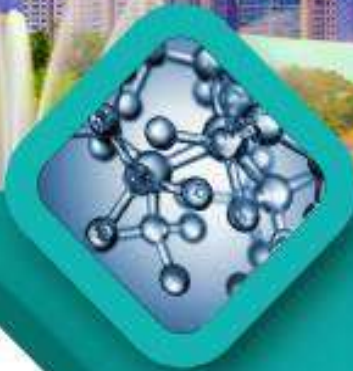


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PREFACE

The 3rd International Conference on Science, Engineering and Social Sciences, ICSESS'17 is organised jointly by Universiti Teknologi Malaysia (UTM), International Student Society-Nigeria (ISS-Nigeria), UTM International and International Student Center (ISC). The theme for this year conference is "*Promoting Innovative Multidisciplinary Research for Sustainable Development*". This promotes and encourage innovative and novelty for sustainable development in wide range of science, engineering, social science researches in terms of approaches and methods, advanced technology, professionalization, experiences, and culture.

The responses from participants for this conference is overwhelming, well attended, and successful. Our participants are from Universiti Teknologi Malaysia (UTM), School of Business, Yogyakarta, Indonesia, Universiti Tun Hussein Onn Malaysia (UTHM), University Andalas, Kampus UNAND Limau Manih, Padang, West Sumatera, Indonesia, Universiti Teknologi Mara (UITM), University of Jos Nigeria, Federal University of Technology Minna Nigeria (FUTMINNA), University of Dammam Saudi Arabia just to mention a few. Hence, this conference provides a good platform for professionals, academicians and researchers to widen their knowledge and approach on latest advances in research and innovation. Papers presented in these conference cover a wide spectrum of science, engineering and social sciences.

Finally, a note of thanks must go to ICSESS'17 central working committee for their remarkable dedication in making these conference a success. We hope the event will prove to be an inspiring experience to all committee members and participants.

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Analysis of Residents' Satisfaction in Abuja Residential Police Barracks, Nigeria

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ABSTRACT

Housing ranks only after food in the order of man's needs, it transcends just the supply of houses, but also the provision and access to supporting community facilities. The aim of this research is to examine residents' perception of satisfaction with regards to Police Barracks' Housing Condition in Abuja, with the following objectives, to: assess the Condition of Housing in the selected Police Barracks; and examine the residents' satisfaction with dwelling components of the Police Barracks. Stratified random sampling method was employed to determine the particular police barracks for sampling while, simple random sampling was employed to determine the households for sampling. Respondents' satisfaction levels show that in Garki Barracks 52.4% were dissatisfied, 27% were just satisfied, 19% indicated satisfaction for the electrical component of their dwelling; In Nyanya Barracks, 10.2% were very dissatisfied 42.4% were dissatisfied, 42.4% were just satisfied while 3.4% were satisfied while in MD Abubakar Barracks, 3.2% were very dissatisfied 46.5% were dissatisfied, 8% were just satisfied and 76.2% of the respondents were satisfied while 7% were very satisfied. The research established through empirical study that Resident Police Officers are generally dissatisfied with the Housing in Barracks in Abuja, also by comparative analysis satisfaction levels of building, neighbourhood and management components of the three barracks it established a significant relationship between the satisfactions levels of these components across the three barracks studied. This study analysed Residents' Satisfaction of Residential Buildings in Police Barracks in Abuja, Nigeria by employing variables of building, neighbourhood and management components which determine Resident Satisfaction in Police Barracks. The findings of this research show that these variables affect residents' satisfaction therefore establishing previous studies in Housing Satisfaction in Nigeria.

Key words: Housing, Housing Satisfaction, Residents

INTRODUCTION

Housing ranks only after food in the order of man's needs, it transcends just the supply of houses, but also the provision and access to supporting community facilities and services, safety and security, privacy, neighbourhood and communal association, work and recreational activities, and security of tenure that make for healthy living (Sulyman, 2015; Olotuah, 2006). The ultimate goal of every housing scheme is to further improve housing adequacy so as to meet the needs of the residents, this is because housing is not just a vital national investment but also the right of every individual. Nigeria's housing challenges are both qualitative and quantitative (Federal Republic of Nigeria, 1991), studies show that while quantitative challenges can be surmounted by improving on housing supply, qualitative challenges have for the most part been as a consequence of the failure of housing providers to consider processes and determinants of residents' satisfaction (Ukoha and Beamish, 1997; Ilesanmi, 2010). Oladapo (2006) considered that qualitative problems were the major limitations of urban housing in Nigeria.

Police barracks in Nigeria have been described as notorious for their filthy condition and poor maintenance (Civil Society Panel on Police Reform in Nigeria, 2012), with most of the officers unhappy with their living conditions which some of them say can be compared to abodes for pigs and other animals (Dachen, 2015). The aim of this research is to examine residents' perception of satisfaction with regards to Police Barracks' Housing Condition in Abuja, with the view to

proffering solutions and sustainable strategies that will ensure improvements in practice to enhance better service delivery consequently enhancing better quality of life for officers of the Nigeria Police Force with the following objectives, to: assess the Condition of Housing in the selected Police Barracks; examine the residents' satisfaction with dwelling components of the Police Barracks; and evaluate the level of residents' satisfaction with the neighbourhood components of the Police Barracks in Abuja.

MAIN RESULTS

Respondents' satisfaction levels show that in Garki Barracks 52.4% were dissatisfied, 27% were just satisfied, 19% indicated satisfaction for the electrical component of their dwelling; In Nyanya Barracks, 10.2% were very dissatisfied 42.4% were dissatisfied, 42.4% were just satisfied while 3.4% were satisfied. And in MD Abubakar Barracks, 3.2% were very dissatisfied 46.5% were dissatisfied, 8% were just satisfied and 76.2% of the respondents were satisfied while 7% were very satisfied.

Table 1: Residents Satisfaction with Electrical Component

Electrical Component	Nyanya	Garki	MD Abubakar
Very Dissatisfied	6 (10.3)	1 (1.6)	12 (3.2)
Dissatisfied	25 (43.1)	33 (52.4)	30 (8.0)
Neutral	25 (43.1)	17 (27.0)	21 (5.6)
Satisfied	2 (3.4)	12 (19.0)	285 (76.2)
Very Satisfied	-	-	26 (7.0)
Total	58 (100)	63 (100.0)	374 (100.0)

Source: Fieldwork, 2016

Respondents across the three barracks expressed high levels of dissatisfaction with the Roof Condition of their dwelling in Garki, 28.6% were very dissatisfied, 46% were dissatisfied, 11.1% were neutral, and 14.3% were however satisfied. In Nyanya, 35.6% were very dissatisfied, 44.1% expressed dissatisfaction, 11.9% were indifferent; and 8.5% of the respondents was satisfied. In MD Abubakar Barracks, 58.8% of the respondents were dissatisfied, 8.3% were indifferent, 32.1% were satisfied, while 0.8% was very satisfied.

Table 2: Residents' Satisfaction with Roof Condition

Roof Condition	Nyanya	Garki	MD Abubakar
Very Dissatisfied	21 (35.6)	18 (28.6)	-
Dissatisfied	26 (44.1)	29 (46.0)	220 (58.8)
Neutral	7 (11.9)	7 (11.1)	31 (8.3)
Satisfied	5 (8.5)	9 (14.3)	120 (32.1)
Very Satisfied	-	-	3 (0.8)
Total	59 (100)	63 (100.0)	374 (100.0)

Source: Fieldwork, 2016

Relationship between the levels of satisfaction of residents with the housing in the three selected police barracks in Abuja. The research established through empirical study that Resident Police Officers are generally dissatisfied with the Housing in Barracks in Abuja, also by comparative analysis satisfaction levels of building, neighbourhood and management components of the three barracks it established a significant relationship between the satisfactions levels of these components across the three barracks studied. The study established assertions by Onibokun (1973) Oladapo (2006) and Jiboye (2010) that housing satisfaction transcends just the provision of just the dwelling components but include the neighbourhood and management components among other factors that influence satisfaction.

CONCLUSION

This study analysed Residents' Satisfaction of Residential Buildings in Police Barracks in Abuja, Nigeria by employing variables of building, neighbourhood and management components which determine Resident Satisfaction in Police Barracks. The findings of this research show that these variables affect residents' satisfaction therefore establishing previous studies in Housing

Satisfaction in Nigeria. The findings showed that the respondents were generally dissatisfied with their housing environment irrespective of their location but were especially dissatisfied with the management component.

REFERENCES

- Dachen, I. (2015). Fit for Pigs: Policemen decry poor living conditions. pulse.ng.com, pp. <http://pulse.ng/gist/fit-for-pigs-policemen-decry-poor-living-conditions-id3458170.html>.
- Federal Republic of Nigeria (1991). National Housing Policy. Lagos: Federal Ministry of Lands and Housing.
- Ilesanmi, A. O. (2010). Post-occupancy evaluation and residents' satisfaction with public housing in Lagos, Nigeria. *Journal of Building Appraisal*, 153-169.
- Sulyman, A. O. (2015). *Introduction to Housing: Basic Concepts and Applications*. Minna: KingJames Publishing House.
- Oladapo, A. A. (2006). A Study of Tenant Maintenance Awareness Responsibility and Satisfaction in Institutional Housing in Nigeria. *International Journal of Strategic Prop. Manage. Vilnius Gediminas Technology. University*, 10, 217-231.
- Olotuah, A. (2006). Housing Quality in Suburban Areas: An emperical Study of Oba-Ile, Nigeria. 34(2), 133-137.