*Original Research Article*

Prevalence and Determinants of Transactional Sex among Commercial Drivers in Southwest, Nigeria

.

ABSTRACT

|  |
| --- |
| **Background:** Commercial drivers constitute a high-risk population for the acquisition and transmission of Sexually Transmitted Infections (STIs), a vulnerability largely attributed to their occupational mobility, frequent interstate travel, and engagement in high-risk sexual behaviours.  **Objective:** This is a cross-sectional study aimed at determining the prevalence and examining the socio-demographic and behavioural determinants of transactional sex among male commercial drivers in the southwestern region of Nigeria.  **Methods:** Data were collected using a structured questionnaire, digitized via Google Forms, which was administered both in person and distributed through social media platforms affiliated with commercial driver and rider groups. The survey instrument elicited information on socio-demographic, economic, behavioural patterns, and health-related characteristics of respondents. Chi-square tests were employed to assess association between categorical variables, while binary logistic regression models were fitted to examine predictors of transactional sex, a respondent engaging in transactional sex within the preceding six months taken as dependent variable.  **Results:** Findings revealed that 64.5% of respondents initiated sexual activity between the ages of 12 and 18 years, with a mean age at sexual debut of years (standard deviation years). The prevalence of transactional sex varied across sub-groups: motorcycle riders (64.2%), tricycle operators (64.6%), taxi drivers (68.5%), bus drivers (75.0%) and ride-hailing drivers (76.3%). A statistical significant association between vehicle operated and transactional sex was observed in Lagos , Oyo , and Ogun states but not in Osun , Ondo , and Ekiti states. Age, marital status, and vehicle operated were identified as significant predictors in the binary logistic regression while age, religion, marital status, vehicle operated, interstate travels, and smoking behaviour were significant predictors in the multivariable logistic regression.  **Conclusion/Recommendation:** This study establishes that transactional sex is prevalent among commercial drivers in Southwest, Nigeria. The analysis identified several predisposing factors, including age, religious affiliation, marital status, type of vehicle operated, engagement in interstate travel, and smoking behaviour. These findings underscore the importance of context-specific interventions aimed at addressing the underlying socio-demographic and occupational determinants of high-risk practices in this population. |

**Keywords:** Commercial drivers, Transaction, Southwest, Prevalence, Determinants, Gain

1. INTRODUCTION

Transactional sex, broadly defined as the exchange of sexual activities for material gain–such as money, goods, favours, or services–has been widely recognized as a major global public health concern, primarily because of its role in facilitating the transmission of Human Immunodeficiency Virus (HIV) and other Sexually Transmitted Infections (STIs) (Choudhry et al., 2014; Olayiwola et al., 2022; Ige & Solanke, 2021). This practice is particularly prevalent in sub-Saharan Africa, where socio-economic disparities, gender inequality, and limited access to educational and employment opportunities contribute to its persistence (Ige & Solanke, 2021).

In Nigeria, numerous studies have documented the widespread occurrence of transactional sex, especially among vulnerable populations, including young women (Mensah, 2020), adolescents (Adeusi et al., 2020; Olorunsola et al., 2021; Ezumah et al., 2021), and students in tertiary institutions (Ige & Solanke, 2021). Among university and college students, transactional sex is often employed as a survival strategy to manage financial constraints or to sustain a desired standard of living (Olayiwola et al., 2022; Fadahunsi et al., 2025). Despite the growing scholarly attention to these groups, empirical investigations into the involvement of commercial drivers in transactional sex remain limited and fragmented. This paucity of research presents a significant gap in the literature, particularly given the potential public health implications and the socio-behavioural risks associated with this occupational group.

Empirical evidence has consistently highlighted the heightened vulnerability of truck drivers to HIV/AIDS, both in terms of their risk of contracting the virus and serving as potential vectors for its transmission across geographic regions (Roy et al., 2010). Similar patterns of elevated sexual risk have been observed among other categories of commercial drivers, including taxi, bus, and motorcycle operators (Lakew & Tamene, 2014; Odeyemi & Osibogun, 2007; Kakwagh, 2018). For instance, Laikemariam & Fetene (2023) documented a high prevalence of risky sexual behaviours among taxi drivers in northwestern Ethiopia. In Nigeria, Ekanem et al. (2005) reported the existence of extensive sexual networks among commercial bus drivers and motor park attendants in Lagos, involving interactions with female hawkers, market women, schoolgirls, and commercial sex workers. Similarly, Roy et al. (2010) found that among rural-to-urban migrant men in Dhaka, Bangladesh, those who were unmarried or married but were often away from home had significantly higher odds of engaging in risky sexual behaviour. Complementing these findings, Adeoye (2005) reported that nearly two-thirds of the investigated commercial motorcycle had sexual partners, and approximately one-quarter were infected with HIV.

This study aims to assess the prevalence and determinants of transactional sex among commercial drivers in southwestern region of Nigeria. Findings from this study is believed to inform the development of properly structured and health interventions tailored to this occupational group.

2. materialS and methods

**2.1 Study area**

This cross-sectional study was conducted between December 2024 and March 2025 in the southwestern region of Nigeria. The southwestern region is predominantly home to the Yoruba ethnic group (Falola & Genova, 2006, p.1), and consists of six states: Lagos, Oyo, Ogun, Osun, Ondo, and Ekiti states. Each state is governed by an elected governor, whose seat is at the administrative capital of the state. This region has historically been, and remains, a significant economic hub for Nigeria, housing three of the country’s seven seaports and one of its five functional international cargo airports.

**2.2 Selection criteria and survey instrument administration**

The survey targeted only commercial drivers and riders operating in the southwestern states of Nigeria. A structured questionnaire was developed, digitized using Google forms–a mobile data collection platform-to reduce paper cost, coding error and encourage wider reach, and subsequently published. The link to the form was shared with participants through WhatsApp platforms designated by the associations of the commercial drivers or riders in each state, via a person delegated by the park’s manager. In areas where a functional social media platform was non-existent, two trained fieldworkers administered the electronic questionnaire directly to drivers and riders who were willing and consented to participate.

The survey instrument (or questionnaire) consisted of thirty-one items, divided into four sections, covering socio-demographic and economic status, sexual debut, social interaction and health status of the participants. The questionnaire took approximately ten (10) minutes to complete. A total of three thousand, seven hundred and sixty-six respondents, comprising drivers and riders, participated in the survey. However, two hundred and twenty-four respondents were excluded from the study because they had not had sexual intercourse within the past six months. Consequently, a total of three thousand five hundred and forty-two respondents were left for analysis.

**2.3 Research variables**

A description of items in the survey instrument is presented on Table 1. The dependent variable was the response to the item “whether or not a commercial driver engaged in transactional sex,” while all other items were considered potential explanatory, or independent, variables. All items in the survey were closed-ended and measured on the categorical scale, either as a dichotomous or polytomous variable.

**Table 1: Description of items on the survey instrument**

|  |  |
| --- | --- |
| **Variable** | **Categorical type** |
| **Dependent Variable** | |
| ***Do you engage in commercial (transactional) sex?*** 1 = No; 2 = Yes | Dichotomous |
| **Independent/explanatory Variable** | |
| ***Age (in years):*** 1 = 18 - 24; 2 = 25 - 34; 3 = 35 - 44; 4 = 44 - 55;  5 = Above 55 | Polytomous |
| ***Religion:*** 1 = Christianity; 2 = Islam; 3 = Traditional | Polytomous |
| ***Education:*** 1 = No formal education; 2 = Vocational training (e.g. carpentry, plumbing etc.); 3 = Primary education; 4 = Secondary education;  5 = Tertiary education | Polytomous |
| ***Marital status:*** 1 = Single; 2 = Married; 3 = Separated/Divorced;  4 = Widower | Polytomous |
| ***Family type:*** 1 = Monogamous; 2 = Polygamous | Dichotomous |
| ***Your Family type:*** 1 = Monogamous; 2 = Polygamous | Dichotomous |
| ***Driving:*** 1 = Motorcycle; 2 = Tricycle; 3 = Taxi; 4 = Public Bus;  5 = Ride hailing | Polytomous |
| ***Ownership:*** 1 = I own it; 2 = Leased/Rented | Dichotomous |
| ***Driving duration (in years):*** 1 = Below 1; 2 = 1 - 3; 3 = 4 - 6; 4 = 7 - 9;  5 = 10 - 12; 6 = Above 12 | Polytomous |
| ***Do you engage in interstate travels?*** 1 = No; 2 = Yes | Dichotomous |
| ***Profit from driving (₦):*** 1 = 2000 - 15000; 2 = 15001 - 30000;  3 = 30001 - 45000; 4 = 45001 - 55000; 5 = Above 55000 | Polytomous |
| ***Do you smoke:*** 1 = No; 2 = Yes | Dichotomous |
| ***Do you consume alcohol?*** 1 = No; 2 = Yes | Dichotomous |
| ***Age at sexual debut (in years):*** 1 = 12 -18; 2 = 18 - 23; 3 = 24 - 30;  4 = Above 30 | Polytomous |
| ***Sexual partner at sexual debut:*** 1 = Friend; 2 = Wife; 3 = Sex worker;  4 = Cannot remember | Polytomous |
| ***Had sex in last six months?*** 1 = No; 2 = Yes | Dichotomous |
| ***Do you take psychoactive drugs or drinks before sex?*** 1 = No; 2 = Yes | Dichotomous |
| ***Why do you have sex with more than one woman?*** 1 = I enjoy sex;  2 = My faith supports it; 3 = My family agrees with it; 4 = I have problem with my wife; 5 = It gets me relaxed | Polytomous |

**2.4 Ethical approval**

This study received approval from the Institutional Review Board of the Federal Polytechnic, Ile-Oluji, Ondo State. While respondents’ anonymity and confidentiality were strictly upheld, the interviewers ensured that the purpose of the survey and the items in the survey instrument were clearly explained to the drivers and/or riders present at each vehicle, or riders’ park. Verbal consents were obtained from participants before they were included in the study. To protect anonymity, information that could reveal the identity of participants, such as participant’s name, email address, were excluded from the survey instrument.

**2.5 Statistical analysis**

The socio-behavioural characteristics of the respondents were analysed using frequency distribution. The prevalence of transactional sex among commercial drivers in each southwestern state of Nigeria, as well as in the pooled dataset, was assessed using the chi-square test. This analysis, conducted at a ninety-five percent confidence interval, examined the association between being a commercial driver in southwestern Nigeria and engaging in transactional sex.

A bivariate logistic regression was conducted on the pooled data to identify the socio-behavioural variables influencing the likelihood of a commercial driver, or rider, engaging in transactional sex. Subsequently, all the variables were included in a multivariable logistic regression to assess their combined contribution to the likelihood of such engagement in transactional sex. All analyses were carried out at the 95% confidence level using the Statistical Packages for Social Sciences (SPSS), Version 21.0.

3. results

**3.1 Socio-demographic characteristics of respondents**

Three thousand, seven hundred and sixty-six participants were involved in the survey. However, two hundred and twenty-four respondents were excluded from the study. This was because they had not had sexual intercourse within the past six months, consequently leaving a total of three thousand five hundred and forty-two eligible respondents for analysis. Of these, one thousand, two hundred and forty-nine participants (35.3%) were from Lagos state, six hundred and twenty-nine (17.8%) participants were from Oyo state, five hundred and fifty-one (15.6%) from Ogun state, three hundred and sixty-four (10.3%) from Osun state, four hundred and fifty-six (12.9%) from Ondo state, and two hundred and ninety-three (8.3%) from Ekiti state. A majority of the participants (approximately 60.1%) were between thirty-five and fifty-five years of age. The mean age of the respondents was 40.26 years (standard deviation = 10.45years).

A majority (54.7%) of the commercial drivers identified as Muslim, while 27.5% practiced Christianity and 17.8% adhered to traditional religious beliefs. Most participants (77.8%) had completed at least primary education but did not advance beyond the secondary school level. The vast majority (81.6%) of the drivers were married, with 57.8% of these in the monogamous unions. 3.2% were single while 15.1% were separated/divorced from their spouses.

Public bus drivers made up the largest proportion of participants (28.7%), followed by taxi drivers (23.7%) and ride-hailing service drivers (17.4%). Tricycle operators and motorcycle riders constituted the smallest groups, representing 16.3% and 13.9% of the eligible respondents, respectively. About 37.9% of the respondents reported engaging in interstate travel. The average weekly income among drivers in the region was ₦20,663.56 (standard deviation=₦8526.29), falling within the modal income bracket (₦15001-₦30000), earned commonly among public bus drivers. The modal age for sexual debut (that is, age at first sexual intercourse) was 12 – 18 years with 64.5% reporting first sexual experience within this range. The mean age of sexual debut was 17.28 years (standard deviation=3.40 years). Of the eligible participants, two thousand, four hundred and ninety-seven (70.5%) reported engaging in transactional sex while working as a driver (Table 2).

Table 2: Socio-behavioural characteristics of the participants of the survey

|  |  |  |
| --- | --- | --- |
| **Characteristic** | **Count** | **Percent (%)** |
| **Age (in years)** |  |  |
| 18 - 24 | 211 | 6.0 |
| 25 - 34 | 1146 | 32.4 |
| 35 - 44 | 521 | 14.7 |
| 45 - 55 | 1607 | 45.4 |
| Above 55 | 57 | 1.6 |
| **Religion** |  |  |
| Christianity | 974 | 27.5 |
| Islam | 1936 | 54.7 |
| Traditional | 632 | 17.8 |
| **Educational level** |  |  |
| No formal education | 253 | 7.1 |
| Primary education | 1490 | 42.1 |
| Secondary education | 1266 | 35.7 |
| Tertiary education | 533 | 15.0 |
| **Marital status** |  |  |
| Single | 114 | 3.2 |
| Married | 2892 | 81.6 |
| Separated/Divorced | 536 | 15.1 |
| **Family type** |  |  |
| Monogamy | 1916 | 54.1 |
| Polygamy | 1626 | 45.9 |
| **Type of driving** |  |  |
| Commercial motorcycle | 492 | 13.9 |
| Commercial tricycle | 579 | 16.3 |
| Taxi | 838 | 23.7 |
| Public Bus | 1018 | 28.7 |
| Ride hailing | 615 | 17.4 |
| **Do you do inter-state travels?** |  |  |
| No | 2198 | 62.1 |
| Yes | 1344 | 37.9 |
| **Weekly earnings (₦)** |  |  |
| 2000 - 15000 | 904 | 25.5 |
| 15001 - 30000 | 2228 | 62.9 |
| 30001 - 45000 | 410 | 11.6 |
| **Age at sexual debut (in years)** |  |  |
| 12 - 18 | 2286 | 64.5 |
| 18 - 23 | 1072 | 30.3 |
| 24 - 30 | 184 | 5.2 |
| **Transactional sex** |  |  |
| No | 1045 | 29.5 |
| Yes | 2497 | 70.5 |

**Source:** Fieldwork, 2024

**3.2 Prevalence of transactional sex among commercial drivers in southwestern Nigeria**

The prevalence of transactional sex among commercial drivers in Southwest Nigeria was notably high. As shown on Table 3, 64.2% of commercial motorcycle riders, 64.6% of commercial tricycle operators, 68.5% of taxi drivers, 75.0% of commercial bus drivers and 76.3% of ride-hailing drivers reported engaging in transactional sex. Bivariate analysis of the data, stratified by state, examined the association between the type of commercial vehicle class operated and involvement in transactional sex within the past six months. Significantly significant associations were found in Lagos state (χ2=11.284, p-value<0.05), Oyo state (χ2=22.798, p-value<0.001), and Ogun state (χ2=35.106, p-value<0.001), indicating that the vehicle type was significantly related to engagement in transactional sex in these states. In contrast, no significant association was observed in Osun state (χ2=2.218, p-value=0.696), Ondo state (χ2=5.453, p-value=0.244), or Ekiti state (χ2=1.027, p-value=0.906), suggesting that vehicle type was not a major influencing factor for engaging in transactional sex in those states.

The pooled dataset comprising all the six Southwest Nigerian states, the overall prevalence of transactional sex among commercial drivers was 70.5%. A bivariate analysis examining the relationship between the type of vehicle operated and drivers’ involvement in transactional sex within the past six months revealed a statistically significant association (χ2=40.574, p-value<0.001). This indicated that the commercial vehicle used was a significant factor influencing engagement in transactional sex among commercial drivers across the region, as presented on Table 3.

Table 3: Engagement of respondents in transactional sex (Yes/No) vs type of vehicle driven by states in southwest, Nigeria

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Location** | **Motorcycle** | | **Tricycle** | | **Taxi** | | **Bus** | | **Ride hailing** | |  |
| **Yes**  **[N(%)]** | **No**  **[N(%)]** | **Yes**  **[N(%)]** | **No**  **[N(%)]** | **Yes**  **[N(%)]** | **No**  **[N(%)]** | **Yes**  **[N(%)]** | **No**  **[N(%)]** | **Yes**  **[N(%)]** | **No**  **[N(%)]** |
| **Lagos** | 77 (78.6) | 21 (21.4) | 102 (75.0) | 34 (25.0) | 107 (84.9) | 19 (15.1) | 369 (71.2) | 149 (28.8) | 281 (75.7) | 90 (24.3) | 11.284\* |
| **Oyo** | 50 (92.6) | 4 (7.4) | 92 (100.0) | 0 (0.0) | 121 (100.0) | 0(0.0) | 274 (98.9) | 3 (1.1) | 85 (100.0) | 0 (0.0) | 22.798\*\*\* |
| **Ogun** | 55 (64.0) | 31 (36.0) | 67 (59.3) | 46 (40.7) | 153 (80.1) | 38 (19.9) | 46 (51.7) | 43 (48.3) | 59 (81.9) | 13 (18.1) | 35.106\*\*\* |
| **Osun** | 46 (59.0) | 32 (41.0) | 38 (50.0) | 38 (50.0) | 72 (49.3) | 74 (50.7) | 22 (51.2) | 21 (48.8) | 10 (47.6) | 11 (52.4) | 2.218 |
| **Ondo** | 53 (50.5) | 52 (49.5) | 46 (45.5) | 55 (54.5) | 75 (45.2) | 91 (54.8) | 27 (64.3) | 15 (35.7) | 20 (47.6) | 22 (52.4) | 5.453 |
| **Ekiti** | 35 (49.3) | 36 (50.7) | 29 (47.5) | 32 (52.5) | 46 (52.3) | 42 (47.7) | 26 (53.1) | 23 (46.9) | 14 (58.3) | 10 (41.7) | 1.027 |
| **Southwest region**  **(All six states)** | 316 (64.2) | 176 (35.8) | 374 (64.6) | 205 (35.4) | 574 (68.5) | 264 (31.5) | 764 (75.0) | 254 (25.0) | 469 (76.3) | 146 (23.7) | 40.574\*\*\* |

**3.3 Determinants of transactional sex among commercial drivers**

The univariate and multivariable logistic regression analyses of the dependent variable-engagement in transactional sex by commercial drivers or riders within the past six months-on various independent variables is presented on Table 4. The univariate logistic regression models assessed the relationship between the dependent variable and each independent variable individually, without adjusting for other factors while the multivariable logistic regression model included all independent variables simultaneously, allowing for the assessment of potential confounding effects. The result, on Table 4, revealed that age was significantly associated with engagement in transactional sex. In the univariate model, drivers aged 18–24 years, 25–34 years, 35–44 years, and 45–55 years had significantly higher odds of engaging in transactional sex compared to those aged 55 years and above. Specifically, the odds increased by 92% (1.05≤OR≤3.51), 91% (1.11≤OR≤3.27), 91% (1.10≤OR≤3.34) and 86% (1.09≤OR≤3.18), respectively. After adjusting for other factors in the multivariable model, commercial drivers aged 18–24 years, 25–34 years, 35–44 years, and 45–55 years had significantly higher odds of engaging in transactional sex compared to those aged 55 years and above, with increases of 86% (1.01≤OR≤3.42), 89% (1.10≤OR≤3.27), 91% (1.09≤OR≤3.37), and 84% (1.07≤OR≤3.16), respectively. Using Christian faith as the reference category, drivers who identified as Muslim had higher odds of engaging in transactional sex, though the association was not statistically significant, 16% (0.99≤OR≤1.38) higher in the unadjusted model and 15% (0.97≤OR≤1.37) in the adjusted model. Conversely, drivers who reported adherence to the traditional religion faith had a non-significant 23% (0.99≤OR≤1.53) in odds in the univariate model, but this became statistically significant in the adjusted model with a 31% (1.03≤OR≤1.67) higher likelihood in engaging in transactional sex. In the univariate model, commercial drivers who were married and those who were separated or divorced had statistically significantly higher odds of engaging in transactional sex compared to single/never married drivers. Married drivers were 59% (1.08≤OR≤2.34) significantly more likely while separated or divorced drivers were 55% (1.02≤OR≤2.35) significantly more likely in the univariate model. In the multivariable model, Married drivers were 67% (1.12≤OR≤2.47) significantly more likely while separated or divorced drivers were 72% (1.09≤OR≤2.72) significantly more likely to engage in transactional sex than single/unmarried drivers.

Regarding the type of vehicle driven, the univariate model showed that commercial tricyclists had a non-significant 2% (0.79≤OR≤1.31) higher odds of engaging in transactional sex compared to commercial motorcyclists, while taxi drivers had a non-significant 21% (0.96≤OR≤1.53) higher odds. In contrast, drivers of public buses and those working with ride-hailing services companies had significantly higher odds of 68% (1.33≤OR≤2.11) and 79% (1.38≤OR≤2.32), respectively than commercial motorcycle riders. In the multivariate model, the odds for commercial tricyclists were 2% (0.76≤OR≤1.26) lower than for commercial motorcyclists, though not statistically significant. However, the odds remained significantly higher for taxi drivers (27% (1.00≤OR≤1.62)), public bus drivers (82% (1.44≤OR≤2.32)), and ride-hailing cab drivers (92% (1.47≤OR≤2.51)) when compared to commercial motorcycle riders. Commercial drivers who engaged in interstate travel had a 12% (0.96≤OR≤1.30) higher odds of engaging in transactional sex compare to those who did not, though this association was not statistically significant in the unadjusted model. However, in the adjusted model, the association became significant, with a 44% (1.19≤OR≤1.74) higher odds. Similarly, drivers who smoked had a non-significant 12% (0.90≤OR≤1.40) higher odds of engaging transactional sex in the unadjusted model, which became statistically significant in the adjusted model, showing 62% (1.08≤OR≤2.43) increased odds compared to non-smokers. Other factors included in the model (educational attainment, ownership of vehicle/tricycle/motorcycle, weekly earnings, alcohol consumption, sexual debut, and use of psychoactive drugs during sex) were not significantly associated with engagement in transactional sex in either of the model.

Table 4: Logistic regression of factors motivating transactional sex among commercial drivers

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Variable** | **Univariate (unadjusted)** | | **Multivariate (adjusted)** | |
| **cOR (95% CI)** | **p-value** | **aOR (95% CI)** | **p-value** |
| **Age (years):** *ref (Above 55 years)* | | | | |
| 18 - 25 | 1.92 (1.05 - 3.51) | 0.034 | 1.86 (1.01 - 3.42) | 0.047 |
| 25 - 34 | 1.91 (1.11 - 3.27) | 0.019 | 1.89 (1.10 - 3.27) | 0.022 |
| 35 - 44 | 1.91 (1.10 - 3.34) | 0.022 | 1.91 (1.09 - 3.37) | 0.024 |
| 45 - 55 | 1.86 (1.09 - 3.18) | 0.023 | 1.84 (1.07 - 3.16) | 0.027 |
| **Religion:** *ref (Christianity)* | | | | |
| Islam | 1.16 (0.99 - 1.38) | 0.074 | 1.15 (0.97 - 1.37) | 0.118 |
| Traditional | 1.23 (0.99 - 1.53) | 0.065 | 1.31 (1.03 - 1.67) | 0.028 |
| **Educational status:** *ref (No formal education)* | | | | |
| Primary education | 0.92 (0.69 - 1.24) | 0.590 | 0.91 (0.63 - 1.31) | 0.604 |
| Secondary education | 0.99 (0.73 - 1.33) | 0.925 | 1.20 (0.80 - 1.80) | 0.385 |
| Tertiary | 1.06 (0.76 - 1.47) | 0.752 | 1.36 (0.92 - 2.02) | 0.123 |
| **Marital status:** *ref (Single)* | | | | |
| Married | 1.59 (1.08 - 2.34) | 0.018 | 1.67 (1.12 - 2.47) | 0.011 |
| Separated/Divorced | 1.55 (1.02 - 2.35) | 0.041 | 1.72 (1.09 - 2.72) | 0.020 |
| **Driving:** *ref (Commercial motorcycle)* | | | | |
| Commercial tricycle | 1.02 (0.79 - 1.31) | 0.901 | 0.98 (0.76 - 1.26) | 0.853 |
| Taxi | 1.21 (0.96 - 1.53) | 0.110 | 1.27 (1.00 - 1.62) | 0.046 |
| Public Bus | 1.68 (1.33 - 2.11) | < 0.001 | 1.82 (1.44 - 2.32) | < 0.001 |
| Ride hailing cabs | 1.79 (1.38 - 2.32) | < 0.001 | 1.92 (1.47 - 2.51) | < 0.001 |
| **Ownership of vehicle/tricycle/motorcycle:** *ref (Rented)* | | | | |
| Owned | 0.97 (0.83 - 1.13) | 0.702 | 0.89 (0.61 - 1.29) | 0.522 |
| **Interstate travels?:** *ref (No)* | | | | |
| Yes | 1.12 (0.96 - 1.30) | 0.138 | 1.44 (1.19 - 1.74) | < 0.001 |
| **Weekly earnings (₦):** *ref (2000 - 15000)* | | | | |
| 15001 - 30000 | 0.90 (0.75 - 1.06) | 0.208 | 1.15 (0.89 - 1.48) | 0.275 |
| 30001 - 45000 | 0.80 (0.62 - 1.03) | 0.085 | 1.20 (0.61 - 2.35) | 0.595 |
| **Do you smoke?:** *ref (No)* | | | | |
| Yes | 1.12 (0.90 - 1.40) | 0.302 | 1.62 (1.08 - 2.43) | 0.020 |
| **Do you consume alcohol?:** *ref (No)* | | | | |
| Yes | 0.97 (0.84 - 1.13) | 0.725 | 1.03 (0.79 - 1.34) | 0.840 |
| **Sexual debut (in years):** *ref (12 - 18)* | | | |  |
| 18 - 23 | 0.99 (0.84 - 1.16) | 0.869 | 1.00 (0.78 - 1.29) | 0.975 |
| 24 - 30 | 1.16 (0.82 - 1.62) | 0.400 | 1.48 (0.96 - 2.28) | 0.080 |
| **Psychoactive drugs use:** *ref (No)* | | | | |
| Yes | 0.83 (0.67 - 1.03) | 0.084 | 1.01 (0.58 - 1.78) | 0.961 |

**Note:** Dependent variable: Transactional sex (reference category: No); ref (\*) means “reference category is \*”; cOR means crude Odds Ratio; aOR means adjusted Odds Ratio

4. DISCUSSION

This study investigated the prevalence and determinants of transactional sex among male commercial drivers operating motorcycles, tricycles, taxis, buses, and ride-hailing cabs in Southwest, Nigeria. The findings revealed a notably high prevalence of transactional sex within this population. Furthermore, a significant association was observed between the type of vehicle operated and engagement in transactional sex, with this relationship varying by state. Specifically, in Lagos, Oyo and Ogun states, type of vehicle operated was statistically significantly associated with prevalence of transactional sex. In contrast, no statistically significant association was found in Osun, Ondo and Ekiti states.

The majority (92.5%) of the commercial drivers surveyed were between the 25 and 55 years, with substantial proportion (59%) having at least seven years of driving experience. This demographic profile reflects an actively energetic and experienced workforce, indicative of a high level of compliance with Nigeria’s commercial driver licensing regulations (Federal Road Safety Corps, 2024). The age distribution observed in this study aligns with findings in previous research sexual practices of commercial operators Nigeria. For instance, Abiodun (2013) reported that 92.4% of commercial motorcyclists involved in a study on HIV/AIDS awareness and sexual behaviour in Sagamu, Ogun State were above the age of 21 years. Similarly, Olarewaju et al. (2013) found that 84.3% of commercial motorcyclists in Osun State were above 25 years of age. Bako et al. (2017) documented that 67.7% of commercial motorcycle operators in Makurdi, Benue state, were above 25 years of age, while Kakwagh (2018) reported that 85.9% of such operators in Anyigba, Kogi state, fell within a similar age range, consequently reinforcing the demographic consistency of commercial driving population across different regions of Nigeria.

A majority (64.5%) of the commercial drivers initiated sexual activity (that is, had first sexual experience) between the ages of 12 and 18 years, with a mean age of sexual debut at 17.28 years (standard deviation =3.40 years). This mean age closely aligns with those reported in similar studies among transportation workers, including truck drivers in Nigeria (Adeoti et al., 2021), taxi drivers in Bangladesh (Roy et al., 2010), mini-bus taxi drivers in Ethiopia (Lakew and Tamene, 2014), and motorcyclists in Nigeria (Kakwagh, 2018). According to Adeoti et al. (2021), early sexual debut within this age bracket is not uncommon. This view is supported by Odeyemi and Osibogun (2007), who attributed early sexual initiation to the curiosity driven by biological and psychological changes characteristic of adolescence-particularly in contexts where parental supervision and emotional connectedness are lacking, and where peer influence is strong.

Age categories below 55 years were found to be statistically significantly associated with engaging in transactional sex, a finding consistent with those reported in several other studies. Drivers under the age of 55 years were identified as being more vulnerable to transactional sex, and by extension, to high-risk sexual practices. Multivariate logistic regression analysis revealed that commercial drivers who adhered to traditional religious beliefs had significantly higher odds-specifically, 31% greater-of engaging in transactional sex compared to their Christian counterparts. This finding is consistent with expectations, given the generally stricter doctrinal teachings on sexual behaviour within Christianity.

In the multivariable logistic regression, commercial drivers involved in interstate travel demonstrated significantly higher odds-specifically 44% greater-of engaging in transactional sex compared to their counterparts. Additionally, separated or divorced commercial drivers demonstrated a 72% increase in the odds of engaging in transactional sex, while married drivers showed a 67% increase, both statistically significant when compare to their single, unmarried, counterpart. These findings are consistent with those of Roy et al. (2010) and Orubuloye et al. (2014), who reported a higher prevalence of transactional sex among married men. Roy et al. (2010) further posited that married men, particularly those frequently away from their spouses, were more inclined to engage in such behaviours. The higher odds observed among separated or divorced individuals are also consistent with prior research, which indicates that individuals in this category often perceive themselves as having increased autonomy to initiate new sexual relationships, or experiences.

Additionally, commercial drivers who smoked had 62% higher odds of engaging in transactional sex compared to non-smokers. With respect to the mode of transportation, commercial taxi drivers demonstrated a 27% increase in the odds of engaging in transactional sex compared to commercial motorcycle riders, a difference that was statistically significant. In addition, commercial bus drivers and ride-hailing cab drivers exhibited elevated odds-82% and 92%, respectively-of engaging in transactional sex relative to their counterparts operating commercial motorcycles.

5. Conclusion

This study examined the prevalence and determinants of transactional sex among commercial drivers and riders across the six states of Southwest, Nigeria. The findings indicate that transactional sex is a prevalent practice within this occupational group, with marked variation observed across the surveyed states. Notably, states situated in closer proximity to Lagos-such as Ogun and Oyo-recorded significantly higher prevalence rates of engagement in transactional sex. Conversely, states closer to Ondo, such as Ekiti and Osun, exhibited comparatively lower and statistically non-significant levels of engagement in transactional sex.

These geographic disparities may be influenced by factors such as urban proximity, population density, levels of economic activity, and the intensity of interstate mobility, all of which can shape exposure to transactional sex. Furthermore, the study identified several socio-demographic and behavioural factors significantly associated with engagement in transactional sex. These include age, religious affiliation, marital status, type of vehicle operated, frequency of interstate travel, and smoking behaviour.

However, the study is not without limitations. The research focused exclusively on male commercial drivers and riders, thereby limiting the applicability of the findings to their female counterparts. This is particularly relevant as female participation-especially in the commercial tricycle section-is gradually increasing across southwestern, Nigeria Furthermore, the cross-sectional nature of the study design precludes the establishment of causal inference between the identified predictors and engagement in transactional sex, restricting the interpretation to associations rather than causation. Despite these limitations, the study provides valuable insights into the patterns and correlates of transactional sex among a mobile, and often underserved population. These findings highlight the need for targeted, context-specific public health interventions aimed at reducing risky sexual behaviours and addressing the underlying socio-behavioural and economic drivers within this occupational group.

Disclaimer (Artificial intelligence)

Option 1:

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc.) and text-to-image generators have been used during the writing or editing of this manuscript.

Option 2:

Author(s) hereby declare that generative AI technologies such as Large Language Models, etc. have been used during the writing or editing of manuscripts. This explanation will include the name, version, model, and source of the generative AI technology and as well as all input prompts provided to the generative AI technology

Details of the AI usage are given below:

1.

2.

3.

References

Abiodun, O.A. (2013). HIV/AIDS-related sexual behaviour among commercial motorcyclists in Sagamu, South-west, Nigeria. *International Journal of Medicine and Biomedical Research*, 2(1), 69–74. DOI:http://dx.doi.org/10.14194/ijmbr.2111.

Adeoti, A.O., Desalu, O.O., and Oluwadiya, K.S. (2021). Sexual practices, risk perception and HIV self-testing acceptability among long-distance truck drivers in Ekiti State, Nigeria. *Nigerian Postgraduate Medical Journal*, 28, 273–277. DOI:10.4103/npmj.npmj\_618\_21.

Adeoye, S. (2005). Sexual behaviour, perception of HIV/AIDS and condom use among commercial motorcyclists in Benin City. *Nigerian Postgraduate Medical Journal*, 12(4), 262–265.

Adeusi, T.J., Iyanda, A.E., Sunmola, K.A., and Ilesanmi, O.O. (2021). Determinants of transactional sexual intercourse among adolescents in Ekiti State, Nigeria. *Sexuality Research and Social Policy*, 18, 427–439. <https://doi.org/10.1007/s13178-020-00470->w.

Drivers of transactional sex among female bar workers in Yaounde, Cameroon. *PLoS ONE*, 13(6), e0198853. https://doi.org/10.1371/journal.pone.0198853

Bako, I.A., Jamda, M.A., Audu, O., and Araoye, M.O. (2017). A cross-sectional study on HIV risk perception and sexual behaviours among commercial motorcyclists in Makurdi, Benue state, Nigeria. *Mediterranean Journal of Social Sciences*, 8(3), 27–33. DOI:10.5901/mjss.2017.v8n3p27.

Choudhry V., Östergren P-O, Ambresin A-E, Kyagaba E, Agardh A (2014). Giving or Receiving Something for Sex: A Cross-Sectional Study of Transactional Sex among Ugandan University Students. *PLoS ONE* 9(11), e112431. https://doi.org/10.1371/journal.pone.0112431.

Ekanem, E.E., Afolabi, B.M., Nuga, A.O., and Adebajo, S.B. (2005). Sexual behaviour, HIV-related knowledge and condom use by Intra-city commercial bus drivers and motor park attendants in Lagos, Nigeria. *African Journal of Reproductive Health*, 9, 78–87.

Ezumah, N., Agu, I.C., Okeke, C., Agu, C., Mbachu, C.O., and Onwujekwe, O. (2021). Adolescents’ perception about dating and sexual permissiveness in Ebonyi State, Nigeria: What can be done to enhance adolescents’ sexual health and well-being. *Frontiers in Reproductive Health*, 3, 626931. DOI:10.3389/frph.2021.626931.

Fadahunsi, J.A., Adiele, S., and Stephen, M. (2025). Effects of commercial sex work on marital breakdown in Wukari Metropolis, Taraba State: Counselling implications and interventions. *International Journal of Humanities, Education, and Social Sciences*, 3(1), 127–148. https://doi.org/10.58578/IJHESS.v3i1.4556.

Falola, T. and Genova, A. (2006). Introduction. In: T. Falola and Genova, A. (Eds.), Yoruba identity and power politics (p.1). UK: University of Rochester Press.

Federal Road Safety Corps. (2024). Service level agreements to PEBEC (Version May 2024). <https://frsc.gov.ng/wp->content/uploads/2024/05/SLAs-TO-PEBEC.pdf

Ige, O. S., & Solanke, B. L. (2021). Drivers of transactional sexual relationships among students in a Nigerian University: implications for elimination of reproductive rights violation. *International Journal of Reproduction, Contraception, Obstetrics and Gynaecology*, 10(1), 55–60. https://doi.org/10.18203/2320-1770.ijrcog20205754

Kakwagh, V.V. (2018). Nigeria perception of HIV risk and sexual behaviour of commercial motorcycle operators in Anyingba, Kogi State, Nigeria. *International Journal of Current Aspects in Social Sciences (IJCASS)*, 2(2), 26–33.

Laikemariam, M. and Fetene, Y. (2023). Risky sexual practices and associated factors among taxi drivers in the Finoteselam town, northwest Ethiopia, 2023: A community-based cross-sectional study. *Frontiers in Reproductive Health*, 6, 1436615. DOI:10.3389/frph.2024.1436615.

Lakew, Y. and Tamene, H. (2014). HIV related risk behaviours among taxi drivers and their assistants in Addis Ababa, Ethiopia: Descriptive cross-sectional study. *BMC Public Health*, 14, 330. <https://www.biomedcentral.com/1471->2458/14/330.

Mensah, E.O. (2020). When you open your legs, you eat: The discourse of transactional sex among female youth in Nigeria. *Sexuality and Culture*, 24(3), 543–560. https://doi.org/10.1007/s12119-019-09648-w.

Odeyemi, K.A. and Osibogun, A. (2007). Sexual behaviour and associated risk factors among adolescent/young adult male transport workers at Yaba Bus stop, Lagos. *The Nigerian Postgraduate Medical Journal*, 14(1), 21–25.

Olarewaju, S., Odu, O., Bamidele, J., and Olarewaju, A. (2013). Knowledge, attitude, and risky sexual behaviour on HIV/AIDS amongst commercial motorcyclists in Osogbo, Osun state, south western, Nigeria. *International Journal of Medical Science and Public Health*, 2(1), 104–109.

Olayiwola, S.O., Kazeem. B.L.O., and Ajudua, E.I. (2022). Determinants of commercial sex in South-West Nigeria: A case study of Akure Metropolis. *International Journal of Research and Innovation in Social Science*, 6(9), 423–429.

Olorunsola, A.M., Muyibi, S.A., Irabor, A.E., Adetunji, A.A., Ismail, W.O., and Ogunniyan, T. (2021). Pattern and predictors of sexual behaviour among adolescents in Ibadan, Southwest, Nigeria. *Archives of Community Medicine and Public Health,* 7(2), 175–181. DOI:10.17352/2455-54.79.000158.

Roy, T., Anderson, C., Evans, C., and Rahman, M.S. (2010). Sexual risk behaviour of rural-to-urban migrant taxi drivers in Dhaka, Bangladesh: A cross-sectional behavioural survey. *Public health*, 124, 648–658.