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Attitude towards Solid Waste Disposal in Port Harcourt Metropolis of Rivers State, Nigeria

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Abstract

This study focused on household willingness and attitude towards solid waste disposal in Port Harcourt Metropolis of Rivers state. In order to achieve the purpose of this study, six objectives and research questions, four null hypotheses were formulated and tested at 0.05 significance level. Descriptive cross sectional design was adopted for this study with the population of 282,500 households. Multistage sampling procedure was adopted for this study. A self-structured and an adapted instrument on Households Willingness and Attiude towads Solid waste disposal. Cronbach Alpha was used to determine the reliability coefficient of 0.72 for the instrument. A Statistical Package for Social Science (SPSS) version 25, was used in analyzing the data collected from questionnaire. The result of this study showed that the extent of household willingness towards solid waste disposal in Port Harcourt Metropolis was high since the grand mean of 2.52±0.98 is greater than the criterion mean of 2.50. The result of the study showed that there was no significant difference in household attitude based on gender ($p>0.05$).The result of the study showed that there was no significant differe nce in household attitude based on location ($p = 0.628$). The findings of this study shows that there was no significant difference in household attitude based on level of education ($p>0.05$). It was concluded that there was high extent of households willingness and attitude towards solid waste disposal in Port Harcourt metropolis. It was recommended that Government should make solid waste disposal material available for households and families to enable good practices of waste disposition so as to prevent indiscriminate dumping.

Keywords: *household willingness, attitude, solid waste disposal, port harcourt metropolis.*

Introduction

Urbanization and its attendant population growth have continued to accentuate the corresponding increase of the volume of refuse or waste generated from the multifarious or diverse activities and programmes engaged by the cross-section of the population or citizenry from different social and demographic characteristics. However, humans are naturally bound to produce refuse when they consume and utilize resources in an unsustainable manner (Almquist & Barnsley, 2008). Furthermore, the unsustainable consumption pattern by populace or residents promotes the generation and disposal of refuse, which when unethically done forcibly causes pollution that impacts on the health of man and the environment (Amalu & Ajake, 2014). Corroborating this view, Binafeigha and Enwin (2017) emphasized that the constant flooding of the environment with waste pollutants could lead to alteration in soil, air and water quality, with damaging consequences for plants and animals as well as aesthetic of the environment.

Refuse is a wide category of solid wastes from household, industrial, commercial and construction activities. Such materials involve household waste, biomass that is food waste, plant matter (Yanto et al.,2017). Also include non-biodegradable where plastics, paper, glass and metals like battery or part of discarded equipment (Amalu & Ajake, 2014; Modebe et al., 2011). Management of such waste is highly challenging due to their heterogeneous nature, especially in rapidly urbanizing areas of developing nations which generate solid waste at alarming rates. However, it is

particularly challenging to manage household refuse because this type of waste consists of different and mixed materials that require a variety of disposal or treatment methods (Keita, 2016).

And in support of this vision, Yoada et al. Compakati (2014) outlined that escalating worries about urban waste management is fueled by the environmental pollution, threats to public health and degradation of urban environments. Accumulation of litter, bags and other rubbish not only creates inconvenience but even imposes a serious impact on human health and environmental sustainability. Therefore, proper waste management has become an important strategy for urban planning and environmental protection in developing countries.

It is estimated that an average Nigerian in the urban or rural areas generates about 0.49 kg of solid waste per day with household and commercial Centre contributing almost 10% of total urban waste burden. Every day, a staggering 10, 000 tons of refuse (mostly solid wastes) are generated countrywide with about 50% accounted to the Lagos, Port Harcourt and Abuja area (Agwu, 2012; Abuja-Citiserve, 2014). Of these about two thirds of wastes are dumped indiscriminately on the streets and in the drains thus posing serious environmental health hazards to residents or populace (Lawal, 2014). Refuse disposal involves the collection, transportation and discarding of whole or a part of waste, debris or rubbish. The methods of refuse disposal include: land filling, incineration, open dumping, composting, and mechanical destructor (Adogu, et al 2015), and recently scavenging. However, Adogu et al. The stagnant progress in optimizing the multi-faceted nature of solid waste disposal technologies has been argued by (2015) to be a significant factor leading to ineffective refuse management, which is an ongoing threat to human health and well-being, both urban and rural Improved health outcomes are directly correlated with environmental cleanliness, and improved health outcomes equate to higher human productivity. Thus, one can say that a clean and green environment has an important place in enhancing the economic development of a country. Effective refuse management stipulates the orderly collection, transportation, processing, treatment and disposal of individual, household and commercial debris generated in an urban centre or rural area based on global acceptable standards of sustainability. Refuse must be collected differently, directly in bins or special guide boxes at spots to take it where it will necessarily go to disposal, acceptable for sanitary landfills or places designed and approved for such purposes, following rules and procedures making this task safe for the environment and human health. The proper management of waste involves the preparation and execution of planned, sustainable, economical exploitative schemes (Stanley & Owhor, 2018). These types of frameworks promote actions, such as recycling, which transforms unusable waste into raw items that can be reused. This process aids in the saving of natural resources, energy needs reduction, waste & disposal costs minimization along with minimized emissions to air and water pathways, while on top creating profitability in terms of jobs and cost savings.

The attitude of a people may be negative or positive towards the disposal of refuse. Unfortunately, the negative attitude of people towards the disposal of refuse may make the dwelling place/ environment unconducive to health, and this may in turn impose health hazard on the people and lead to environmental problems. People should try to have a positive attitude as regards refuse disposal methods in the communities, as this will help to improve the situation the people/ the general public within the country. Eveth, Lustia, and Christian (2016) found out that the respondents in their study area possessed positive attitudes towards refuse disposal methods. Similarly,Kiran,Sanjay, Ravi, Santhosh Udaya(2015) found out that majority of their respondents had a positive attitude towards solid waste disposal methods Rhule (2010) noted negative attitude towards refuse disposal methods among respondents in his study area. Attitude is a very vital concept in refuse disposal methods that cannot be over emphasized when it comes to refuse disposal methods, this has received much attention from so many researcher, yet there are still gaps to be filled as it concerns people's attitudes towards refuse disposal methods within the communities.

Hence, the attitude of sustainable or viable refuse disposal or option also influences the practice of residents or households across different age, gender, level of education, occupation and location towards their willingness to adopt viable refuse disposal (Banga, 2013). Nugent (2013) define knowledge as an awareness of something, information and understanding of a specific topic of the world in general which is usually acquired by experiences or learning. Asuamah, et al (2012) opined that this knowledge is vital in galvanizing proper collection and disposal (otherwise management) of human refuses which are great contributors of environmental health hazards. Practice is the ``customary, habitual, or expected procedure or way of doing something). Conversely, poor refuse disposal practices (followed by a lack of knowledge regarding refuse management) lead to contamination of edible products thereby increasing the burden of infection and diseases among the citizens.

Ifegbesan (2010) emphasized the existence of some relationship between some socio-demographic variables (like: age, gender, education and occupation, location) and environmental attitude and behavior/practices especially in

school. However, poor refuse management practices by both students and school management and gender and educational background rescores or indicates the tendency for refuse management practices to differ by gender and educational level of teachers and students. Age means the number of years that a person has lived or a thing has existed. It is about a specific time of life Education is the act of teaching, training or learning, especially in a school or college, to enhance knowledge and develop skills. These environmentally unfriendly behaviours pose different dangers to the human health and adversely harm flora and wildlife as well as the ecosystem especially when it is not adequately collected and disposed. Poor refuse management knowledge and practices, regrettably, might predispose residence and the environment or neighborhoods to the dangers of air borne diseases. Hence, sufficient knowledge begets ethical and positive attitude which help protect people or residence from the diseases, health issues and environmental problems associated with poor refuse disposal methods in Nigeria. Against the background of these identified problems, this research is posed on investigating household willingness and attitude towards solid waste disposal in Port Harcourt Metropolis.

Objectives of the study

The objective of this study is to investigate household willingness and attitude towards solid waste disposal in Port Harcourt Metropolis.

1. determine the household willingness towards solid waste disposal in Port Harcourt Metropolis;
2. investigate the household attitude towards solid waste disposal in Port Harcourt Metropolis;
3. ascertain the household attitude towards solid waste disposal in Port Harcourt Metropolis level of education;
4. ascertain the household attitude towards solid waste disposal in Port Harcourt Metropolis based on location;
5. ascertain the household attitude towards solid waste disposal in Port Harcourt Metropolis based on occupation.

Research Questions

The following research questions were formulated to guide this study:

1. What is the household willingness towards solid waste disposal in Port Harcourt Metropolis?
2. What is the household attitude towards solid waste disposal in Port Harcourt Metropolis?
3. What is the household attitude towards solid waste disposal in Port Harcourt Metropolis based on gender?
4. What is the household attitude towards solid waste disposal in Port Harcourt Metropolis level of education?
5. What is the household attitude towards solid waste disposal in Port Harcourt Metropolis based on location?
6. What is the household attitude towards solid waste disposal in Port Harcourt Metropolis based on occupation?

Hypotheses

The following hypotheses were tested at 0.05 level of significance:

1. There is no significant difference in the household attitude towards solid waste disposal in Port Harcourt Metropolis based on gender.
2. There is no significant difference in the household attitude towards solid waste disposal in Port Harcourt Metropolis level of education.
3. There is no significant difference in the household attitude towards solid waste disposal in Port Harcourt Metropolis based on location.
4. There is no significant difference in the household attitude towards solid waste disposal in Port Harcourt Metropolis based on occupation.

Methodology

This study employed a descriptive cross-sectional survey design to obtain data from a defined segment of the population at a specific point in time. According to Elendu (2010), a cross-sectional survey is suitable for describing phenomena as they occur in their natural setting without manipulation. The target population comprised all residents of Port Harcourt Metropolis, which has an estimated population of approximately 1,682,500 according to the National Bureau of Statistics (2018). From this population, a sample of 600 respondents was selected. The determination of the sample size was guided by the Taro Yamane formula, which was applied to ensure representativeness and statistical adequacy for the study;

$$S = \frac{N}{(1 + N\ \alpha^2)}$$

Where = S = Sample size

N = population size

α = level of significance usually 0.05

The sample of this research consisted of 602 people from residents in a geographically diverse area around the United Kingdom; A multi-stage sampling method was used to provide sufficient coverage for the target population [23]. For the first steps, Obio/Akpor; and Port Harcourt local

government areas within Port Harcourt Metropolis were sampled from the statistical sampling frame by use of simple random sampling technique. In the second stage, a non-proportionate sampling method based on population characteristics in each of the selected areas was used to recruit respondents. The collected data were in the form of a questionnaire made by researchers themselves, namely "Willingness and Attitude Towards Solid Waste Disposal." Thereby validated, the instrument had a reliability index of.74 (Cronbach's alpha), suggesting that it possessed internal consistency appropriate for the study.

After the collection of data, care was taken in sorting out coded questionnaires and analyzing them through Statistical Package for the Social Sciences. Because the descriptive and inferential statistics were employed to answer the research questions mean, standard deviation was used while for testing null hypotheses ANOVA, z-test was applied.

Results

Research Question 1: What is the extent of household willingness towards solid waste disposal in Port Harcourt Metropolis?

Table 1: Extent of household willingness towards solid waste disposal in Port Harcourt Metropolis

SN	Items	Mean	S. D.	Decision
1	Store refuse in cardboard and old box	2.21	1.06	LE
2	Covered refuse bin and bag in order to avoid flies piercing on them and to avoid offensive smells	3.43	.82	HE
3	Throw refuse into farmlands and bushes	2.69	.99	HE
4	Throw refuse on the streets, road side and open space and backyards	2.65	1.02	HE
5	Dump refuse into the lake, sea, river, gutter or drains	2.46	1.01	LE
6	Discard refuse into abandoned burrow pit and community sanitary landfill / site	2.56	.94	HE
7	Feed animals with some household refuse	2.17	.97	LE
8	Burry household refuse in the ground	2.51	1.02	HE
9	Dump household refuse on the heaps of mountains of garbage on high ways	2.01	.95	LE
10	Discard refuse in market places	2.43	1.04	LE
11	Defecate on the streets/ market places/ open places	1.98	.97	LE
12	Discard animal dropping/ poultry remains on the streets	2.01	.99	LE
13	Discard baby's diaper with excrement on the streets	2.18	1.03	LE
14	Separate/ segregate household refuse before disposing them	2.84	.97	HE
15	Reuse some of the items instead of discarding them away	2.58	.97	HE
16	Make use of wheelbarrow/ truck in moving household refuse to the dumpsite	3.16	.92	HE
17	Employ the service of the refuse collectors	3.00	1.14	HE
	Grand mean	2.52	0.98	HE

Criterion mean = 2.50

Table 1 revealed the extent of household willingness towards solid waste disposal in Port Harcourt Metropolis. The grand mean of 2.52±0.98 is greater than the criterion mean of 2.50. Thus, the extent of household willingness towards solid waste disposal in Port Harcourt Metropolis was high.

Research Question 2: What is the household attitude towards solid waste disposal in Port Harcourt Metropolis?

Table 2: Household attitude towards solid waste disposal in Port Harcourt Metropolis

SN	Items	Mean	Std Dev.	Decision
1	Liked throwing my refuse	2.44	1.55	LE
2	Prefer discarding refuse into	3.22	.82	HE
3	dumping of refuse on any	3.29	.91	HE
4	throwing of refuse at the backyard	3.28	.95	HE
5	burying refuse in the ground	2.78	1.10	LE
6	Liked throwing refuse into waste bin	2.86	.98	HE
7	Dumping refuse in gutters	3.20	1.01	LE
8	Using fire to burn	2.39	1.08	LE
9	Don't like sending children	2.86	1.01	HE
10	Carrying household refuse to	2.43	1.04	LE
	Grand mean	**2.92**	**1.04**	**HE**

Criterion mean = 2.50

Table 2 revealed the attitude towards solid waste disposal in Port Harcourt Metropolis. The grand mean of 2.92±1.04 is greater than the criterion mean of 2.50. Thus, the attitude of household towards solid waste disposal in Port Harcourt Metropolis was positive.

Research Question 3: What is the household attitude towards solid waste disposal in Port Harcourt Metropolis based on gender?

Table 3: Household attitude towards solid waste disposal in Port Harcourt Metropolis based on gender

SN	Items	Males		Female	
		M	S.D.	M	S.D.
1	Liked throwing my refuse	2.50	1.89	2.37	1.07
2	Prefer discarding refuse into	3.25	.80	3.16	.84
3	dumping of refuse on any	3.29	.92	3.27	.89
4	Throwing of refuse at the backyard	3.31	.97	3.26	.94
5	Burying refuse in the ground	2.79	1.12	2.76	1.06
6	Liked throwing refuse into waste bin	2.92	.96	2.80	.99
7	Dumping refuse in gutters	3.21	1.02	3.20	.98
8	Using fire to burn	2.31	1.10	2.47	1.07
9	Don't like sending children	3.00	.95	2.72	1.05
10	Carrying household refuse to	3.39	.89	3.23	.91
	Grand mean	**2.99**	**1.06**	**2.92**	**.98**

Criterion mean = 2.50

Table 3 revealed the attitude towards solid waste disposal in Port Harcourt Metropolis based on gender. The result showed that, positive attitude towards solid waste disposal was more among the males (2.99±1.06), compared to the females (2.92±0.98). Thus, positive attitude of household towards solid waste disposal in Port Harcourt Metropolis was more among the males.

Research Question 4: What is the household attitude towards solid waste disposal in Port Harcourt Metropolis level of education?

Table 4: Household attitude towards solid waste disposal in Port Harcourt Metropolis based on level of education

SN	Items	None		Primary		Secondary		Tertiary	
		M	S.D.	M	S.D.	M	S.D.	M	S.D.
1	Liked throwing my refuse	2.52	1.04	3.00	1.06	2.62	2.22	2.27	1.09
2	Prefer discarding refuse into	3.28	.84	3.41	.79	3.26	.81	3.16	.83
3	dumping of refuse on any	3.32	.98	3.29	.91	3.30	.91	3.28	.90
4	Throwing of refuse at the backyard	3.12	1.01	2.52	1.37	3.36	.84	3.34	.92
5	Burying refuse in the ground	2.28	1.17	2.70	1.21	2.97	1.06	2.75	1.08
6	Liked throwing refuse into waste bin	3.12	.97	2.58	1.00	2.68	.98	2.95	.96
7	Dumping refuse in gutters	3.44	1.04	3.17	.95	3.11	.98	3.22	1.02
8	Using fire to burn	2.76	1.05	2.58	1.32	2.37	1.07	2.32	1.06
9	Don't like sending children	3.40	.86	2.58	1.06	2.84	.96	2.82	1.03
10	Carrying household refuse to	3.60	.91	3.11	.99	3.23	.86	3.34	.91
	Grand mean	**3.08**	**.98**	**2.89**	**1.06**	**2.97**	**1.06**	**2.94**	**.98**

Criterion mean

Table 4 revealed the attitude towards solid waste disposal in Port Harcourt Metropolis based on the level of education. The result showed that, positive attitude towards solid waste disposal was more among those with no formal education (3.08±0.98), and followed by those who had secondary education (2.97±1.06), tertiary (2.94±0.98), and those with primary education (2.89±1.06). Thus, positive attitude of household towards solid waste disposal in Port Harcourt Metropolis was more among with no formal education.

Research Question 5: What is the household attitude towards solid waste disposal in Port Harcourt Metropolis based on location?

Table 5: Household attitude towards solid waste disposal in Port Harcourt Metropolis based on location

SN	Items	Rural		Urban	
		M	S.D.	M	S.D.
1	Liked throwing my refuse	2.54	1.81	2.31	1.13
2	Prefer discarding refuse into	3.30	.78	3.10	.86
3	dumping of refuse on any	3.33	.87	3.23	.96
4	Throwing of refuse at the backyard	3.30	.93	3.25	.98
5	Burying refuse in the ground	2.88	1.04	2.64	1.16
6	Liked throwing refuse into waste bin	2.72	.97	3.03	.96
7	Dumping refuse in gutters	3.13	1.04	3.30	.95
8	Using fire to burn	2.38	1.08	2.40	1.09
9	Don't like sending children	2.79	1.01	2.93	1.01
10	Carrying household refuse to	3.29	.92	3.41	.87
	Grand mean	**2.97**	**1.04**	**2.96**	**.99**

Criterion mean = 2.50

Table 5 revealed the attitude towards solid waste disposal in Port Harcourt Metropolis based on location. The result showed that, positive attitude towards solid waste disposal was more among those in the rural areas (2.97±1.04), compared to those at the urban places (2.96±0.99). Thus, positive attitude of household towards solid waste disposal in Port Harcourt Metropolis was more among the at the rural areas.

Test of Hypotheses

Hypothesis 1: There is no significant difference in the household attitude towards solid waste disposal in Port Harcourt Metropolis based on gender.

Table 6: Z-test result showing the significant difference in household attitude towards solid waste disposal in Port Harcourt Metropolis based on gender

Gender	N	Mean	SD	Df	z-cal	p-value	Decision
Male	154	3.0021	.46820	296	.161	0.688	H_o accepted
Female	144	2.9083	.50653				

P>0.05 = Not Significant

Table 6 presents the z-test analysis examining differences in household attitudes toward solid waste disposal in Port Harcourt Metropolis based on gender. The findings indicate that no statistically significant difference exists, as the calculated z-value (z = 0.161, df = 296) yielded a p-value of 0.688, which exceeds the 0.05 level of significance. Consequently, the null hypothesis was retained, suggesting that gender does not significantly influence household attitudes toward solid waste disposal within the study area.

Hypothesis 2: There is no significant difference in the household attitude towards solid waste disposal in Port Harcourt Metropolis based on level of education.

Table 7: Analysis of Variance (ANOVA) showing significant difference in the household attitude towards solid waste disposal in Port Harcourt Metropolis based on level of education

Sources of variance	Sum of squares	Df	Mean sum of squares	F-value	p-value	Decision
Between group	.612	3	.204	.861	.462	H_o
Within group	70.375	297	.237			Accepted
Total	70.987	300				

*Not Significant, p<0.05

Table 7 presents the results of the one-way ANOVA assessing differences in household attitudes toward solid waste disposal in Port Harcourt Metropolis based on educational level. The analysis indicates that there is no statistically significant difference among the groups, as reflected by the F-value [F(3, 297) = 0.861] with a p-value greater than 0.05. Accordingly, the null hypothesis was retained, implying that educational attainment does not significantly influence household attitudes toward solid waste disposal within the study area.

Hypothesis 3: There is no significant difference in the household attitude towards solid waste disposal in Port Harcourt Metropolis based on location.

Table 8: Z-test result showing the significant difference in household attitude towards solid waste disposal in Port Harcourt Metropolis based on location

Gender	N	Mean	SD	Df	z-cal	p-value	Decision
Male	169	2.9485	.52555	297	.236	0.628	H_o accepted
Female	130	2.9656	.43513				

P>0.05 = Not Significant

Table 8 is the summary of the z-test demonstrating significant variation in household attitude to solid waste disposal in Port Harcourt Metropolis based on location. The results of the study revealed that there was no significant variation in the attitude of households based on geography (z-cal = 0.236, df = 297, p = 0.628). The p>0.05 so the null hypothesis was accepted. This implies that, there was no substantial difference in the attitude of the household towards solid waste disposal in Port Harcourt Metropolis based on geography.

Discussion of Findings

Household willingness and attitude towards solid waste disposal

Household willingness for solid waste disposal in Port Harcourt Metropolis as characterise by (Table 4.1) is fairly high(2.52 ± 0.98). This could be due to heightened awareness and exposure of waste management practices across the Metropolis that have positively impacted residents' attitudes towards how they dispose of their refuse. This outcome is consistent with other earlier studies notably Binafeigha and Enwin (2017) whose reported data indicate very high amounts of waste produced and handled in the city. Similarly, Kaoje et al. The majority of respondents (94.1%) were worry about unrelated waste disposal but over half (55%) claimed that residents are responsible for bad sanitary condition (Mugisha et al., 2017). Later Laor (2017), Twumasi (2017) and Barloa et al. These results are further confirmed in (2016) where higher positive intentions and behaviour regarding solid waste management were observed among residents.

The literature, however, contains opposing evidence. Studies by Erekpitan et al. (2015) and Kiran et al. Regrettably, the unnecessary disposal of waste is most detrimental (González-Álvarez et al. 2015), whereby the overwhelming majority of respondents identified health risks, adverse environmental impacts, foulodours and an influx of pests as primary concerns50. The differences may be explained by sample sizes, study populations and varying conditions in different locations. However, despite the generally positive attitudes exhibited by some households, these results highlight the need for continuous public education on proper waste disposal options.

The result of this study in table 4.2 the attitude of household towards solid waste disposal in Port Harcourt Metropolis was positive. The result of this study is expected because the enforcement of laws for improper disposaal of waste in the city was very high and has the tendency to punish offenders which in turn cause a change in residents action and attitudinal chnage. The result of this study is in keeping with studies of Babaeia et al. (2015) and Kiran, et al (2015)

good number of household showed positive attitude regarding proper disposition of waste. Barloa et al (2016) added that large percentage of residents exhibited good or positive attitude towards solid waste disposal and related matters especially in the urban areas. Banga (2013) and Jatau (2013) buttressed that residents showed positive attitude and actions concerning waste handling and disposal. As of the time of this study, there was no previous studies that contradict with findings of the current study.

The result of this study illustrated that there was no significant difference in the household attitude towards solid waste disposal in Port Harcourt Metropolis based on gender ($p>0.05$). The result of this study is expected because irrespective of their gender disposition does not affect attitude of household residents regarding solid waste disposal. The result of this study is in consonance with studies of Oluwole (2014) that gender had no significant effect on the attitude of household residents regarding solid waste disposal. Ifegbesan (2010) observed that sex had a significant relationship with the level of awareness and attitude of respondents towards waste disposal. Banga (2013) added that gender of the households sampled in the study influenced their practice and attitude recycling activities. In the contrary, Kadafa (2017) that gender characteristics had significantly determined or influenced the solid waste management practice among residents

The findings of this study indicate that there was no statistically significant difference in household attitudes toward solid waste disposal based on level of education ($p > 0.05$). This suggests that increased educational attainment does not necessarily translate into improved attitudes toward waste management among household residents. The result is consistent with the findings of Laor (2017) and Kaoje et al. (2017), who similarly reported that educational level did not significantly influence household attitudes toward municipal solid waste management. However, contrasting evidence from Banga (2013) and Babaeia et al. (2015) suggests that education can positively affect recycling behavior and attitudes, highlighting inconsistencies in the literature that may be due to contextual and methodological differences. Additionally, the study revealed that household attitudes did not significantly differ based on location ($p > 0.05$), further indicating that demographic variables alone may not be strong determinants of waste disposal attitudes. The result of this study is expected because in spite of the person place of living there is a likelihood of disposing waste properly if positive attitude are developing. The result of this study is inline with studies of Ayodeji (2012) that place of residents does not affect the attitude of people regarding the proper waste disposal. Banga (2013) and Jatau (2013) added that location or place of resident showed no significant influence on the aatitude of households towards waste disposal. Erekpitan et al. (2015) buttressed that awareness of proper waste disposal has influence on attitude not location. As on the time of this study, there was related studies that contradict with the findings of the current one.

Conclusion and Recommendations

In respect to this study, it was concluded that there was high extent of households willingness and attitude towards solid waste disposal in Port Harcourt metropolis. The extent of household willingnes of solid waste disposal were differs in gender location, level of education among others. In regards to this study, the following recommendation were made:

1. Government should make solid waste disposal material available for households and families to enable good practices of waste disposition so as to prevent indiscriminate dumping.
2. Government should make laws and policies that would regulate the attitude of household regarding waste disposal activities in the metropolis of Port Harcourt so that indiscriminate dumping action may be punished.
3. Household should prioritize health and safety welfare by properly dispose solid waste at the right place.

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