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Ethical Climate and Citizen Satisfaction in Informal Service Delivery in Nigeria

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ABSTRACT

Dynamism is a critical nature of business environment that is deeply enrooted in shifts in paradigms, and this shift has in recent times emphasized on the need to place great priority on the satisfaction of customers for business success. In this vein, businesses have clearly explored various options in achieving this objective, but less attention has been to given latent options which includes ethical climate most especially in the area of artisans. This study thus investigates effect of ethical climate and customer satisfaction among auto mechanics in Minna metropolis. The study focuses on four dimensions of ethical climate: trustworthiness, transparency, fair treatment, and professional competence. Customer satisfaction is evaluated through measures of overall satisfaction and willingness to recommend auto mechanics to other car owners. The research employs a quantitative approach, utilizing a structured questionnaire to collect data from 402 registered car owners. The collected data was analyzed using Structural Equation Modeling-Partial Least Squares (SEM-PLS) to examine the associations between ethical climate dimensions and customer satisfaction. The results reveal captivating insights into the dynamics at play. Transparency, fair treatment, and professional competence demonstrate statistically significant positive relationships with customer satisfaction. However, the dimension of trustworthiness displays a positive relationship with customer satisfaction that lacks statistical significance. The findings underscore the importance of nurturing a robust ethical climate within the auto mechanic industry to enhance customer satisfaction. It is recommended that auto mechanics, through their associations, prioritise initiatives aimed at strengthening ethical dimensions. Such initiatives can include continuous improvement programmes and ethical awareness campaigns. By emphasizing these aspects, auto mechanics can create an environment that not only ensures their own professional growth but also enriches their interactions with customers, fostering trust and loyalty.

Introduction

Globally, Micro, Small, and Medium Enterprises (MSMEs) play a pivotal role in economic development, contributing over 55% of employment and a substantial share of Gross Domestic Product (GDP) in both developed and developing economies (Laila et al., 2023). Their dominance—accounting for over 90% of businesses worldwide—underscores their importance in fostering inclusive growth, innovation, and livelihoods. However, beyond their economic contributions, the sustainability of MSMEs increasingly depends on their ability to maintain strong relationships with customers, particularly through service quality and ethical business practices.

Customer satisfaction has therefore emerged as a critical performance indicator for MSMEs, reflecting how well businesses meet or exceed customer expectations (Setyaningsih & Kelle, 2022). In service-oriented sectors, satisfaction is not only driven by technical outcomes but also by the ethical conduct embedded in service delivery, including fairness, transparency, and professionalism. Despite this, many MSMEs—especially informal and artisan-based enterprises—tend to prioritize operational survival over ethical considerations, which often results in customer dissatisfaction and weak long-term competitiveness (Mansur & Djaelani, 2023).

Within the MSME ecosystem, artisans represent a vital but under-researched segment, particularly in developing economies. These skilled individuals provide essential services such as automobile repairs, electrical works, and carpentry, often operating within informal and loosely regulated environments (Gamble, 2021). Among them, auto mechanics occupy a strategically important position due to the increasing reliance on automobiles for both personal mobility and commercial activities. Their services directly affect safety, economic productivity, and daily life.

However, the informal nature of the auto mechanic sector creates conditions where ethical challenges are prevalent and often unregulated. Issues such as overpricing, unnecessary repairs, lack of transparency, and poor service quality have been widely reported in Nigeria (Atiku & Randa, 2021; Yusuf, 2021). These practices not only erode customer trust but also undermine satisfaction and long-term business sustainability. This highlights the need to examine ethical climate—defined as shared perceptions of appropriate ethical behavior—as a critical but underexplored determinant of customer satisfaction within this sector.

While prior studies have examined ethical climate in formal organizations, there is limited empirical evidence focusing on informal service sectors such as auto mechanics, particularly in developing country contexts. This gap is significant because ethical interactions in such settings are often personalized, directly influencing customer perceptions and repeat patronage.

Minna metropolis provides a compelling context for this investigation due to several factors. First, it serves as an important administrative and commercial hub in Niger State, with a growing population and increasing demand for automobile maintenance services. Second, the city hosts a high concentration of informal auto

mechanic clusters, making it a representative setting for studying artisan-based MSMEs. Third, anecdotal and documented evidence suggest persistent ethical concerns in service delivery within the area, including pricing irregularities and inconsistent service quality (Yusuf, 2021). These characteristics make Minna not merely a convenient location but a relevant and meaningful case for examining the intersection of ethical climate and customer satisfaction.

Based on the identified gaps, this study seeks to answer the following questions:

1. How does trustworthiness influence customer satisfaction among auto mechanics in Minna metropolis?
2. What is the effect of transparency on customer satisfaction in the auto mechanic sector?
3. To what extent does fair treatment affect customer satisfaction among car owners?
4. How does professional competence influence customer satisfaction in Minna metropolis?

To empirically address these questions, the study proposes the following hypotheses:

H1: Trustworthiness has a significant positive effect on customer satisfaction.

H2: Transparency has a significant positive effect on customer satisfaction.

H3: Fair treatment has a significant positive effect on customer satisfaction.

H4: Professional competence has a significant positive effect on customer satisfaction.

Literature Review

Ethical Climate

Ethics refers to the contextual moral principles guiding the behavior of individuals and organizations, enabling them to distinguish between right and wrong (Ozen, 2018). Ethical climate (EC), as first defined by Victor and Cullen (1988), represents shared perceptions of ethically correct behavior and the handling of ethical issues within an organization (Zhang et al., 2021), creating norms that influence decision-making (Newman et al., 2017). EC reflects the moral atmosphere and ethical practices prevalent in an organization (Timberlake & Philips, 2019), and according to Yasin (2021), it encompasses the behaviors and decisions specific to an industry or organizational context. For this study, EC is contextualized in the informal and unstructured environment of auto mechanics in Nigeria, defined as the guiding principles that shape the behavior and decision-making of mechanics in their interactions with customers.

Ethical climate (EC) plays a pivotal role in shaping organizational behavior and decision-making processes, influencing both individual and collective

outcomes. Broadly defined as the shared perceptions of ethically correct behavior within an organization, EC embodies the moral principles and practices that guide interactions and decisions. Victor and Cullen's (1988) foundational conceptualization of EC established it as the moral atmosphere within organizations, offering a framework for resolving ethical issues. This notion underscores the role of collective norms and standards in aligning employee actions with the organization's ethical expectations (Newman et al., 2017).

In the context of auto mechanics, where informal and unstructured work environments are prevalent, EC assumes even greater significance. Drawing on Yasin's (2021) definition, EC in this domain encapsulates the ethical practices and behaviors of mechanics in their dealings with customers, focusing on principles of fairness, transparency, trustworthiness, and professional competence. These dimensions reflect the industry's ethical benchmarks and are instrumental in fostering customer trust and satisfaction. By addressing the specific behavioral norms within this setting, the conceptualization aligns ethics with the contextual realities of the trade.

An established and well-maintained EC offers multifaceted advantages that extend beyond ethical compliance to become a cornerstone of organizational success. Organizations that cultivate EC gain an enhanced reputation, fostering trust among stakeholders, including employees, customers, and partners (Croucher, 2019; George et al., 2021). This reputation serves as a competitive edge, attracting top talent and securing long-term partnerships. Moreover, EC enhances employee engagement and job satisfaction, as ethical work environments resonate with personal values and promote motivation and productivity (Hefny, 2021).

The decision-making processes within organizations are also significantly improved in an ethical climate. Guided by moral principles, decisions align with long-term organizational goals while safeguarding stakeholder welfare (Asgari, 2019). This principled approach mitigates impulsive choices driven by short-term gains and reinforces sound governance practices. Additionally, EC fosters innovation and creativity by creating a secure and respectful environment, enabling employees to contribute novel ideas without fear of reprisal (Tayal et al., 2021). This aligns ethical considerations with adaptive business practices, ensuring resilience in dynamic market conditions.

Beyond internal advantages, EC promotes positive customer relationships. Ethical practices such as transparency, fair treatment, and professionalism strengthen customer trust, leading to increased satisfaction, repeat business, and positive referrals (Barusman, 2019). For industries like auto mechanics, these factors are particularly critical, as they address the unique customer expectations for honesty, clarity, and expertise. Moreover, EC aids in regulatory compliance, reducing risks associated with legal violations and financial penalties while safeguarding organizational integrity (Klopotan et al., 2020).

Over time, EC has been conceptualized and measured through various frameworks tailored to organizational contexts. Victor and Cullen's (1987) Ethical

Climate Questionnaire (ECQ), a seminal tool, identifies five dimensions of EC instrumental, caring, independence, law and code, and rules. While these dimensions provide a robust structure for evaluating EC, subsequent adaptations, such as Arnaud's (2010) Ethical Climate Index, expanded the framework to include moral sensitivity, motivation, and character. This evolution highlights the multidimensional nature of EC, encompassing both individual and collective ethical considerations (Newman et al., 2017).

For the auto mechanics industry, the National Institute of Automotive Service Excellence (ASE) code of conduct provides a context-specific lens. Dimensions such as trustworthiness, fair treatment, transparency, and professional competence address the unique ethical challenges in customer-mechanic interactions. These principles ensure alignment between industry practices and customer expectations, fostering a culture of integrity and accountability.

Customer satisfaction

Customer satisfaction refers to the overall perception and evaluation of customers regarding the products or services they receive. According to Bhatnagar and Dheeraj (2019) It reflects the extent to which their expectations and needs have been fulfilled, leading to a positive emotional state and a desire to continue the business relationship. Customer satisfaction is the outcome of a customer's comparison between their prior expectations and the actual experience with a product or service. It represents the customer's judgment of how well the product or service met their anticipated standards and whether it provided value for their investment. Customer satisfaction can be defined as the degree to which customers' needs and desires are fulfilled by the products or services they have acquired. It encompasses factors such as quality, reliability, responsiveness, and overall customer experience. In this study, customer satisfaction is defined in line with Bhatnagar and Dheeraj's (2019) due to its emphasis on expectation been met and the desire to continue business and therefore define customer satisfaction as the extent to which car owners believe their service expectations are met and the desire to repeat business with their auto mechanics

Customer satisfaction (CS) refers to the overall perception of customers regarding the products or services they receive, based on how well their expectations are met. It is the result of comparing prior expectations with actual experiences, leading to a judgment about the value received for their investment. In this study, CS is defined as the extent to which car owners feel their service expectations are fulfilled and their desire to continue business with their auto mechanics (Bhatnagar & Dheeraj, 2019). Factors such as quality, reliability, responsiveness, and customer experience all contribute to this evaluation. Satisfaction leads to positive emotional states and stronger customer relationships, thus influencing business sustainability.

Customer satisfaction is crucial for the long-term success of any business, especially in the Nigerian automotive mechanic industry, where it drives repeat business, customer loyalty, and positive word-of-mouth. Satisfied customers are more likely to recommend services to others, enhancing the mechanic's reputation

and attracting new clients (Taştan & Davoudi, 2019). For Nigerian auto mechanics, satisfaction is influenced by effective communication, reliable repairs, fair pricing, and timely service (Mohamed et al., 2022). Key dimensions of CS, such as repeat business and recommendation, serve as indicators of a mechanic's success, reflecting trust and loyalty from customers. This study assesses customer satisfaction using these two dimensions, which are integral to the sustainability and growth of automotive repair businesses in Nigeria.

Ethical Climate and Customer Satisfaction

Customer satisfaction (CS) is the overall evaluation of customers based on how well their expectations are met by products or services. It results from comparing prior expectations with actual experiences, and in this study, it is defined as the extent to which car owners believe their service expectations are fulfilled and their desire to continue business with auto mechanics (Bhatnagar & Dheeraj, 2019). Key factors influencing CS include quality, reliability, responsiveness, and overall customer experience, which collectively determine whether customers perceive value for their investment and feel emotionally positive about their interactions. In the context of the Nigerian automotive industry, CS plays a vital role in fostering long-term customer relationships.

Customer satisfaction is crucial for business sustainability, as satisfied customers are more likely to return for repeat business and recommend services to others, driving growth and enhancing the mechanic's reputation (Taştan & Davoudi, 2019). In Nigeria's auto mechanic sector, satisfaction is influenced by factors such as effective communication, reliable repairs, fair pricing, and timely service (Mohamed et al., 2022). For this study, customer satisfaction is measured through repeat business and recommendations, as these dimensions reflect the trust and loyalty customers have toward their mechanics. These indicators are essential for sustaining the business, as they show the level of satisfaction and the mechanic's ability to foster enduring customer relationships.

Figure 1 presents this study's conceptual framework showing how ethical climate of auto mechanics and customer satisfaction has been conceptualized in this study and the expected relationship between the two variables.

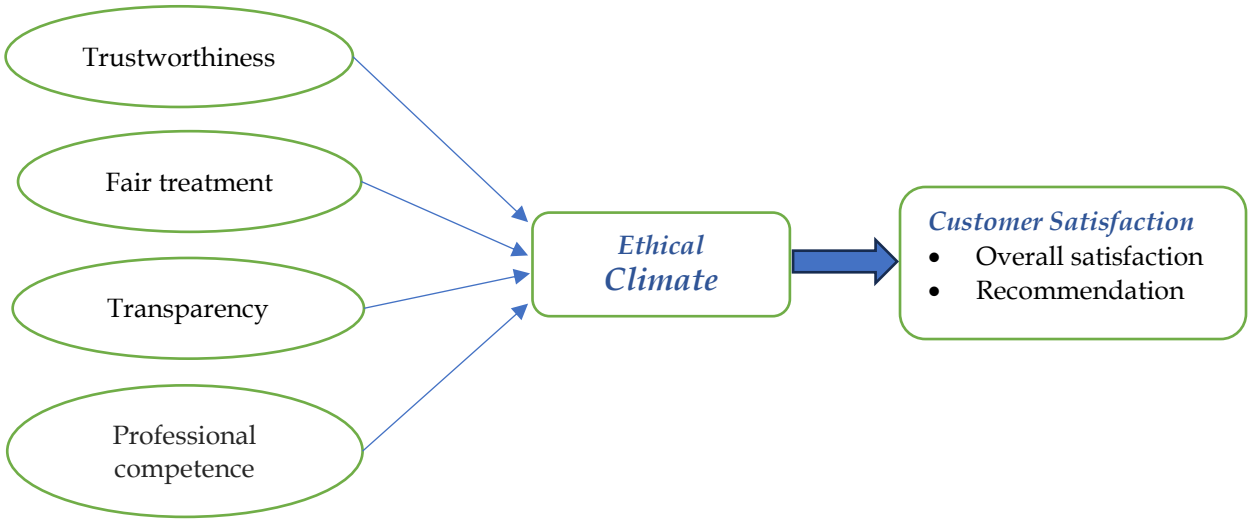

Figure 1. Study's Conceptual Framework

Source: Researcher, 2023

It can be observed from Figure 1 that customer satisfaction was assessed through the cumulative of repeat business and their willingness to recommend them to other car owners and not independent proxies. Each of the four dimensions of ethical climate of the auto mechanics in Minna Metropolis is expected to affect the satisfaction of car owners in the study area.

The Expectancy-Disconfirmation Theory is the most relevant framework for understanding the relationship between ethical climate and customer satisfaction in the context of auto mechanics in Nigeria. This theory examines the alignment between customer expectations and actual experiences, making it ideal for evaluating how customers perceive the ethical climate of auto mechanics. By focusing on dimensions such as trustworthiness, fairness, transparency, and professional competence, the theory helps assess whether the ethical behavior of mechanics meets or exceeds customer expectations. This alignment is key to determining customer satisfaction, influencing their decisions to recommend the mechanic and engage in repeat business.

The empirical review highlights several studies that explore the connection between ethical climate (EC) and customer satisfaction (CS) in various industries. For example, Bhatnagar and Dheeraj (2019) suggest that customer satisfaction results from fulfilling or exceeding customer expectations, which is influenced by factors such as service quality, fairness, and trust. Similarly, studies by Zhang et al. (2021) and Yasin (2021) reinforce the idea that an ethical climate within organizations plays a critical role in shaping customer perceptions. An ethical environment fosters trust and satisfaction, aligning with the expectations of customers, thereby improving business outcomes. In the Nigerian auto mechanic context, a study by Mohamed et al. (2022) suggests that customer satisfaction in the automotive industry is heavily dependent on the mechanic's ability to communicate

effectively, deliver reliable repairs, and offer fair pricing, aligning with the principles of an ethical climate.

Furthermore, the concept of ethical climate has been investigated through various dimensions such as trustworthiness, fairness, transparency, and professionalism (Zhang et al., 2021). These elements directly influence customer satisfaction by either meeting or exceeding their service expectations. Studies like those by Taştan and Davoudi (2019) emphasize the importance of an ethical environment for fostering customer loyalty and satisfaction, suggesting that satisfied customers are more likely to return for repeat business and recommend the service to others. In the context of Nigerian auto mechanics, the ethical climate may include the mechanic's honesty, the transparency of pricing, and the quality of services provided, which are crucial for customer satisfaction (Ayaga et al., 2022).

However, despite the growing body of research, there remains a gap in understanding the direct impact of ethical climate on customer satisfaction specifically in the Nigerian auto mechanic industry. While studies by Newman et al. (2017) and Boadi et al. (2019) have highlighted the importance of an ethical climate in improving customer relations, few studies focus on the informal and unstructured nature of the Nigerian auto mechanic industry. This presents an opportunity to explore how the unique challenges of this industry, including inconsistent service delivery and informal business practices, may affect customer satisfaction and loyalty. Therefore, this study aims to bridge this gap by focusing on how ethical behavior within the Nigerian auto mechanic sector influences customer satisfaction, particularly through repeat business and customer recommendations.

Research Methods

This study adopted a quantitative research design using a cross-sectional survey to examine the relationship between ethical climate and customer satisfaction among auto mechanics in Minna metropolis. A quantitative approach was considered appropriate because the study seeks to test hypothesized relationships between measurable constructs using statistical techniques. The survey method was chosen due to its ability to collect data consistently and reduce bias, offering a standardized set of questions with response options. The research adopted a deductive and quantitative approach, focusing on numeric data that test hypotheses derived from general principles.

The study population consisted of car owners residing in Minna metropolis, Niger State. A multi-stage sampling approach was adopted to ensure adequate representation. First, Minna metropolis was stratified into its 21 political wards across Chanchaga and Bosso Local Government Areas. To address concerns regarding sampling validity, the list of car owners was obtained through a combination of registered vehicle records from local transport associations, and customer patronage points within recognized auto mechanic clusters and workshops.

Respondents were selected at these service locations to ensure that participants were actual customers of practicing auto mechanics. Screening questions were included to confirm that respondents had recently patronized a registered or recognized mechanic within the study area, thereby improving the reliability of responses.A systematic sampling technique was then applied, where every third eligible respondent at selected locations was approached for participation. The sample size was determined using Taro Yamane's formula, yielding 395 respondents, which was increased to 439 to account for non-response. A total of 402 valid responses were ultimately used for analysis.

Data collection was carried out through face-to-face administration of a structured questionnaire across the selected wards. The questionnaire was divided into three sections: demographic information, ethical climate dimensions (Trustworthiness, Transparency, Fairness, and Professional Competence), and customer satisfaction, with all items measured on a 5-point Likert scale. The instrument's validity was checked through expert reviews, and its statistical validity was further confirmed using convergent (Average variance extracted ≥ 0.5; Hair et al., 2019) and discriminant validity (Heterotrait–Monotrait ≥ 0.85; hair et al., 2019) methods. Reliability tests were conducted using Cronbach's alpha, ensuring an internal consistency greater than 0.70 for all scales (Hair et al., 2019). This was further confirmed using composite reliability, with values indicating the instrument's consistency. The final instrument's validity and reliability confirmed that it was suitable for data collection.

The study measured two main constructs: ethical climate (independent variable) and customer satisfaction (dependent variable). Ethical climate was operationalized using four dimensions: trustworthiness, transparency, fair treatment, and professional competence. Each dimension was measured using multiple-item scales adapted from existing literature on ethical climate and service quality, including Victor and Cullen (1988), Arnaud (2010), and Zhang et al. (2021), with modifications to suit the auto mechanic context. Where necessary, some items were contextually adapted and refined to reflect the informal nature of the sector.

Trustworthiness was measured with 4 items (e.g., honesty and reliability in service delivery). Transparency was measured with 4 items (e.g., clarity in pricing and repair explanations). Fair treatment was measured with 4 items (e.g., equitable pricing and unbiased service). Professional competence was measured with 4 items (e.g., technical skill and service quality).

Customer satisfaction was measured using 5 items, capturing: overall satisfaction, and behavioral intentions such as repeat patronage and willingness to recommend. All items were measured on a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

For data analysis, Partial Least Squares Structural Equation Modeling (PLS-SEM) was used to examine the relationships between the constructs (Hair et al., 2019). The analysis followed a two-step approach: first, confirmatory factor analysis (CFA) was conducted to validate the measurement model, ensuring that the observed variables reliably represented the latent constructs at a 0.5 factor loading

threshold (Hair et al., 2019). Second, a structural model was used to assess the causal relationships between ethical climate dimensions and customer satisfaction. The analysis was conducted using SMART PLS-SEM software, providing a robust framework for testing the hypotheses. This methodological approach allowed for a detailed assessment of how ethical climate influences customer satisfaction, offering insights into improving practices in the auto repair industry based on the findings.

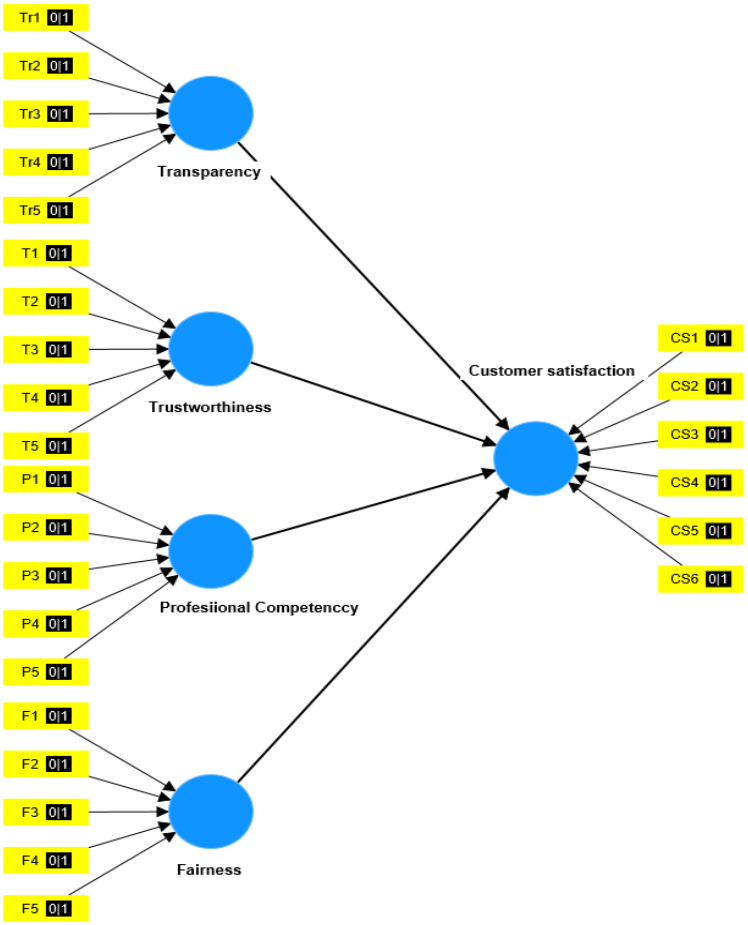

Figure 2. Model specification for the study (Schematic diagram)

The measurement instrument underwent both content and statistical validation. Content validity was ensured through expert review. Convergent validity was assessed using Average Variance Extracted (AVE ≥ 0.5), while discriminant validity was evaluated using the Heterotrait-Monotrait (HTMT) ratio (Hair et al., 2019). Reliability was confirmed using Cronbach's alpha and composite reliability, with all values exceeding the recommended threshold of 0.70.

Results and Discussion

The analysis of the demographic data revealed a predominantly male car ownership group, with men making up 78.6% of the respondents, while females

accounted for 21.1%. This gender disparity reflects the socio-cultural norms in Northern Nigeria, where women's mobility and engagement in public activities are often limited. In terms of occupation, most respondents (78.1%) were categorized as individuals in non-driving roles, while 21.9% were commercial drivers. Additionally, a majority of car owners (60.7%) reported having an average level of technical knowledge about automobiles, with 25.4% expressing low technical knowledge and only 13.9% possessing high technical expertise. This suggests that while most car owners have basic awareness of car mechanics, fewer have in-depth knowledge. In terms of geographic distribution, more respondents were from Chanchaga (57.5%) compared to Bosso (42.5%), which can be attributed to Chanchaga's higher number of political wards. The age of the car owners ranged from 22 to 68 years, with an average age of 36.31 years, showing a diverse age group participating in the study. This demographic composition provides essential context for understanding the ethical climate and customer satisfaction levels among auto mechanics in the Minna metropolis.

Table 1. Variance Inflation Factor (VIF) Collinearity Statistics For Inner Model

Variable	**Customer Satisfaction**
Customer Satisfaction	
Fair treatment	2.207
Professional competence	2.468
Transparency	2.291
Trustworthiness	1.959

Source: Author's Fieldwork (2024)

Table 1 reveals the analysis of collinearity within the context of Structural Equation Modeling (SEM) was assessed using the Variance Inflation Factor (VIF), a metric commonly used to gauge the extent of collinearity between predictor variables (Hair et al., 2019). In this study, VIF values for the predictor variables of Fair Treatment, Professional Competence, Transparency, and Trustworthiness were calculated at 2.207, 2.468, 2.291, and 1.959, respectively. Since these values are well below the threshold of 5, which typically signals potential collinearity issues, the analysis suggests that collinearity is not a concern in this dataset (Wang et al., 2021). Therefore, the model can accurately evaluate the individual impact of each predictor on the dependent variable, Customer Satisfaction, without the complications associated with collinearity (Hair et al., 2020).

Table 2. Summary of Relaibility and Validity Statistics

Variable	Cronbach's alpha	Composite reliability (rho)	Composite reliability (rho)	Average variance extracted (AVE)
Customer satisfaction	0.912	0.916	0.932	0.696
Fair treatment	0.879	0.89	0.912	0.676
Professional competence	0.839	0.845	0.886	0.610
Transparency	0.805	0.81	0.885	0.719
Trustworthiness	0.878	0.882	0.911	0.671

Source: Author's Computation

The reliability and validity analysis of the research measurement framework in table 2 provides valuable insights into the quality of the measured variables. The reliability indicators, including Cronbach's alpha, composite reliability (rho), and average variance extracted (AVE), highlight the consistency and robustness of the measurements (Hair et al., 2021). The variable "Customer Satisfaction" achieved a high Cronbach's alpha of 0.912, demonstrating strong internal consistency. Its composite reliability (rho) and AVE values of 0.916 and 0.932, respectively, further support the reliability and convergent validity of the construct, as they indicate substantial variance capture.

For other variables such as "Fair Treatment," "Professional Competence," "Transparency," and "Trustworthiness," the Cronbach's alpha values range from 0.805 to 0.879, indicating acceptable to strong internal consistency. The composite reliability scores, ranging from 0.81 to 0.89, reinforce these findings (Hair et al., 2019). The AVE values for these variables, ranging from 0.885 to 0.912, also indicate a high proportion of variance is captured, thus supporting their convergent validity. The model fit criteria for the study, including NFI (0.839), TLI (0.854), and CFI (0.871), indicate acceptable fit levels (Habibi et al., 2022). Typically, values above 0.90 are considered excellent, but values close to or above 0.80 are generally considered satisfactory in social science research (Yan et al., 2022). These values suggest that the model exhibits a reasonable fit, though some improvements may be needed for optimal performance.

Table 3. Path and Significance of Path Coefficient

Variable	Path coefficient	Sample mean (M)	t statistics	p values
Fair treatment > Customer satisfaction	0.484	0.482	8.65	0.000
Professional competence -> Customer satisfaction	0.191	0.195	2.859	0.004
Transparency -> Customer satisfaction	0.135	0.136	2.072	0.038
Trustworthiness -> Customer satisfaction	0.066	0.064	0.97	0.332

Source: Author's Computation, 2024

Table 3 presents the results of hypothesis testing, revealing significant relationships between certain ethical climate dimensions and customer satisfaction. Fair treatment, professional competence, and transparency all have positive and statistically significant effects on customer satisfaction, with p-values well below the 0.05 threshold. Conversely, trustworthiness does not show a significant effect, as its p-value (0.332) exceeds the acceptable level, confirming the acceptance of the null hypothesis for this variable. The R-squared and adjusted R-squared values (0.593 and 0.589, respectively) demonstrate that the ethical climate explains a substantial portion (58.9%) of the variance in customer satisfaction, with fair treatment having the strongest predictive value (48.4%). Other dimensions like trustworthiness, transparency, and professional competence contribute less significantly, with predictive values ranging from 6.6% to 19.1%. The study concludes that ethical climate dimensions, particularly fair treatment, transparency, and professional competence, play a significant role in enhancing customer satisfaction among auto mechanics in Minna Metropolis.

The findings of this study provide valuable insights into the relationship between ethical climate and customer satisfaction among auto mechanics in Minna metropolis, Niger State. Through the exploration of key ethical climate dimensions of trustworthiness, transparency, fair treatment, and professional competence, the study sought to understand how these factors influenced customer satisfaction.

Trustworthiness, while perceived positively by customers, did not show a statistically significant effect on customer satisfaction. Trustworthiness, although positively related to customer satisfaction, did not exhibit a statistically significant effect. This finding warrants deeper contextual interpretation beyond conventional expectations. One possible explanation lies in the informal and highly competitive nature of the auto mechanic sector in Minna, where customers are not strongly tied to specific service providers. As earlier noted, the availability of multiple alternative mechanics reduces dependency on any single provider, thereby weakening the role of trust as a determinant of satisfaction. This finding contrasts with previous studies, such as those by Barusman (2019) and Givan et al. (2021), where trustworthiness was found to be a crucial determinant of customer satisfaction in e-commerce. In those contexts, trust was central to building long-term customer

loyalty. However, in the auto mechanic industry, customers may perceive a higher level of availability of alternatives, which reduces the importance placed on trust as a key factor. This is consistent with Social Exchange Theory, which suggests that trust is important in stable relationships, but its impact may be weakened when customers perceive a lack of dependency or a wide array of substitutes available. In Minna, the customers' ability to switch mechanics easily likely diminishes the effect trust has on their overall satisfaction.

Beyond competition, cultural and behavioral norms within informal service markets may also shape this outcome. In many developing economy contexts, including Nigeria, customers often approach artisan services with pre-existing skepticism, expecting some level of opportunistic behavior (e.g., price inflation or unnecessary repairs). As a result, trustworthiness may be perceived not as a differentiating factor but as a baseline expectation or even a contested attribute, limiting its measurable impact on satisfaction.

Furthermore, the findings can be interpreted through the lens of transactional versus relational exchange dynamics. Unlike formal service settings where long-term relationships are cultivated, interactions between auto mechanics and customers in informal clusters tend to be short-term and transaction-driven. Under such conditions, customers prioritize observable and immediate service outcomes—such as fair pricing, transparency, and technical competence—over abstract relational constructs like trustworthiness. Additionally, the result reflects the institutional characteristics of informal industries, where weak regulation and a lack of standardized pricing mechanisms shift customer evaluation criteria toward tangible service cues. Consequently, dimensions such as transparency and fairness become more salient signals of value, overshadowing the influence of trustworthiness.

Building on this, transparency emerged as a significant factor in influencing customer satisfaction. The positive relationship found in this study supports Transparency Theory, which emphasizes the importance of clear and open communication in fostering trust and customer satisfaction. Previous studies by Kim et al. (2020) and Quach et al. (2022) have reinforced this view, highlighting that transparency helps reduce uncertainty, making customers feel more in control and valued. For auto mechanics, providing transparent communication about repair processes, costs, and timelines appears to strengthen customer trust and satisfaction. When customers feel informed and involved in the service process, they are more likely to express satisfaction, as it aligns with their expectations and perceived value. Fair treatment, particularly in pricing and service delivery, also played a significant role in customer satisfaction. This finding aligns with the Social Exchange Theory, which suggests that fairness in interactions leads to positive outcomes. In line with the work of Alzoub et al. (2020) and Atmaja and Yasa (2020), fairness, especially regarding cost transparency and equitable treatment, proved essential in fostering customer satisfaction. When customers perceive that they are treated fairly, especially in terms of pricing, their satisfaction and trust in the mechanic's business grow. Fairness reduces feelings of exploitation, increases trust,

and encourages repeat business, which is critical for long-term customer relationships in the service sector.

Lastly, professional competence was found to have a significant positive impact on customer satisfaction. This finding reinforces the tenets of Human Capital Theory, which posits that the knowledge and skills of employees are fundamental to the quality of service and, by extension, customer satisfaction. Similar results have been documented in various industries, including banking (Mekonen et al., 2019) and real estate (Yeh et al., 2020), where competence was identified as a key driver of customer satisfaction. In the context of auto mechanics, customers' satisfaction levels increase when they perceive their mechanics as skilled and capable of performing repairs efficiently. Professional competence assures customers that their vehicles are in capable hands, which directly enhances their overall satisfaction and loyalty. Taken together, the findings suggest that while trustworthiness may have a lower impact in the context of auto mechanics due to the availability of alternatives, transparency, fair treatment, and professional competence are all key drivers of customer satisfaction. These results highlight the importance of clear communication, fairness in pricing, and the technical expertise of auto mechanics in fostering positive customer experiences. Theories like Transparency Theory, Social Exchange Theory, and Human Capital Theory provide a robust framework for understanding how these dimensions contribute to customer satisfaction, emphasizing the importance of ethical behavior and professionalism in service industries.

The findings of this study both align with and diverge from prior research, particularly when contextual differences are considered. Consistent with studies in service industries, dimensions such as fair treatment, transparency, and professional competence have been widely identified as strong predictors of customer satisfaction (Mohamed et al., 2022; Taştan & Davoudi, 2019). These results reinforce the argument that observable service attributes play a dominant role in shaping customer perceptions, especially in environments characterized by uncertainty.

However, the non-significant effect of trustworthiness contrasts with findings from more formalized sectors, such as e-commerce and banking, where trust is often a central determinant of customer loyalty (Barusman, 2019; Givan et al., 2021). This divergence suggests that the importance of trust may be context-dependent, diminishing in informal and highly competitive service environments.

In relation to other developing and informal sector contexts, the findings are more consistent. For example, studies in African service sectors (e.g., informal healthcare and small-scale enterprises in Ghana) indicate that customers tend to rely more on tangible indicators such as service quality, fairness, and responsiveness rather than trust alone (Boadi et al., 2019). Similarly, research on artisan and informal businesses highlights that customer satisfaction is often driven by immediate service outcomes rather than long-term relational factors, due to low switching costs and weak institutional enforcement.

Although this study focuses on auto mechanics within the informal sector, its relevance extends to the broader field of public administration, particularly in understanding service delivery in contexts characterized by weak formal institutions. In many developing countries, informal service providers such as auto mechanics function as quasi-public service actors, filling gaps where formal regulatory and service systems are limited or ineffective (Mogaji, 2025). As noted in prior studies, artisans play a critical socio-economic role and operate within loosely structured environments that shape their ethical practices and service outcomes (Ugwuneke et al., 2025; Rachidi, 2014). From a public administration perspective, this reflects a form of informal governance, where service quality, accountability, and citizen satisfaction are influenced not by formal rules alone but by everyday interactions and ethical norms. Therefore, examining ethical climate and customer satisfaction in this context contributes to public administration literature by highlighting how ethical behavior and service performance emerge outside formal bureaucratic systems, offering insights into improving service delivery, accountability, and citizen trust in hybrid governance environments.

The findings of this study can also be more deeply understood when linked to a non-Western public administration perspective, which emphasizes the importance of social context, institutions, and informality in shaping service behavior (Drechsler, 2015). Contrary to assumptions in Western literature that tend to place trust as the primary foundation of service relationships, studies of public administration in the Global South context show that in systems dominated by informal institutions and weak regulatory mechanisms, trust often does not function as a primary factor in service evaluation (Helmke & Levitski, 2004; Wal et al., 2021). Instead, service users rely more heavily on directly observable indicators, such as transparency, fairness, and service outcomes.

In the context of Africa and other developing countries, service practices, both in the public and informal sectors, often operate within what are referred to as practical norms, unwritten rules governing interactions between service providers and users (Herdt & Olivier, 2015). In such systems, customers tend to develop adaptive strategies, including skepticism of service providers, so that trustworthiness is no longer a primary differentiating factor but rather a minimum expectation that is not necessarily consistently met. This aligns with the findings of this study, where trustworthiness has no significant effect on customer satisfaction, while more concrete dimensions such as fairness and transparency are key determinants.

Furthermore, non-Western public administration literature also highlights that in contexts with high levels of competition and low switching costs, relationships between service providers and users tend to be transactional (Eiró & Lotta, 2023; Herdt & Olivier, 2015; Mangla, 2022). This situation diminishes the importance of building long-term trust and enhances the role of directly perceived service performance in determining satisfaction. Therefore, the findings of this study not only enrich the services marketing literature but also contribute to the study of non-Western public administration by demonstrating how the dynamics

of informality and institutional context moderate the role of ethical values in service delivery.

Conclusion

In conclusion, this study aimed to assess the impact of ethical climate dimensions on customer satisfaction among auto mechanics in Minna metropolis, Niger State. Through a survey of 402 registered car owners and the application of Structural Equation Modeling (SEM-PLS 4), the study found that Transparency, Fair treatment, and Professional competence significantly contribute to customer satisfaction, accounting for approximately 60% of the variance in satisfaction levels. While Trustworthiness showed a positive but statistically insignificant relationship with customer satisfaction, the findings indicate that focusing on the three significant ethical dimensions can lead to improvements in service delivery. These results highlight the importance of ethical behavior in the auto repair industry, emphasizing that enhancing an ethical climate can foster trust and improve customer loyalty, ultimately leading to business success.

The study's recommendations reflect the key dimensions identified in the findings. The Nigerian Automobile Technician Association (NATA) should prioritize building trustworthiness among auto mechanics, recognizing its foundational role in ethical business practices despite its limited statistical significance. NATA can achieve this through targeted training programs that enhance communication skills, moral awareness, and customer engagement. Furthermore, the study advocates for transparent communication between mechanics and customers, ensuring that repair processes, costs, and potential outcomes are clearly explained. This transparency can demystify complex technical processes and strengthen customer trust. Additionally, NATA should encourage fair treatment through training on conflict resolution and unbiased service delivery. Mechanics should learn to provide services based on the actual needs of the vehicle, rather than upselling unnecessary services, which will foster trust and improve customer satisfaction.

This study contributes significantly to the body of knowledge by providing empirical evidence of the relationship between ethical climate dimensions and customer satisfaction in the auto repair industry. It advances theoretical understanding by identifying specific ethical climate factors, such as transparency, fair treatment, and professional competence, that impact customer satisfaction. The research also offers valuable contextual insights into the practices that most influence customer perceptions in the Minna region of Nigeria, adding to the understanding of service industries in similar contexts. The findings suggest that auto repair businesses should integrate ethical considerations into their business strategy, focusing on these dimensions to improve service quality and customer loyalty.

This study also contributes to the public administration literature by demonstrating that service delivery outcomes in informal sectors are shaped by

ethical practices operating outside formal bureaucratic systems. From a non-Western public administration perspective, the findings highlight how informal actors function as quasi-public service providers, where transparency, fairness, and competence—rather than trust alone—play a central role in shaping citizen satisfaction in contexts of weak institutional regulation.

However, the study has a limitation, which is that its reliance on a cross-sectional research design restricts the ability to draw strong causal inferences between ethical climate dimensions and customer satisfaction. While the findings reveal significant associations, they do not capture how these relationships may evolve over time or in response to changes in customer experiences and service practices. Future studies are therefore encouraged to adopt longitudinal approaches to provide deeper insights into the causal dynamics and stability of these relationships. In addition, the study opens the door for future research to explore the relationship between ethical training, service quality, and customer satisfaction, and to employ mixed research methods for a more nuanced understanding of these dynamics. By extending these investigations, future studies can refine and expand the practical applications of this research, ensuring that ethical climate remains a central pillar in enhancing customer satisfaction across the industry.

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