The survey data was obtained from a study that investigated factors responsible for the patronage of the traders on the pedestrian bridges along Ikorodu road, Lagos state, Nigeria. Survey research was adopted for this investigation while data were primarily sourced. The sample frame adopted for this study was the average total number of people using the pedestrian bridges per day along Ikorodu road was estimated as 240,380, while the sample size was 384, based on Cochran’s sample size formula. The convenience, non-probability sampling technique was used for the survey. Data were analyzed using descriptive statistics (frequency tables) and inferential statistics techniques (factor analysis for data reduction and categorization, communalities of variables and KMO) while Likert scale was used as a means of measurement. The datasets can be considered in the commerce and environmental policies of Lagos State and Nigeria with a view to recommending policies that will encourage easy movement of people and the effective uses of the transport facilities.
**Specifications Table**

| Subject area                  | Environmental Science                  |
|------------------------------|----------------------------------------|
| More specific subject area   | Transportation Management              |
| Type of data                 | Tables and Figures                     |
| How data was acquired        | Field Survey in some selected pedestrian bridges along Ikorodu road, Lagos, Nigeria |
| Data format                  | Raw and analyzed                       |
| Experimental factors         | Simple percentages and level of agreed index (LAI) were used as analytical tool of the generated data. Factor analysis was used in determining the factors influencing the patronage of the traders on pedestrian bridges. Likert scale also ranked factors using the Sum of weighted values (SWV). |
| Experimental features        | The key method used in data collection - structured questionnaire designed in Likert scale, the questionnaire was designed in such a way that it helped to collate basic information from the respondents. A population size of two hundred and forty thousand three hundred and eighty (240,380) was selected, and a total sample size of 384 respondents was used in data generation, with questionnaire distributed to pedestrian bridge users. Variables pertaining to the above listed targets. 14 samples were excluded because of non-response. |
| Data source location         | Ikorodu road, Lagos, Nigeria           |
| Data accessibility           | All the data are in this data article  |

**Value of the data**

- The data can be used to review of Lagos State transportation, commerce, environmental policies.
- The dataset can also be for safety and precautionary measures on pedestrian bridges in Lagos and other major cities across Nigeria.
- The data can be used for educational and research purposes.
- The questionnaire for this survey can be adopted and modified to include subjects not included in this article.

1. Data

The data in this article was obtain from a field survey aimed at the determination of perceived factors that influences pedestrian in patronizing traders on pedestrian bridges along Ikorodu road in Lagos, Nigeria. Trading on the pedestrian bridges is a subset of the phenomenon known as “street trading” or street hawking”. The pedestrian bridges are constructed on major expressways to ease transportation. Over the years, the pedestrian bridges have become a place where business transactions are conducted between traders and pedestrian, even though that street trading is outlawed in the Lagos metropolis. The data collected on the factors that encourage such business transactions are presented in this article. The socio-demographics of the respondents are presented in Tables 1–6.

### Table 1

| Sex     | Frequency | Percentage |
|---------|-----------|------------|
| Male    | 170       | 45.9       |
| Female  | 200       | 54.1       |
| Total   | 370       | 100        |
Subsequently, several aspects of trading on pedestrian bridges or similar phenomena can be explored. Some of them are outlined: child trading on pedestrian bridges, incidence of robbery on pedestrian bridges, epidemiology of injuries that occurred on pedestrian bridges, the menace of alms begging on pedestrian bridges, prostitution on pedestrian bridges, the economic benefits of trading

| Table 2 | Age of the respondents. |
|---------|-------------------------|
| Ages (yrs) | Frequency | Percentage |
| 10–20 | 44 | 11.9 |
| 21–40 | 264 | 72.8 |
| 41–60 | 62 | 15.3 |
| 61 and above | 0 | 0 |
| Total | 370 | 100 |

| Table 3 | Marital status of the respondents. |
|---------|-----------------------------------|
| Marital status | Frequency | Percentage |
| Single | 148 | 40.0 |
| Married | 214 | 57.8 |
| Divorced | 8 | 2.2 |
| Widow/widower | 0 | 0 |
| Total | 370 | 100 |

| Table 4 | Religion of the respondents. |
|---------|-----------------------------|
| Religion | Frequency | Percentage |
| Christianity | 208 | 56.2 |
| Islam | 162 | 43.8 |
| African tradition | 0 | 0 |
| Total | 370 | 100 |

| Table 5 | Level of education attained by the respondents. |
|---------|-----------------------------------------------|
| Educational background | Frequency | Percentage |
| Primary | 95 | 25.7 |
| Secondary | 150 | 40.5 |
| BSc/ HND | 113 | 30.6 |
| Informal training | 12 | 3.2 |
| Total | 370 | 100 |

| Table 6 | Level of monthly Income (Nigerian Naira) of the respondents. |
|---------|-------------------------------------------------------------|
| Monthly income | Frequency | Percentage |
| Below #10,000 | 84 | 22.7 |
| #11,000 - #20,000 | 88 | 23.8 |
| #21,000 - #30,000 | 92 | 24.9 |
| #31,000 and above | 106 | 28.6 |
| Total | 370 | 100 |
on pedestrian bridges, poverty, unemployment and illiteracy as predictors of trading on pedestrian bridges and others. Some of these have been researched as street trading or street hawking [1–10]. Trading on the pedestrian bridges and street trading in general are part of social problems facing the Lagos metropolis. Others are transportation using bus rapid transit [11], crime [12], gambling [13], housing, construction and estate management [14–18], power outages [19,20], water, sanitation, waste management and hygienic issues [21–24], prostitution, sexual violence, HIV incidence and drug abuse [25–28] and unemployment [29]. In addition, other statistical analysis can be applied such as in [30–40].

In summary, data revealed that young adults (21–40 years), female and married persons were the people mostly patronizing the traders on the surveyed bridges.

2. Experimental design, materials and methods

The study area (pedestrian bridges along Ikorodu road, Lagos, Nigeria) was chosen because the road linked to several cities in the metropolis and pedestrian bridges located there often experience heavy pedestrian movement. Also the bridges are the only means of crossing from one part of the expressway to another since pedestrian crossing on the expressway is outlawed. The traders often use the avenue of heavy movement of people on the pedestrian bridges to display their wares and solicit sales from the people. On the other hand, disable people are often seen on the bridges begging for alms.

The sample frame adopted for this study was the average total number of people using the pedestrian bridges per day along Ikorodu road was estimated as 240,380, while the sample size was 384, based on Cochran's sample size formula.

The convenience sampling which is a non-probability sampling technique was adopted for the survey because most of the respondents were interviewed by circumstantial-convenience. This sampling technique was very beneficial because the survey was done in the evening when people are returning from work, schools, markets, offices or shops. The morning was not used because the pedestrian are rushing to work and may not have time to complete the questionnaires.

Factor analysis was used to analyze the data. Results of factor analysis for pedestrians’ perceived factors of pedestrian bridge trading patronage revealed a K.M.O. value of 0.618 with Bartlett's test significance level of 0.000 presented in Table 7. The result of tests implies that the data is suitable for factor analysis.

Likert scale as seen in the questionnaire which can be assessed as Supplementary Data 1 in a 5-point scale namely: 1 = strongly disagree, 2 = disagree, 3 = moderately agree, 4 = agree and 5 = strongly agree. Likert scale ranked the perceived factors responsible for the patronage of the traders on the pedestrian bridges using the sum of weighted values (SWV) and average weighted values (AWV). These are shown in Table 8. The factors can be arranged in descending or ascending order in order to fully understand the data, facilitate comparison between the factors or to roughly determine the factors that contributed minimally to the overall average value. The average level of agreed index of the factors responsible for the patronage of the traders on the pedestrian bridge was 2.90 AWV out of an achievable 5. Hence, the factors were moderately agreed.

| Table 7 |
| --- |
| KMO and Bartlett’s Test. |
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy | 0.618 |
| Bartlett’s Test of Sphericity | Approx. Chi-Square: 9010.849 |
| | Degrees of freedom: 806 |
| | Significance: 0.000 |
Table 8
Factors responsible for the patronage of the traders on the pedestrian bridges using sum and average weighted values.

| FACTORS          | OPINION | SWV | AWV |
|------------------|---------|-----|-----|
|                  | 1       | 2   | 3   | 4   | 5   |     |
| Marketable       | 4       | 8   | 108 | 304 | 1250| 1674| 4.52|
| Reachable        | 24      | 120 | 252 | 320 | 610 | 1326| 3.58|
| Not stressful    | 40      | 104 | 222 | 480 | 420 | 1266| 3.42|
| Time             | 8       | 140 | 300 | 600 | 210 | 1258| 3.4 |
| Satisfactory     | 40      | 120 | 252 | 400 | 430 | 1242| 3.36|
| Distance         | 8       | 144 | 582 | 304 | 100 | 1138| 3.08|
| Availability     | 50      | 120 | 330 | 440 | 200 | 1140| 3.08|
| Safety           | 48      | 128 | 354 | 384 | 220 | 1134| 3.06|
| Attractiveness   | 48      | 152 | 384 | 280 | 240 | 1104| 2.98|
| Convenience      | 48      | 168 | 288 | 488 | 100 | 1092| 2.95|
| Durable          | 32      | 180 | 450 | 280 | 140 | 1082| 2.92|
| Accessibility    | 62      | 120 | 456 | 328 | 70  | 1036| 2.8 |
| Handiness        | 72      | 120 | 414 | 320 | 100 | 1026| 2.77|
| Competitive      | 70      | 224 | 240 | 280 | 190 | 1004| 2.71|
| Reliable         | 88      | 184 | 240 | 248 | 240 | 1000| 2.7 |
| New items        | 44      | 272 | 252 | 408 | 20  | 996 | 2.69|
| Proximity        | 80      | 140 | 396 | 256 | 120 | 992 | 2.68|
| Valuable items   | 76      | 248 | 240 | 200 | 200 | 964 | 2.61|
| Effectiveness    | 70      | 296 | 222 | 200 | 140 | 928 | 2.51|
| Quality of product| 132   | 160 | 258 | 176 | 140 | 866 | 2.34|
| Cost             | 160     | 120 | 210 | 200 | 150 | 840 | 2.27|
| Conductive       | 140     | 148 | 270 | 192 | 90  | 840 | 2.27|
| Comfortable      | 152     | 240 | 210 | 112 | –   | 714 | 1.93|

Table 9
Communalities of variables using principal component analysis as extraction method.

| Factors            | Initial | Extraction |
|--------------------|---------|------------|
| Quality of product | 1       | 0.853      |
| Proximity          | 1       | 0.836      |
| Safety             | 1       | 0.835      |
| New items          | 1       | 0.832      |
| Effectiveness      | 1       | 0.831      |
| Valuable items     | 1       | 0.827      |
| Conducive          | 1       | 0.819      |
| Satisfactory       | 1       | 0.797      |
| Convenience        | 1       | 0.791      |
| Durable            | 1       | 0.783      |
| Competitive        | 1       | 0.78       |
| Time               | 1       | 0.772      |
| Reachable          | 1       | 0.756      |
| Availability       | 1       | 0.762      |
| Accessibility      | 1       | 0.757      |
| Marketable         | 1       | 0.728      |
| Cost               | 1       | 0.718      |
| Attractiveness     | 1       | 0.689      |
| Reliable           | 1       | 0.684      |
| Distance           | 1       | 0.639      |
| Handiness          | 1       | 0.637      |
| Comfortable        | 1       | 0.632      |
| Not stressful      | 1       | 0.604      |
Communality values revealed “not stressful” (60.4%) as the least while “quality of product” (85.3%) had the highest value. Factor analysis finally revealed convenience and effectiveness as factors responsible for pedestrian bridge trading patronage, as perceived by the pedestrians. This can be seen in Table 9 and the factors are arranged in descending order. The result was obtained using the principal component analysis as the extraction method.

The total variance explained is presented in Table 10. As shown in Table 10, all factors that are with Eigen value that are above 1 were extracted and represented under the column extraction sums of square loading. The findings reveal that 10 unconfirmed factors and suggested that there was a cumulative total of 75.54% with the variance of 4.56% and 6.68% at and after extraction which was confirmed after rotational extraction.

There are various factors responsible for the patronage of the traders on the pedestrian bridge but most reason why the pedestrians patronize the bridge is because of their level of quality, convenience and effectiveness according to the result given by the rotated component matrix as shown in Table 11. Furthermore, component transformation matrix was presented in Table 12 while the summary of the data analysis can be visually seen in Fig. 1. The figure is restricted to first three components with the highest Eigenvalues. However, after various investigations that have been carried out and analyzed, the result of findings shows that there is significant relationship between the socio-economic characteristics of the people using the pedestrian bridge and the factor responsible for the patronage of the traders on the pedestrian bridge. The raw data (set of responses) can be assessed as Supplementary Data 2.

| Component | Initial Eigenvalues | Extraction Sums of Squared Loadings | Rotation Sums of Squared Loadings |
|-----------|---------------------|-------------------------------------|----------------------------------|
|           | Total % of Variance | Cumulative %                        | Total % of Variance              | Cumulative % | Total % of Variance | Cumulative % |
| 1         | 2.818               | 12.251                              | 2.818                            | 12.251       | 2.025               | 8.804       |
| 2         | 2.230               | 9.697                               | 2.230                            | 9.697        | 1.979               | 8.604       |
| 3         | 2.099               | 9.125                               | 2.099                            | 9.125        | 1.846               | 8.024       |
| 4         | 1.910               | 8.303                               | 1.910                            | 8.303        | 1.805               | 7.848       |
| 5         | 1.720               | 7.478                               | 1.720                            | 7.478        | 1.744               | 7.583       |
| 6         | 1.590               | 6.913                               | 1.590                            | 6.913        | 1.661               | 7.223       |
| 7         | 1.489               | 6.473                               | 1.489                            | 6.473        | 1.640               | 7.131       |
| 8         | 1.312               | 5.702                               | 1.312                            | 5.702        | 1.588               | 6.903       |
| 9         | 1.159               | 5.038                               | 1.159                            | 5.038        | 1.549               | 6.734       |
| 10        | 1.048               | 4.558                               | 1.048                            | 4.558        | 1.537               | 6.684       |
| 11        | .951                | 4.134                               | 1.025                            | 8.804        |                     |             |
| 12        | .824                | 3.582                               | 1.230                            | 12.251       |                     |             |
| 13        | .790                | 3.437                               | 1.484                            | 9.697        |                     |             |
| 14        | .623                | 2.709                               | 1.484                            | 9.697        |                     |             |
| 15        | .520                | 2.259                               | 1.625                            | 9.366        |                     |             |
| 16        | .484                | 2.106                               | 1.455                            | 8.803        |                     |             |
| 17        | .425                | 1.846                               | 1.048                            | 4.558        |                     |             |
| 18        | .285                | 1.237                               | 1.048                            | 4.558        |                     |             |
| 19        | .241                | 1.047                               | 1.048                            | 4.558        |                     |             |
| 20        | .154                | .671                                | 1.048                            | 4.558        |                     |             |
| 21        | .147                | .637                                | 1.048                            | 4.558        |                     |             |
| 22        | .116                | .505                                | 1.048                            | 4.558        |                     |             |
| 23        | .067                | .290                                | 1.048                            | 4.558        |                     |             |

Extraction Method: Principal Component Analysis.
Table 11
Rotated Component Matrix of Factors for the patronage of the traders on the pedestrian bridge.

| Component | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  |
|-----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Cost      | .651| -.211| .009| .431| .147| .009| .158| .102| .009| .085 |
| Distance  | .027| .037| -.077| -.056| .777| .038| .043| .055| .070| .109 |
| Time      | .024| -.007| -.069| -.010| .025| .083| .127| .861| .003| .044 |
| Availability | .057| .205| -.163| -.054| -.133| -.023| .780| -.009| .105| -.222 |
| Quality of product | -.848| -.099| -.061| .156| .191| .120| .013| -.183| .023|     |
| Accessibility | -.065| -.068| -.186| .782| -.215| .121| -.121| .074| .019| -.144 |
| Safety    | -.042| -.033| -.054| -.886| -.130| -.040| -.086| .035| -.075| -.106 |
| Convenience | .621| -.304| -.119| .020| .210| .227| -.436| .000| .010| -.114 |
| Effectiveness | .162| .331| .715| .130| .233| -.065| .152| .062| -.278| -.065 |
| Handiness | -.460| .261| .200| .105| -.265| .259| -.062| .298| .078| .267 |
| Not stressful | -.038| .342| .086| -.118| .071| -.624| -.089| .005| -.245| .050 |
| Conductive | -.085| .117| .011| .130| .275| .252| .019| -.133| .763| -.206 |
| Reachable | .285| .196| -.318| .107| .023| .078| -.218| .191| .054| -.664 |
| Satisfactory | -.133| .817| -.046| -.104| -.037| .231| -.031| .066| -.020| .198 |
| Durable   | .080| .064| -.493| .048| .584| -.016| -.410| -.024| -.123| -.055 |
| Competitive | -.094| -.022| .813| -.175| -.044| .144| -.162| -.061| .163| .005 |
| Valuable items | -.047| .808| .169| .049| .079| -.216| .176| -.117| .095| -.187 |
| Attractiveness | -.074| -.166| .172| .131| -.400| .003| .613| -.209| -.028| .170 |
| Reliable  | -.071| .175| .197| .098| .122| .754| -.088| .026| -.081| -.010 |
| Proximity | .084| .173| -.225| .059| .157| -.042| -.253| .088| -.020| .804 |
| New items | -.211| -.130| .183| .196| .400| -.365| -.076| .616| .099| -.103 |
| Comfortable | .126| -.080| .074| .080| .158| -.442| .097| -.450| .279| .296 |
| Marketable | .215| -.032| .026| -.002| -.130| -.144| .070| .099| .786| .097 |

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
Rotation converged in 24 iterations.

Table 12
Component transformation matrix of Factors for the patronage of the traders on the pedestrian bridge.

| Component | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  |
|-----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1         | -.606| .510| .442| -.217| -.139| .006| .268| .073| -.114| .143 |
| 2         | -.221| -.048| .059| .619| .425| .300| .035| .535| .011| .061 |
| 3         | .364| .058| .400| -.156| .311| -.446| .490| .114| .354| .076 |
| 4         | -.083| -.125| -.053| -.249| .489| -.438| -.260| .077| -.424| .479 |
| 5         | .261| .798| -.193| .016| .348| .058| -.286| -.084| -.006| -.209 |
| 6         | .136| -.109| .566| -.090| .142| .482| -.422| -.305| .183| .289 |
| 7         | .247| -.152| .377| -.390| .159| .088| .048| .390| -.332| -.569 |
| 8         | -.254| -.087| -.236| -.505| .291| .047| -.023| .234| -.688| -.051 |
| 9         | .463| .198| -.025| -.145| -.376| .079| .012| .576| -.075| .490 |
| 10        | -.132| .018| .285| .217| -.269| -.518| -.596| .226| .246| -.216 |

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
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Transparency document. Supporting information

Transparency data associated with this article can be found in the online version at https://doi.org/10.1016/j.dib.2018.06.055.

Appendix A. Supporting information

Supplementary data associated with this article can be found in the online version at https://doi.org/10.1016/j.dib.2018.06.055.

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