Analele Universităţii din Oradea, Seria Geografie **XXXIV**, no. **1/2024**, pp. **15-32**
ISSN **1221-1273**, E-ISSN **2065-3409** DOI 10.30892/auog. 34102-908

FEAR AND FEELING OF INSECURITY IN HOTELS AND HOST COMMUNITIES, IBADAN, NIGERIA

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Citation: Oladehinde, G. J., Oladele, A. F., Adeniyi, L. A., Lawal, O. L. (2023). Fear and Feeling of Insecurity in Hotels and Host Communities, Ibadan, Nigeria. *Analele Universităţii din Oradea, Seria Geografie*, *34*(1), 15-32. https://doi.org/10.30892/auog.34102-908

Abstract: The study examines fear and feeling of insecurity in Ibadan, Nigeria. Residents and staff of hotels were selected through multistage and purposive sampling respectively. The study discovered that the mean relative frequency worry index (RFWI) among the hotel staff was 2.54, while it was 2.44 among the residents of the host communities. The result showed that theft, fraud, robbery sexual abuse, and burglary were the most frequently worried crime in the hotel industry while robbery, theft, fraud, burglary, and sexual abuse were highly worried among the residents of host communities. Using factor analysis, 82.28% of the total variance which comprises mechanical/personal (42.7%), human (19.5%), economic (11.53%), and environmental factors (8.49%) were the factors influencing fear and feeling of insecurity among hotel staff while human/personal (49.30%), economic (11.26%), mechanical (7.49%), and environmental factor (6.52%), representing 74.5% of the whole variance were the factors among the residents of the host communities. The study concluded that fear and feeling of insecurity is associated with different factors

Key words: Fear, Feeling, Insecurity, Hotel, Host Communities, Factors

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INTRODUCTION

Hotel is an integral aspect of the hospitality industry which provides customers with services to meet their needs away from home (Okoli, 2012). It is an establishment that provides paid accommodation, generally for a short duration of stay**.** Hotel often provides a number of additional guest services, such as restaurants, bars, swimming pools, healthcare, retail shops, and business facilities like conference halls, banquet halls, boardrooms, and space for private parties like birthdays, marriages, welfare parties among others (Nwokorie & Igbojekwe, 2019). Despite the functions of the hotel, it has been argued that security threat is one of the major factors affecting hotel operations and their development in host communities (Li, Wen, & Ying, 2018). This in return has subjected hotels and their host communities to risks that make them vulnerable to different forms of crimes and security challenges. Security does not only concern hotel staff and guests, but also more of concern to the host communities where most of these hotels are located (Enz, 2009; Li, Wen, & Ying, 2018). This is because the occurrence of crime in the precincts of hotels might have a trickle-down effect on fear and feelings of security among residents of the host communities.

Issues of fear of crime and feeling of insecurity have become a major concern for policy-makers, criminologists, victimologists, policing organizations, and the public in general. Its emergence in research and literature emanated as a result of the recent increase in the occurrence of urban crime in different parts of the world, especially in developing countries like Nigeria (Ayoyo, 2013; Farodoye, Olawuni, Oladehinde, Atoyebi, & Ayoola, 2021). This increase in crime occurrence is supported by Walklate (2006) and (Reid, Appleby-Arnold, Brockdorff, Jakovljev, & Zdravkovic, 2020) who observed a closer relationship between growth in crime occurrence and growth in the feeling of insecurity. Some studies have linked the effects of fear of crime on individuals and emotions (Pain R. H., 1997; Gray, Jackson, & Farrall, 2011; Guedes, Domingos, & Cardoso, 2018). Although the central debates of these studies were on emotion, it has been observed that studies on the fear and feeling which involved the expression of emotions about crime have not been properly documented. Other studies have also assessed crime with reference to socio-economic attributes, weather variability, and geographical location (Schuck, Rosenbaum, & Hawkins, 2008; Pearson & Breetzke, 2014; Badiora, Afon, & Dada, 2017; Ogundiran, 2019). While these variables are commonly used in literature, however, it has been argued that some other mediating factors that influence fear and feeling of insecurity, especially in different physical setting of hotel (hospitality business) and host communities (residential area) were not taken into account. Factors influencing fear and feeling of insecurity in hotel settings may not be the same factors within the host communities. In addition, studies on issues of insecurity and its impact on guest patronage and hotel operation and development are numerous in the literature (Huang, Kwag, & Streib, 1998; Cebekhulu, 2016; Leung, Yang, & Dubin, 2018; Nwokorie & Igbojekwe, 2019) however, studies of fear and feeling of insecurity among hotel staff and residents of host communities are hard to come by. The adopted approach could be justified by the study of Afon (2001) who argued that certain areas are hotspots of criminal activity, with differences in degrees of occurrence. This in turn might influence the level of worry and feeling of insecurity differently among hotel staff and residents of host communities. This study, therefore, aims to examine factors influencing fear and feeling of insecurity in hotels and host communities of Ibadan Municipality, Nigeria. In order to actualize the aim, the study specifically examines the forms of crimes that are experienced in the past, frequency of worry of insecurity, and factors responsible for fear and feeling of insecurity among the hotel staff and residents within the host communities.

LITERATURE REVIEW

Previous studies in literature have used different indicators in the measurement of fear and feelings of insecurity. However, those that are related to this study will be discussed. These studies include Reid et al. (2020), Valente and Vacchiano (2021), Pain (2000), Badiora and Afon (2013), Almanza-Avendano, Romero-Mendoza, Luis and Hortensia (2018). For instance, Pain (2000)

maintained that personal factors such as age, gender, and race often influence differences in the experience of feeling, or fear in the same social and geographical setting. Valente and Vacchiano (2021) adduced that factors affecting insecurity could be categorized into three, namely; victimization, individual characteristics, and neighbourhood characteristics. Also, Reid et al. (2020) considered seven factors in measuring the feelings of insecurity and security in the context of crime. The factors include signs of social and physical disorder, trust in police, trait anxiety, collective efficiency, perceived risk of victimization, fear of personal harm, and fear of property theft. The study showed that the seven factors were not associated with feelings of insecurity but were related to the measures associated with the feeling of security. In the study of Badiora and Afon (2013), the identified factors were gender, house type, level of education, age, length of residency, availability of security, locality, and rate of criminal activities.

The study discovered that age, length of residency, availability of security, and localities were negatively correlated while gender, house type, level of education, and rate of criminal activities were positively correlated to influence fear and feeling of insecurity. Furthermore, Almanza-Avendano et al. (2018) found that government failures, organized crime, corruption, moral causes, economic needs, lack of education, and social causes were the perceived factors of insecurity. These factors were confirmed by Azaola (2012) and Jusidman (2012) who noted that social crisis is attributed to unemployment, lack of job security, and inability to have access to education as well as moral degradation that relates to greed, the pursuit of easy money and lack of values contributed to fear and feeling of insecurity among the respondents.

Despite the fact that the above authors have examined one or two factors influencing the fear and feeling of insecurity, there is need for a study that will examine most of these factors in one study. It is also observed that most of the identified factors focused on fear and feeling of insecurity within the urban centre while fear and feeling of insecurity in the hotel was not considered. Apart from this, some of the factors may not be used to draw an empirical conclusion on fear and feeling of insecurity in hotels and host communities. With an increase in the number of cases of crime and violent incidents in hotel precincts and host communities. Feelings of or worries about insecurity may be perceived differently due to differences in physical settings of the hotel (hospitality business - commercial landuse) and host communities (residential landuse). It is therefore very necessary to compare fear and feeling of insecurity using certain parameters from different physical settings. This study, therefore, is an attempt to fill the gap in the literature by comparing the factors influencing fear and feeling of insecurity in hotels and host communities.

METHODOLOGY

The study area

Ibadan, which is the capital of Oyo State, is the most populous city in Oyo State, Nigeria, and the third largest city by population in Nigeria after Lagos and Kano with an estimated population of 3,649,000 in 2021. It shares boundaries with Kwara State in the north, Osun and Ogun State in the east and south respectively and Benin Republic in the West. It is located between longitude $7^0 20^{'}$ E and $7^0 40^{'}$ E of the Greenwich Meridian and latitudes $3^0 35'$ N and $4^0 10'$ N of the Equator. Ibadan is drained by three major rivers, namely: Ogbere, Ogunpa, and Ona with a lot of tributaries. Ibadan was occupied by immigrants who moved into the city in search of security from inter-tribal wars. It is the largest indigenous city in tropical Africa. Since its foundation in the 1800s, Ibadan city has been experiencing rapid growth, in fact, it was regarded as one of the pre-colonial urban centers in Nigeria. The built-up area in Ibadan increased from 100 ha in 1830 to 12.5 km^2 in 1931, and 38.85 km^2 in 1935. Around 1955 and 1965, the land use land cover increased from 46.40 km^2 and 77.70 km^2 respectively. In 1973, the city had extended to 112 km^2, 152.8 km^2 in 1977, 323.3 km^2 in 1990, and 463.33 km^2 in 2011 (Salami, 1997). Ibadan is made up of eleven local government areas (LGAs). Out of these eleven LGAs, five local government areas make up Ibadan municipality which includes, Ibadan North, Ibadan North East, Ibadan North West, Ibadan South East, and Ibadan South West (see Figure 1). The remaining six LGAs which encompass Akinyele, Egbeda, Ido, Lagelu, Oluyola,

and Ona-Ara are regarded as less urban LGAs (Adeyeni, Olayiwola, & Oladehinde, 2016). This research centres on the five LGAs which make up the Ibadan municipality. The five LGAs are known for diverse economic activities that have not only attracted people, and visitors from far and near to settle down, but have also brought about the establishment of allied activities, especially hotel industry, where people from far and near can stay, lodge, and have fun. The proliferation of crime and other social vices in the municipality has made most of the hotel industries and their host communities vulnerable to attack (Ogundiran, 2019; Anichiti, Dragolea, Tacu Harsan, Haller, & Butnaru, 2021). This might have a trickle-down effect on the feeling of insecurity among the hotel staff and residents of the host communities. The state of security in Ibadan, therefore, presents a good case for studies with implications for informing policy formulation in the developing countries of the world

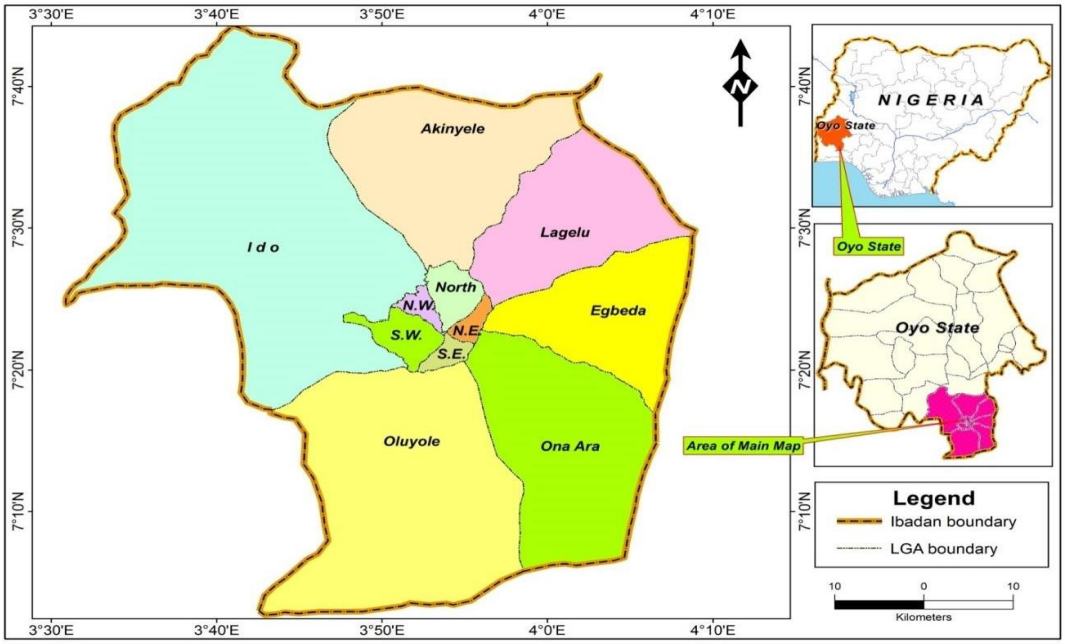

Figure 1. Map of Ibadan indicating the local government areas.
(Source: Ministry of Lands, Physical Planning and Urban Development, 2022)

Data Source, Collection, Procedure, and Analysis

This study made use of primary data sources. Questionnaire were used to collect primary data among hotel staff and residents of the host communities. The respondents were selected because of their divergent views on insecurity, which could be influenced by several factors. Information obtained through the administration of questionnaires includes types of crime, frequency of worry about crime, and factors influencing fear and feeling of security.

Multi-stage sampling was adopted for this study. The first stage involved the selection of the local government areas (LGAs) within Ibadan metropolis. Out of the eleven (11) local government areas in Ibadan, five (5) LGAs that fall within the core areas were selected. The selected LGAs include; Ibadan North, Ibadan North West, Ibadan North East, Ibadan South West, and Ibadan South East. The second stage involves the selection of hotels within the selected local government areas. Studies have shown that there were more than four hundred hotels in each of these local government areas, therefore one hotel was randomly selected in each without replacement.

In this regard, the randomly selected hotels were Premier Hotel, Mokola; Bayse One Place Hotel, Jerico; Owu Crown Hotel, Monatan; Fawzy Hotel, Ringroad; and House Eleven Hotel and

event, Challenge in Ibadan North, Ibadan North West, Ibadan North East, Ibadan South West, and Ibadan South East respectively. The third stage involved the identification and selection of residential buildings within 500m radius in the host communities of the selected hotels. The selection was based on the fact that places closer to the hotels may likely have better information concerning the existing security situation around the hotel area. In other words, residential buildings within 500 m were considered (Figure 2). Using Google Earth and a reconnaissance survey, the number of residential buildings within 500 m of Premier Hotel, Bayse One Place Hotel, Owu Crown Hotel, Fawzy Hotel and House Eleven Hotel and Apartment were 421, 218, 512, 321, and 570 buildings, respectively. Systematic random sampling was used in the selection of residential buildings that were surveyed. The first building was selected randomly, while the subsequent selections were every tenth building within the 500 m radius of each hotel. Based on this, 43, 22, 52, 33, 57 residential buildings were selected for the administration of questionnaire in the study area. Altogether, 207 buildings were surveyed in the five (5) local government areas of Ibadan municipality. One respondent was selected per building for the administration of questionnaire (See Table 1). It is important to note that churches, mosques, shopping complexes, offices were exempted from the survey.

Table 1. Local government areas in Ibadan Municipality
(Source: Google Earth and Authors' Review, 2022)

Selected local government	Hotel	No of buildings identified with 500m radius	Sample size (10%)
Ibadan North	Premier Hotel, Mokola	421	43
Ibadan North West	Bayse One Place Hotel, Jerico	218	22
Ibadan North East	Owu Crown Hotel, Monatan	512	52
Ibadan South West	Fawzy Hotel, Akinyemi Ringroad	321	33
Ibadan South East	House Eleven Hotel and Apartment, Challenge	570	57
	Total	**2,042**	**207**

The survey also investigated the selected hotels staff. The staff was selected because of their understanding of the dynamics of security situations in the hotels precincts. They were equally selected because they are directly or indirectly in charge of security management in their hotel and environs. Guests, visitors and tourists were not selected due to the fact that their stay is temporal and may not have broad knowledge of the security state in selected hotels. Six (6) questionnaire each were administered to manager, supervisor and four other staff members of each establishment. This makes it a total of thirty (30) questionnaire administered to the staff (See Table 2).

Data obtained were analysed through the use of descriptive and inferential statistical methods. Descriptive statistical tools used include frequency, percentage, and chart, while Relative Frequency of Worry Index (RFWI), and factor analysis were used under inferential statistical method. Data analysis was categorised into two sections. The first section used frequency tables, percentages, and charts to assess the forms of crime that have been experienced by the respondents. In the second section, Relative Frequency Worry Index was used to analyse the frequency of worry about crime types; Factor Analysis was used to examine the factors influencing fear and feeling of insecurity in the study area. Associated factors influencing fear and feeling of insecurity among the respondents were measured using 24 variables that were established in the literature (Hilliard & Baloglu, 2008; Pain R. , 2000; Badiora & Afon, 2013; Almanza-Avendano, Romero-Mendoza, Luis, & Hortensia, 2018; Azaola, 2012; Reid, Appleby-Arnold, Brockdorff, Jakovljev, & Zdravkovic, 2020; Ojo & Ojewale, 2018). Factor analysis was used to group the rated twenty- four (24) variables

into a few numbers of factors (Popoola, Oladehinde, & Animasaun, 2021; Reid, Appleby-Arnold, Brockdorff, Jakovljev, & Zdravkovic, 2020). Factor analysis was equally used to identify the underlining factors that explain the pattern of relationship between the set of observable variables. It is very useful in eliminating the collinearity among variables as well as uncovering latent variables (Oladehinde, 2019).

Table 2. Distribution of questionnaire to the Hotel staff
(Source: Authors' field survey, 2022)

Local Government Areas	Selected Hotels	No of respondents (Hotel Staff)
Ibadan North	Premier Hotel, Mokola	6
Ibadan North West	Bayse One Place Hotel, Jerico	6
Ibadan North East	Owu Crown Hotel, Monatan	6
Ibadan South West	Fawzy Hotel, Akinyemi Ring road	6
Ibadan South East	House Eleven Hotel and Apartment, Challenge	6
	Total	**30**

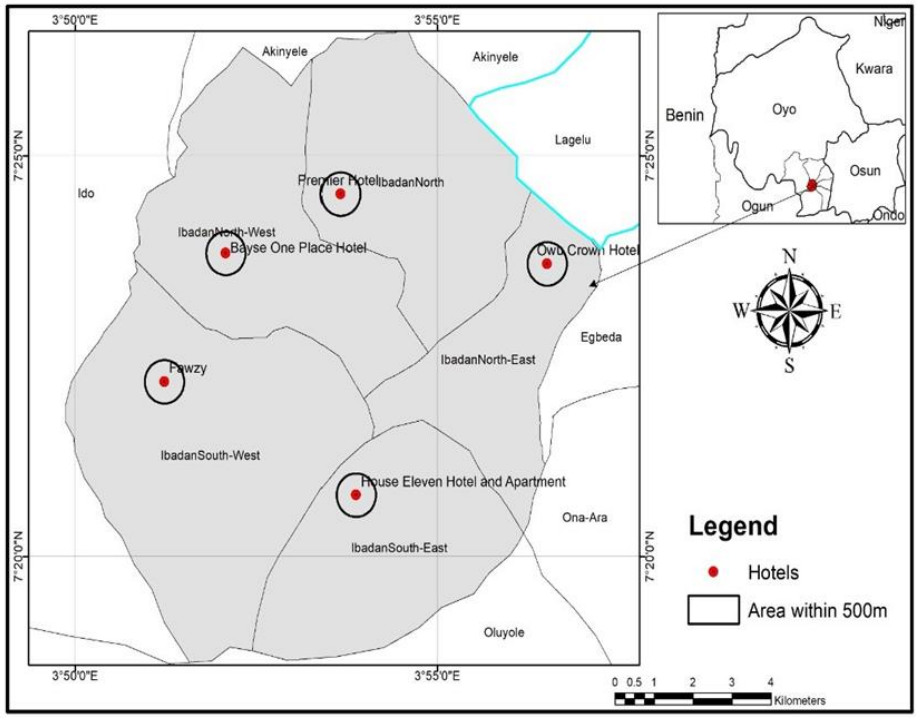

Figure 2. Ibadan Map indicating selected hotels in each local government within the municipality
(Source: Ministry of Lands, Physical Planning and Urban Development, 202

RESULT AND DISCUSSION

The findings of this research were discussed under the subheadings below. Unless otherwise stated, the tables and charts through which the information was presented and summarized are the products of the survey carried out by the author(s) in 2022.

Forms of insecurity experienced by the respondents (hotel staff and residents)

Previous studies have established that certain areas are hotspots of criminal activity, with differences in degrees of occurrence (Afon, 2001). In the light of the foregoing, information on the forms of insecurity that is prevalent in the study area is presented in Figures 3 and 4. As shown in Figure 3, 85.7% of the hotel staff have experienced robbery. Also, 78.6%, 75%, 57.1%, and 53.6% of the hotel staff have experienced sexual abuse, burglary, theft, and internet scams respectively. About 46.4%, 39.3%, 35.7%, and 25.0% of the staff of hotels respectively have witnessed vandalization, kidnapping, fraud, and pickpocketing. The case of assassination was not reported or had not been witnessed by the hotel staff.

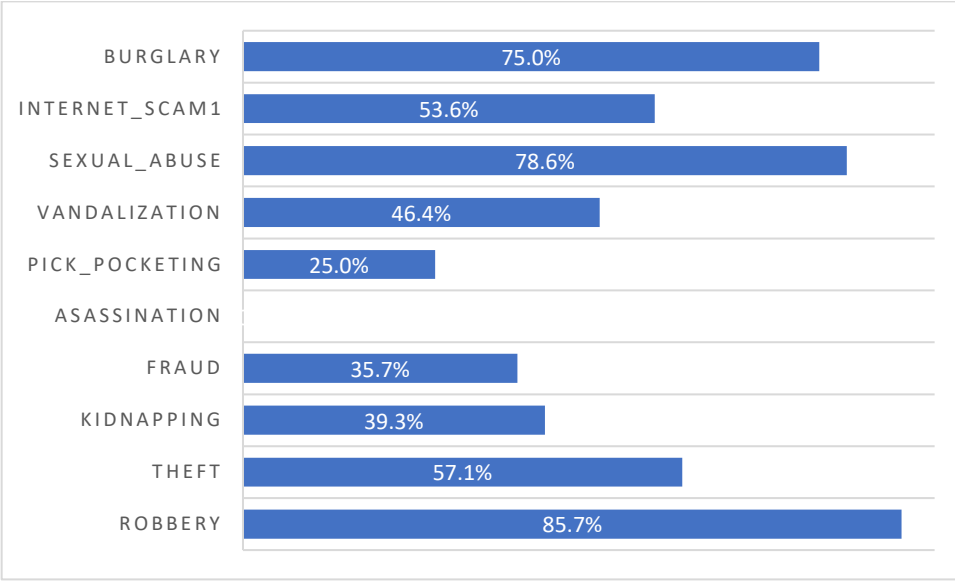

Figure 3. Forms of Insecurity experienced by the hotel staff

On the other hand, 84.5% of the residents indicated that robbery was a common occurrence in the precincts of the host communities while 79.6%, 58.3%, and 50.0% reported cases of theft, burglary, and pickpocketing respectively (see Figure 4). Other types of insecurity reported or witnessed by residents were vandalism (48.1%), sexual abuse (39.8%), internet scams (28.2%), kidnapping (22.8%), and fraud (21.4%). None of the residents reported cases of assassination. Based on the above, one can conclude that the majority of the respondents have experienced robbery in one form or another in the past, while cases of assassination were absent. By extension, the result shows that the occurrence of robbery in the hotel and host communities was high, while other forms of insecurity were experienced at varying degrees by the hotel staff and residents. This variation could probably be attributed to different factors that have been established by previous studies (Afon, 2001). It also agrees with the study of Badiora and Afon (2013), who reported housebreaking, store breaking, and stealing as the three most occurring crime types in the municipality.

Frequency of worry on varieties of crime

'Frequency measures' has been established in the literature as the better way of exploring how often people experienced event of feelings or worries about varieties of crime (Gray, Jackson, & Farrall, 2008). Thus, 'frequency measures' were adopted to find out the level of worry about crime varieties such as robbery, burglary, pickpocketing, sexual abuse, vandalization, fraud, assassination, internet scams, kidnapping, and theft. The frequency of worry is rated on a perceived index level called Relative Frequency of Worry Index (RFWI) on the 5-point Likert scale. This statistical method is similar to what Oladehinde et al., (2023) used in measuring the level of agreement with

land accessibility indicators. It is also similar to what Adeniyi et al., (2022) used in rating environmental problems. This was carried out with the calculation of the Relative Frequent of Worry Index (RFWI) for the identified variables of crime varieties. The results of these weighted values were assigned to the frequency level of worry about insecurity among the respondents in hotel and host communities. Since a Five-point Likert Scale was used, 'Never' was assigned a weight value of 1, 'Rarely' was assigned a weight value of 2; weight values of 3 and 4 were assigned to 'Often' and 'Very Often' respectively while 'Always' was assigned to a weight value of 5.

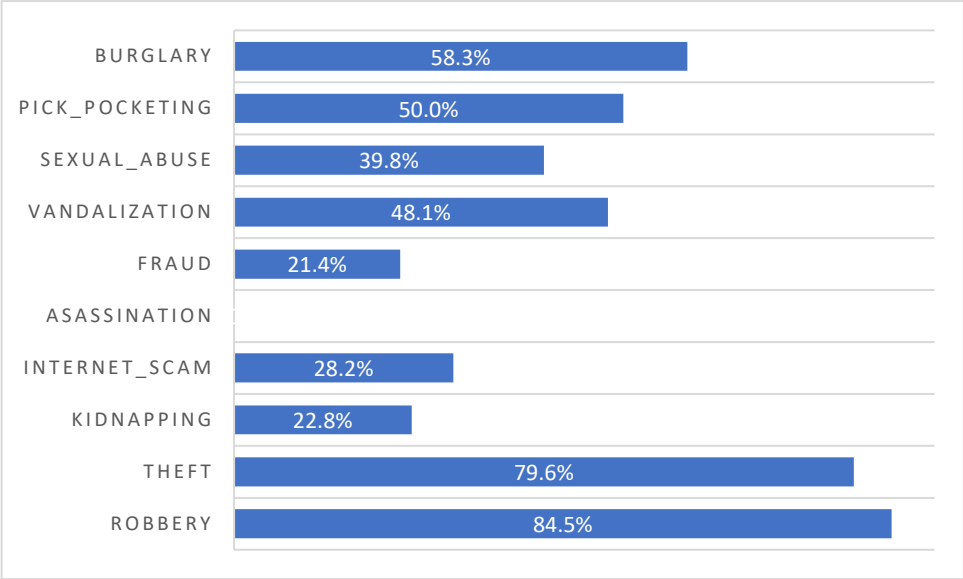

Figure 4. Forms of Insecurity experienced by the Residents of host communities

The Total Weight Value (TWV) of each of the variables of crime made by the respondents is calculated and presented in Table 3. The index for each variable was arrived at by dividing the TWV by the total number of responses. The TWV for each of the variables on crime was obtained through the addition of the product of the number of responses to each variable on crime with the assigned weight value. Mathematically, this is expressed as:

$\mathbf{TWV} = \sum_{i=1}^{5} X_i Y_i$

Where: TWV= Total Weight value;

x_i= number of respondents to rating i;

y_i=the weight assigned to a value (i=1, 2, 3, 4, 5).

The RFWI for each of the variables on crime was calculated as follows

$$\text{RFWI}=\frac{TWV}{\sum_{i=1}^{5} X_i}$$

Where RFWI can take the value between 1 and 5. The higher the RFWI of each variable on crime, the higher the level of worry made by the respondents which are the hotel staff and residents in Ibadan

Summarized in Table 3 are the findings on the frequency of worry on crime varieties in the past among staff of hotels and residents of host communities. Also revealed in the tables is the average RFWI which is denoted by $\overline{\text{RFWI}}$. This is obtained by the summation of the RFWI of all the types of crime and dividing by the number of the identified variables (n = 10). Thus, the mean relative frequency index (RFWI) among the staff of hotels denoted by $\overline{\text{RFWI}}$ is 2.54, while it was 2.44 for the residents of host communities. From the findings, it could be established that the mean RFWI among hostel staff and residents of host communities is significantly different. The frequency

of worry among the hotel staff was higher than the frequency of worry among the residents of host communities. This indicates that the staff of the hotel worries often about the variety of crimes. In order words, hotel staff usually worry more about crime occurrence than residents of the host communities. The reasons for this could be attributed to the peculiar characteristics of the hotel industry which makes it as hotspot for criminal activity and it explains the difference in the degree of worry among hotel staff and residents of host community. These characteristics make the hotel industry to be more accessible and serve as a suitable target for crime occurrence as a result of the absence of capable guards. Potential offenders often find it easy to have access to the property without stress, especially in hotels with a high level of proximity where there is an absence of capable guardians. This study corroborates the findings of Khadka (2014) and Afon (2001) that certain areas are hotspots of criminal activity, with differences in degrees of occurrence

Further analysis in Table 3 reveals that five of the ten identified forms of crimes among the hotel staff had an RFWI that was above the mean RFWI with positive deviations. These crimes include Theft (RFWI = 3.03, MD = 0.49), Fraud (RFWI = 2.83, MD = 0.29), Robbery (RFWI = 2.77, MD = 0.23), Sexual abuse (RFWI = 2.67, MD = 0.13), and Burglary (RFWI = 2.57, MD = 0.03). The implication of this is that the staff of hotels often worry about crimes with positive mean deviation. Crimes rated below the mean RFWI with negative deviations were pickpocketing (RFWI = 2.53, MD = -0.01), vandalism (RFWI = 2.50, MD = -0.04), Internet scam (RFWI = 2.33, MD = -0.21), Kidnapping (RFWI = 2.17, MD = -0.37), and assassination (RFWI = 2.00, MD = -0.54). This implies that hotel staff have lesser frequency of worry about crime with negative mean deviation in the study area.

Table 3. Frequency of worry on the forms of crime using Relative Frequency Index (RFWI)
(Source: Authors' Fieldwork, 2022)

Hotel Staff' Rating					**Residents' Rating**				
Forms of Crime	**TWV**	**RFWI**	**MD**	**Rank**	**Forms of crime**	**TWV**	**RFWI**	**MD**	**Rank**
Theft	91	3.03	0.49	1st	Robbery	741	3.58	1.14	1st
Fraud	85	2.83	0.29	2nd	Theft	737	3.56	1.12	2nd
Robbery	83	2.77	0.23	3rd	Fraud	675	3.17	0.73	3rd
Sexual abuse	80	2.67	0.13	4th	Burglary	520	2.51	0.07	4th
Burglary	77	2.57	0.03	5th	Sexual abuse	511	2.47	0.03	5th
Pick-pocketing	76	2.53	-0.01	6th	Vandalisation	479	2.31	-0.13	6th
Vandalisation	75	2.50	-0.04	7th	Pickpocketing	380	1.84	-0.6	7th
Internet scam	70	2.33	-0.21	8th	Assassination	368	1.78	-0.66	8th
Kidnapping	65	2.17	-0.37	9th	Kidnapping	361	1.74	-0.7	9th
Assassination	60	2.00	-0.54	10th	Internet Scam	304	1.47	-0.97	10th
Total	**762**	**25.4**			**Total**	**5076**	**24.43**		
Average Mean RFWI		2.54			Average Mean RFWI		2.44		

Note: RFWI – Relative Frequency of Worry Index; TWV – Total Weighted Value; MD – Mean about Deviation

Moreover, results in Table 3 show that five of the ten identified forms of crime among the residents of the host communities were rated above the mean, with positive deviations. These crimes were Robbery (RFWI = 3.58, MD = 1.14), Theft (RFWI = 3.56, MD = 1.12), Fraud (RFWI = 3.17, MD = 0.73), Burglary (RFWI = 2.51, MD = 0.07), and Sexual abuse (RFWI = 2.47, MD = 0.03). The implication of this is that residents of the host communities often have high frequency of worry about crimes with positive mean deviation. Crimes rated below the mean RFWI with negative deviations were vandalization (RFWI = 2.31, MD = -0.13), pickpocketing (RFWI = 1.84, MD = -

0.60), Assassination (RFWI = 1.78, MD = -0.66), Kidnapping (RFWI = 1.74, MD = -0.70), and Internet scam (RFWI = 1.47, MD = -0.97). This implies that most of the residents have a lesser frequency of worry about crimes with negative mean deviation in the study area.

It can generally be inferred that the most commonly worried crime among the hotel staff was Theft while robbery was the most worried crime among the residents of host communities. This finding agrees with the submission of Cohen and Felson (1979) on the routine activity theory which stated that before crime could occur there must be a suitable target. The suitable target must be attractive and accessible enough to potential offenders for criminal activities to occur. It could also be inferred that risk of individual victimization significantly varies within the host communities and the hotel environment. The result is therefore in consonance with the submission of Huang, Kwag, and Streib (1998), and Reynald (2011) in this regard. From the survey, analysis of the frequency of worry about the forms of crime among the respondents is a good representation of the study area and could have implications on the factors influencing fear and feeling of insecurity.

Determinants associated with fear and feeling of insecurity in the study area

Having considered the frequency of worry about the varieties of insecurity among the hotel staff and residents of host communities. There is a need to explore the factors influencing fear and feeling of insecurity in the study area. Factors analysis with varimax rotation was used to reduce and regroup the 24 variables into fewer classes. This statistical method is similar to what Hilliard and Baloglu (2008), Reid et al. (2020), Popoola et al. (2021), and Oladehinde et al. (2023) used in their studies. Factor analysis in most cases is used to show the calculated underlying components. The results of factor analysis are presented in four tables: the Kaiser-Meyer-Olkin (KMO-Bartlett) test, the communalities table, the common variance table, and the component rotated matrix. In factor analysis, the suitability of the data for factor analysis was first checked on Kaiser-Meyer-Olkin (KMO) value of sampling adequacy and Bartlett's test of significance. The rule is that the smaller the value of the index, the less appropriate the model. A score of 0.50 is considered poor, above 0.60 is acceptable, above 0.70 is good, above 0.80 is commendable, and above 0.90 are exceptional (Ahadzie, Proverbs, & Olomolaiye, 2008; Popoola, Oladehinde, & Animasaun, 2021). The results in Table 5 showed that the staff of the hotel had a Kaiser-Meyer-Olkin value of 0.613, while the residents of the host communities had 0.736. These values individually are greater than the minimum of 0.5, and the significant level of Bartlett's test of sphericity was 0.000 ($p < 0.05$). The Bartlett's test of sphericity chi-square value was 9995.873 and 3736.261 for hotel staff and residents of host communities respectively. This implies that the factor analysis considers the values of these variables adequate and suitable. They are also within the acceptable range for the well-specified model.

Table 5. KMO and Bartlett's Test
(Source: Authors' Field Survey, 2022)

		Staff of Hotels	Residents
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.616	0.768
Bartlett's Test of Sphericity	Approx. Chi-Square	995.873	3736.261
	Df	276	276
	Sig.	0.000	0.000

Interpretation of loaded factors is very important in factor analysis. However, before the interpretation is done, decision on the number of factors that could be extracted must be reached. For this decision to be made, Tabachinck, Fidell and Ullman (2013) observed that variables with factor loadings of 0.32 and above are interpretable. In addition to this, Comrey and Lee (2013) considered loadings above 0.71 to be excellent, 0.63 very good, 0.55 good, 0.45 fair, and 0.32 poor. Previous studies that used factor analysis, for example, Oladehinde (2019), Popoola et al. (2021),

and Oladehinde et al. (2023) used a cut-off mark of 0.55. This study, therefore, adopted 0.55, which is considered to be good for the respondents.

Table 6. Rotated Component Matrix[a] for hotel staff
(Source: Authors' Field Survey, 2022)

	Component					
	1	**2**	**3**	**4**	**5**	**6**
Poor control system	**.924**	-.011	.173	.056	-.104	.187
Housing type	**.907**	.169	.119	-.149	.206	-.217
Length of residency	**.861**	-.033	.149	-.297	-.115	-.285
Absence of Street light/ security light	**.762**	-.530	.020	-.076	-.244	.125
Genders	**.727**	.149	.016	.101	.138	.573
Age	**.684**	-.133	-.467	.126	.273	.174
Poor maintenance cultures	**.680**	-.067	.241	.373	.032	.303
Poor road condition	**.622**	-.072	-.055	.464	-.205	.397
Absence of Surveillance system	**.564**	.052	.050	.449	.451	.333
Rate of assassination	-.005	**.866**	.148	-.011	.024	-.018
Rate of kidnapping	.050	**.711**	-.040	.144	.445	.034
Rate of occurrence of physical violence	.232	**-.623**	-.319	.003	-.016	.437
Rate of criminal activities	-.167	**.558**	-.045	.461	-.387	-.386
Engagement of unqualified professionals as security	-.239	**-.542**	-.433	.284	-.256	-.218
Presence of economic activities	.287	-.197	**.791**	.268	.090	-.183
Poverty	.224	.285	**.776**	.003	.058	.280
Unemployment	-.164	.117	**.750**	-.229	.362	-.099
Low standard of living	-.028	-.426	**-.566**	.158	.073	.039
Lack of access to basic healthcare	.084	.189	-.075	**.854**	.036	.159
Locality/Location of the establishment	.448	.155	-.032	**-.709**	-.339	.149
Poor accessibility	.419	-.328	-.090	**.503**	-.311	-.169
Level of education	-.112	.246	.034	-.069	**.877**	-.132
Ethnicity	-.128	.015	-.461	-.217	**-.742**	.090
Income	-.030	.117	.019	-.029	.176	**-.945**
Eigenvalue	6.536	4.689	2.766	2.038	1.961	1.758
Variance Explained (%)	27.233	19.536	11.525	8.493	8.171	7.325
Cumulative Variance Explained (%)	27.233	46.769	58.294	66.787	74.958	82.283

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 25 iterations.

Analysis in Tables 6 and 7 is the grouping and categorization of factors with loading items and value of each of the variables from the rotated component matrix. The forms of variables that were loaded highly on each factor are revealed in the Tables. Six factors that were extracted by factor analysis were named and explained. The first factor for hotel staff in Table 8 was observed from components 1, 5, and 6. The highly loaded variables were poor control system (0.924), housing type (0.907), length of residency (0.861), absence of street light/security light (0.762), gender (0.727), age (0.684), Poor maintenance cultures (0.680), poor road condition (0.622), absence of surveillance system (0.564), level of education (0.877), ethnicity (0.742) and income (0.945). These components accounted for 42.73% and could be termed ***mechanical/ personal factors.*** On the other

hand, for the residents of host communities in Table 9, thirteen (13) variables were highly loaded on components 1,2, and 6 with 49.30% of the variation.

The variables that were highly loaded on it include rate of physical violence occurrence (0.766), rate of criminal activities (0.735), engagement of unqualified professional as security (0.713), rate of kidnapping (0.638), rate of assassination (0.628), level of education (0.627), length of residence (0.877), housing type (0.875), age (0.746), gender (0.680), absence of surveillance (0.789), ethnicity (0.771), and income (0.736). These variables could be referred to ***as Human and personal factors.***

The second factor for staff of hotel in component 2 which has 19.54% of the variance could be named ***human factor*** (see Table 8). The highly loaded variables were rate of assassination (0.866), rate of kidnapping (0.711), rate of occurrence of physical violence (0.623), rate of criminal activities (0.558), and engagement of unqualified personnel as security (0.542), while the second factor among residents of host communities has four variables that were highly loaded with 11.26% of the variation (see Table 9). The variables include unemployment (0.853), poverty (0.824), low standard of living (0.676), and absence of economic activities (0.529). These variables connote ***economic factor***

Factor three has four variables for hotel staff namely: presence of economic activities (0.791), poverty (0.776), unemployment (0.750), and standard of living (-0.566). These variables represented 11.53% of the variation and it could be attributed to ***economic factors***. On the other hand, four variables such as absence of street light/ security light (0.847), poor control system (0.846), poor maintenance culture (0.674), and poor road condition (0.652) were highly loaded for residents of the host communities on the third factor. These variables, which can be referred to as ***mechanical factors,*** had 7.49% of the variation.

The fourth factor contains three variables each for hotel staff and residents of host communities. The variables for hotel staff include lack of access to basic healthcare (0.854), locality/location of the establishment (-0.709), and poor accessibility (0.503) while that of the residents were lack of access to basic healthcare (0.782), locality/location of the establishment (0.769), and poor accessibility (0.650). This accounted for 8.49% for hotel staff and 6.52% for residents of the host communities of the total variance explained. The associated variables could be named ***environmental factors.***

It could be observed that the combination of all the factors itemized and discussed above accounted for 82.28% and 74.58% of the total variance explained for hotel staff and residents of the host communities respectively. This represents the combinations of determinants that gave the most appropriate explanation for the underlying variation between the respondents from hotels and host communities. From the extracted factors determining fear and feeling of insecurity in the study area, mechanical/personal factors, with 42.73% of the total variables, was the major factor stimulating the perception of insecurity among the hotel staff (see Figure 5). This is followed by human factor (19.54%), economic factor (11.53%), and environmental factor (8.49%). For the residents of the host communities, human/personal factors (49.3%) were the major determinants of fear and feeling of insecurity, followed by economic factors (11.261%), mechanical factors (7.49%), and environmental factors (6.52%) (see Figure 6). This implies that the associated factors influencing fear and feeling of insecurity varied significantly in the study area.

The study established that mechanical/ personal factor was the major determinant associated with fear and feeling of insecurity in the hotel industry. This conforms to the assertion of Cebekhulu (2016), Nwokorie and Igbojewe (2019), Curiel and Bishop (2018). As observed by Curiel and Bishop (2018) fear and feeling of insecurity to increase as the socioeconomic status increases irrespective of the geographical location. Hotels provide different services which attract guests, visitors, and tourists of different socioeconomic status. Fear and feeling of insecurity often increase in the absence of mechanical elements such as standard control systems, surveillance system, and street light/ security lighting. This is in congruence with the study of Cebekhulu (2016), Nwokorie, Everest and Ojo (2014) that mechanical systems such as security lights, street lights, good

surveillance, and control systems could be used to influence hotel security, especially in monitoring movements within the hotel premises. Other determinants were human, economic, and environmental factors. This study substantiated the findings of Ojo and Ojewale (2018), and Ogundiran (2019) that fear and feeling of insecurity depend on several factors.

Table 7. Rotated Component Matrix[a] for Residents of the host communities
(Source: Authors' Field Survey, 2022)

	Component					
	1	**2**	**3**	**4**	**5**	**6**
Rate of physical violence occurrence	**.766**	-.164	.245	.027	.219	.136
Rate of criminal activity	**.735**	-.183	.412	.095	.175	-.017
Engagement of unqualified professionals as security	**.713**	.198	-.108	.119	.343	.044
Rate of kidnapping	**.638**	.011	.492	.329	.045	-.050
Rate of assassination	**.628**	.459	.021	-.171	.079	.266
Level of education	**.627**	.376	-.083	.055	.423	.250
Length of residence	.053	**.877**	.051	.088	.129	.125
Housing type	.046	**.875**	-.015	.144	.010	-.131
Age	-.219	**.746**	.374	.041	.071	.104
Gender	.546	**.680**	.010	.071	-.078	.010
Unemployment	.122	-.029	**.853**	.108	.146	.133
Poverty	.142	.159	**.824**	.107	.231	.183
Low Standard of living	.207	.147	**.676**	.168	.233	.276
Presence of economic activities	-.033	.273	**.529**	.484	-.107	.199
Absence of Street light/ security light	.010	.111	.019	**.847**	.070	.089
Poor control system	.031	.130	.198	**.846**	-.012	.092
Poor maintenance culture	.065	-.026	.157	**.674**	.267	.156
Poor road condition	.298	.016	.080	**.652**	.340	.164
Lack of access to basic healthcare	.190	.327	.166	.184	**.782**	.082
Locality/ Location of the establishment	.341	-.131	.326	.172	**.769**	-.043
Poor accessibility	.482	-.024	.299	.216	**.650**	.000
Absence of surveillance	.191	-.109	.016	.205	.008	**.789**
Ethnicity	.085	.016	.278	.059	.001	**.771**
Income	-.045	.228	.217	.204	.078	**.736**
Eigenvalue	7.796	2.99	2.703	1.798	1.566	1.046
Variance Explained (%)	32.485	12.459	11.261	7.493	6.523	4.359
Cumulative Variance Explained (%)	32.485	44.944	56.205	63.698	70.221	74.58

Extraction Method: Principal Component Analysis; Rotation Method: Varimax with Kaiser Normalization; a. Rotation converged in 11 iterations.

On the other hand, human/ personal factor was the major associated determinant among the residents of the host communities. This implies that fear and feeling of insecurity is attributed to human-induced activities and personal factors. Human-induced activities as observed in the study include different forms of crime such as robbery, theft, burglary, fraud, and kidnapping among others that causes insecurity. The personal attribute indicates the socio-economic status of the residents which makes the person feel insecure. For example, women tend to feel more insecure about crime occurrences than men. This study is in harmony with the submission of Allen (2006) who discovered that 4% more women than men have a high level of worry about burglary.

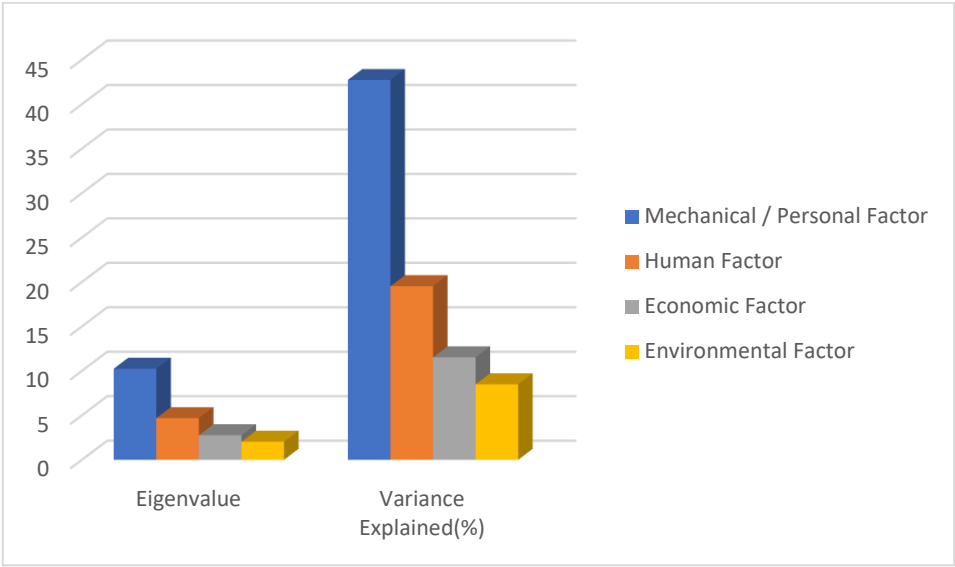

Figure 5. Associated factors influencing fear and feeling of insecurity for hotel staff

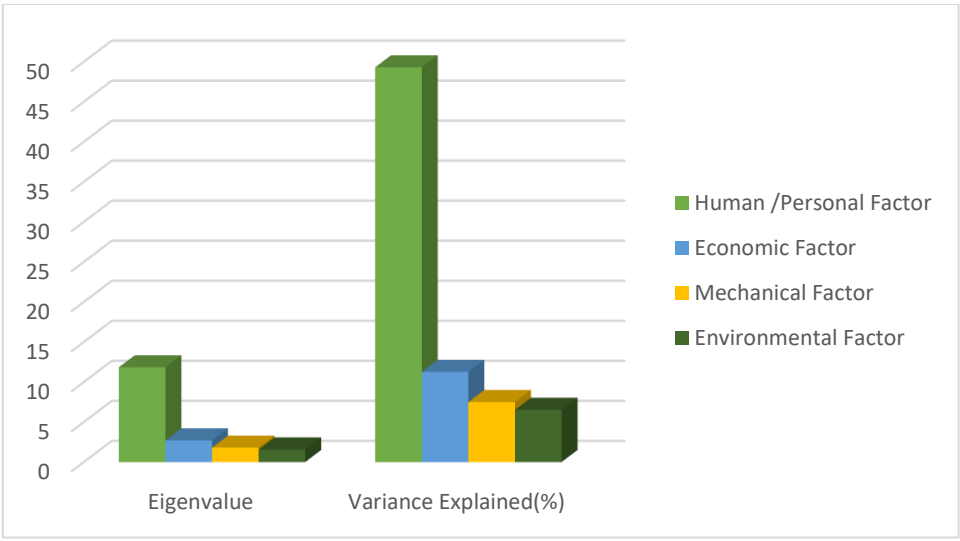

Figure 6. Associated factors influencing fear and feeling of insecurity for residents of host communities

It is also in accordance with the observation of Crowell and Burgess (1996) that women are ten times more likely to be sexually assaulted than men. Another personal attribute is income. Individuals with higher income are often more security conscious than individuals with lower income. This study is in agreement with Sugiharti et al. (2022) that higher income can reduce crime rate and feelings of insecurity. Other factors were economic, mechanical, and environmental factors. This study consistently supports the views of Almanza-Avendano et al. (2018), Ojo and Ojewale (2018), Azaola (2012), and Jusidman (2012) that fear and feeling of insecurity could be attributed to economic, mechanical, and environmental factors. From the foregoing, it could be deduced that even within the same geographical area, fear and feeling of insecurity is associated with several factors.

CONCLUSION

This study has investigated the determinants that are associated with fear and feeling of insecurity in Ibadan, especially among hotel staff and residents of host communities. The study revealed that crime incidence in Ibadan is on the increase. As long as crime occurs, people will continue to perceive insecurity in different forms. The most frequently worried crime in the hotel was theft, fraud, robbery sexual abuse, and burglary while robbery, theft, fraud, burglary, and sexual abuse were highly worried among the resident in the host communities. The study discovered that there was a significant variation in the mean frequency of worry index (RFWI). The reason for this is not farfetched from the differences in the attributes of hotel industry and host communities. The attributes of the hotel industry make it serve as a suitable target for crime occurrence due to the nature of services rendered which could attract potential offenders in the absence of capable guards. On the other hand, the reason why mean frequency of worry index (RFWI) is relatively low among the residents of host communities might be attributed to the fact that the host community is less attractive to potential offenders. The study observed mechanical/personal factors were the major determinant associated with fear and feeling of insecurity in the hotel industry. These factors accounted for more than one-third of the total variance explained. The remaining factors were human, economic, and environmental. On the contrary, among the residents of host communities, human/personal factors were observed as the major associated determinants of fear and feeling of insecurity with more than one-third of the total variance explained. Other factors that were discovered in the study were economic, mechanical, and environmental. The study concluded that irrespective of the geographical area, fear and feeling of insecurity is associated with different factors and these factors varied based on the peculiar attributes of hotel and host communities.

CONFLICTING INTERESTS

The author has declared that there is no conflict of interest regarding the research, authorship and publication of this article.

DATA AVAILABILITY

Data will be made available on reasonable request

CONTRIBUTIONS

All authors contributed to the study conception and design. Material preparation, data collection, and analysis were performed by (AFO). The first draft of the manuscript was written by [GJO] and all authors commented on previous versions of the manuscript. All authors read and approved the final manuscript

FUNDING

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

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Submitted: January 23, 2023 | Revised: March 30, 2024 | Accepted and published online: April 03, 2024