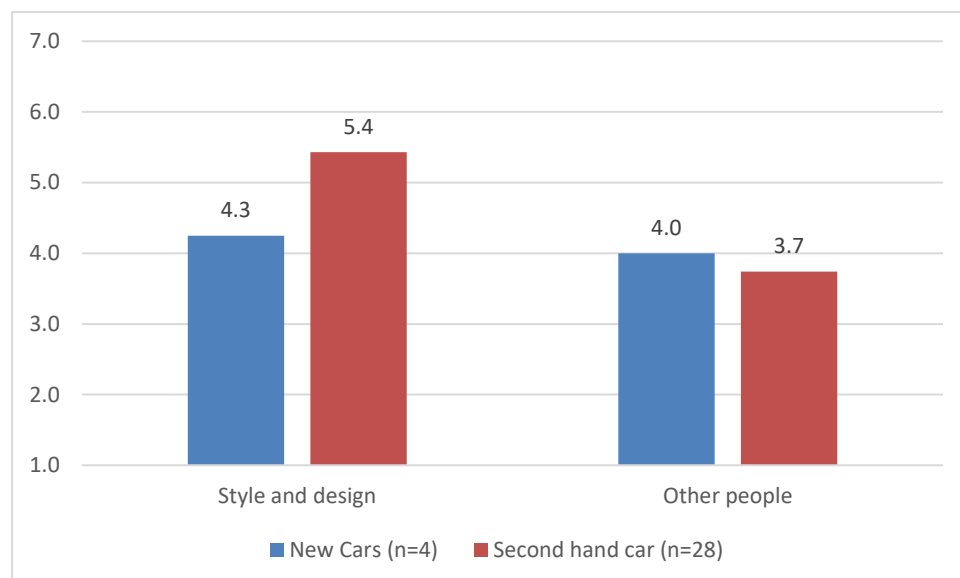


Figure 11: Social and symbolic characteristics by brand-new and second-hand vehicles, after the intervention

7.1.2 Tanzania

Economic considerations

The results dealing with aspects related to the economics of vehicle ownership are presented in Figure 12.

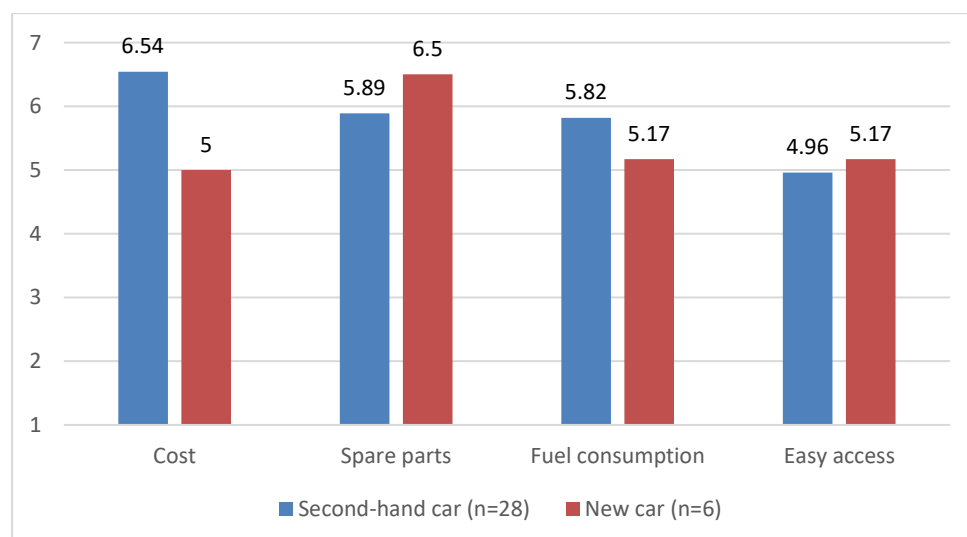


Figure 12: Economic consideration by brand-new and second-hand vehicles, before the intervention

Figure 12 shows that purchase cost was clearly more important to participants driving a second-hand car than to those driving a new car (6.54 against 5.00), which is consistent with a group buying at the tighter end of the market. The pattern reverses for spare parts, rated higher by

new-car owners (6.50 against 5.89). Fuel consumption was also more important to the second-hand group, while ease of access was rated lowest of the four aspects by both groups. Figure 13 shows the results after the intervention.

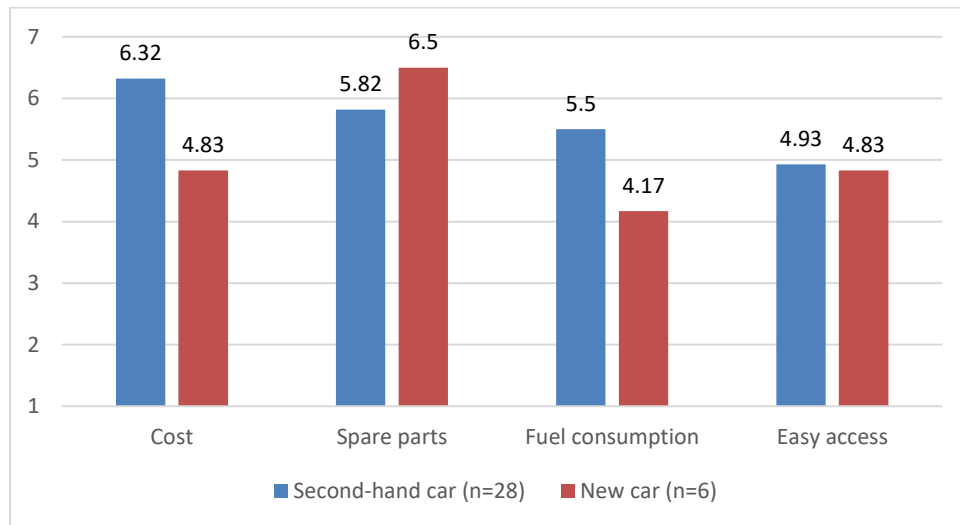


Figure 13: Economic consideration by brand-new and second-hand vehicles, after the intervention

After the intervention the ordering within each group is unchanged and purchase cost remains the dominant economic consideration for second-hand buyers. None of the four economic aspects changed significantly in either group. The only movement of note is fuel consumption among new-car owners, which fell by a full point, although with only six participants in that group this should be treated as indicative rather than established.

Functional characteristics

The ratings of characteristics related to functionality are presented in Figure 14.

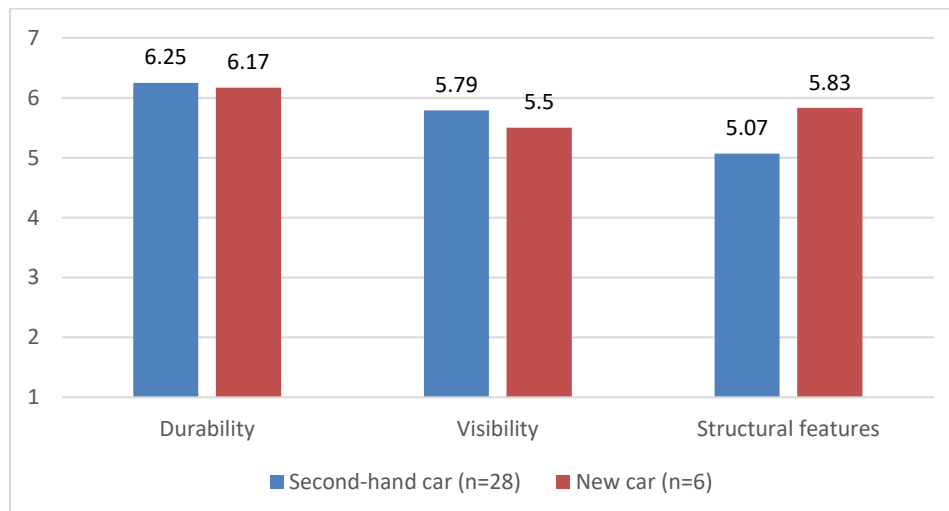


Figure 14: Functional characteristics by brand-new and second-hand vehicles, before the intervention

Figure 14 shows that durability was rated highly by both groups and was the single highest-rated functional characteristic before the intervention. Structural features, meaning the strength and crash behaviour of the vehicle body, were rated noticeably higher by new-car owners than by second-hand owners (5.83 against 5.07). Good visibility sat between the two. Figure 15 presents the results after the intervention.

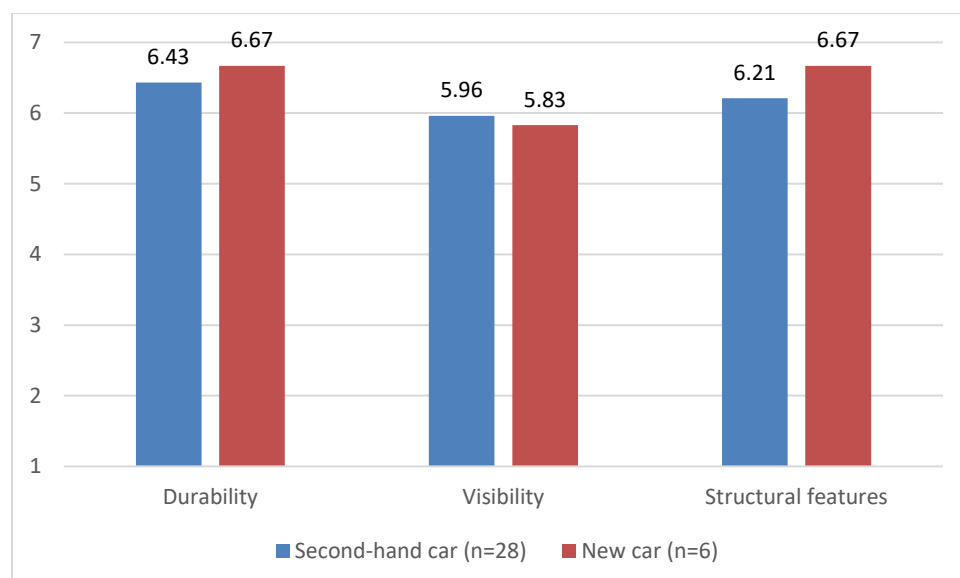


Figure 15: Functional characteristics by brand-new and second-hand vehicles, after the intervention

The clearest change is in structural features, which rose in both groups and rose furthest among second-hand owners, from 5.07 to 6.21, closing most of the gap with the new-car group. Durability and visibility moved only slightly. After the intervention the two groups are more alike on all three functional characteristics than they were before it. .

Social and symbolic characteristic

Participants' ratings of social and symbolic characteristics are presented in Figure 16 and Figure 17.

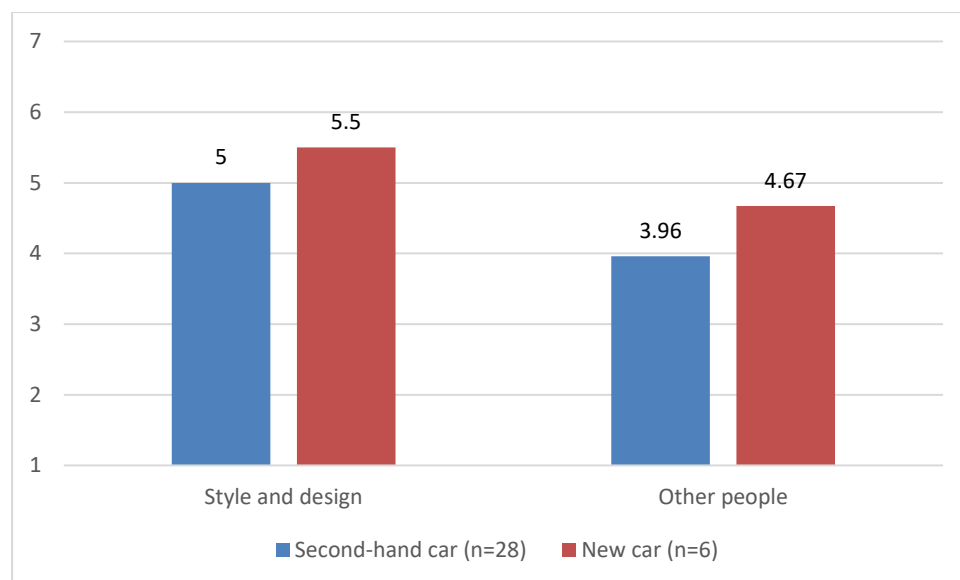


Figure 16: Social and symbolic characteristics by brand-new and second-hand vehicles, before the intervention

Figure 16 shows that before the intervention participants driving a new car rated style and design as more important than the other group (5.50 against 5.00), and the same applies to what other people think about their choice of car (4.67 against 3.96). The opinions of others attracted the lowest rating of any aspect measured in the Tanzanian survey. Figure 17 presents the results after the intervention.

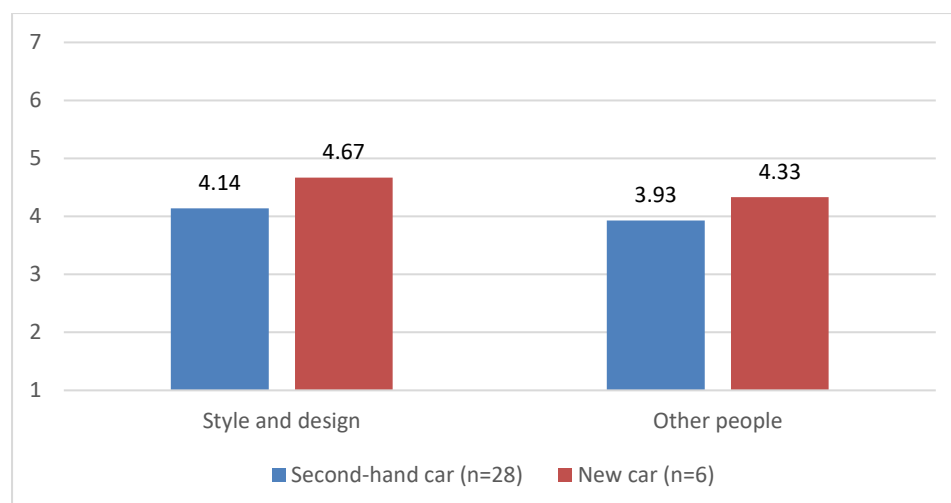


Figure 17: Social and symbolic characteristics by brand-new and second-hand vehicles, after the intervention

Style and design fell in both groups and remains rated slightly higher by new-car owners. This was the largest decline recorded on any aspect in the Tanzanian survey: across the whole sample the rating fell from 5.09 to 4.24, with 20 of the 34 participants lowering it and none raising it. The influence of other people was essentially unchanged, which is consistent with the focus-group material, where participants described advice from mechanics and experienced owners as practical information rather than social pressure.

7.1.3 Zambia

Economic considerations

The result dealing with aspects which are related to economic are presented in Figure 18.

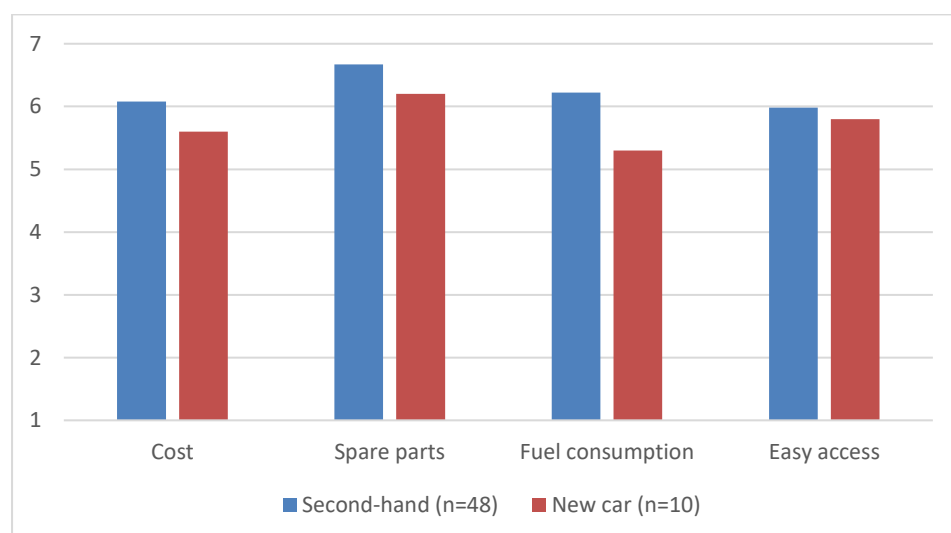


Figure 18: Economic consideration by brand-new and second-hand vehicles, before the intervention

Figure 18 shows that availability of spare parts is very important, especially for those who drive a second-hand car. The figure also shows that this group rates all the aspects as more important than those who drive a new car. Figure 19 shows the results after the intervention.

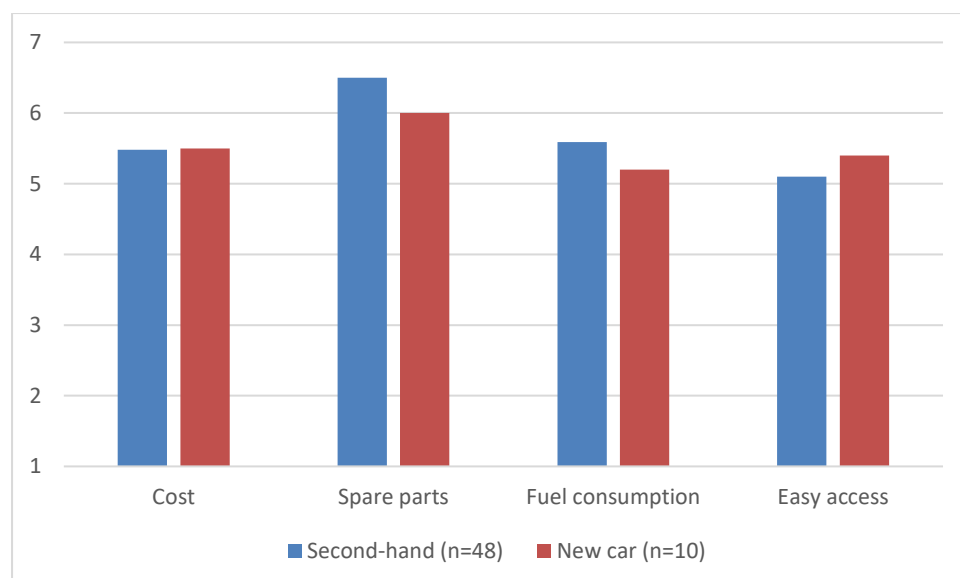


Figure 19: Economic consideration by brand-new and second-hand vehicles, after the intervention

After the intervention those who drive a second-hand car still rate all the aspects as more important than those who drive a new car. The only difference is easy access when buying a car which is more important for those who drive a new car.

Functional characteristics

The ratings of characteristic related to functionality are presented in Figure 20.

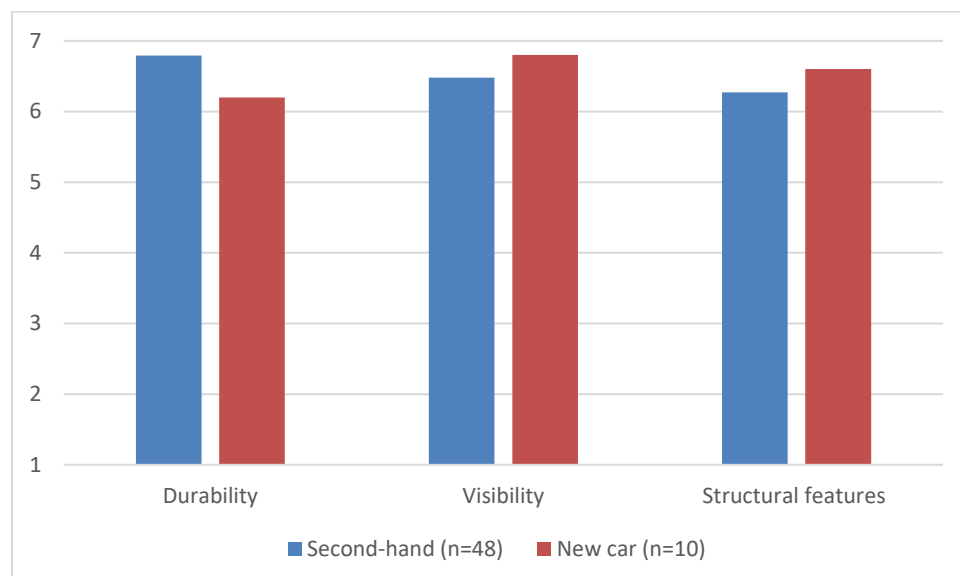


Figure 20: Functional characteristics by brand-new and second-hand vehicles, before the intervention

Figure 20 shows that functional characteristics is more important for those who drive a new car. This applies especially to the importance of good visibility, but also structural features. However, durability is regarded as more important for those who drive a second-hand car. Figure 21 presents the results after the interventions.

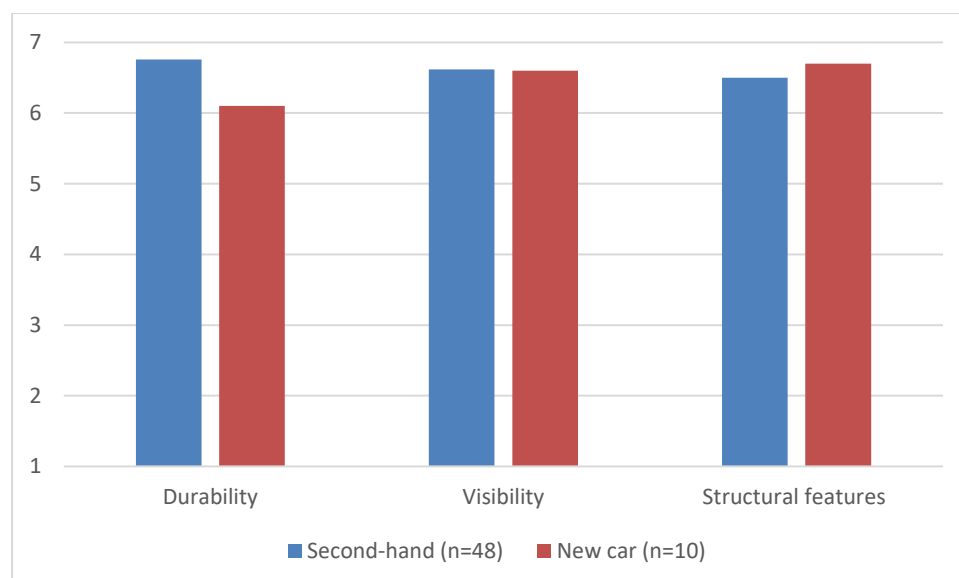


Figure 21: Functional characteristics by brand-new and second-hand vehicles, after the intervention

The results show that the differences between the two groups have decreased. The only notable difference concerns durability, which participants driving second-hand cars rated as more important than those driving a new car.

Social and symbolic characteristic

Participants rating of social and symbolic characteristic are presented in Figure 22 and Figure 23.

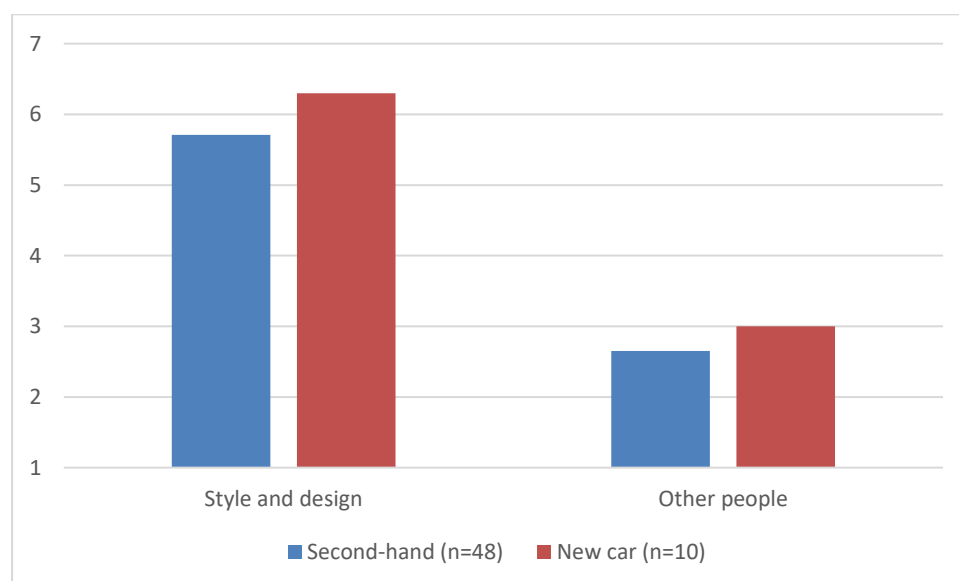


Figure 22: Social and symbolic characteristics by brand-new and second-hand vehicles, before the intervention

Figure 22 shows that before the intervention participants who drive a new car rated style and design as more important than the other group. The same applies to what other people think about their choice of car. Figure 23 presents the results from the survey presented after the intervention.

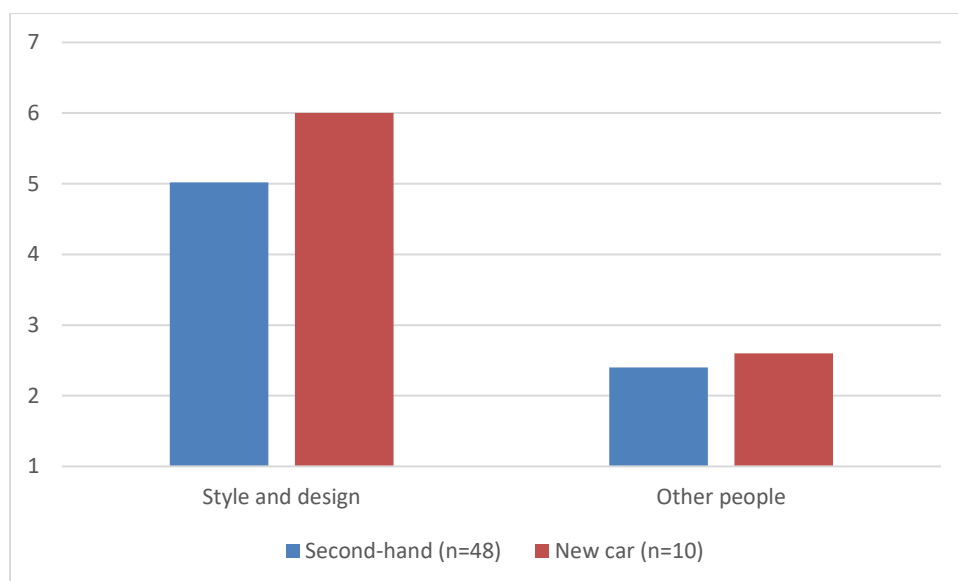


Figure 23: Social and symbolic characteristics by brand-new and second-hand vehicles, after the intervention

The results show that style and design is still rated as more important by participants who drive a new car. However, the impact of other people has become more similar.

As previously described, both age and gender differed between the two groups, and it is possible that these differences, rather than the type of car driven, explain the observed effects. Further analyses were therefore conducted.

When controlling for age, the results showed that participants born between 1965 and 1984 placed greater importance on durability than those driving a new car. This pattern was observed in both the pre-intervention and post-intervention studies (6.33 vs. 7.00 before the study and 5.50 vs. 6.73 after the study).

A second aspect that showed a significant difference was the rating of fuel consumption. Participants driving a new car rated fuel consumption as less important than those driving a second-hand car (5.83 vs. 5.70).

Analyses comparing men and women showed that ease of access was rated as more important by women. This finding was consistent in both the pre-intervention and post-intervention studies (pre-intervention: women 6.33, men 5.78; post-intervention: women 5.89, men 4.63).

In the pre-intervention study, women rated durability as less important than men (6.39 vs. 6.83). In the post-intervention study, design and visibility were rated as more important by women than by men (design: women 5.89 vs. men 4.63; visibility: women 6.89 vs. men 6.50).

7.2 Understanding of Vehicle Safety

7.2.1 Ghana

Before the intervention (Figure 24), respondents who purchased brand-new cars ($n = 4$) rated rear seat belts highest ($M = 6.8$), followed by airbags ($M = 6.5$), reflecting strong appreciation for both safety features. By contrast, respondents who purchased second-hand cars ($n = 28$) rated airbags highest ($M = 6.3$), while rear seat belts received their lowest mean rating ($M =$

5.6). This divergence was most pronounced for rear seat belts, with new-car buyers scoring 1.2 points higher than second hand car buyers (6.8 vs. 5.6). Perceptions of airbags were far more consistent across groups, differing by only 0.2 points.

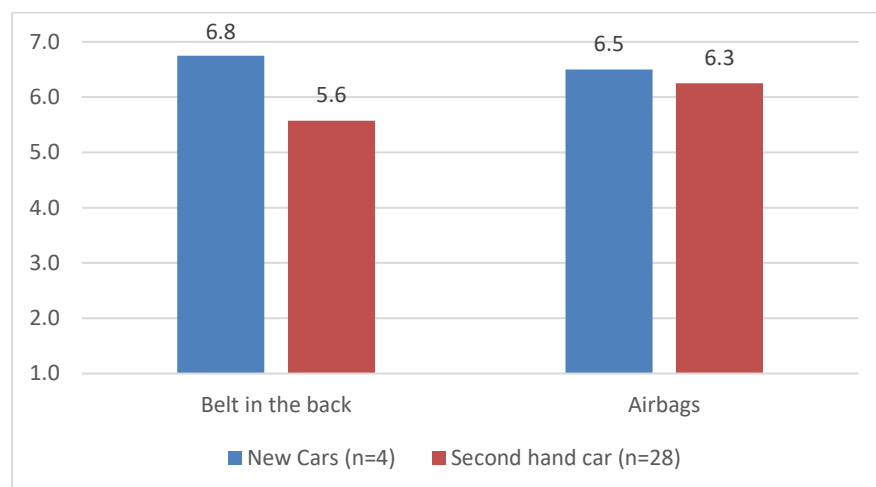


Figure 24: Importance of safety features before the intervention

Following the intervention (Figure 25), perceptions of the importance of both safety features increased across the two groups. Among brand-new car buyers, the mean score for rear-seat seat belts rose marginally from 6.8 to 7.0, while airbags rose from 6.5 to 7.0, indicating uniformly high recognition of both features. Second-hand car buyers showed a more pronounced improvement, with the mean importance of rear-seat seat belts increasing from 5.6 to 6.3 and airbags from 6.3 to 6.75. After the intervention, brand-new car buyers recorded the highest mean values ($M = 7.0$) for both rear-seat seat belts and airbags, whereas second-hand car buyers recorded the lowest mean ($M = 6.3$) for rear-seat seat belts.

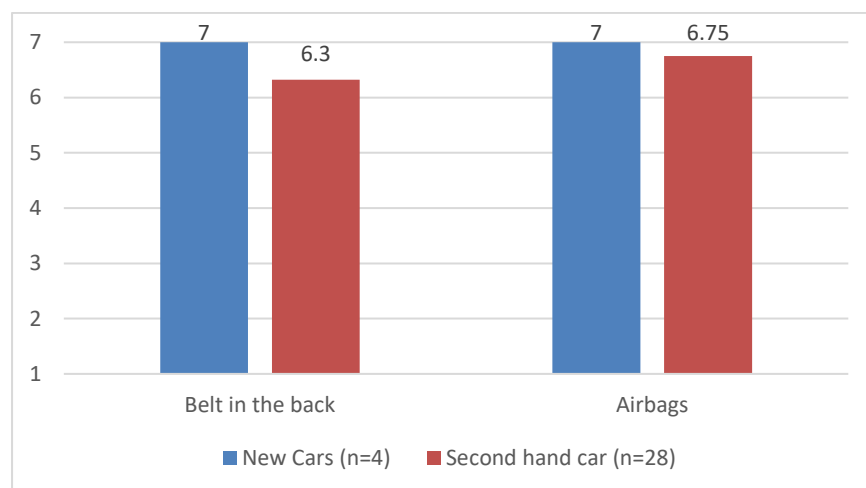


Figure 25: Importance of safety features after the intervention

7.2.2 Tanzania

Regarding the importance of vehicle safety, the results from the survey conducted before the intervention are presented in Figure 26.

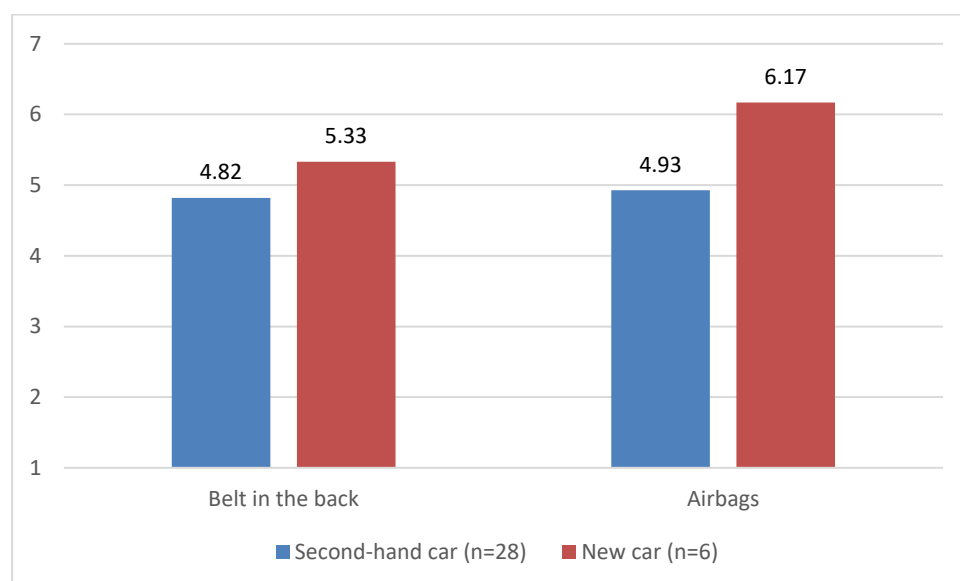


Figure 26: Importance of safety features before the intervention

Figure 26 shows a clear difference between the two groups before the intervention. Participants driving a new car rated airbags substantially higher than those driving a second-hand car (6.17 against 4.93), and rear seat belts somewhat higher (5.33 against 4.82). For the second-hand group, which accounts for 28 of the 34 participants, both safety features were rated below every economic and functional characteristic measured. Rear seat belts were the second-lowest rated of all eleven aspects in the survey, below style and design.

This is the central baseline finding for Tanzania. Safety was not rejected, but among the group that makes up the great majority of the market it ranked behind every consideration bearing on the cost and practicality of ownership. Figure 27 presents the results after the intervention.

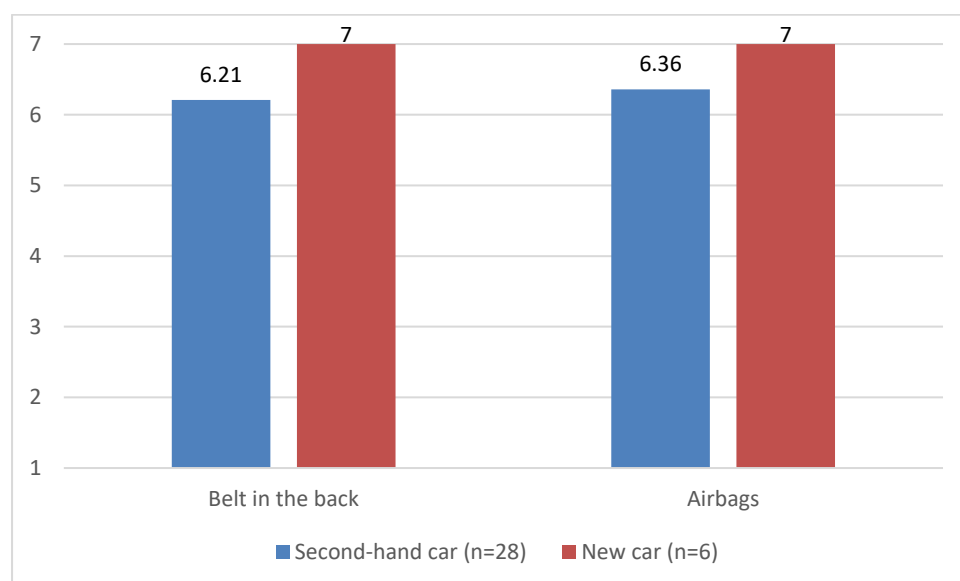


Figure 27: Importance of safety features after the intervention

After the intervention both groups rated both features higher, and the new-car group reached the maximum of the scale on each. The second-hand group moved furthest, from 4.82 to 6.21 on rear seat belts and from 4.93 to 6.36 on airbags, so that the gap between the two groups narrowed considerably. The change was statistically significant within both groups (new car: $t(5) = 6.74$, $p < 0.001$; second-hand car: $t(27) = 6.62$, $p < 0.001$), measured on an index combining rear seat belts, airbags and structural features.

Only 7 of the 34 participants (20.6%) placed anything safety-related among their three most important purchase factors before the session, and no participant had heard of NCAP or any comparable rating programme. The distinction between rating safety as moderately important and actually using it to choose between vehicles is what the intervention had to overcome, and the change in that measure is reported in section 7.4.

Seat belts in the back seat were the clearest case of low baseline priority and large subsequent change. Before the session they were rated 4.91 (SD 1.24), the second-lowest of the eleven attributes, with 13 participants rating them at or below the midpoint. This is significant in the Tanzanian context because observed restraint use is low: Boniface et al. (2016), in a study of 4,675 road-traffic-injury patients across six public hospitals, recorded seat belt use for only 24.4% of injured vehicle occupants.

7.2.3 Zambia

Regarding the importance of vehicle safety, the following presents result from the survey conducted before the intervention, see Figure 28.

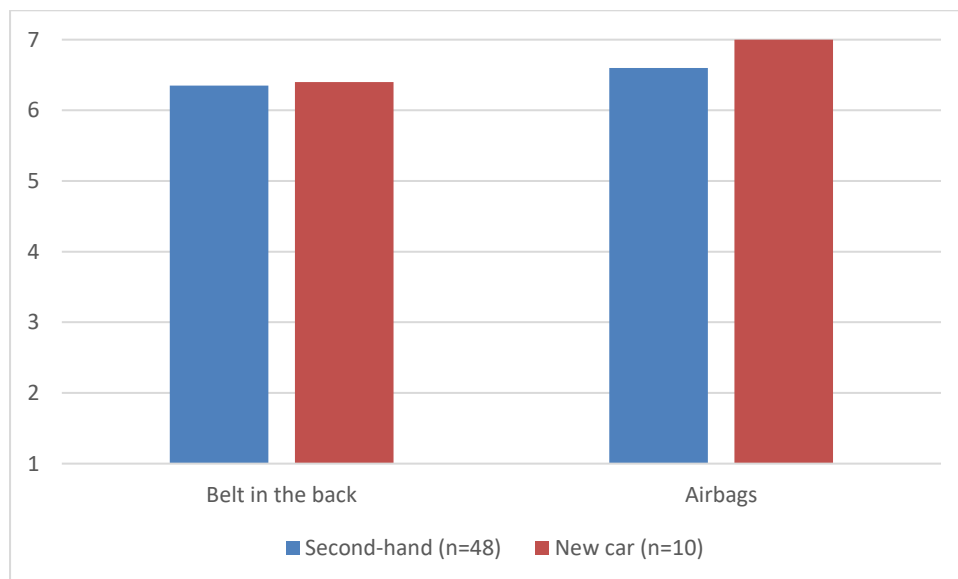


Figure 28: Importance of safety features before the intervention

The results show that, regardless of whether participants drove a new or a second-hand car, rear-seat seat belts and airbags are rated as very important. However, a difference between the groups is observed for airbags, with participants driving a new car rating this feature as more important than those driving a second-hand car. Figure 29 presents the results from the after study.

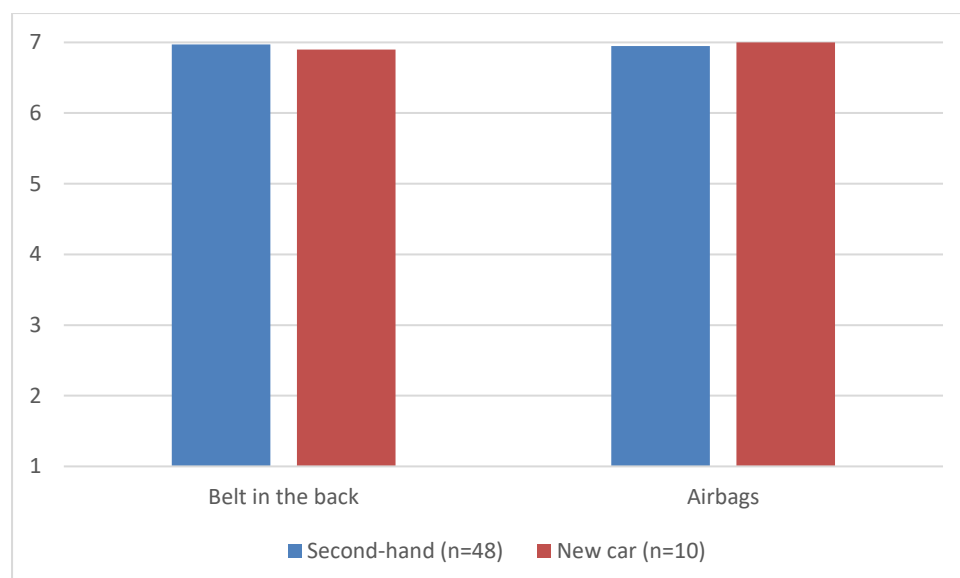


Figure 29: Importance of safety features after the intervention

The results show that those who drive a second-hand car rate seat belt in the back as slightly more important than those who drive a new car. Their rating of airbags is more or less the same.

7.3 The impact of the intervention

This section examines whether the awareness intervention changed the factors participants said they would prioritise when purchasing a vehicle. It compares the results from the pre- and post-survey to identify whether safety-related considerations, such as seat belts, airbags, structural integrity and independent safety ratings, became more important after participants discussed vehicle safety and viewed the crash-test material. The findings are interpreted alongside the continued importance of practical ownership concerns, including purchase cost, fuel consumption, durability and spare-parts availability, in order to understand whether safety replaced, complemented or became integrated with the criteria participants already used when evaluating vehicles.

7.3.1 Ghana

Following the intervention, drivers of new cars reported a consistent decline in the importance attached to all four assessed factors, indicating a general shift in their vehicle-purchase considerations (Figure 30). Spare parts declined substantially from 6.8 before the intervention to 5.8 after the intervention, a 1.0-point reduction. Similarly, the importance attached to cost decreased from 5.8 to 4.8, also a 1.0-point decline, suggesting that financial considerations became less influential in drivers' assessments after the intervention. Access recorded a further notable reduction, falling from 5.5 to 4.3, representing the largest decline of 1.2 points among the four factors. In contrast, style and design decreased only marginally, from 4.5 to 4.3 (0.2 points), indicating greater stability in its perceived importance.

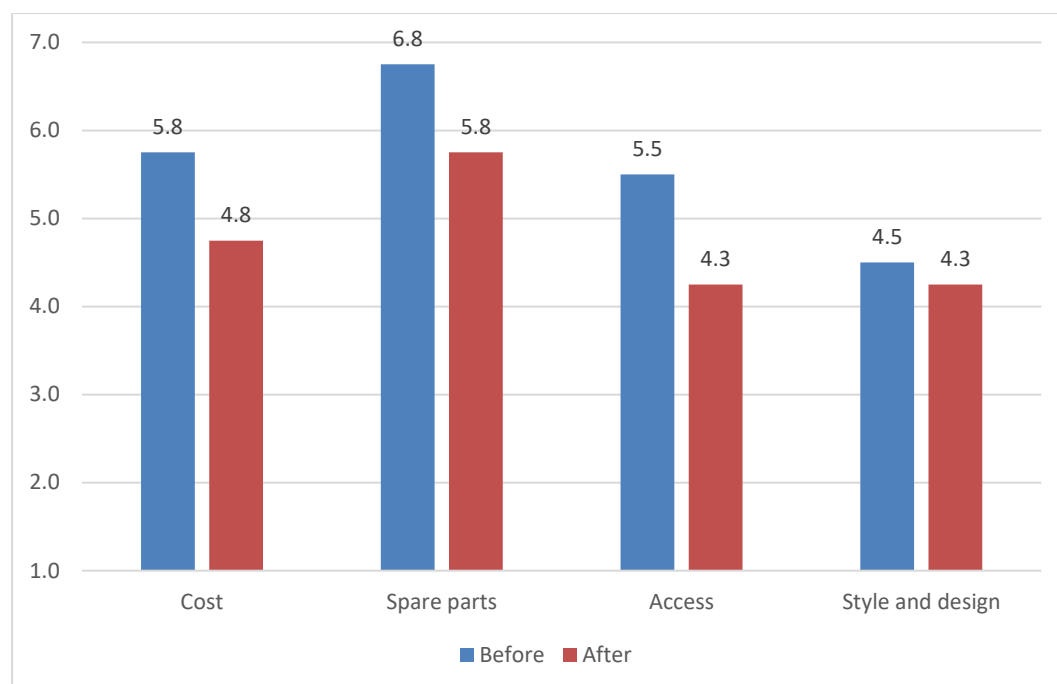


Figure 30: Users with brand-new vehicle: Shift in opinion on vehicle purchase priorities

Following the intervention (Figure 31), durability increased from a mean score of 6.5 before the intervention to 6.8 after the intervention, representing the largest increase of 0.3 points. Fuel consumption increased modestly from 6.3 to 6.5, and structural features rose similarly from 6.3 to 6.5. The importance attached to other people, although comparatively low, also increased slightly from 3.8 to 4.0, suggesting a marginal improvement in drivers' consideration of the implications of vehicle choice for other road users. In contrast, visibility remained unchanged at 6.5, indicating that the intervention did not alter its perceived importance.

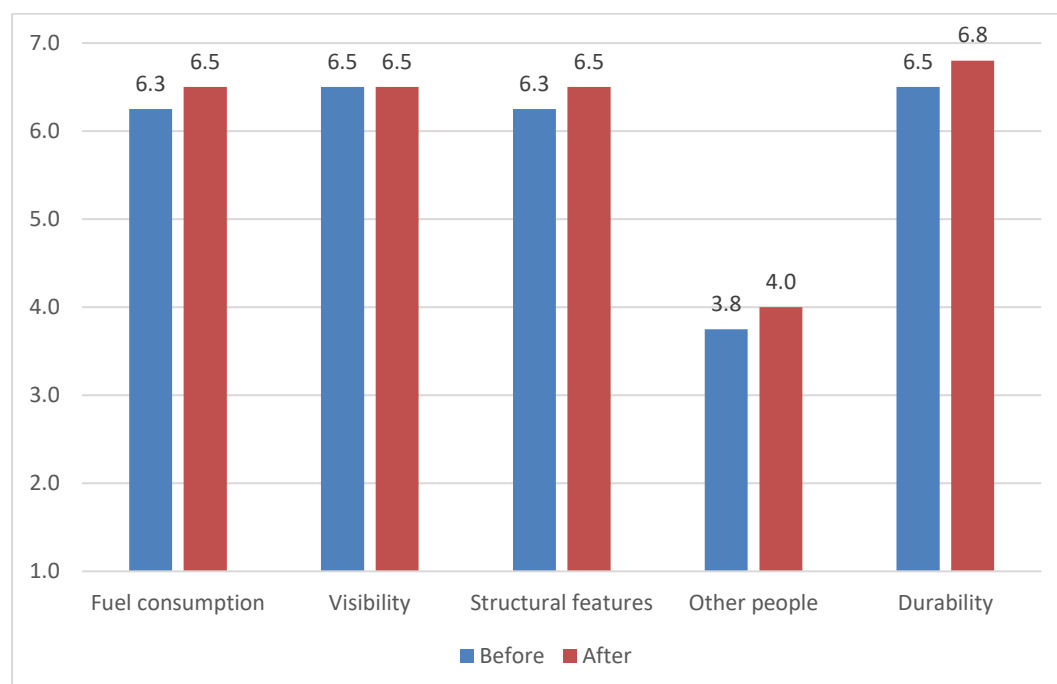


Figure 31: Aspects rated as more important after the intervention by drivers of a new car

Following the intervention (Figure 32), spare parts remained a critical factor in vehicle purchasing intentions, although the mean score decreased slightly from 6.8 before the intervention

to 6.6 after the intervention, indicating a marginal reduction in emphasis. Similarly, the importance attached to fuel consumption declined from 6.7 to 6.5, while style and design declined from 5.6 to 5.4. In contrast, the influence of other people remained unchanged at 3.7, indicating that the intervention did not alter this consideration.

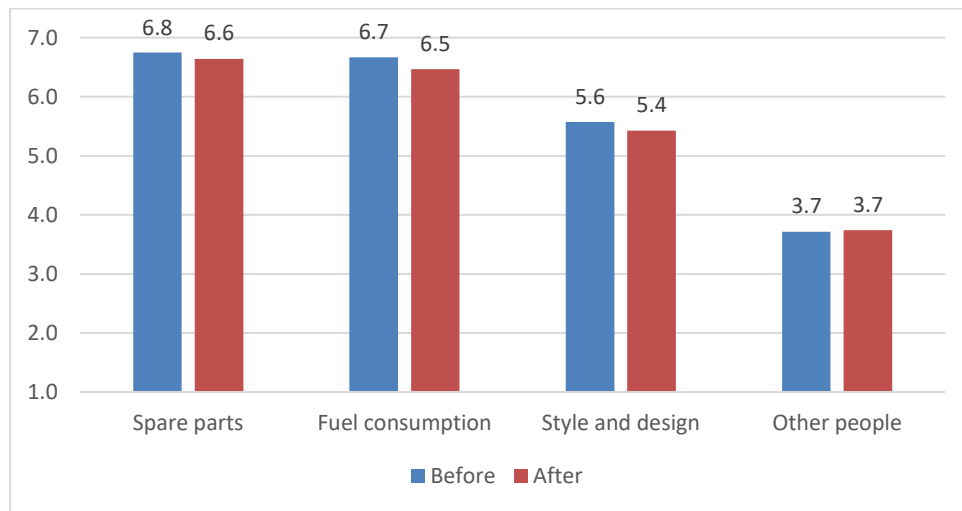


Figure 32: Aspects rated as less important after the intervention by drivers of a new car

Following the intervention (Figure 33), second-hand car drivers assigned modestly higher importance to the following items, indicating an incremental shift in perceived priorities. Durability recorded the largest increase, rising from $M = 6.8$ to $M = 7.0$ (a gain of 0.2 points), and remained the most highly rated item both before and after the intervention, underscoring its consistent centrality to purchasing considerations. Visibility showed a comparable increase of 0.3 points ($M = 6.1$ to $M = 6.4$), the largest proportional shift among all items, suggesting the intervention had a particularly strong effect on heightening awareness of this feature. Structural features likewise rose by 0.2 points ($M = 6.6$ to $M = 6.8$), reinforcing the pattern of increased emphasis on safety- and quality-related attributes. In contrast, cost ($M = 6.1$ to $M = 6.2$) and access ($M = 5.0$ to $M = 5.1$) exhibited only marginal gains of 0.1 points each, indicating that the intervention had a comparatively limited influence on economic and availability-related considerations.

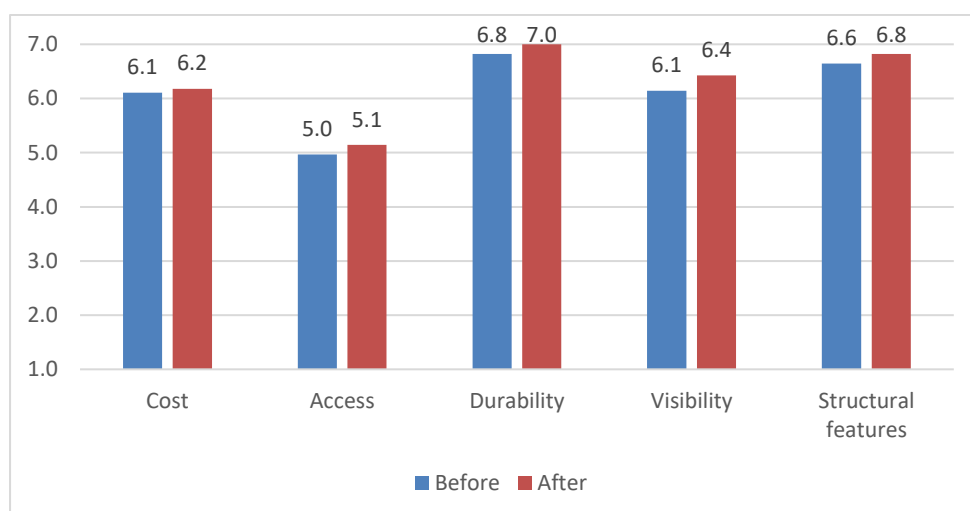


Figure 33: Aspects rated as more important after the intervention by drivers of a new car

Ranking of Top Three Purchase Factors

The comparison of the top three purchasing priorities before and after the focus group discussion shows a meaningful shift in participants' decision-making.

Table 6: Ranking of Top Three Purchase Factors

	Pre Survey	Post Survey
Top 1	Purchase cost	Seat belt
Top 2	Durability	Durability
Top 3	Spare parts	Spare parts

From Table 6, participants' foremost concern during the pre-survey was purchase cost, reflecting the financial realities associated with buying a vehicle. This concern was particularly pronounced among users of second-hand vehicles, as cost was closely tied to economic circumstances. Buyers initially appeared to prioritise acquiring an affordable vehicle, with durability and the availability of spare parts serving as complementary considerations to minimise future maintenance costs.

Following the discussions, however, safety (seat belt and airbag) emerged as the top purchasing factor, overtaking purchase cost. This represents more than a simple change in ranking; it indicates a shift in how participants evaluated vehicle quality. Rather than viewing affordability as the overriding criterion, participants increasingly recognised that essential safety features should be non-negotiable when purchasing both brand-new and second-hand vehicles.

In contrast, durability ranked second in both surveys, indicating that long-term reliability remained a stable and highly valued purchasing criterion. This consistency suggests that participants already recognised the importance of buying vehicles capable of delivering dependable service over an extended period. Similarly, availability of spare parts ranked third in both surveys, highlighting the continued importance of maintenance and repair considerations in the second-hand vehicle market, where replacement parts directly affect operating costs and vehicle longevity.

The substitution of purchase cost with seat belts also suggests that participants did not necessarily become less concerned about affordability. Rather, they appeared to adopt a broader understanding of value, recognising that a safe, mechanically reliable vehicle may offer greater long-term benefits than one chosen primarily for its lower purchase price. This reflects a shift from short-term economic thinking towards long-term, value-based decision-making, in which safety and reliability are viewed as investments rather than optional features.

7.3.2 Tanzania

Because the two vehicle groups started from different positions, the change produced by the intervention is also presented separately for participants driving a new car and those driving a second-hand car. Figure 34 shows the aspects that became more important to new-car owners after the intervention.

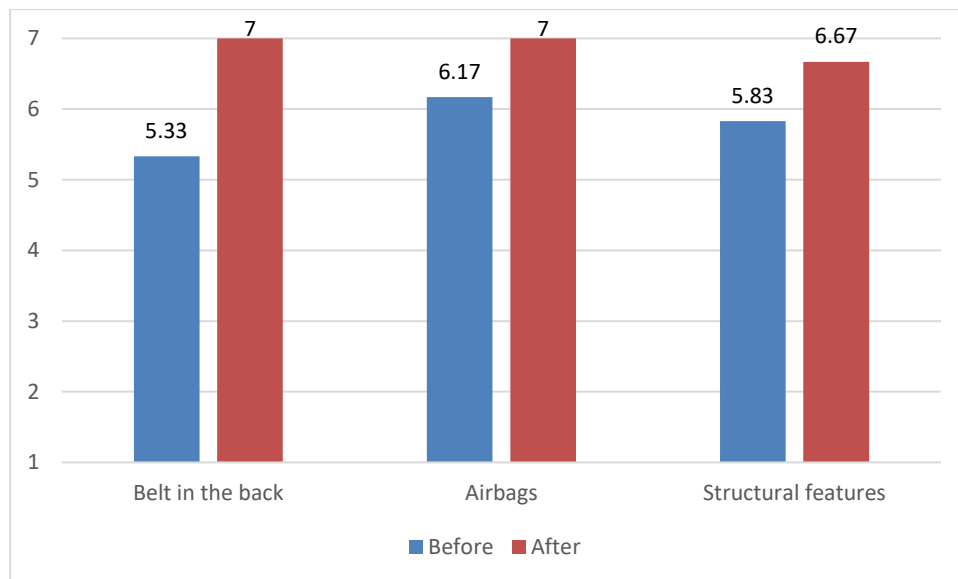


Figure 34: Aspects rated as more important after the intervention by drivers of a new car

For the six participants driving a new car, rear seat belts changed most, rising from 5.33 to 7.00, with airbags and structural features both rising to or close to the top of the scale. All three changes were statistically significant despite the small group size (seat belts $p = 0.011$, airbags $p = 0.004$, structural features $p = 0.042$). This group reached the ceiling of the scale on airbags and rear seat belts, meaning no further movement was possible. Figure 34 shows the aspects that became less important to the same participants.

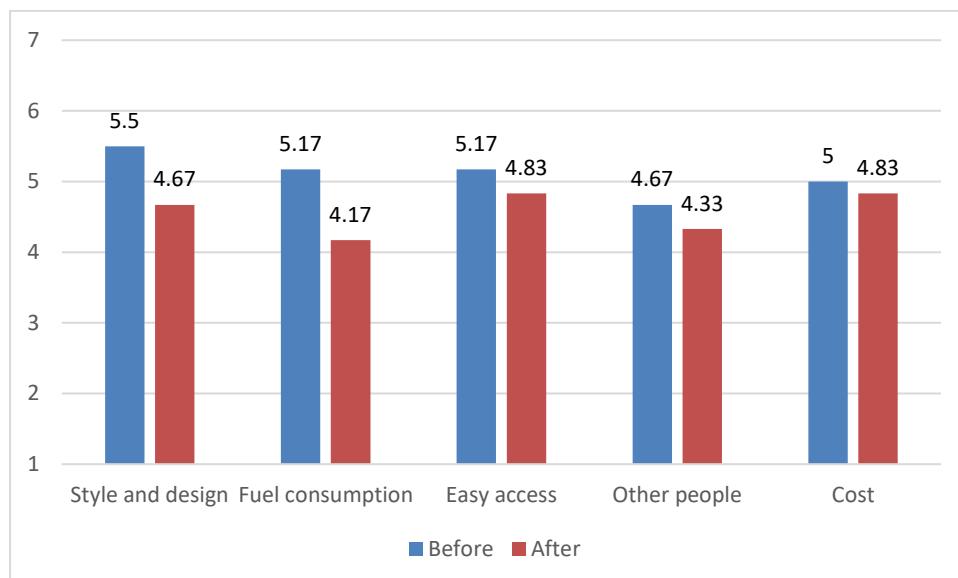


Figure 35: Aspects rated as less important after the intervention by drivers of a new car

Several aspects became less important; most clearly fuel consumption and style and design. None of these reductions reached statistical significance in a group of six, and they are reported as a pattern consistent with the larger second-hand group rather than as a finding in their own right. Figure 36 presents the aspects that became more important to participants driving a second-hand car.

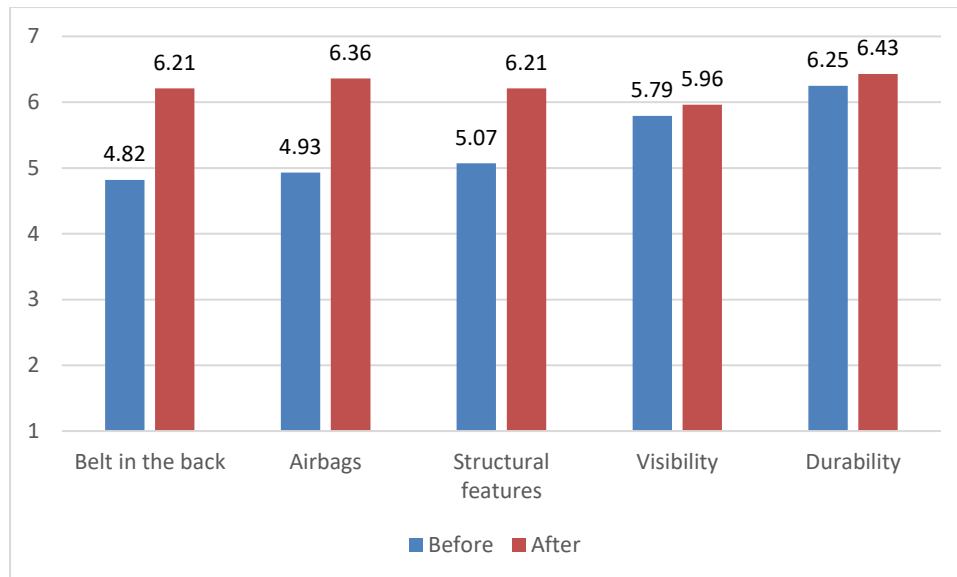


Figure 36: Aspects rated as more important after the intervention by drivers of a second-hand car

Among the 28 participants driving a second-hand car the same three safety aspects changed most, and here the movement is larger and more securely established: rear seat belts rose from 4.82 to 6.21 ($p < 0.001$), airbags from 4.93 to 6.36 ($p < 0.001$) and structural features from 5.07 to 6.21 ($p < 0.001$). Visibility rose slightly but significantly ($p = 0.022$) and durability rose without reaching significance. Figure 37 shows the aspects that became less important to this group.

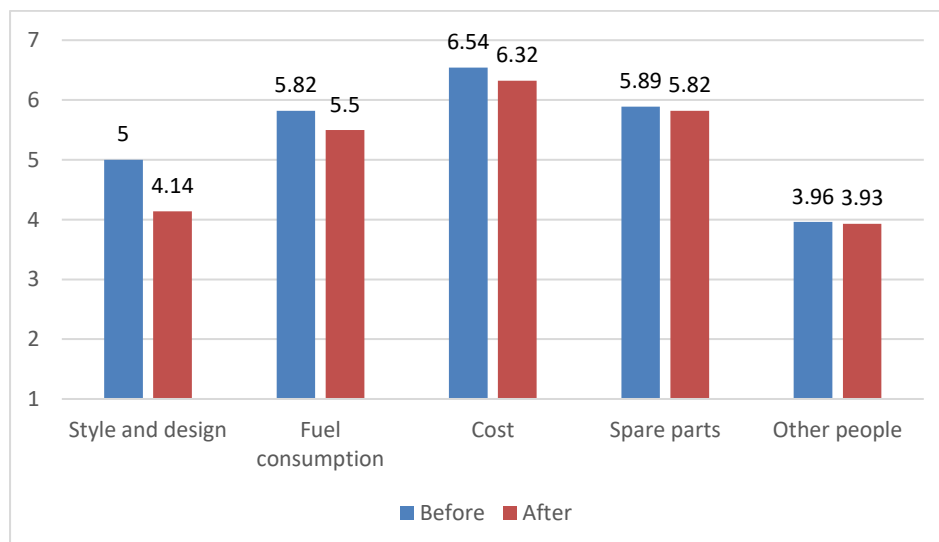


Figure 37: Aspects rated as less important after the intervention by drivers of a second-hand car

Style and design fell from 5.00 to 4.14 ($p < 0.001$) and fuel consumption from 5.82 to 5.50 ($p = 0.017$). Purchase cost, spare parts and the opinions of others did not change significantly. This is the most informative result in the Tanzanian dataset: among the group that represents the great majority of the market, the intervention raised occupant protection sharply while leaving intact the ownership concerns that determine what a buyer can realistically acquire and maintain. Safety was added to the decision rather than substituted for the constraints that govern it.

Comparing the two groups, the change in the combined occupant-protection index was almost identical (new car +1.11, second-hand car +1.32; Mann-Whitney $U = 76.0$, $p = 0.73$), so the

intervention worked equally well for both. The groups differ instead on what they believe they can do with the information. Asked how feasible an NCAP-style rating system would be in Africa, new-car owners rated it 6.83 against 4.71 among second-hand owners, a large and statistically significant difference ($p < 0.001$). All six new-car owners said they would check a safety rating before their next purchase, compared with 22 of the 28 second-hand owners, with the remaining six unsure. Awareness moved both groups; confidence that the information can be acted upon did not follow for the segment that buys most of the vehicles.

7.3.3 Zambia

Figure 38 presents aspects which were rated as more important after the intervention by drivers of new cars.

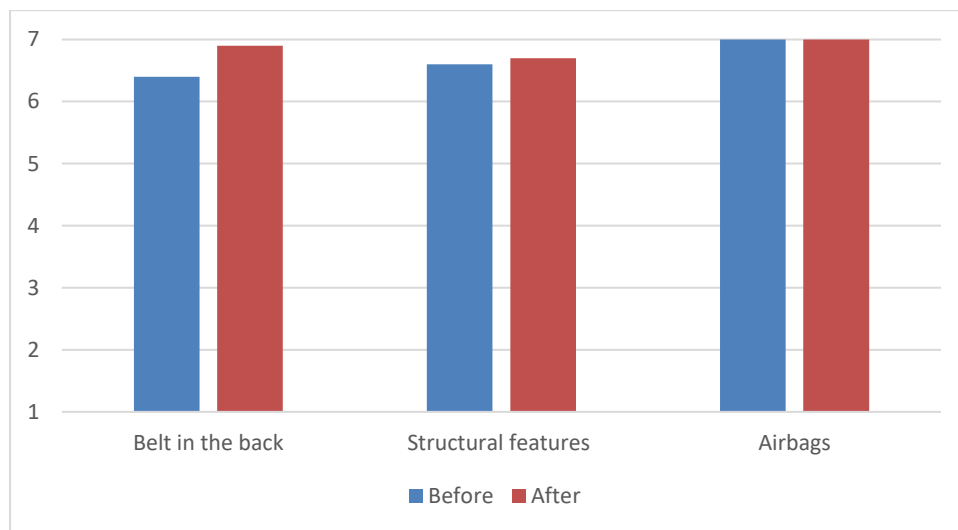


Figure 38: Aspects rated as more important after the intervention by drivers of a new car

Figure 38 shows that rear-seat seat belt use is the item that changed the most after the intervention. Participants driving a new car gave the highest possible rating to airbags, which may explain why there was little scope for further improvement. Figure 39 shows aspects which became less important when buying a car.

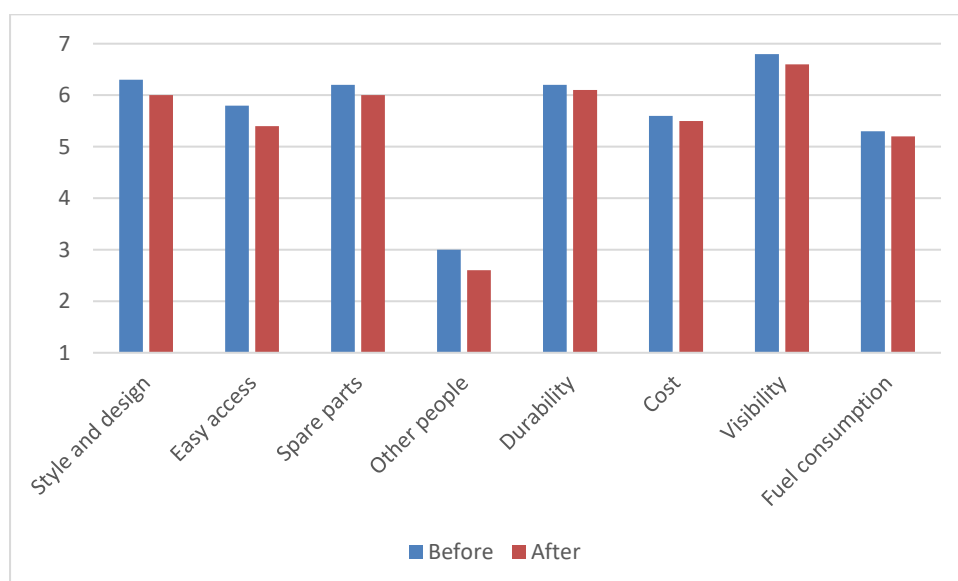


Figure 39: Aspects rated as less important after the intervention by drivers of a new car

Figure 39 shows that several items became less important after the intervention. Especially the view of other people and easy access when buying the car. Figure 40 and Figure 41 shows the effect of the intervention amongst participants who were driving a second-hand car and aspects which have become more important.

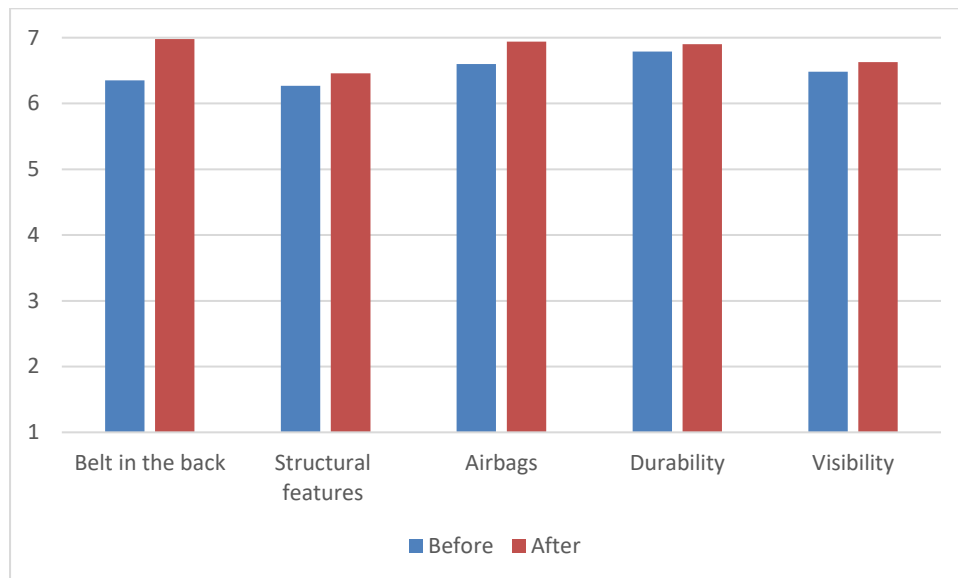


Figure 40: Aspects rated as more important after the intervention by drivers of a second-hand car

The results show that both airbags and seat belt in the back have become more important after the intervention. The same can also be said about other aspects, although the difference is not as great. Figure 41 shows which aspects which have become less important.

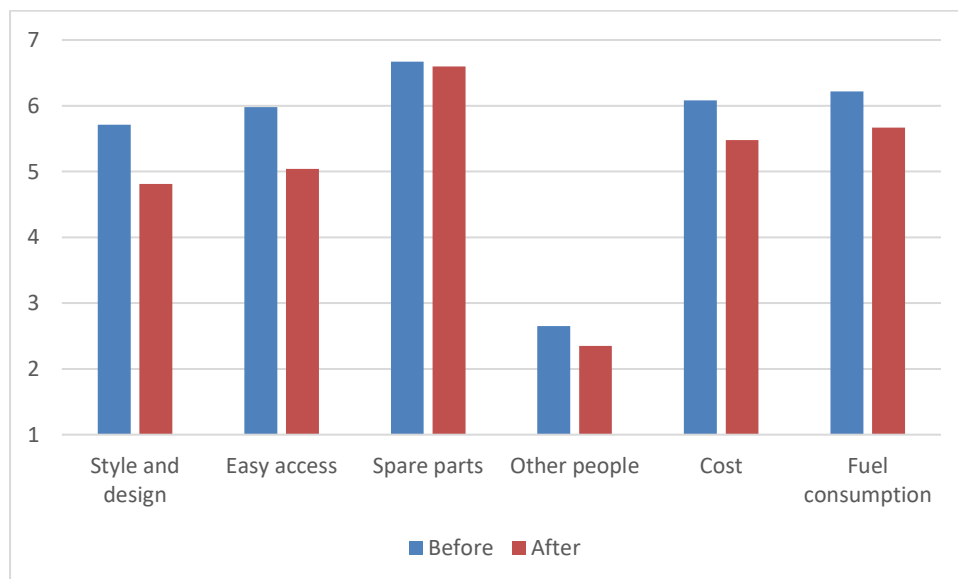


Figure 41: Aspects rated as less important after the intervention by drivers of a second-hand car

Figure 41 shows that several items have become less important after the intervention. This applies especially to, style and design of the car and easy access when buying.

If we compare participants who drive a new car with those who drive a second-hand car, we can see that more items in the latter group had become more important. Participants with a second-hand car rated durability as more important and the same applied to visibility. For participants with a new car these aspects became less important than before the intervention.

The most important purchase Factor

The comparison of most important purchasing priorities before and after the focus group discussion shows a meaningful shift in participants' decision-making.

Table 7. Ranking of most important Purchase Factors

	Pre Survey	Post Survey
Top 1	Spare parts/durability	Seat belt

Table 7 shows that the ranking has moved from functional vehicle characteristics and durability to a greater understanding of vehicle safety.

7.4 Ratings of importance before and after the intervention across the three countries

The results from participants from the three different countries were compared using an Anova. Figure 42 shows how they rated the items before the intervention and include only significant differences between the groups.

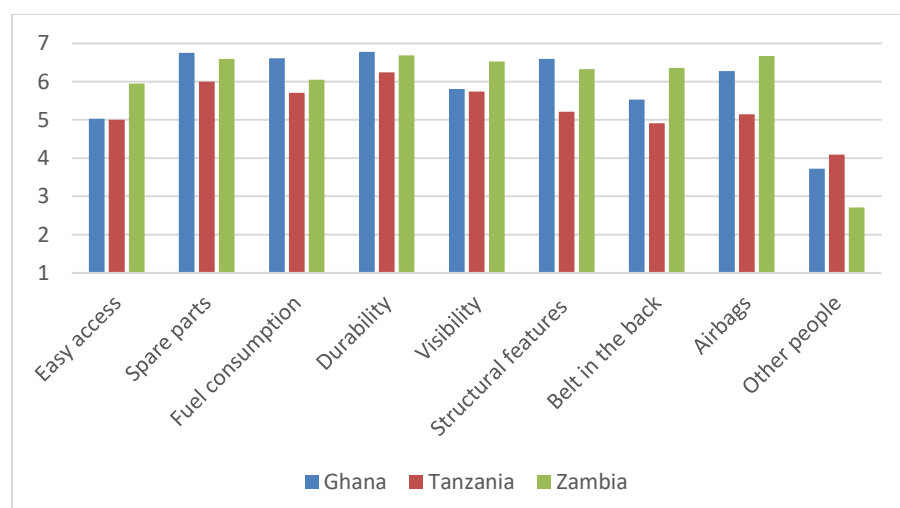


Figure 42: Ratings by participants from the three different countries before the intervention

The results show that participants from Ghana and Zambia were very similar in their ratings of importance, whereas participants from Tanzania tended to rate these factors as less important. Overall, participants from Zambia gave the highest ratings. The only exception was for the rating of other people, which participants from Ghana rated as more important, together with those from Zambia. All differences were statistically significant at $p \leq .01$, except for durability ($p \leq .05$). Figure 43 presents the results from the post-study survey.

The same pattern as the results from the before study was presented in the after study. That is participants from Ghana and Zambia tend to rate the items as more important than participants from Tanzania. The results also show that slightly fewer items deafferented the groups but also that the p values were slightly lower. That means that on three items the difference was at a level of $p .05$ (Design, spare parts and airbags).

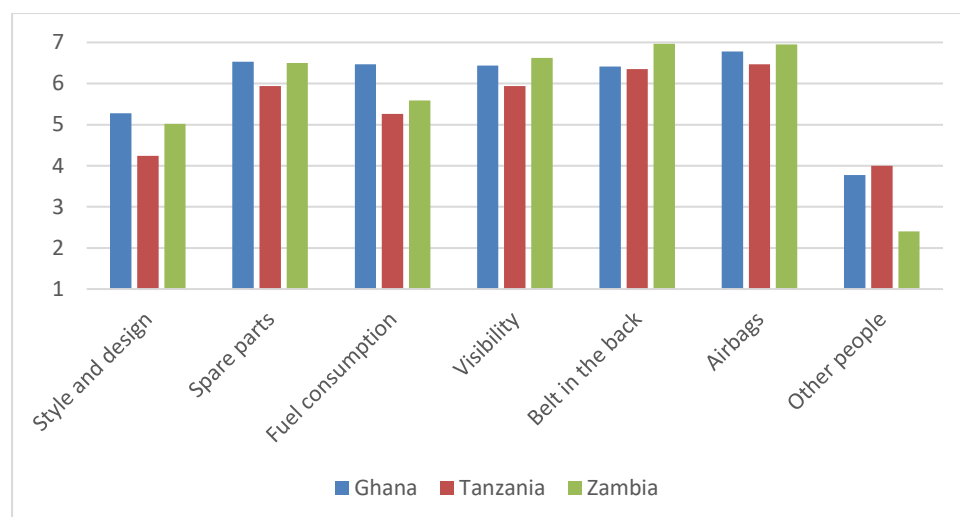


Figure 43: Ratings by participants from the three different countries after the intervention

Participants from Zambia were significantly younger than those from Ghana and Tanzania. Therefore, the effect of age was controlled for in the analyses. Overall, the results showed relatively small differences between the age groups. In the pre-study, the only significant differences were that the oldest age group (60+) rated durability, availability of spare parts, and fuel cost as less important than the other age groups. In the post-study, only the importance of durability differed significantly between the age groups. Once again, it was the oldest group that rated this factor as less important.

Figure 44 presents result from ratings regarding Euro NCAP by participants in the three different countries

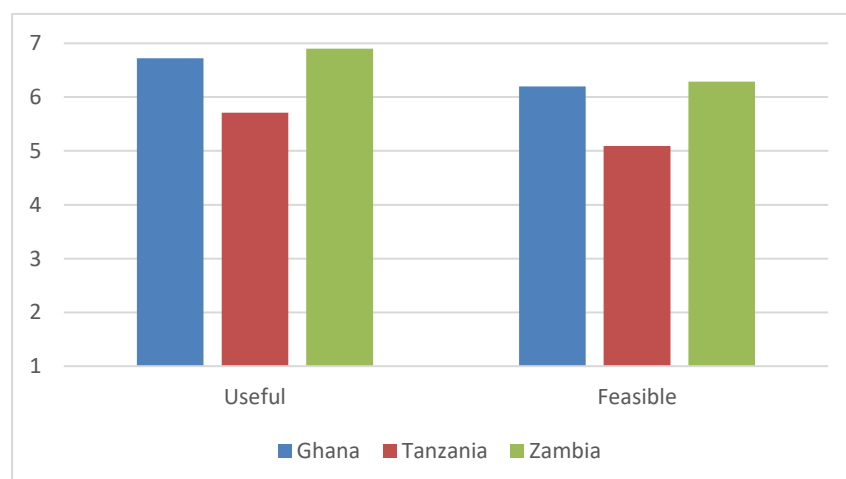


Figure 44: Ratings of Global NCAP by participants from the three different countries

Participants from Tanzania rated Global NCAP as less useful and less feasible compared to participants from Ghana and Zambia (p.001).

8 Discussion on the effect of an awareness campaign

The purpose of this study was to determine whether an intervention focused on vehicle safety and NCAP awareness could influence consumers' vehicle-purchasing priorities and increase their intention to consider independent safety information during future vehicle purchases.

8.1 Ghana

The findings provide strong qualitative evidence that an awareness intervention on vehicle safety and the New Car Assessment Programme (NCAP) can influence consumers' purchasing priorities and strengthen their intention to consider safety information when buying a vehicle. Before the intervention, participants had no knowledge of NCAP ratings, indicating that crash-test performance and independent safety ratings were largely absent from their vehicle-purchasing considerations. This is important because consumers cannot reasonably incorporate information into their decisions if they are unaware of their existence. The intervention therefore addressed an important information deficit by introducing participants to an objective approach to assessing vehicle safety beyond conventional considerations such as price, appearance, brand reputation, and durability.

The findings also indicate a cognitive shift in participants' understanding of vehicle quality. Participants acknowledged they had previously overlooked key safety indicators, and that exposure to NCAP had broadened their understanding of what constitutes a safe vehicle. The statement, "This discussion has been educational for me; now I know what to look out for when buying a car," signals a move from general awareness to informed evaluation. Similarly, the assertion that "Exposure to the Global NCAP broadened my perspective on considering car ratings before purchasing" shows that participants began to recognise safety ratings as a legitimate basis for comparing vehicles. This shift is particularly important in a market where affordability, appearance, and familiarity with vehicle brands can strongly influence purchasing decisions. The intervention therefore appears to have expanded participants' decision-making framework, from asking whether a vehicle is affordable, attractive or durable to also considering whether there is objective evidence that the vehicle can adequately protect its occupants.

The intervention also appears to have increased the salience of safety in participants' purchasing priorities. Participants indicated they would consider NCAP ratings alongside structural integrity, tyre quality and other safety features when purchasing vehicles in future. The observation that "The safety of the car is crucial, from the exterior to the interior security features" illustrates this broader understanding of vehicle safety. The findings consequently suggest that the intervention did more than increase knowledge; it created an expressed intention to incorporate safety information into future vehicle selection.

The findings are particularly relevant because the lack of prior NCAP awareness suggests a broader information gap in the vehicle market. Consumers may have considerable knowledge about vehicle price, fuel economy, appearance, and brand reputation, while possessing limited knowledge of crashworthiness and independent safety ratings

8.2 Tanzania

The Tanzania component highlights a central challenge for vehicle-safety awareness in markets dominated by older imported vehicles. The participant profile was highly unbalanced, with 22

of 34 participants owning vehicles older than five years. This means that the most immediate consumer-safety question is not only which model performed well when new, but whether the individual vehicle has retained its protective capacity after years of use, maintenance and possible crash repair.

The purchasing priorities identified by participants are broadly consistent with earlier Tanzanian research. The emphasis on purchase price, fuel consumption, reliability, vehicle condition, brand familiarity and spare-parts availability reflects the economic, functional and non-functional categories identified by Byamungu (1996). The importance attached to recommendations from relatives, mechanics, dealers and other vehicle owners also corresponds with research showing that trust, security and perceived ease influence the purchasing channels used by Tanzanian car buyers (Leonard, 2012; Masele & Matama, 2020).

The results therefore should not be interpreted as showing that Tanzanian consumers are uninterested in safety. Instead, safety competes with immediate and visible ownership concerns. Price, fuel, reliability and spare parts affect whether the consumer can acquire, operate and maintain the vehicle. In comparison, structural crashworthiness, electronic stability control, airbag integrity and NCAP ratings may be less visible, less familiar and more difficult to verify before purchase.

The before-and-after profiles suggest that a concise intervention can increase the salience of safety and improve the specificity of consumers' reasoning. Safety moved from a broad principle to a practical comparison involving NCAP ratings, active and passive features, child protection, crash history and inspection. At the same time, cost, reliability and spare-parts availability did not become irrelevant. This supports an integrated communication strategy in which a safer vehicle is presented as better long-term value: it should be reliable, maintainable and capable of protecting occupants and other road users.

The need for increased consumer awareness is supported by evidence of limited safety-equipment use in Tanzania. Boniface et al. (2016) reported that seat belt use was recorded for only 24.4% of injured vehicle occupants in a six-hospital study. The same study reported that defective motor vehicles accounted for 6.9% of the crash causes recorded by the police in the study regions. These results connect vehicle condition, occupant protection and roadworthiness directly to the wider national road-injury burden.

The persistence of practical considerations such as serviceability, spare-parts availability and trusted advice is equally important. The intervention did not eliminate these considerations; rather, participants increasingly described safety as an additional criterion to be considered alongside them.

The post-session responses measure stated priorities immediately after exposure to information; they do not demonstrate that participants will pay more, wait longer or reject a familiar brand at the point of purchase. Repeated messaging, access to simple model-specific ratings, disclosure by dealers and importers, and credible pre-purchase inspection are needed to convert awareness into behaviour.

8.3 Zambia

Across all sessions, the NCAP introduction and crash-test demonstration produced the same pattern: near-total prior unfamiliarity with Global/Euro NCAP, followed by visible surprise, a spontaneous re-evaluation of previously held assumptions, and a stated intention to check ratings before the next purchase. This is a strong, consistent effect. The more important question for reporting purposes is what kind of effect this actually has, will they consider this next time when buying a car?

This pattern is consistent with a well-established finding in risk-communication research: people respond far more strongly to concrete, vivid, visual evidence than to abstract statistical information about the same risk. Studies on the "identifiable victim effect" have repeatedly found that people respond more to concrete, graphic information than to abstract, statistical summaries, and that vividness, photographs, video, a tangible sense of a real person's plight, reliably strengthens the emotional and behavioural response (Jenni & Loewenstein, 1997; Kogut & Ritov, 2005; see also the 2016 meta-analytic review by Lee & Feeley). A one-line statistic about pedestrian fatality rates rarely produces the same reaction as watching a wind-screen shatter at 30 km/h. That gap between what people know and what actually moves them is precisely the gap the crash-test demonstration closed, in every session, regardless of participant income or education level.

Two points from the wider evidence base are worth flagging directly, because they validate rather than merely parallel these findings.

First, the exact comparison shown to participants is a real, documented Global NCAP test. The Africa-vs-Europe crash comparison participants reacted to is Global NCAP's own car-to-car test, crashing a 2019 Nissan NP300 Hardbody against a second-hand 2015 European-market Nissan Navara NP300, conducted specifically to expose the safety gap between vehicles sold in Africa and the same models sold in Europe (Global NCAP, "Car to Car Crash Test Demonstrates Double Standard on Vehicle Safety in Africa"). This means the present dataset is not simply illustrating a general point about manufacturing double standards; it is an independent, small-scale field validation that Global NCAP's flagship African advocacy content produces the emotional and cognitive reaction it was designed to produce, in a real Zambian audience.

Second, awareness campaigns of this kind have measurably shifted markets before. In South Africa, the #SaferCarsForAfrica campaign, run by Global NCAP with the Automobile Association of South Africa, the FIA Foundation, and Bloomberg Philanthropies, has been credited with several manufacturers withdrawing poorly rated models or upgrading safety specifications following public disclosure of low star ratings (Automobile Association of South Africa, 2026). That is evidence that consumer-facing awareness work, sustained over time, can eventually translate into supply-side pressure on manufacturers, not just individual purchasing intentions.

This is where some care is warranted in how the finding is framed. A regional comparison is instructive: an ASEAN NCAP consumer study found awareness of that region's rating system rose gradually, from 15.5% to 32%, and later to 36%, but only after repeated road-tour promotional campaigns delivered over several years, not a single exposure (Consumer Behaviour towards Safer Car Purchasing Decisions, ASEAN NCAP study). The present dataset captures a strong in-session attitude shift; it does not, and cannot, from a one-time qualitative interview, demonstrate that this shift survives contact with everyday budget pressure, dealer persuasion, or simply time.

This matters because the broader evidence on road safety interventions in low- and middle-income countries consistently finds that awareness and education-focused interventions shift knowledge and stated attitudes more reliably than they shift durable behaviour, while legislative and enforcement measures tend to produce the larger, more consistent reductions in actual crashes and injuries (see systematic reviews by Bachani et al. and related LMIC road-safety intervention reviews). Put plainly: this data is strong evidence that this specific piece of content works as a communication tool. It is not yet evidence that a one-time viewing changes what anyone actually buys six months later, that would require either repetition, as with ASEAN NCAP, or pairing with something structural, such as point-of-sale disclosure or import regulation, that does not depend on the buyer remembering how they felt in a workshop.

There is also a useful mechanical analogy in the seat belt literature: reminder systems that are simply present at the moment of decision, Euro NCAP-compliant seat belt reminders, have been shown to raise everyday compliance by around 80% among people who otherwise do not buckle up, because they intervene at the point of behaviour, not just the point of knowledge (Lie et al., 2008). That is a strong argument for making Global NCAP information visible at the point of purchase in Zambia specifically, a rating on the windscreen or listing, not only in a workshop setting, rather than relying on awareness sessions alone to carry the effect forward.

8.4 Opportunity to Scale Up NCAP Awareness to Broader African Context

The project findings from Zambia, Ghana and Tanzania indicate that there is considerable scope to extend NCAP awareness to a broader consumer audience across Africa, provided the communication reflects how people actually make vehicle-purchase decisions. Participants did not treat safety as irrelevant. Rather, they often defined a safe vehicle through more familiar and practical qualities, such as reliability, brand reputation, durability, spare-parts availability, and whether the vehicle could be kept running at a reasonable cost. This suggests that the main barrier is not indifference to safety, but a narrow or incomplete understanding of what vehicle safety includes. Many participants could identify seat belts, airbags or brakes when prompted, but fewer raised crashworthiness, structural integrity, electronic stability control, the condition of repaired safety systems, or whether the exact version of a vehicle sold or imported into their market had been independently assessed. Safety awareness therefore appears most effective when it is connected to the choices buyers already make, namely value for money, reliability, durability, family protection and confidence in daily use.

The intervention results also show that awareness can change how participants reason about safety when the information is concrete, visual and easy to understand. The crash-test videos and NCAP explanations helped participants move beyond the assumption that a familiar brand, a newer-looking vehicle or a vehicle from a trusted dealer is necessarily safe. After the sessions, participants were more likely to ask what protection the specific vehicle would provide in a crash, whether its safety systems were present and functional, and whether an independent rating was available. This is important for scale-up because consumer demand can become a practical market signal. If more buyers begin asking dealers about NCAP ratings, airbags, electronic stability control, structural performance and the specification of the exact imported model, safety becomes harder for importers, dealers and manufacturers to treat as secondary. Over time, this can create a stronger pull for safer vehicles in markets where regulation alone has not yet created a high minimum safety baseline.

This issue is particularly important because the African vehicle fleet is supplied from several source markets, including Japan, the United States, South Korea, Europe, China, India and other regional markets. In the study, source market was not always treated as a safety question by participants. Some associated vehicles from Europe or the United States with higher safety content, while others assumed that importers, dealers or manufacturers had already selected vehicles suitable for local conditions. The findings suggest that this assumption needs to be challenged carefully. A familiar brand or model name does not necessarily mean that the vehicle has the same safety equipment or crash protection in every market. A version sold in Europe, Japan or the United States may have a different number of airbags, different electronic safety systems, different structural performance or a different NCAP rating than a version sold or imported into an African market. Scaling up NCAP awareness should therefore help consumers compare the safety of the vehicle actually available to them, not only the reputation of the brand or the rating of a different version sold elsewhere.

A stronger and more visible NCAP system can help address this information gap by making safety performance in African markets more transparent and more comparable with established rating systems such as Euro NCAP, Japan NCAP and the U.S. NCAP. The purpose is not to imply that African markets can immediately reach the same fleet composition as Europe or other high-income regions. Rather, the purpose is to make the differences in safety performance visible enough for consumers, fleet buyers, governments, insurers and dealers to act on them. A locally tested or locally validated rating should make clear whether the vehicle offered in an African market provides a level of occupant protection and safety technology that is broadly comparable with versions sold in other regions. This would strengthen NCAP not only as a consumer-information tool, but also as a way of reducing the information imbalance between buyers and the vehicle supply chain.

This shift is unlikely to transform the vehicle fleet immediately, especially in markets where many consumers depend on older used imports and where purchasing power is constrained. However, the results from Ghana, Tanzania and Zambia show that even short awareness activities can increase the attention given to seat belts, airbags, structural integrity and independent ratings. If this information is repeated and made visible at the point of purchase, it can gradually increase demand for vehicles with higher safety content, including multiple airbags, electronic stability control, stronger body structures, child-restraint compatibility and crash-avoidance technologies. Full market penetration will take time, because the safety content of the fleet will only improve as older vehicles are replaced by vehicles with stronger safety specifications. The transition can nevertheless be accelerated if NCAP ratings and key safety specifications are displayed in sales listings and showrooms, included in import and registration documents, used in public and corporate procurement, and communicated through trusted channels such as road safety authorities, automobile associations, insurers, mechanics, dealers and driving schools.

9 Conclusions and Recommendations

The findings indicate that short, targeted awareness activities can improve participants' understanding of vehicle safety and increase the stated importance of safety information in future purchase decisions. However, the study also shows that safety awareness must be linked to the practical realities of African vehicle markets, including affordability, spare-parts availability, used-vehicle imports and limited access to independent safety information. Sustained communication, point-of-sale disclosure and stronger institutional support are therefore needed if increased awareness is to translate into safer vehicle choices.

9.1 Ghana

This study offers valuable insights into the factors shaping vehicle purchasing intentions in Ghana and shows that purchasing decisions are shaped by a dynamic interplay of economic realities, functional vehicle characteristics, social considerations, and perceptions of vehicle safety. Although these factors operate simultaneously, the findings indicate that economic considerations remain the foundation of most purchasing decisions. Participants consistently prioritised affordability, fuel efficiency, durability, and the availability of spare parts because these attributes directly affect the long-term cost of vehicle ownership in a context of fluctuating incomes, rising fuel prices, and high vehicle maintenance costs.

The findings further demonstrate that participants viewed functional vehicle characteristics as complementary to economic considerations. Durability, reliability, and suitability for Ghana's road environment were perceived as essential attributes that ensured uninterrupted mobility, reduced mechanical failures, and protected investments over time. Vehicles capable of withstanding poor road conditions and travelling long distances without frequent breakdowns were consistently preferred because they enhanced productivity and reduced the uncertainty associated with vehicle ownership. These factors explain why Toyota, Honda and Nissan remain common brands among the Ghanaian driving population.

Although symbolic and social influences contributed to purchasing decisions, they were considerably weaker than economic and functional considerations. Vehicle design, personal aspirations, and social status remained relevant because they reflected participants' identities, professional image, and personal achievements. However, these symbolic motivations rarely displaced practical concerns about affordability, durability, and maintenance. Likewise, advice from family members, friends, and colleagues served primarily as a source of experiential knowledge that reduced uncertainty rather than as direct social pressure to purchase a particular vehicle. Participants demonstrated independent decision-making by critically evaluating external advice alongside their own financial circumstances and mobility needs before arriving at a final purchasing decision.

A major contribution of this study is demonstrating that consumers' understanding of vehicle safety can be substantially improved through targeted educational interventions. Before the focus group discussions, participants generally regarded safety as important but often assumed that essential safety systems, such as airbags and seat belts, are always present and functional in most vehicles. Consequently, these features rarely served as explicit criteria for their purchasing intentions. The crash-test demonstrations fundamentally challenged these assumptions by showing that vehicles with similar appearances or identical brands may perform very differently in collisions, depending on their engineering quality, structural integrity, and compliance with recognised safety standards. This visual evidence transformed safety from an

abstract concept into a tangible and personally relevant consideration, encouraging participants to reassess how they evaluate vehicle quality.

Another important contribution of this study is its demonstration of the value of independent vehicle safety information. Participants expressed overwhelming support for Global NCAP and indicated they intend to consult safety ratings before future vehicle purchases. This finding suggests that objective crash-performance information can significantly reduce information asymmetry in the vehicle market by enabling consumers to compare vehicles on demonstrated safety performance rather than on appearance, marketing claims, or brand reputation alone. Greater awareness of independent vehicle safety ratings therefore has the potential to strengthen consumer confidence, encourage informed purchasing decisions, and stimulate demand for safer vehicles in the Ghanaian market.

9.1.1 Recommendations

The findings of this study have implications for transport policy, consumer protection, vehicle safety regulation, and road safety practice in Ghana and other low- and middle-income countries where imported used vehicles dominate the automotive market.

Governments (DVLA, MoT, NRSA and other)

- Institutionalise public awareness of New Car Assessment Programmes (NCAPs) within national road safety policies, positioning NCAP ratings as consumer protection tools rather than technical information intended only for engineers or manufacturers.
- Mainstream NCAP ratings into consumer decision-making by treating them similarly to energy efficiency labels and nutritional information, enabling prospective buyers to compare vehicles based on independent evidence of crash performance.
- Integrate vehicle safety education into national road safety campaigns, driver licensing programmes, public procurement guidelines, and public communication strategies.
- Develop targeted educational initiatives that improve consumers' understanding of NCAP star ratings, crashworthiness, and the functionality of key safety technologies such as airbags, electronic stability control, and autonomous emergency braking systems.
- Promote a shift from price-driven vehicle purchasing to value-based decision-making by increasing public awareness of the long-term safety and economic benefits of safer vehicles.
- Strengthen regulations governing the importation of used vehicles by incorporating occupant protection requirements alongside existing standards for vehicle age, emissions, and mechanical roadworthiness.
- Require import inspection systems to verify the presence and functionality of critical safety features, including airbags, seat belts, anti-lock braking systems (ABS), and structural crash protection where applicable.

Vehicle Dealers

- Display recognised NCAP safety ratings prominently in vehicle showrooms, online advertisements, auction platforms, and vehicle documentation to facilitate informed purchasing decisions.
- Provide consumers with independent safety information alongside conventional vehicle specifications such as price, mileage, and engine capacity.

- Clearly communicate the availability and operational status of essential safety features, including airbags, seat belts, electronic stability control (ESC), autonomous emergency braking (AEB), lane departure warning systems, and structural safety technologies.
- Reduce information asymmetry in the vehicle market by ensuring that safety performance becomes a standard component of vehicle marketing and sales discussions.
- Encourage competition based on vehicle safety performance, creating market incentives for manufacturers and importers to supply safer vehicles.

National Road Safety Authority (NRSA) and Other Road Safety Agencies

- Expand public awareness campaigns to educate consumers on the importance of NCAP ratings, vehicle crashworthiness, and the role of safety technologies in reducing crash severity.
- Incorporate evidence-based communication strategies, including crash-test videos, interactive demonstrations, comparative vehicle safety analyses, and testimonies from crash survivors, to improve public understanding of vehicle safety.
- Use visual demonstrations to communicate the consequences of poor vehicle safety, recognising their effectiveness in influencing consumer attitudes and purchasing intentions.
- Develop practical guidance to help consumers verify the condition and functionality of essential safety systems before purchasing both new and used vehicles.
- Collaborate with the Driver and Vehicle Licensing Authority (DVLA), Customs Division of the Ghana Revenue Authority, insurance companies, consumer protection organisations, and vehicle importers to deliver coordinated vehicle safety education throughout the purchasing process.
- Integrate consistent vehicle safety messaging across importation, registration, insurance, licensing, and routine roadworthiness inspections to reinforce consumer awareness.

Foster a long-term road safety culture in which crashworthiness is regarded as a fundamental expectation of every vehicle rather than an optional or luxury feature.

9.2 Tanzania

The Tanzania findings should be considered within an import-dependent vehicle market in which affordability, reliability, fuel economy, maintenance requirements and spare-parts availability strongly influence purchasing decisions. Previous Tanzanian studies also indicate that trust, legal assurance, security and ease of purchase influence how consumers select vehicle-purchasing channels. Therefore, an NCAP awareness programme should not present safety as an isolated technical attribute. It should explain how safer vehicles contribute to long-term value, family protection, reduced injury costs and confidence in the quality of the purchased vehicle.

Because Japan is the largest source of Tanzania's passenger-vehicle imports, consumer information should include practical instructions for consulting Japan NCAP and verifying the rating for the exact model year and specification being imported. Similar guidance should be provided for vehicles originating from Europe, South Korea, ASEAN countries, Australia, India, China and the United States.

Tanzania's existing roadworthiness-certification system provides a useful institutional foundation, but roadworthiness inspection and NCAP assessment serve different purposes. Future

consumer information should clearly explain that a Certificate of Roadworthiness does not necessarily establish how well a vehicle will protect its occupants in a severe crash. Consideration should therefore be given to complementary safety labelling showing NCAP performance, airbags, electronic stability control, autonomous emergency braking, child-restraint compatibility and other essential safety features.

9.2.1 Recommendations

Government and regulators (Ministry of Transport, Ministry of Home Affairs, TBS, TRA, LATRA, National Road Safety Council)

- Extend the Tanzania Bureau of Standards pre-shipment verification of conformity for new and used vehicle imports to include safety specification and, where available, the NCAP rating appear in vehicle import documentation, registration records and transfer-of-ownership records, so that the information follows the vehicle through successive owners rather than being lost at first sale.
- Incorporate vehicle safety and independent safety ratings into the driver licensing syllabus and into National Road Safety Council public campaigns, treating ratings as consumer-protection information comparable to energy or nutrition labelling.
- Institutionalise public awareness and deliver regular campaigns on New Car Assessment Programmes (NCAPs) within national road safety policies, positioning NCAP ratings as consumer protection tools rather than technical information intended only for engineers or manufacturers.

Vehicle dealers, importers and online import platforms

- Display the safety specification and any available NCAP star rating for the exact model year and market variant in showrooms, on import platform listings and on vehicle windcreens, alongside price, mileage and engine capacity.
- Offer an independent pre-purchase safety inspection as a standard, separately priced service covering airbags, seat belts and pretensioners, ABS and ESC warning systems, tyres, brakes and evidence of structural repair, and provide the buyer with a photographed report.
- Train sales staff to answer questions about occupant protection. Participants indicated that they would begin asking these questions; a market in which staff cannot answer them will not convert stated intention into safer purchases.

Road safety agencies, insurers and civil society

- Develop and publish a plain-language used-vehicle safety checklist in Kiswahili and English, covering what to inspect, what to ask the seller and how to find a rating for the specific model year and variant, and distribute it through import platforms, insurers and inspection centres.
- Provide proper trainings to mechanics and vehicle inspectors on safety requirements. This study found that mechanics are among the most trusted advisers in the Tanzanian market and currently reinforce serviceability considerations with no corresponding safety input.
- Deliver campaigns repeatedly on NCAP. This study suggests that rating awareness builds gradually over successive campaign cycles.

Employers, and institutions

- Write a minimum safety specification into institutional and corporate vehicle procurement, covering electronic stability control, a stated minimum number of airbags, ABS and, where a rating exists for the variant, a minimum star rating. Several senior participants proposed this themselves during the sessions, and it is the fastest lever available to the organisations represented in this sample.
- Apply the same specification to vehicles hired or contracted for staff travel, including project and consultancy fieldwork, which was a recurring use case among Tanzanian participants.

For future research

- Conduct follow-up with the Tanzanian participants at six and twelve months, or at their next vehicle purchase, to test whether the stated intentions recorded here translate into behaviour.
- Repeat the study with a sample that reflects the general vehicle-buying population.
- Audit what proportion of vehicles actually imported into Tanzania have a retrievable NCAP or Japan NCAP rating for the exact model year and grade. This would establish whether a ratings-disclosure requirement is practically implementable before it is proposed as policy.

9.3 Zambia

This study examined how Zambian vehicle owners make purchasing decisions and what they know, believe, and do about vehicle and road safety, while testing whether a live crash-test demonstration and an introduction to Global NCAP shift those beliefs in real time. Across four focus groups and five key informant interviews, a consistent picture emerged: safety is a secondary, often unverified consideration for most buyers, crowded out by price, fuel economy, and spare-parts logistics, and frequently substituted by a “brand halo” (familiar names such as Toyota or Honda assumed to signal safety). Specific misinformation, for example, that airbags can injure or seat belts can trap occupants, actively discourages safe behaviour, and participants expressed limited trust in existing vehicle-inspection systems.

The clearest finding is the high responsiveness of attitudes to concrete visual evidence. Every session that included the crash-test demo produced the same response: genuine surprise, visible re-evaluation of prior beliefs, and reframing seat belts from a police-avoidance measure to life-saving behaviour. The Africa-vs-Europe NP300 comparison reframed safety as a structural, regulatory-equity issue rather than solely a personal purchasing choice. Because the footage is Global NCAP’s validated #SaferCarsForAfrica material, this study serves as a small independent field validation that the content works as intended among Zambian audiences.

Two further findings matter for programming. First, real lived experience (a near-miss or a new child) produced attitude shifts similar to those produced by the demonstration, suggesting personal-experience framing can complement visual campaigns. Second, an emerging electric-vehicle segment appears unusually safety-literate but is constrained by infrastructure and market barriers (insurance, charging access, range), a distinct policy area requiring monitoring.

Taken together, the evidence supports a cautious conclusion: the intervention reliably changes attitudes and immediate intentions within the session, but converting that into durable purchasing behaviour and supplier responses requires repeated exposure and point-of-decision or structural interventions (for example, point-of-sale disclosure, import standards, or regulation).

9.3.1 Recommendations

For policymakers and regulators (Ministry of Transport, RTSA, Road Development Agency)

- Require transparent disclosure of region-specific vehicle specifications so consumers can see when local models lack safety equipment present in other markets.
- Explore mandating visible Global NCAP (or equivalent) star ratings at importation and at point of sale (windscreen, listings, import documents).
- Address perceived corruption in vehicle inspection systems to restore consumer trust in safety verification.
- Track and address EV-specific barriers (insurance market, charging infrastructure, import rules) as an emerging policy area.
- Consider mandatory eye testing at licence renewal in line with evidence and stakeholder recommendations.

For road-safety organisations and advocates (ZRST, SADC Alliance, AfroSAFE)

- Use Global NCAP #SaferCarsForAfrica footage (notably the NP300 Africa-vs-Europe comparison) as flagship content in public campaigns, driver education, and driving-school curricula, the material is already validated for Zambian audiences.
- Run a targeted myth-busting campaign focused on airbags and seat belts, rather than generic safety messaging.
- Prioritise rear-seat belt messaging, which was consistently neglected across sources.
- Plan sustained, repeated campaigns (multi-year roadshows, media cycles) rather than one-off screenings; ASEAN NCAP experience shows awareness builds gradually with repetition.

For dealers, importers, and insurers

- Move safety information to the point of decision: display star ratings on windscreens and in sales listings and make ratings visible in import paperwork.
- Standardise independent, photographed vehicle inspections for second-hand imports to address the trust gap with informal assurances.
- Engage insurers to develop fair EV premium structures as the market matures, since current pricing is a significant non-attitudinal barrier.

For employers and institutions

- Use institutional vehicle procurement and “conditions of service” requirements to set minimum safety standards (an effective scalable lever, as demonstrated by the Bank of Zambia example).

For future research

- Conduct follow-up with a participant subset after 3–6 months to test whether stated intentions after the demonstration translate into actual purchases.
- Run a larger, targeted study of the EV segment given its safety literacy and distinct barriers.
- Verify ASR-transcribed focus group quotations against original audio and use these qualitative patterns to design a larger, quantitatively representative survey.

9.4 General recommendations for the African Context

There are several recurring recommendations highlighted from Ghana, Tanzania and Zambia, which can be treated as a general basis for work in other African countries. Governments are advised to bring NCAP ratings into national road safety policy and into driver licensing and education, and to treat them as consumer protection information rather than technical material intended for specialists. Import and inspection systems should confirm that airbags, seat belts, braking systems and structural protection are present and functional in the vehicles actually entering the market. Dealers and importers should display the safety specification, and any available rating for the exact model year and variant, alongside price, mileage and engine capacity, so that the information reaches the buyer at the point of sale. Awareness activities should use crash-test material and be repeated over time rather than delivered once, and governments, employers and other large buyers should apply a minimum safety specification when procuring vehicles.

10 References

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Appendix 1: Pre-Campaign Questionnaire

Pre Questionnaire

We would be grateful if you could take a few minutes to answer the following questions. Please try to answer each question as accurately as you can. Of course, the answers will be kept confidential and when the results are reported, they will be aggregated across respondents.

If you were to buy a car today, what would be important for you?

The style and the design of the car?

Not at all important 1 2 3 4 5 6 7 Very important

Easy access when buying the car?

Not at all important 1 2 3 4 5 6 7 Very important

To be able to get spare parts?

Not at all important 1 2 3 4 5 6 7 Very important

Seat belts in the back seat?

Not at all important 1 2 3 4 5 6 7 Very important

What other people think about your choice of car?

Not at all important 1 2 3 4 5 6 7 Very important

The cars structural features (i.e. the strength and structure of the vehicle)?

Not at all important 1 2 3 4 5 6 7 Very important

That the car has airbags?

Not at all important 1 2 3 4 5 6 7 Very important

Durability (i.e., can withstand the test of time)?

Not at all important 1 2 3 4 5 6 7 Very important

Purchase cost?

Not at all important 1 2 3 4 5 6 7 Very important

Good visibility (i.e., lights)?

Not at all important 1 2 3 4 5 6 7 Very important

Low fuel consumption?

Not at all important 1 2 3 4 5 6 7 Very important

If you had to choose only three important factors from the list above, which would you select?

Do you have a favourite brand of car you would like to buy if the cost was not a problem?

☐ Yes

☐ No

What make?

Why is this car your favourite?

Your current car, what is the model and year?

Was your car imported or not?

☐ Imported

☐ Not imported

☐ Don't know

If imported from which country?

How often do you drive in urban areas?

Never 1 2 3 4 5 6 7 Always

How often do you drive in rural areas?

Never 1 2 3 4 5 6 7 Always

Your background:

Born year 19__ __

Gender ☐ Female ☐ Male

Appendix 2: Interview Guide

Interview guide

Before the actual discussions start:

Introduce yourself and tell the interviewee that you are part of AfroSAFE project wanting to explore what is important when they are in the process of buying a car. They have already received some information when they were recruited but some of it can be repeated.

Ideally, the discussion is audio-recorded since that ensures that you do not miss anything and makes you more focused on the conversation itself. Before starting the recorder, you will have to seek the interviewee's explicit permission. Tell them that the recording can be stopped at any time and that the report will not include any references to a specific person. The discussion will be in three parts. How long you spend on each part depends very much on the background of the individual or the group. Some might need longer than others to understand the problem.

Part 1

The purpose of this section is to encourage participants to reflect on which aspects they consider important when they are in the process of buying a car. Many people base their decision on previous experience or on having heard that a particular brand is good. We want to help them think more deeply about what influences their choices. The order of the questions does not have to be followed strictly; the important thing is that it is a natural discussion. However, try to include all the questions. Text in italic is for the interviewer only.

1. Let's go back to when you/they last bought a car. What car was that and why did you buy it?

Probe why this was important. If they answer, "I always buy this brand of car" ask why. Try to find out if it was new or not.

2. If you were to buy a car today, what would you focus on, what would be important for you?

If the person specifically mentions brand, safety, cost or something else then probe. Ask them why this is important.

3. Would you consider anything else to be important?

Yet again, prompt them to elaborate.

4. You have mentioned xxxx and xxx what would you consider being most important?

xxx refers to how they responded to question 1 and 2.

If they have not mentioned style and design, ask them:

5. What about style and design how important is that?

If they have not mentioned safety, ask them

6. What about safety features is that something you think is important?

Probe how they would describe safety features, what does it mean to them?

Cultural influences appear to be important so ask:

7. Would you say that you are influenced by people around you when buying a car?

Probe what kind of car that would be and what makes it attractive

Brand is another thing which might be important (e.g., name, symbol). Ask:

8. Do you have a favourite brand of car you would like to buy if the cost was not a problem?

Probe why they would buy this specific car.

9. How important is easy access when buying a car?

10. How important is it to be able to get spare parts?

Part 2

This part is intended to help participants understand the risks involved when a car lacks essential safety systems. They need to grasp why these systems matter. To achieve this, we can use different emotional and cognitive triggers. One effective approach is to show a short film that clearly illustrates what can happen if safety systems are not installed or used.

Before showing the film, we can ask a simple question such as: “What do you think might happen if you drive at 30 km/h without wearing a seat belt?” Listen to their responses, then show the film. Afterward, facilitate a discussion about their reactions.

Some of the available films demonstrating differences between vehicles with different star ratings can be used, but without mentioning the ratings. Show only the contrast between cars with and without safety systems. Besides from films a picture might also illustrate the problem.

If participants already have some understanding of the issue, you can still show the films, but this section may be shorter.

Video on importance of wearing Safety Belt:

 [2023-01-16 A-traktor obältad passagerare 30 kmph.mpg](#)

Part 3

The aim of this part is to get participants interested in seeking more information about star ratings. Start by explaining why these ratings are useful, what value they provide when choosing a car. From there, move on to what kind of information star ratings include and how this information can help them make safer and more informed decisions.

Next, show them how they can find star-rating information for the specific car they intend to buy. This could include demonstrating where to search, what to look for, and how to interpret the results.

Concluding comments and ask if he/she has any further questions or comments to make

Thank the person from taking part in the discussion. Emphasise again that their comments will be treated anonymously.

Euro NCAP convenient filter on star rating etc: (show different cars and ratings)

https://www.euroncap.com/assessments/?assessmentType.code=CAR_SAFETY&limit=20&path=%2Fassessments&sort=protocol.protocolYear%3Adesc%2Cmake.name%3Aasc

A Car-to car test by Global NCAP, with two similar Nissan Pickups, one from UK and one from South Africa:

https://youtu.be/UL_2MdSTM7g?si=K_WT9AXtXB5W2aoP



Example of two stars (with only two airbags):

<https://youtu.be/3RBbSPjQv6g?si=cb20qbGCFPrMK7ns>

Later, the same car model was upgraded with more airbags and then achieved four starts: <https://youtu.be/RWloTLfeV-Q?si=0gcJ1ZyHY04nmctH>

Link to Japan NCAP: https://www.nasva.go.jp/mamoru/en/assessment_car/list/1?brand_id=5&model_id=256&type_id=&keyword=&testfy=

Link to Global NCAP (YouTube about a car from South Africa): <https://www.global-ncap.org/>

Appendix 3: Post-Campaign Questionnaire

Post Questionnaire

Thanks for having participated in our pilot project within the AfroSAFE project. To gauge your experiences, we have compiled another short set of questions, for which we hope you can spare a few minutes.

The questions provide us with important information about what influence the car purchase decision factors. The information you provide will only be used to summarise our group of drivers and will not identify individual responses. We are interested in your honest opinion.

All the information you provide will be kept confidential

If you were to buy a car today, what would be important for you?

The style and the design of the car?

Not at all important 1 2 3 4 5 6 7 Very important

Easy access when buying the car?

Not at all important 1 2 3 4 5 6 7 Very important

To be able to get spare parts?

Not at all important 1 2 3 4 5 6 7 Very important

Seat belts in the back seat?

Not at all important 1 2 3 4 5 6 7 Very important

What other people think about your choice of car?

Not at all important 1 2 3 4 5 6 7 Very important

The cars structural features (i.e. the strength and structure of the vehicle)?

Not at all important 1 2 3 4 5 6 7 Very important

That the car has airbags?

Not at all important 1 2 3 4 5 6 7 Very important

Durability (i.e., can withstand the test of time)?

Not at all important 1 2 3 4 5 6 7 Very important

Purchase cost?

Not at all important 1 2 3 4 5 6 7 Very important

Good visibility (i.e., lights)?

Not at all important 1 2 3 4 5 6 7 Very important

Low fuel consumption?

Not at all important 1 2 3 4 5 6 7 Very important

In general, how important is the cars safety features?

Not at all important 1 2 3 4 5 6 7 Very important

If you had to choose only three important factors from the list above, which would you select?

#1 _____ #2 _____ #3 _____

Finally, some questions about NCAP (New Car Assessment Programs)
I.e. Euro NCAP, Global NCAP or Japan NCAP

How would you rate it?

Not very useful 1 2 3 4 5 6 7 Very useful

Not feasible 1 2 3 4 5 6 7 Very feasible

Next time you buy a car, would you first have a look at the cars rating?

☐ Yes☐ Not sure☐ No

Other comments from your side:

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Appendix 4: Vehicle Safety Awareness Leaflet

Why you should choose a safe vehicle

The World Health Organization estimates that over 1.2 million people lose their lives in traffic crashes every year. Vehicle safety has an important role to play to reducing that number.

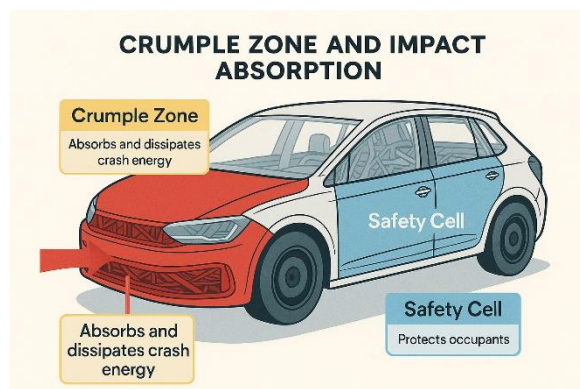
Vehicle safety is about how well a car protects people before, during, and after a crash. Safer vehicles have deformation zones, seat belts, airbags, well-functioning brakes, anti-lock braking systems (ABS), electronic stability control (ESC) and good tyres.

In Zambia road crashes are a serious danger to families and communities. More than 2,100 people were killed in road traffic accidents in Zambia in 2021, and crashes cost the country about ZMK 16.7 billion each year, which is around 4.7 percent of GDP. Safe vehicles is not only a serious health issue, but also one about prosperity.

For everyday drivers, passengers, and families, a safe car can mean the difference between life and death. Choosing a safer vehicle, using seat belts on every trip, and keeping the vehicle in safe working condition can reduce the risk of serious injury and give better protection when something goes wrong on the road.

Deformation zones

During a road crash the car experience extremely large forces from the outside. For example, a car travelling at 80 km/h can come to a complete stop in less than 1 second during a crash. This sudden stop involves tremendous amount of energy and violence, far greater than a human body can handle. To reduce the severity of these forces, modern cars are designed with deformation zones, also called crumple zones. A crumple zone is a safety feature that protect the driver and passengers during a collision. In simple terms, a crumple zone prevents the car from being crushed by creating a buffer zone around the passenger compartment. This is the first step in making car crashes more survivable.



Seat Belts

While the deformation zone helps distribute and reduce the energy in crashes, they do not fully protect the passengers on their own. When a car is involved in a collision, even though the deformation zone helps soften the impact, the occupant inside the vehicle continues moving forward at the same speed, that is if they are not using a seat belt. This follows Newton's law of motion, which states that an object continues to remain in motion unless an external force is applied to it.

The seat belt's most important role is to keep the passengers firmly on the seat. By preventing occupants from being thrown forward, seat belts significantly increase the chances of surviving a crash that would otherwise be unsurvivable. Advanced seat belt technology, such as a pretensioners which tighten the seat belt instantly during a crash, or load limited which reduce excessive forces on the chest and upper body, further reduce the risk of serious injury. The buckle and tongue of the seat belt system also enable easy fastening and unfastening for the occupant. Do seat belts save lives? Watch this video to understand their role in your car:



https://www.youtube.com/watch?v=9_Af8w2SAT4

Wearing a seat belt can increase the chance of surviving a crash by as much as 45%, with more advanced seat belt technology increasing much further. Estimates show that over 153,000 lives can be saved globally if everyone wore a seat belt.²

When travelling with children it is important to understand that seat belts designed for adults are not designed to protect young children on their own. For this reason, different forms of restraint systems, such as child seats and booster seats, are essential to reduce the risk of serious injury or death. How to protect your child in the car? Watch this video to know more:



<https://www.youtube.com/watch?v=Ym5GFPJZfLo>

Airbags

Airbags are inflatable cushions built into a vehicle that protect occupants from hitting the vehicle interior. Airbags are supplementary restraint system and therefore most effective when working together with the seat belt. They work by providing a softer, energy absorbing layer between the occupant and the hard structures of the car.

Airbags can increase survivability of an occupant wearing a seat belt by as much as 25% and reduce serious head injuries by up to 60%. During a crash, an airbag inflates fully in under 0.05 seconds – much faster than you can blink your eye! According to a large-scale study the results presented no support for the notion that airbags increase fatalities among belted drivers³.

² Read Autoliv's whitepaper on the role of vehicle safety technology in saving lives here: <https://ti-nurl.com/2a5xtchw>

³ Høye, A. (2010). Are airbags a dangerous safety measure? A meta-analysis of the effects of frontal airbags on driver fatalities. *Accident Analysis & Prevention*, 42, 2030-2040.



AI generated image to show how the occupants are held in place during a crash.

Remember that an airbag cannot be reused once it has deployed in a crash and must be replaced to ensure your safety.

While airbags play an important role in saving lives, they can pose a danger to children since they are more fragile than adults and less resistant to injuries caused by airbag deployment. For this reason, children are better protected by only using a seat belt together with a child seat or booster cushion. The advice is that children who are shorter than 135 centimetres should use some form of child restraint or protective device when travelling in a car.

Brakes, ABS, ESC and tyres

Well-functioning brakes can prevent a crash, or significantly reduce the impact of the crash, by reducing the speed of the vehicle. Anti-lock brakes (ABS) increase the effectiveness of the brake by preventing the wheels from locking, which helps the driver maintain control of the vehicle and allows the car to stop faster over a shorter distance.

The electronic stability control (ESC) is an extension of the ABS technology to prevent skidding and loss of control under all driving conditions. This is an important technology to prevent loss of control in challenging driving conditions such as on wet roads. Studies show that these systems can reduce crashes by up to 32% in wet weather, reduce skidding by 33% and rollover (when the car loses control and falls over sideways) by 59%.

Good tyres are essential for safety as they greatly influence how well a vehicle brakes, steers and stays in control. However, the cost of tyres varies, which raises the question: what is the difference between budget tyres and premium tyres? Although they may look very similar, there are important differences in both their design and the development process. Compared with a budget tyre, a premium tyre is manufactured using higher-quality rubber and designed with a tread pattern which can withstand wear differently to budget tyres. As a result, premium tyres generally last longer and, most importantly, provide greater grip on the road. Better grip helps reduce the risk of skidding, especially on wet or slipper roads. This means that choosing a premium tyre offer improved safety, better driving performance and longer service life, making them more cost-effective in the long run.

In many parts of the world, it is not allowed to drive on tires with less than 1.5mm of tread depth, with the recommendation to change them already when less than 3mm. This is because tires with lower tread depth decrease the grip offered during emergency situations, especially on wet roads.

Choosing a safe vehicle, which comply to the latest safety standards, might be bewildering but there is help at hand.

New Car Assessment Program (NCAP)

New Car Assessment Program or NCAP test new car models to benchmark how safe they are. A car with a 5-star rating offers the highest level of safety possible whereas a 1 or 0 star offers the lowest level of protection. NCAPs often have much stricter safety requirements than laws and regulations in most parts of the world. They test the car rigorously against various types of crashes a person might experience in the real world. There are several different NCAP programs around the world as these are designed to represent the local traffic conditions better.

NCAPs and crash testing play an important role in advancing vehicle safety. The video below shows a comparison of the effect of strong NCAP testing protocols in Europe compared to South Africa where the program is not yet fully established. This video highlights the differences between a car manufactured in South Africa crashes against an older model car manufactured for Europe where NCAP is well established:



(https://www.youtube.com/watch?v=UL_2MdSTM7g)

On the African continent, Global NCAP tests cars are sold in South Africa under the “Safer Cars for Africa” program. Read more about Global NCAP tests on the links below:

Website:

Crash test with 0 stars

Crash test with 5 stars



<https://www.globalncap.org/africa/results>

<https://youtu.be/ytqcihTrFI?si=PhC6l3ec1mFqiPkm>

<https://www.youtube.com/watch?v=JEu2NCOF49M>

Most consumers in the African market today import cars from other parts of the world. Next time you buy a car, read more about tests in that country (there can be variations between the tests conducted in each country but please note that these NCAPs are trustworthy) through the respective link so that you can make a more informed purchase:

1. Japan NCAP: <https://www.nasva.go.jp/mamoru/en/>
1. Euro NCAP: <https://www.euroncap.com/>
2. US NHTSA Safety Testing: <https://www.nhtsa.gov/ratings>
3. US IIHS Safety Testing: <https://www.iihs.org/ratings>
4. China NCAP: <https://www.c-ncap.org.cn/>
5. Korea NCAP: <https://www.kncap.org/indexNew.jsp>
6. ASEAN NCAP: <https://aseancap.org/>
7. Australian NCAP: <https://www.ancap.com.au/>
8. Bharat NCAP (India): <https://www.bncap.in/>
9. Latin NCAP: <https://www.latinncap.com/en/>

Safety Checklist

We recommend that the following are checked by yourself or somebody who has good knowledge about cars.

1. Uneven or large gaps in between panels of the body work:

This could indicate the car has been involved in a crash. Check service history and whether the airbags and seat belts had been deployed and needed to be replaced. Make sure that the car has been properly repaired including energy absorption structures.

2. Airbags:

Check service history and whether the airbags have been deployed or manipulated and needed to be replaced

- a. Check if there are no airbag warning lights on the instrument cluster when ignition key is set to “on” position.
- b. Visually inspect the dashboard on the passenger side for signs of airbag deployment – inconsistency in texture, colour or poor alignment of seams.

- c. Visually inspect steering wheel for signs of deployment – discoloration, mismatched plastic, or poor alignment of seams.
- d. Visually inspect the side panels (along roof near windows and pillars): does it appear loose, have creases, inconsistencies in texture, or misalignment.
- e. Check side seams of the seats. If it appears stitching appears inconsistent or looks repaired, the side airbag might have been deployed.
- f. If possible, request for an OBD check to verify there is not airbag warnings on the car's computer.

3. Seat belts:

As with the airbag, it is important to verify that the seat belt functions as intended.

- a. Fully extend the seat belt on all seats to check for visible damages to the belt.
- b. Check that the seat belt extends and retracts smoothly and quickly when let go. It should not hang loose.
- c. Pull each seat belt sharply to test whether the emergency locking is working as intended.
- d. Click each seat belt into place and ensure it locks into place.

4. Tyres:

- a. Check that all tyres have a minimum of 1.6mm of tread depth and the tyre wear indicators are not visible (these are marks spaced evenly along the tyre tread). Check the sides for visible damage.
- b. Check whether the tyre appear to be worn even and without bald patches.
- c. Check that the tyres don't have small cracks on them. This can indicate an old tyre. Tyres usually have their date of manufacture on them and need to be replaced after about 6-8 years.
- d. Tyres should be matching and have same thread pattern.
- e. When replacing the tyres a premium tyre would be more expensive, but it is more cost-effective in the long run and more importantly it offers improved safety and better driving performance.

5. Brakes:

- a. Visually inspect the discs, if possible, for signs of damage or severe rust.
- b. Check that brake warning light goes away when the engine is on and the parking brake is released.
- c. Test drive and ensure there is no squealing, scraping or grinding sounds when braking. Brakes should also not feel spongy or pulling to one side.
- d. Perform an emergency stop to verify ABS is working and tyres do not lock up.

Products and Solutions – Autoliv Inside

Based on our extensive research into real-life accidents, we develop and engineer automotive safety solutions to save more lives and prevent injuries on the roads.

1 DRIVER AND PASSENGER AIRBAG Saves lives and reduces injuries

The driver airbag reduces fatalities in frontal crashes by approximately 25% (for belted drivers) and reduces serious head injuries by over 60%.

2 PEDESTRIAN AIRBAG Protects pedestrians

The pedestrian airbag aims to mitigate and reduce the severity of a head impact in case of a pedestrian-vehicle accident.

3 ACTIVE HOOD LIFTER Reduces pedestrian head injuries

Active hood lifters help to mitigate the impact of a pedestrian's head against the structure beneath the hood, meaning the engine, suspension, etc.

4 KNEE AIRBAG Reduces leg injuries

Knee airbags, which deploy from a vehicle's lower dashboard, distribute the impact forces on an occupant's legs, thereby reducing leg and knee injuries. Additionally, they are designed to control the movement of the occupant so that the driver and passenger airbags can provide optimal protection.

11 INTEGRATED CHILD BOOSTER SEAT Provides protection and comfort

The integrated booster seat is specially designed to provide safety for children, together with the car's seatbelt.

12 CENTER AIRBAG Enhances row protection

The center airbag can prevent row passengers from colliding with each other during side impacts.

10 SIDE-CURTAIN AIRBAG Reduces head injuries

Reduces the risk of life threatening head injuries by approximately 50%.

9 SEATBELT Top life-saving device

Seatbelts are considered the primary restraint system, because of their vital role in occupant safety, and can reduce fatalities by as much as 45%.

6 STEERING WHEEL With the lives of others in your hands

The steering wheel is a vital part of the safety system and controls many of the vehicle's functions.

7 BELT IN SEAT Ensuring the effectiveness of the belt

Integrating the seatbelt in the seat supports improved safety in reclined seating positions, a feature used in self-driving vehicles, and ensuring the belt remains properly positioned and effective.

8 SIDE AIRBAG Protects in side collisions

Side airbags reduce the risk of chest injuries by approximately 25%. With dual-chamber side airbags, both the pelvis and the chest areas are protected which further reduces the risk of serious injuries in side-impact crashes.

5 PYRO SAFETY SWITCH Prevents fire and electrocution

Pyro safety switches can disconnect or cut power during/after an accident.

MOBILITY SAFETY SOLUTIONS

Safety Systems for Commercial Vehicles

Accidents where commercial vehicles are involved often result in severe outcomes due to their weight and size. Autoliv designs and sells specific safety solutions, including airbags, seatbelts, steering wheels, and pyro safety switches, for commercial vehicles such as trucks, buses, and more.

