

Assessing Work Ethics and Safety Standards among Roadside Mechanics in Adamawa State

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Abstract: The main aim of the study was to assess work ethics and safety standards among roadside mechanics in Adamawa State. The study was guided by three specific objectives as well as three research questions. The study used a descriptive survey research approach and was conducted in Adamawa State. The study's population comprised 21,597 individuals, including 755 roadside mechanics, 20,782 motorists, and 60 Federal Road Safety Corps officers. The sample size of 377 respondents was determined using on Krejcie and Morgan's (1970) sample size table and a simple random sampling technique was used to select respondents. A structured questionnaire with a reliability coefficient of 0.89 established through the Cronbach alpha designed by the researcher and validated by three experts was used for data collection. Mean statistics was used to answer the research questions while ANOVA was used to test the hypotheses. The study revealed that to a moderate extent, roadside mechanics adhere to ethical conduct and comply with safety standards. Based on the findings, it was recommended that efforts should be focused on improving access to education and training programs tailored to mechanics' needs, particularly emphasizing ethical work practices and safety standards, and the government should bolster infrastructure and provide necessary resources to mechanics.

Keywords: Roadside Mechanics, Safety, Safety Standards, Work Ethics.

1. INTRODUCTION

The automotive industry plays a pivotal role in the economic landscape of Adamawa State, Nigeria, with roadside mechanics forming a significant segment of this sector. These mechanics, often operating in informal settings, are essential for maintaining and repairing vehicles crucial for transportation and commerce within the state. However, the work environment and practices of these roadside mechanics raise concerns regarding work ethics and safety standards. This study aims to delve into these issues, examining various factors contributing to work ethics and safety standards among roadside mechanics in Adamawa State.



Understanding the concept of work ethics among mechanics is fundamental. Work ethics encompass attitudes, behaviors, and values related to work, influencing the quality of services provided and the overall reputation of the profession (Sims, 2002). Mechanics are expected to adhere to ethical principles that guide their interactions with clients, colleagues, and the broader community (Smith, 2019). In the context of roadside mechanics in Adamawa State, ethical considerations extend beyond mere technical competence to encompass various aspects of their professional conduct.

For roadside mechanics, ethical considerations may include honesty in dealings with customers, diligence in diagnosing and repairing vehicles, and adherence to professional standards (Kumar, 2016). Being transparent about the scope of work, providing accurate estimates, and delivering services in a timely manner are essential components of ethical behavior in this context (Jones, 2015). Upholding these principles not only fosters trust and loyalty among customers but also contributes to the long-term sustainability of the mechanic's business.

Ethical dilemmas often arise in the automotive repair industry, requiring mechanics to navigate complex situations with integrity and accountability (Brown, 2020). For instance, mechanics may face pressure to upsell unnecessary repairs or parts to increase profits, compromising their ethical standards in the process (Akintola, 2017). Balancing the interests of profitability with the ethical obligation to provide honest and reliable service poses a significant challenge for roadside mechanics.

Additionally, ethical conduct extends beyond customer interactions to encompass relationships with suppliers, fellow mechanics, and regulatory authorities (Ojo, 2018). Mechanics must uphold ethical standards in their dealings with suppliers to ensure the quality and authenticity of parts used in vehicle repairs (Khan, 2017). Collaborating with other mechanics in a fair and respectful manner and complying with industry regulations are also integral aspects of ethical behavior in this profession. By embracing ethical principles in their daily practices, mechanics can enhance the quality of services provided and build a reputation for reliability and integrity within their communities while adhering to safety standards.

Safety standards are paramount in the context of roadside mechanics, given the inherent risks associated with their work environments. These mechanics frequently toil in settings that lack adequate safety measures, thereby increasing their vulnerability to a plethora of hazards. These hazards span from chemical exposure due to handling of automotive fluids and solvents to physical injuries resulting from mishaps with heavy machinery and tools. Moreover, the nature of their work often entails prolonged periods of awkward postures and repetitive motions, leading to ergonomic strains and musculoskeletal disorders (Smith, 2019). The absence of proper safety protocols exacerbates these risks, posing threats not only to the mechanics themselves but also to their customers who may inadvertently be exposed to unsafe conditions (Jones, 2015).

Safety standards include a comprehensive set of practices and protocols designed to mitigate these risks and safeguard the well-being of both mechanics and customers alike. Such standards encompass a range of measures, including the provision of personal protective equipment (PPE) such as gloves, goggles, and respiratory masks to mitigate chemical exposure (Akintola, 2017). Additionally, adherence to proper procedures for lifting heavy objects and operating machinery reduces the likelihood of physical injuries (Brown, 2020). Moreover, implementing



ergonomic principles in the design of workspaces and tools helps alleviate strains and injuries associated with repetitive tasks (Kumar, 2016). By integrating these practices into their daily operations, roadside mechanics can significantly enhance workplace safety and mitigate the adverse effects of their inherently hazardous work environments.

Safety standards extend beyond individual practices to encompass broader organizational and regulatory frameworks aimed at promoting a culture of safety within the automotive industry. This includes instituting regular safety training programs to educate mechanics about potential hazards and proper safety procedures (Ojo, 2018). Additionally, establishing mechanisms for reporting and addressing safety concerns fosters a proactive approach to identifying and mitigating risks (Hofstede, 1980). At the regulatory level, stringent enforcement of safety regulations ensures compliance with industry standards and holds stakeholders accountable for maintaining safe working conditions (Sims, 2002).

Several variables significantly influence the work ethics and safety standards observed among roadside mechanics in Adamawa State. Firstly, the socio-economic background of these mechanics plays a pivotal role in shaping their work practices and priorities. Mechanics hailing from lower-income backgrounds often face greater financial pressures, compelling them to prioritize expedient repairs over stringent adherence to safety protocols (Jones, 2015). This tendency is rooted in the need to swiftly complete tasks to secure income, potentially compromising safety measures in the process. Conversely, mechanics with more affluent backgrounds might afford to prioritize safety standards without the same financial constraints, demonstrating a nuanced interplay between economic status and work ethics within the industry.

Furthermore, the level of education and training among roadside mechanics significantly impacts their comprehension and application of ethical principles and safety protocols. Mechanic education ranges from informal apprenticeships to formal technical training programs, with varying degrees of emphasis on ethical conduct and safety awareness (Smith, 2019). Mechanic apprenticeships, common among individuals from socio-economically disadvantaged backgrounds, may provide practical skills but often lack structured education on safety standards and ethical responsibilities. Conversely, mechanics who have undergone formal technical training programs are more likely to possess a comprehensive understanding of safety protocols and ethical considerations due to the structured curriculum and emphasis on professional conduct.

Additionally, the regulatory framework governing the automotive industry in Adamawa State exerts considerable influence on the work practices of roadside mechanics. Government regulations pertaining to licensing, workplace safety, and environmental concerns establish baseline standards that mechanics are expected to adhere to (Ojo, 2018). However, the effectiveness of these regulations depends on enforcement mechanisms and regulatory oversight. Inadequate enforcement may lead to a lax attitude towards safety and ethical standards among mechanics, as the absence of consequences for non-compliance diminishes the incentive to prioritize these aspects of their work.

Moreover, the relationship dynamics between roadside mechanics and their clientele significantly shape work ethics and safety standards within the industry. Mechanic-customer interactions are influenced by cultural norms, community expectations, and the nature of the automotive repair market (Kumar, 2016). Mechanics operating within tight-knit communities



often prioritize building trust and fostering long-term relationships with their clientele, which may translate into a heightened commitment to ethical conduct and safety standards. Conversely, mechanics operating in highly competitive urban areas may face pressures to prioritize speed and cost-effectiveness over ethical considerations, particularly in environments where customers prioritize expediency over quality (Brown, 2020).

The dynamics of work ethics and safety standards among roadside mechanics in Adamawa State are shaped by a myriad of interconnected variables, including socio-economic background, education and training, regulatory frameworks, and customer relations. Understanding these complex dynamics is essential for devising targeted interventions aimed at promoting ethical conduct and enhancing safety standards within the automotive industry.

Statement of the Problem

Despite their crucial role in the automotive industry in Adamawa State, Nigeria, roadside mechanics operate within a predominantly informal sector where concerns regarding work ethics and safety standards persist. The lack of comprehensive understanding surrounding the ethical conduct and safety practices prevalent among these mechanics poses significant risks to both their well-being and the general public. Issues such as dishonest dealings with customers, negligence in adhering to safety protocols, and the absence of regulatory oversight contribute to an environment fraught with potential hazards and ethical dilemmas. Furthermore, socio-economic disparities, limited access to education and training, and inadequate enforcement of regulations exacerbate these challenges, creating a complex landscape that warrants urgent attention. Without addressing these issues, there is a tangible risk of continued compromise to the integrity of services provided by roadside mechanics, as well as the safety of individuals relying on their expertise. Therefore, this study seeks to systematically assess the work ethics and safety standards among roadside mechanics in Adamawa State.

Purpose of the Study

- 1. To evaluate the extent of ethical conduct practiced by roadside mechanics in Adamawa State.
- 2. To assess the compliance of roadside mechanics in Adamawa State with safety standards and protocols aimed at mitigating occupational hazards commonly encountered in automotive repair settings.
- 3. To identify the socio-economic factors influencing the work ethics and safety practices of roadside mechanics in Adamawa State.

Research Questions

- 1. To What extent do roadside mechanics in Adamawa State adhere to ethical conduct?
- 2. To what extent do roadside mechanics in Adamawa State comply with safety standards aimed at mitigating occupational hazards commonly encountered in automotive repair settings?
- 3. What are the socio-economic factors influencing the work ethics and safety practices of roadside mechanics in Adamawa State?



Hypotheses

The following null hypotheses were formulated to guide the study

- 1. There is no significant difference among the mean responses of roadside mechanics, motorists, and federal road safety corps officers on the extent to which roadside mechanics in Adamawa State adhere to ethical conduct.
- 2. There is no significant difference among the mean responses of roadside mechanics, motorists, and federal road safety corps officers on the extent to which roadside mechanics in Adamawa State comply with safety standards aimed at mitigating occupational hazards commonly encountered in automotive repair settings.
- 3. There is no significant difference among the mean responses of roadside mechanics, motorists, and federal road safety corps officers on the socio-economic factors influencing the work ethics and safety practices of roadside mechanics in Adamawa State.

2. RELATED WORK

The automotive repair industry in Adamawa State, Nigeria, relies heavily on the services of roadside mechanics, who play a crucial role in maintaining the region's transportation infrastructure. However, concerns regarding work ethics and safety standards among these mechanics have garnered increasing attention from researchers and policymakers alike. Existing literature provides valuable insights into various factors influencing work ethics and safety standards within the automotive repair sector, both globally and within the Nigerian context.

Work Ethics among Mechanics:

Studies have highlighted the significance of socio-economic background in shaping work ethics among blue-collar workers, including mechanics. Mechanic apprenticeships, common among individuals from lower-income backgrounds, may prioritize practical skills over ethical considerations due to the emphasis on financial stability (Brown, 2020). Conversely, formal technical training programs have been associated with a greater awareness of professional ethics and standards (Smith, 2019). However, cultural norms and market pressures may also influence the ethical conduct of mechanics, underscoring the need for a nuanced understanding of these dynamics.

Safety Standards in the Automotive Industry:

Safety concerns within the automotive repair sector have been extensively documented, with studies highlighting the prevalence of occupational hazards and the importance of implementing safety protocols. Khan (2017) emphasized the occupational hazards faced by mechanics, including chemical exposure and physical injuries, while Akintola (2017) explored the role of resource availability in promoting workplace safety. Regulatory frameworks governing the automotive industry, as examined by Ojo (2018), are essential for establishing baseline safety standards. However, inadequate enforcement mechanisms may undermine the effectiveness of these regulations, necessitating a closer examination of regulatory compliance within specific regions such as Adamawa State.



Challenges in Transitioning to Online Teaching/Learning:

The challenges associated with transitioning to online teaching and learning, although not directly related to the automotive repair sector, offer valuable insights into the broader issues of training and preparedness. The lack of stable internet connectivity and technology infrastructure, as highlighted by various studies (Akintola, 2017; Ojo, 2018), poses significant barriers to effective digital education. Rushing into online teaching without adequate training and preparation may result in a poor user experience and hinder the long-term growth and development of learners.

3. METHODOLOGY

The study employed a descriptive survey research approach, adhering to the methodology outlined by Gall, Gall, and Borg (1996). Descriptive survey research involves gathering data from a sample representative of the population, typically through the use of questionnaires or interviews. Adamawa State, situated between latitude 6.260 East and longitude 4.920 North East, serves as the research area. It is located in northeastern Nigeria, bordered by various states within the country and neighboring nations, including Borno State to the northeast, Gombe State to the south, Taraba State to the southwest, Cameroon to the southeast, and the Republic of Chad to the east. The study's population comprised 21,597 individuals, including 755 roadside mechanics, 20,782 motorists, and 60 Federal Road Safety Corps officers. The sample size of 377 respondents was determined using a simple random sampling technique based on Krejcie and Morgan's (1970) sample size table. Data collection utilized the Work Ethics and Safety Standards among Roadside Mechanics Questionnaire (WESSRMO), a structured questionnaire designed by the researcher and validated by three experts from the Department of Technology Education at Modibbo Adama University in Yola, Adamawa State. The questionnaire employed a 5-point Likert scale for responses, with a reliability coefficient of 0.89 established through the Cronbach alpha reliability approach. Researchers, aided by two research assistants, collected the study's data. Analysis of the three research questions utilized the mean statistic, while ANOVA was used to test the hypothesis. The decision for each item was based on real limits of numbers on a 5-point scale.

4. **RESULTS & DISCUSSION**

Research Question 1: To What extent do roadside mechanics in Adamawa State adhere to ethical conduct?

Table	: Mean and Standard Deviation on the Extent Roadside Mech	nanics Adhere to Ethical
	Conduct	
		N= 377

			N=3	577
S/No.	ITEMS	\overline{x}	δ	Remark
1.	Roadside mechanics in Adamawa State consistently provide accurate estimates for repair costs to their customers	2.84	0.45	ME



2.	Mechanics demonstrate transparency by informing customers about all repairs conducted on their vehicles, including those not initially requested	2.96	0.51	ME
3.	Mechanics prioritize customer safety by refusing to compromise on the quality of spare parts used in repairs, even if cheaper alternatives are available	2.84	0.65	ME
4.	Roadside mechanics maintain integrity by honoring warranties and guarantees for services provided to customers	3.70	0.55	HE
5.	Mechanics exhibit professionalism by consistently meeting deadlines agreed upon with customers for vehicle repairs	2.88	0.46	ME
6.	Roadside mechanics adhere to ethical standards by refusing to engage in deceptive practices, such as falsifying repair invoices	2.44	0.89	ME
7.	Mechanics demonstrate respect for customer property by maintaining cleanliness and organization in their repair workshops	2.68	0.76	ME
8.	Roadside mechanics in Adamawa State prioritize customer satisfaction by actively seeking feedback and addressing concerns promptly	3.94	0.43	HE
9.	Mechanics uphold ethical conduct by treating all customers equally, regardless of their socio-economic status or background	4.05	0.20	HE
10.	Roadside mechanics exhibit honesty by accurately diagnosing vehicle issues and providing clear explanations to customers regarding necessary repairs	3.85	0.67	HE
	Grand Mean	3.22	0.56	ME

The data analysis assesses the extent of ethical conduct among roadside mechanics in Adamawa State, Nigeria, revealing a moderate overall adherence level. Mechanics excel in customer satisfaction and equality in customer treatment but show lower adherence in areas like transparency in repair estimates and avoidance of deceptive practices. This highlights the need for improvements in pricing transparency and ethical standards to bolster trust and professionalism within the roadside mechanics industry in Adamawa State.

Research Question 2: To what extent do roadside mechanics in Adamawa State comply with safety standards aimed at mitigating occupational hazards commonly encountered in automotive repair settings?

 Table 2: Mean and Standard Deviation on the Extent Roadside Mechanics Comply With

 Safety Standards

		N= 377		
S/No.	ITEMS	\overline{x}	δ	Remark

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1.	Roadside mechanics in Adamawa State consistently wear appropriate personal protective equipment (PPE) such as gloves, goggles, and respirators when handling hazardous chemicals or materials	1.59	0.67	LE
2.	Mechanics demonstrate adherence to safety protocols by securely lifting and supporting vehicles using appropriate equipment such as jacks and stands to prevent accidents and injuries	3.69	0.67	HE
3.	Compliance with safety standards is evidenced by the proper storage and handling of flammable materials, including gasoline, oil, and solvents, to reduce the risk of fire and explosions in workshop environments	2.29	0.67	LE
4.	Mechanics consistently utilize ventilation systems or work in well-ventilated areas to minimize exposure to harmful fumes and airborne contaminants during vehicle repair and maintenance tasks	3.08	0.66	ME
5.	Roadside mechanics demonstrate awareness of electrical safety protocols by disconnecting vehicle batteries and wearing insulated gloves when working on electrical systems to prevent electrical shocks and hazards	3.51	0.67	HE
6.	Proper disposal of hazardous waste, such as used oil, batteries, and chemical solvents, indicates compliance with safety standards and environmental regulations among mechanics in Adamawa State	1.88	0.56	LE
7.	Regular inspection and maintenance of tools and equipment by mechanics ensure safe and effective operation, reducing the risk of accidents and injuries caused by faulty or damaged equipment	1.88	0.34	LE
8.	Mechanics prioritize workspace organization and cleanliness, maintaining clear pathways and designated storage areas to prevent slips, trips, and falls in the workshop environment	1.63	0.68	LE
9.	Compliance with safety standards includes the use of fire extinguishers and emergency response protocols to effectively manage and mitigate fire hazards and other emergencies in automotive repair settings	1.92	0.66	LE
10.	Roadside mechanics demonstrate commitment to safety by participating in ongoing safety training and education programs, staying informed about industry best practices and regulations to enhance workplace safety	1.84	0.45	LE
	Grand Mean	2.33	0.60	ME

Table 2 indicates that roadside mechanics in Adamawa State exhibit varying levels of compliance with safety standards aimed at mitigating occupational hazards in automotive



repair settings. The findings indicate a moderate level of compliance with safety standards among roadside mechanics in Adamawa State.

Research Question 3: What are the socio-economic factors influencing the work ethics and safety practices of roadside mechanics in Adamawa State?

 Table 3: Mean and Standard Deviation of Respondents on the Socio-Economic Factors

 Influencing the Work Ethics and Safety Practices

			N= 377	
S/No.	ITEMS	\overline{x}	δ	Remark
	The socio-economic background of roadside mechanics			
11.	significantly influences their prioritization of safety	4.74	1.02	Agreed
	practices in their work			
12	Adequate access to resources and financial stability	1 56	0.96	Agreed
12.	positively influence the work ethics of roadside mechanics	4.50	0.90	Agreeu
	Roadside mechanics from lower-income backgrounds are			
13.	more likely to prioritize quick repairs over adherence to	4.28	0.87	Agreed
	safety protocols due to financial constraints			
	The level of education and training among roadside			
14.	mechanics correlates with their understanding and	4.40	0.91	Agreed
	implementation of ethical work practices			
	Mechanic apprenticeships, common among individuals			
15.	from socio-economically disadvantaged backgrounds, may	4.40	0.91	Agreed
	prioritize practical skills over ethical considerations			
	Roadside mechanics with access to formal technical training			
16.	programs demonstrate a higher awareness of professional	4.36	0.90	Agreed
	ethics and safety standards			
17	Financial pressures faced by roadside mechanics may lead	4 36	0.90	Agreed
17.	to compromises in safety standards to meet economic needs	т.50		
	The availability of safety equipment and resources in the			
18.	workplace significantly influences the adherence to safety	4.36	0.90	Agreed
	practices among mechanics			
	Mechanic workshops with limited resources and			
19.	infrastructure are more prone to overlooking safety	4.16	0.83	Agreed
	standards due to resource constraints			
	The socio-economic status of roadside mechanics impacts			
20	their ability to invest in continuous training and	4 54	0.97	Agreed
20.	development, which in turn affects their commitment to	т.J+		Agittu
	safety practices in their work			
	Grand Mean	4.42	0.92	Agreed

Table 3 summarizes respondents' perceptions regarding the socio-economic factors influencing the work ethics and safety practices of roadside mechanics in Adamawa State. The data indicate a strong agreement across all items, highlighting the significant impact of factors such as

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financial stability, access to resources, and level of education on safety practices and ethical work standards among mechanics.

Hypotheses

Hypothesis 1: There is no significant difference among the mean responses of roadside mechanics, motorists, and federal road safety corps officers on the extent to which roadside mechanics in Adamawa State adhere to ethical conduct.

	Sum of Squares	Mean Square	df	F	р	Remark
Between Groups	0.056	.028	2			
				0.888	0.418	Accepted
Within Groups	1.469	.031	374			
Total	1.524		376			

Table 4: ANOVA on the Extent Roadside Me	echanics Adhere to Ethical Conduct
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The ANOVA reveals that the between-groups sum of squares is 0.056, with a corresponding mean square of 0.028 and 2 degrees of freedom. The F-value obtained is 0.888, and the associated p-value is 0.418. Since the p-value (0.418) is greater than the commonly used significance level of 0.05, the null hypothesis, which posits that there is no significant difference among the mean responses of the three groups, is accepted.

Hypothesis 2: There is no significant difference among the mean responses of roadside mechanics, motorists, and federal road safety corps officers on the extent to which roadside mechanics in Adamawa State comply with safety standards aimed at mitigating occupational hazards commonly encountered in automotive repair settings.

	Sum of Squares	df	Mean Square	F	р	Remark
Between Groups	.040	2	0.020	0.167	0.846	Accepted
Within Groups	5.600	374	0.119			
Total	5.640	376				

Table 5: ANOVA on the Extent Roadside Mechanics Comply With Safety Standards

The ANOVA results show that the F-value is 0.167, with a corresponding p-value of 0.846. Since the p-value is greater than the significance level of 0.05, the null hypothesis, which states that there is no significant difference among the mean responses of the groups, is accepted. This indicates that there is no statistically significant difference in the perceptions of roadside mechanics, motorists, and federal road safety corps officers regarding the extent of compliance with safety standards among roadside mechanics in Adamawa State. **Hypothesis 3:** There is no significant difference among the mean responses of roadside mechanics, motorists, and federal road safety corps officers regarding the extent of significant difference among the mean responses of roadside mechanics, motorists, and federal road safety corps officers of roadside mechanics motorists, and federal road safety corps officers on the socio-economic factors influencing the work ethics and safety practices of roadside mechanics in Adamawa State.



	Sum of Squares	Df	Mean Square	F	Sig.	Remark
Between Groups	0.060	2	0.030	0.619	0.543	Accepted
Within Groups	2.282	374	0.049			
Total	2.342	376				

Table 6: ANOVA on the Socio-Economic Factors Influencing the Work Ethics and Safety

The analysis indicates that the sum of squares between groups is 0.060, with 2 degrees of freedom, resulting in a mean square of 0.030. The calculated F-statistic is 0.619, with a corresponding p-value of 0.543. Since the p-value is greater than the conventional significance level of 0.05, the null hypothesis that there is no significant difference among the mean responses of the three groups is accepted. Therefore, based on the ANOVA results, it can be concluded that there is no significant difference among the mean responses of roadside mechanics, motorists, and Federal Road Safety Corps officers regarding the socio-economic factors influencing work ethics and safety practices in Adamawa State.

Findings

The finding which reveals that to a moderate extent, roadside mechanics in Adamawa State adhere to ethical conduct resonates with broader observations regarding ethical practices within the context of Northern Nigeria. While specific studies on roadside mechanics in Adamawa State may be limited, broader research on ethical behavior within Nigeria's cultural and socio-economic context offers relevant insights. Abdullahi (2017) and Ibrahim (2019) explored ethical conduct in various sectors across Northern Nigeria and, as a result, shed light on the complex interplay of cultural values, religious beliefs, and economic pressures. These studies highlight the significance of factors such as social norms, community expectations, and religious teachings in shaping ethical behavior. Additionally, Yusuf (2018) underscores the importance of regulatory frameworks and institutional mechanisms in promoting ethical standards within Nigerian society. By drawing on this broader body of research, the finding regarding the moderate adherence to ethical conduct among roadside mechanics in Adamawa State can be contextualized within the larger socio-cultural landscape of Northern Nigeria, emphasizing the need for targeted interventions and policy initiatives to enhance ethical awareness and compliance within the automotive repair sector.

The finding that to a moderate extent, roadside mechanics in Adamawa State comply with safety standards aimed at mitigating occupational hazards commonly encountered in automotive repair settings resonates with previous research conducted by scholars in Nigeria. Studies conducted by Abdullahi et al. (2018) have emphasized the importance of promoting safety awareness and adherence to standards among mechanics in the region. Similarly, investigations by Bako et al. (2019) have highlighted the prevalence of occupational hazards faced by mechanics in northern Nigeria and the need for improved safety measures. Moreover, the influence of socio-economic factors on safety compliance among mechanics has been underscored by studies like those conducted by Lawal et al. (2020), which found that financial constraints and resource availability significantly impact safety practices in automotive repair



settings. Therefore, the finding regarding moderate compliance with safety standards among roadside mechanics in Adamawa State aligns with the broader research conducted by scholars from northern Nigeria

The finding that factors such as financial stability, access to resources, and level of education influence safety practices and ethical work standards among mechanics resonates with existing literature, particularly in the context of northern Nigeria. Smith (2019) highlighted the crucial role of education and training in bolstering mechanics' comprehension and application of ethical work practices, emphasizing the need for accessible educational opportunities in the region. Furthermore, Akintola (2017) underscored the criticality of resource availability and infrastructure in fostering workplace safety, particularly in automotive workshops across northern Nigeria. Additionally, Haruna (2020) discussed how financial constraints prevalent in the region may compel mechanics to prioritize efficiency over safety, potentially compromising ethical standards. These findings collectively underscore the significant influence of socio-economic factors on safety practices and ethical work standards within the automotive repair sector in northern Nigeria.

5. CONCLUSION

The study on assessing work ethics and safety standards among roadside mechanics in Adamawa State emphasizes the intricate interplay of socio-economic factors in shaping practices within the automotive repair sector. Through a descriptive survey research approach, it was revealed that factors such as financial stability, access to resources, and level of education significantly influence safety practices and ethical work standards among mechanics. The high level of agreement among respondents emphasizes the importance of addressing these socio-economic factors to enhance safety and ethical conduct within the industry.

Recommendations

The following are the recommendations:

- 1. Efforts should be focused on improving access to education and training programs tailored to mechanics' needs, particularly emphasizing ethical work practices and safety standards.
- 2. The government should bolster infrastructure and provide necessary resources to mechanics, especially those in remote areas
- 3. Regulatory bodies should enhance enforcement mechanisms to ensure compliance with safety standards and ethical practices.

6. REFERENCES

- Abdullahi, A. (2017). Ethical Behavior in Business Organizations: A Case Study of Northern Nigeria. International Journal of Business and Management Invention, 6(2), 38-45.
- 2. Abdullahi, A., Ibrahim, S., & Sani, A. (2018). Occupational Safety and Health Practices among Auto-Mechanics in Kano State, Nigeria. International Journal of Science and Research, 7(7), 109-113.



- 3. Akintola, O. (2017). Resource Availability and Workplace Safety: A Case Study of Automotive Workshops in Lagos, Nigeria. Safety Science, 95, 119-126.
- 4. Akintola, O. (2017). Resource Availability and Workplace Safety: A Case Study of Automotive Workshops in Lagos, Nigeria. Safety Science, 95, 119-126.
- 5. Bako, J. R., Madu, A. A., & Abubakar, U. I. (2019). Occupational Hazards among Automobile Mechanics in Kano Metropolis, Kano State, Nigeria. Journal of Environmental Treatment Techniques, 7(4), 594-599.
- 6. Brown, T. (2020). Competition and Ethical Dilemmas in Urban Automotive Repair Shops. Journal of Business Ethics, 137(2), 369-382.
- 7. Haruna, T. (2020). Competition and Ethical Dilemmas in Urban Automotive Repair Shops. Journal of Business Ethics, 137(2), 369-382.
- 8. Hofstede, G. (1980). Culture's Consequences: International Differences in Work-Related Values. Sage Publications.
- 9. Ibrahim, S. (2019). Understanding Ethical Dilemmas in the Nigerian Public Sector: Insights from Northern Nigeria. Journal of Public Administration and Governance, 9(1), 114-126.
- 10. Jones, L. (2015). Work Ethics and Socio-Economic Background: A Study of Blue-Collar Workers in America. Journal of Business Ethics, 128(4), 735-746.
- 11. Khan, S. (2017). Occupational Hazards and Safety Measures Among Automobile Mechanics in Karachi, Pakistan. Safety and Health at Work, 8(2), 169-174.
- 12. Kumar, A. (2016). Customer Relations in the Automotive Service Industry: A Comparative Study. International Journal of Automotive Technology and Management, 16(3), 245-261.
- Lawal, M. S., Ahmed, A. A., & Musa, M. M. (2020). Socio-Economic Determinants of Safety Practices among Automobile Mechanics in Kaduna Metropolis, Kaduna State, Nigeria. Journal of Environmental Science, Toxicology and Food Technology, 14(8), 10-16.
- 14. Ojo, F. (2018). Regulatory Frameworks and Compliance in the Nigerian Automotive Industry. Journal of Regulatory Economics, 54(1), 67-85.
- 15. Sims, R. (2002). Ethics and Corporate Social Responsibility: Why Giants Fall. Praeger Publishers.
- 16. Smith, M. (2019). Education and Training in the Automotive Industry: Current Trends and Future Directions. Automotive Engineering International, 127(3), 42-47.
- Yusuf, Y. (2018). Ethics, Governance, and Development in Nigeria: Perspectives from Northern Nigeria. African Journal of Political Science and International Relations, 12(2), 25-33.