

Gender disparity in visit motivation and participation in recreational activities at Oluinrin waterfall, Erin Ijesha, Osun State, Nigeria

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ABSTRACT

Gender is an important factor in motivation and participation in recreational activities in nature-based recreation centres. This study was conducted at Oluinrin Waterfall to determine the gender-based differences in motivation and participation in recreational activities, identify the barriers and predictors of male and female participation in recreational activities. It was a cross-sectional questionnaire survey involving 174 visitors to the site selected through intercept method. The data obtained were subjected to descriptive statistics, independent t-test and multiple linear regression. Results revealed that the highest visit motivation for male and female at the site was to rest and relax. Most of the respondents (59.4% male, 71.6% female) were first time visitors. Male had higher level of participation than female with swimming statistically significantly different ($t=3.02$, $p<0.01$). No significant difference was found between male and female with regard to barriers to participation, but female experienced higher participation barriers than male. The predictors for male and female visit motivation was membership of environment-related NGOs ($p<0.01$) and age ($p<0.01$) respectively. Participation of male respondents was influenced by education ($p<0.05$), religion ($p<0.01$), and motivation ($p<0.01$). Female respondents' participation was influenced by only education. The study suggests the use of these findings for market segmentation of visitors to the Waterfall by the management.

Keywords: Gender disparity, motivation, participation, recreational activities

INTRODUCTION

Visitation to nature-based recreation centres such as waterfalls, warm springs, parks and gardens, national parks, game reserves, and wildlife sanctuaries including zoological gardens for recreational activities is increasing. This corresponds to the level of enlightenment and education on the importance and significance of outdoor recreational activities, the scenic landscape features, and experiences and

satisfaction such sites could offer. Nature-based recreational activities are important aspect of leisure which may assist in relieving daily work stress. Such activities provide substantial benefits on human physiology and psychology and promote good health. According to Sidi *et al.* (2017), recreational activities are generally pursued for personal enjoyment during individual leisure time without being forced by others. From a psychological

perspective, recreational activities involve social interaction. Recreational activities not only promote physical and mental health, but can also reduce psychological pressure (Liang and Jung, 2015, Tsai *et al.*, 2015). Three components of the concept of outdoor recreation have been identified, physical activity outdoors, nature experiences, and change of scenery (Emmelin *et al.*, 2010). Kling *et al.* (2018) highlighted two basic reasons why individual participation in outdoor recreation and nature-based tourism is important. The first is health and wellbeing benefits (Bedimo-Rung *et al.*, 2005, Doherty *et al.*, 2014) and second, the growing urbanisation and disconnectedness from nature in which outdoor recreation promoting environmental awareness and, subsequently, environmentally-friendly behaviour and policies (Kil *et al.*, 2014, Cocks and Simpson, 2015).

Gender refers to the roles and responsibilities of men and women that are created in our families, our societies and our cultures. Available data indicate that female constitute larger percentage of the World population (United Nations Population Fund, UNFPA, 2020). Despite this, women have always been ignored in many activities including participation in recreational activities. Until recently, in most instances, particularly in traditional African societies, a lot of cultural impediments and norms inhibit the ability of female gender to socialise and involve in physical recreation activities. Culturally, females are more restricted than male when it comes to participation in outdoor recreation. In every facet of human activities, there is sex-role stereotypes and these manifest in the differing role a male and female could undertake. This stereotypic behaviour is usually bias against the female folks. It is believed that women do not normally engage in physically challenging activities, whereas, men would do.

Gender differences in motivation, leisure preferences and participation have been established with women more constrained from participating in their favourite activities than men. Findings by Tang (2010), show that there is a considerable relationship between gender and recreational activities. Female are more inclined to static activities, while male have a greater preference for dynamic activities. Men and women are equally likely to walk for health or recreational purposes. However, men are more likely than women to cycle for health or recreation and to take part in sport (Helen *et al.*, 2011). The findings of Phongsavan *et al.* (2007) posited that three of the top five sports for men and women are the same: swimming, health and fitness and cycling, but female participation is heavily concentrated in two activities (swimming and health and fitness) while male participation is more widely spread across a range of activities. Women are more likely than men to do sport with their spouse or partner, their children or other family members while men are more likely to participate with friends. The study of Babatunde (2011) stated that the top three perceived benefits of participating in sport are the same for both men and women: health, exercise and fitness, being with others/socialising and enjoyment/fun.

Several socioeconomic and psychological variables have been identified as causal factors for motivation and participation in recreation. Socioeconomic variables such as age, marital status, education, income (Belcher *et al.*, 2010, Saint Onge and Krueger, 2011, Fan *et al.*, 2013, Richardson *et al.*, 2014, Shuval *et al.*, 2017, Miller *et al.*, 2018) and psychological motivation (Roychowdhury, 2012, 2018) have been reported to predict motivation and participation in recreational activities. According to Leversen *et al.* (2012), gender specialisation may be an important mechanism to both

understanding and counteract observed differences in leisure activity participation between sexes. Gender socialization may be an important mechanism to both understand and counteract observed differences in leisure activity participation between the sexes (Ingrid *et al.*, 2012). Findings from this study can be used to better inform recreational site managers on formulating recreational activities' interventions and strategies. Furthermore, the findings could be important for a more targeted marketing and improving recreational opportunities with gender lens. This study was carried out to determine differences in male and female motivation and participation in recreational activities in Oluminrin Waterfall and identify the predictors of motivation and participation.

METHODOLOGY

Study Area

Oluminrin Waterfall is located in Erin Ijesha, Oriade Local Government, Osun State, Nigeria. Osun State is located in the southwest of Nigeria and covers an area of approximately 9,251 km², lies between latitude 7°30' and 8°45' North and longitude 4°31' and 5°55' East (Wikipedia, 2014). The state is bounded on the west by Oyo State, Ekiti State by the east, Kwara State, and in the south by the Ogun State. The State has a rich cultural heritage which shows in their music, art, dances, dresses and cultural festivals. Osun State is also known for excellent works of art. The study site falls within the tropical climatic belt with alternating hot and warm humid season only slightly from 30-34°C ranges while the annual rainfall averages 1500mm. The waterfall has a height of sixty metres with an assemblage of seven distinct cascades located on the southern slopes of the lush Effon ridge in Erin Ijesha town. The first cascade plummets through a narrow opening in a cluster of luxuriant tree trunks blanketed in dark green leafage,

down a steeply folded rock face of about ten metres in height (Naijatreks, 2011).

Data Collection and Analysis

The population of interest consisted of male and female visitors and participants in recreational activities in Oluminrin waterfall during the period of this study. In this study, a quantitative analysis of how visit motivations and participation in recreational activities are affected by gender differences was conducted. The determinants of participation in recreational activities were also identified. This study is based on a cross-sectional survey of data collected at the waterfall. Onsite intercept survey was used to sample the tourists to the site. Intercept method is more cost effective at targeting tourists (Wu *et al.*, 2018). In addition, 174 tourists at the Waterfall were sampled from May to July 2015. The study was conducted for two (2) days per week and every weekend to collect the data in order to ensure representativeness of the tourist population. The week days earmarked by government for the celebration of any festival that falls within the study period were selected to represent the two days.

The study involved questionnaire survey. The survey instrument was developed after an extensive literature review. The instrument was subjected to pre-testing which consisted of 20 respondents at Ikogosi Warm Spring. Pretest was used to refine the questions. The survey instrument was divided into three sections. Section one presents a variety of questions on tourists' socioeconomic variables. In the second section, questions relating to tourists' motivation and travel behaviour were asked. The third section focused on tourists' participation in recreational activities and the barriers to participation. Data obtained were subjected to descriptive analyses. T-test was used to determine the differences between male and female tourists' motivations and

participation in recreational activities at the site. In addition, to identify the determinants of male and female visit motivation and participation in recreation activities, data were subjected to multiple linear regression analysis.

RESULTS

Socioeconomic Characteristics of Respondents

Table 1 presents the socio-economic characteristics of the respondents. It indicates that majority of the respondents fall between the age bracket of 16-24years (48.9% for male and 58.1% for female), with a mean of 40.3 and 18.5 years. The sample consists of 96 male tourists (56.5%) and 74 female tourists (43.5%). Approximately, 79.2% of the male respondents were single while 75.7% of the female respondents were single which represents majority of the respondents. About 94.8% male and 97.2 % female had formal education. In addition, 70.8% male and 74.8% of female were Christian. Most male (55.5%) and female (56.2%) were students. Large percentage of male (49.8%) and female (43.2%) had income between ₦1000-₦20000. All male (100%) and female (100%) were Nigerian while male (81.3%) and female (61.2%) were from southwest indicating that majority of the tourists were from Osun State. Concerning environment -related NGO

membership, 80.2% male and 81.1% female selected were non-members.

Male and Female Visit Motivation in Oluminrin Waterfall

Table 2 shows a summary of the results obtained on visit motivation at the site. The means of male tourists visit motivation range from 2.25 to 3.51 with 'rest and relax' are the highest motivation and 'be alone' is the least motivation for visiting the waterfall. In addition, the means of female tourists' motivation range from 2.09 to 3.54. The highest motivation is to 'rest and relax' while the least is also to 'be alone'. T-test indicates no statistically significant difference between male and female visitors' motivation items. However, out of the 10 motivation items, male has higher means in six (5) while female has higher means in four (4).

Travel Behaviour of Respondents

Table 3 reveals that majority of the respondents, male (59.4%) and female (71.6%) were on their first visit while male (40.6%) and female (29.7%) were on repeat visit. Approximately, male (79.2%) and female (86.5%) respondents visit the sites only during the day, 6.3% male and 2.7% female visit at night. Based on this result, it is quite obvious that majority of the visitors visits the site during the day while 95.8% male and 91.3% female spends 1-2 days at the site.

Table 1: Distribution of the respondents based on socioeconomic variables

| Variable | Male | | Female | |
|--------------------------|-----------|------------|-----------|------------|
| | Frequency | Percentage | Frequency | Percentage |
| Age | | | | |
| 16– 24 | 47 | 48.9 | 43 | 58.1 |
| 25 – 32 | 29 | 30.2 | 26 | 35.1 |
| 33 – 40 | 16 | 16.7 | 4 | 5.40 |
| >40 | 4 | 4.17 | 1 | 1.35 |
| Mean | 40.3 | | 18.5 | |
| Median | 22.5 | | 15.0 | |
| Marital Status | | | | |
| Single | 76 | 79.2 | 56 | 75.7 |
| Married | 15 | 15.6 | 17 | 23.0 |
| Divorced/ Separated | 2 | 2.1 | 1 | 1.4 |
| Widow/ Widower | 3 | 3.1 | 0 | 0 |
| Education | | | | |
| Non-formal | 5 | 5.2 | 1 | 2.7 |
| Formal | 91 | 94.8 | 72 | 97.2 |
| Religion | | | | |
| Christianity | 68 | 70.8 | 0 | 74.3 |
| Islam | 25 | 26.0 | 19 | 25.7 |
| Traditional | 2 | 2.1 | 0 | 0 |
| Occupation | | | | |
| Student | 53 | 55.2 | 42 | 56.8 |
| Civil Servant | 24 | 29.2 | 16 | 25.8 |
| Artisan | 12 | 13.4 | 10 | 21.8 |
| Self Employed | 3 | 3.4 | 2 | 2.7 |
| Income (₦) | | | | |
| 1000-20000 | 48 | 49.8 | 32 | 43.2 |
| 21000-40000 | 11 | 11.4 | 10 | 13.5 |
| 41000-60000 | 10 | 10.4 | 10 | 13.5 |
| 61000-80000 | 3 | 3.1 | 5 | 6.8 |
| >81000 | 24 | 24.9 | 17 | 23.0 |
| Nationality | | | | |
| Nigerian | 96 | 100 | 96 | 100 |
| Geopolitical Zone | | | | |
| Southwest | 78 | 81.3 | 64 | 65.2 |
| Southeast | 4 | 6.3 | 5 | 6.7 |
| South-south | 9 | 9.3 | 0 | 0 |
| North Central | 3 | 3.1 | 15 | 20.2 |
| Membership Of NGO | | | | |
| Yes | 19 | 19.8 | 14 | 18.9 |
| No | 77 | 80.2 | 60 | 81.1 |

Table 2: Male and female visit motivation to Oluminrin Waterfall

| Motivation item | Male | Female | t-value |
|---|------|--------|---------|
| | Mean | Mean | |
| To rest and relax | 3.51 | 3.54 | -0.19 |
| To see site | 3.14 | 3.36 | -1.02 |
| To be with family and friends | 3.45 | 3.36 | 0.49 |
| To be close to nature | 3.55 | 3.19 | 0.79 |
| To be physically active | 3.38 | 3.23 | 0.88 |
| To be alone | 2.25 | 2.09 | 0.76 |
| To engage in recreational activities | 3.34 | 3.20 | 0.87 |
| To earn about the waterfall | 3.20 | 3.19 | 0.04 |
| To enjoy quiet environment | 3.20 | 3.32 | -0.68 |
| To learn about cultural history of the area | 2.66 | 2.91 | -1.12 |

Table 3: Distribution of respondents according to travel behaviour

| Variables | Male | | Female | |
|-----------------------------|-----------|------------|-----------|------------|
| | Frequency | Percentage | Frequency | Percentage |
| Nature of visit | | | | |
| First Visit | 57 | 59.4 | 53 | 71.6 |
| Repeat Visit | 39 | 40.6 | 22 | 29.7 |
| Time of visit | | | | |
| Day Visit Only | 76 | 79.2 | 64 | 86.5 |
| Night Visit Only | 6 | 6.3 | 2 | 2.7 |
| Number of days spent | | | | |
| 1 – 2 | 92 | 95.8 | 69 | 91.3 |
| 3 – 4 | 2 | 2.1 | 6 | 9.5 |
| >4 | 2 | 2.1 | | |

Male and Female's Participation in Recreational Activities

Figure 1 shows that 72.9% male and 51.4% of female participated in swimming, 55.2% male and 55.4% female participated in picnicking, 53.1% male and 50.0% female participated in nature walk, 72.9% male and 64.9 % participated in

mountaineering, 49.0% male and 45.9% female participated in visiting in historical site, 25.0% male and 28.4% female, 32.3% male and female 37.3% participated in dancing, 49.0% male and 52.7% participated in viewing natural features at the site.

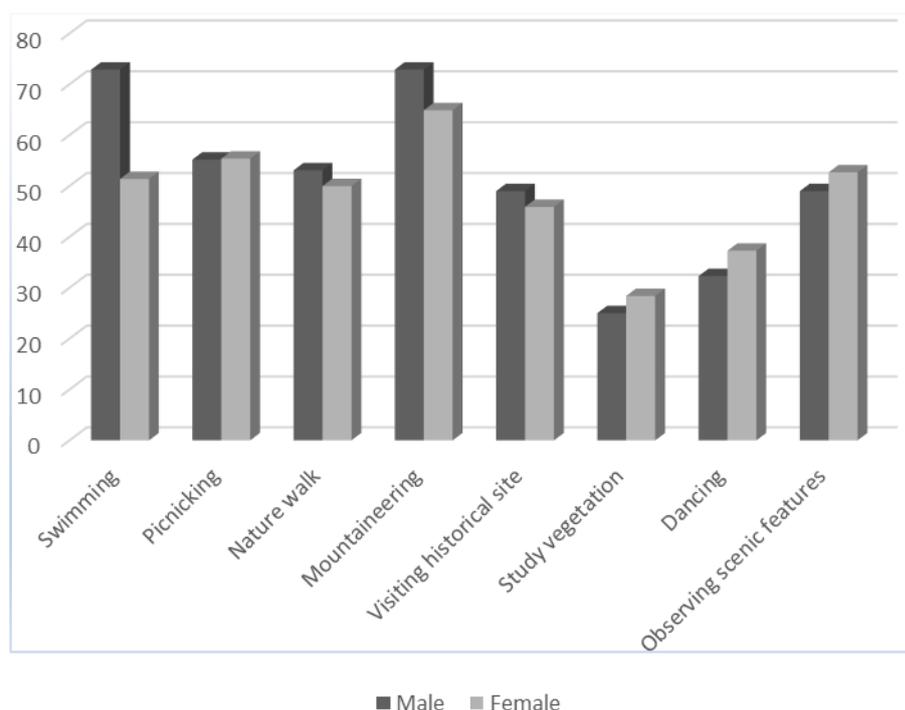


Fig.1. Distribution of respondents according to their participation in recreation activities

Differences in Male and Female Participation in Recreational Activities at the Waterfall

Results on gender disparity in participation in recreational activities are presented in Table 4. Among the listed activities, statistically significant difference between male and female was observed in

swimming ($t=3.02$). Male have higher means in four activities (swimming, nature work, mountaineering, visiting historical site), female have higher means in three activities (vegetation study, dancing, observing scenic features) while both have the same means in one activity (picnicking).

Barriers to Participation in Recreation Activities

The highest barrier to male and female participation in recreational activities is ‘safety concern’ (Male=3.15, Female=3.32). The least barrier is ‘lack of interest in outdoor activities’ (Male=2.32, Female=2.34). There is no statistically significant difference between male and female with regards to barriers to their participation in recreational activities, although female had higher means in four barriers out of seven items (Table 5).

Predictors of Male and Female Visit Motivation and Participation in Recreation at Oluinrin Waterfall

In order to understand male and female visitors visit motivation and participation in recreational activities’ predictors, this study carries out multiple regression analysis. The results show that membership of environment related NGO is the only predictor of male visit motivation explaining 14% of their motivation, whereas age is the only predictor of female visit motivation, explaining 28% of their motivation (Table 6). On the other hand, three factors were identified as the predictors of male participation in recreational activities at

the waterfall, accounting for 32% of their participation. The factors are motivation ($t=3.74$), and it is the strongest factor, others are religion ($t=2.99$), and education ($t=2.02$). For female participation in

recreational activities, only education is the main predictor ($t=2.86$), it accounts for 25% of female participation in recreation (Table 7).

Table 4: Differences in male and female participation in recreation activities

| Activities | Male Mean | Female Mean | t-value |
|---------------------------|------------------|--------------------|----------------|
| Swimming | 0.74 | 0.51 | 3.02 |
| Picnicking | 0.55 | 0.55 | -0.03 |
| Nature walk | 0.53 | 0.50 | 0.40 |
| Mountaineering | 0.73 | 0.65 | 1.12 |
| Visiting historical site | 0.59 | 0.46 | 0.98 |
| Study vegetation | 0.25 | 0.28 | -0.49 |
| Dancing | 0.32 | 0.38 | -0.75 |
| Observing scenic features | 0.49 | 0.58 | -0.97 |

Table 5: Obstacles to participation in recreation by male and female

| Obstacles | Male Mean | Female Mean | t-value |
|-----------------------------------|------------------|--------------------|----------------|
| No time for recreation | 2.77 | 2.91 | -0.76 |
| My safety | 3.15 | 3.32 | -0.92 |
| My health | 2.60 | 2.45 | 1.01 |
| Physical strength | 2.44 | 2.45 | -0.05 |
| Lack of transport | 2.79 | 2.51 | 1.65 |
| Cost of participation | 3.04 | 2.82 | 1.29 |
| No interest in outdoor activities | 2.32 | 2.34 | -0.12 |

Table 6: Predictors of male and female visit motivation

| Variable | Male | | Female | |
|---------------------------------------|---------------------------------|----------------------|---------------------------------|----------------------|
| | β-value | t-value | β-value | t-value |
| Age | -0.18 | -1.21 | -0.52 | -2.84** |
| Marital status | -0.02 | -0.14 | 0.21 | 1.53 |
| Education | -0.08 | -0.71 | -0.09 | -0.71 |
| Religion | -0.03 | -0.23 | -0.04 | -0.35 |
| Occupation | -0.24 | -1.45 | 0.10 | 0.53 |
| Monthly income | -0.18 | -1.23 | 0.14 | 0.86 |
| Membership of Environment-related NGO | -0.31 | -2.90** | 0.21 | 1.80 |
| Model | R=0.37 | R ² =0.14 | R= 0.53 | R ² =0.28 |

**P<0.01

Table 7: Predictors of male and female participation in recreation activities

| Variable | Male | | Female | |
|---------------------------------------|----------------|----------------------|----------------|----------------------|
| | β -value | t-value | β -value | t-value |
| Age | -0.21 | -1.43 | -0.12 | -0.58 |
| Marital status | 0.10 | 0.85 | -0.05 | -0.33 |
| Education | 0.23 | 2.02* | 0.42 | 2.86** |
| Religion | 0.31 | 2.99** | -0.01 | -0.04 |
| Occupation | 0.16 | 1.01 | 0.24 | 1.18 |
| Monthly income | 0.21 | 1.57 | 0.19 | 1.11 |
| Membership of Environment-related NGO | 0.01 | 0.12 | 0.04 | 0.27 |
| Nature of visit | 0.15 | 0.45 | 0.19 | 0.36 |
| Period of visit | -0.39 | -1.45 | -0.31 | -0.71 |
| No of days spent | -0.03 | -0.25 | 0.09 | 0.48 |
| Motivation | 0.38 | 3.74** | 0.15 | 1.06 |
| Model | R=0.57 | R ² =0.32 | R=0.50 | R ² =0.25 |

*P<0.05 **P<0.01

DISCUSSION

Of the respondents in this study, majority of the respondents were within 16-24 age group, this implies that they are within the third largest age group according to Central Intelligence Agency (2020) estimates and they form the most active group of the population. Large percentage of the respondents were single, and indication that most nature enthusiasts in the Waterfall were not yet married, this gave them freedom to explore nature for outdoor recreation. In terms of education, significant percentage had formal education and suggests that education is an important consideration for outdoor recreation. Furthermore, majority of the respondents were Christians which implies that large percentage of visitors to the Waterfall practice Christianity. Majority of the respondents in this study were students, which resulted from them having formal education. The study further showed that large percentage of the respondents earned between ₦1000 and ₦20, 000, which revealed that most of the visitors to the Waterfall were low income earners. All the respondents were Nigerians, which showed low level of patronage of the site by international

tourists. Low level of membership of environment-related NGOs was observed among the respondents. This is consistent with Ogunjinmi and Binuyo (2018) in Ikogosi Warm Spring Resort who reported low level of membership of environment-related NGOs.

The main visit motivation for large percentage of the respondents was to rest and relax which is contrary to Ogunjinmi (2015) who reported game viewing as the major motivating factors for visiting the parks, this could be attributed to the main attraction in the present study area (waterfall) and national parks (wild animals) where the previous study was conducted. This is consistent with Sidi *et al.* (2017) who found that significant participation motive in outdoor recreational activities are to enjoy the nature, looking for new experience, to take challenge, as a social need, and accessibility to the recreation areas. In terms of travel behaviour, the study revealed that large percentage of the visitors were first time visitors, they were day visitors and spent 1-2 days at the Waterfall. These findings thus showed that

there was low level of repeat visitation at the site and that by the nature of the site, day visit is prominent. The number of days spent could be a function of activities to be carried out at the site, especially, those on vegetation study would require longer periods of stay whereas visitors undertaking waterfall related activities would require day visit. The implication of findings on travel behaviour is the necessity for a distinct marketing strategies for travel behavioural categories of visitors to the site.

Mountaineering was the foremost activity engaged in by the respondents. This could not be farfetched and could be due to the topographic nature of the site which enhances mountain climbing experience. Among the activities participated in by the visitors, statistically significant difference was observed between male and female respondents with regards to swimming and generally, male had higher level of participation in considerable number of activities. This suggests that gender of respondents have significant effect on participation in outdoor recreation. This agrees with Green *et al.* (2012) who reported significantly higher participation in outdoor recreational activities among male. Consistent with this study, Hickey and Mason (2017) found significant gender differences in several aspects of exercise including female's participation in physical activities (Jabeen *et al.*, 2017). Kling *et al.* (2018) also reported gender difference in both participation and representation at outdoor recreation. For barriers to participation in recreation, safety was the most indicated barrier by the respondents and thus suggests that safety concern was a major impediment to participation in recreation. The result is consistent with the findings of Johnson *et al.* (2001) who found that women who participated in outdoor recreation were more likely than men to feel constrained by threat of safety as well as by lack of adequate facilities. Although, no

statistically significant difference was observed between male and female respondents with regards to barriers to recreation, the study revealed that female had higher barriers to participation in recreational activities.

The study further revealed that membership of environment-related NGOs was the predictor for male respondents' visit motivation while age was the predictor for female visit motivation. This suggests the importance of membership of environment-related NGOs in male visitors' motivation, particularly visiting ecotourism and nature-based sites such as waterfalls. Age is also very critical to female visit motivation. This could be due to the fact that young female may experience limited freedom in terms of outdoor recreation while matured female enjoy more liberty than their younger counterparts. Male's participation in recreational activities was influenced by motivation, religion, and education. Motivation exerted the strongest influence while education was the only predictor of female participation. This implies that education could serve as a tool for female participation in recreational activities by giving them liberty and freedom to engage in recreation activities of their choice. Other socioeconomic variables and travel behaviours appear to have limited influence on participation. This agrees with Asan and Emeksiz, (2018) who found that outdoor recreation motivations are influenced by vacation activity preference structures rather than socio-economic variables.

CONCLUSION

It was found that large percentage of the participants' visit motivation was to rest and relax and majority were first time visitors. Among the recreational activities, only swimming was statistically significant between male and female participants and male had higher level of participation in recreational activities at

the Waterfall. The highest barrier to participation in recreation activities at the site was safety concern. Although no significant difference was observed between male and female in terms of the barriers affecting their participation, female had higher level of barriers than male. The predictors of male and female visit motivation were membership of environment-related NGOs and age respectively. Of the selected independent variables, the factors that influenced male respondents' participation in recreational activities were motivations, religion, and education whereas only education influenced female participation. The study suggests the use of these findings for market segmentation of visitors to the Waterfall by the management.

REFERENCES

- Asan, K. & Emeksiz, M. 2018. Outdoor recreation participants' motivations, experiences, and vacation activity preferences. *Journal of Vacation Marketing*, 24(1), 3-15.
- Babatunde W.C. 2011. The relationship between physical fitness and attitude toward physical activities. *Synopsis of Local Researches in Sport Science*, 23, 45-86.
- Bedimo-Rung, A. L., Mowen, A. J., & Cohen, D. A. 2005. The significance of parks to # physical activity and public health – a conceptual model. *American Journal of Preventive Medicine*, 28(2), 159–168.
- Belcher, B.R.; Berrigan, D.; Dodd, K.W.; Emken, B.A.; Chou, C. & Spuijt-Metz, D. 2010. Physical activity in US youth: Impact of race/ethnicity, age, gender, & weight status. *Med. Sci. Sports Exerc.* 42, 2211–2221.
- CIA 2020. Nigeria: CIA World Factbook. <https://www.cia.gov/library/publications/the-world-factbook/geos/ni.html>
- Cocks, S., & Simpson, S. 2015. Anthropocentric and ecocentric - an application of environmental philosophy to outdoor recreation and environmental education. *Journal of Experiential Education*, 38(3), 216–227.
- Doherty, S. T., Lemieux, C. J., & Canally, C. 2014. Tracking human activity and well-being in natural environments using wearable sensors and experience sampling. *Social Science & Medicine*, 106, 83–92.
- Emmelin, L., Fredman, P., Lisberg Jensen, E., & Sandell, K. 2010. *Planera för friluftsliv: Natur, samhälle, upplevelser*. Stockholm: Carlssons.
- Fan, J.X., Kowaleski-Jones, L. & Wen, M. 2013. Walking or dancing: Patterns of physical activity by cross-sectional age among US women. *Journal Aging Health*, 25, 1182–1203.
- Green, G. T., Bowker, J. M., Wang, X. F., Cordell, K., & Johnson, C. Y. 2012. A national study of constraints to participation in outdoor recreational activities. In: Cordell, H. Ken, ed. 2012. *Outdoor Recreation Trends and Futures*. Gen. Tech. Rep. SRS-150. Asheville, NC: US Department of Agriculture Forest Service. Southern Research Station. 150, 70-74.
- Helen J., Peter M., & Babatunde B. 2011. Adult participation in sport *University of Central Lancashire*, 1(3), 175-189.
- Hickey, M.E. & Mason, S.E. 2017. Age and gender differences in participation rates, motivators for, and barriers to exercise. *Modern*

- Psychological Studies*, 22(2), 10-19.
- Ingrid, L., Torbjørn, T., and Oddrun, S. 2012. Gendered Leisure Activity Behaviour among Norwegian Adolescents Across Different Socio-Economic Status Groups. *International Journal of Child, Youth and Family Studies*, 4, 355–375.
- Jabeen, A., Marwat, M.K., Khan, A. & Ali, K. 2017. Issues and challenges for female's participation in physical activities at secondary school level in Sargodha division. *MOJ Sports Medicine*, 1(6), 146-149.
- Johnson, C. Y., Bowker, J. & Cordell, H. 2001. Outdoor recreation constraints: An examination of race, gender, and rural dwelling. *Journal of Southern Rural Sociology*, 17, 111-133.
- Kil, N., Holland, S. M., & Stein, T.V. 2014. Structural relationships between environmental attitudes, recreation motivations, and environmentally responsible behaviors. *Journal of Outdoor Recreation and Tourism*, 7–8, 16–25.
- Kling, K.G., Margaryan, L. & Fuchs, M. 2018. (In) Equality in the outdoors: gender perspective on recreation and tourism media in the Swedish mountains, *Current Issues in Tourism*, DOI: 10.1080/13683500.2018.1495698
- Leversen, I., Torsheim, T. & Samdal, O. 2012. Gendered leisure activity behaviour among Norwegian adolescents across different socio-economic status groups. *International Journal of Child, Youth and Family Studies*, 4, 355-375.
- Liang J.M., & Jung, J.C. 2015. Social support of sport and participation of regular leisure activity of adults. *Rev. Leis. Sport. Health*. 16, 1–18.
- Miller, J.; Nelson, T.; Barr-Anderson, D.J.; Christop, M.J.; Winkler, M.; Neumark-Sztainer, D. 2018. Life events and longitudinal effects on physical activity: Adolescence to adulthood. *Med. Sci. Sports Exerc.*, 51, 633-670.
- More, T.A., Echelberger, H.E. & Koenemann, E.J. 1989. Factors affecting recreation participation by Vermont residents. Research Paper NE-631, Northeastern Forest Experiment Station, United States Department of Agriculture.
- Naijatreks 2011. The mysterious Waters of Oluminrin falls in Erin Ijesa. <http://naijatreks.com/2011/04/olumir-inwaterfalls/> retrieved on 12-06-2014
- Ogunjinmi, A.A. 2015. Analysis of ecotourists' profiles, trip characteristics and motivations in Nigeria National Parks. *Centre Point Journal*, 18(1), 25-48.
- Ogunjinmi, A.A. & Binuyo, I.Y. 2018. Relationship between destination service quality and tourists' satisfaction in Ikogosi Warm Spring Resort, Nigeria. *Tourism*, 66(4), 362 – 378.
- Phongsavan, P., Mclean, G. and Bauman, A.E. 2007. Gender difference in influences of perceived environmental and psychosocial correlates on recommended level of physical activity among New Zealanders. *Psychology of Sport and Exercise*, 8(6), 939-950
- Richardson, A.S., Meyer, K.A., & Howard, A.G. 2014. Neighborhood socioeconomic status and food environment: A 20-year longitudinal latent class analysis among CARDIA participants. *Health Place*, 30, 145–153.

- Roychowdhury, D. 2012. *Examining reasons for participation in sport and exercise using the Physical Activity and Leisure Motivation Scale (PALMS)* (Doctoral dissertation, Victoria University, Melbourne, Australia). Retrieved from <http://vuir.vu.edu.au/id/eprint/19943>
- Roychowdhury, D. 2018. A comprehensive measure of participation motivation: Examining and validating the Physical Activity and Leisure Motivation Scale. *Journal of Human Sport and Exercise*, 13(1), 231-247.
- Saint Onge, J.M. & Krueger, P.M. 2011. Education and racial-ethnic differences in types of exercise in the United States. *J. Health Soc. Behav.*, 52, 197–211.
- Shuval, K.; Li, Q.; Gabriel, K.P. & Tchernis, R. 2017. Income, physical activity, sedentary behavior, and the ‘weekend warrior’ among US adults. *Prev. Med.*, 103, 91–97.
- Sidi, M.A.M., Radzi, W.M., Aman, M.S., & Yassim, M.M. 2017. A study of participation motive in outdoor recreational activities. *International Journal of Academic Research in Business and Social Sciences*, 7(3), 740-753.
- Tang, S.M. 2010. When leisure collides with paid work and domestic labor: Gender differences in leisure experiences. *J. Tourism. Leis. Stud.*, 16, 1–18.
- Tsai, L-T., Lo, F-E., Yang, C-C., Keller, J.J. & Lyu, S-Y. 2015. Gender differences in recreational sports participation among Taiwanese adults. *International Journal of Environmental Research and Public Health*, 12, 829-840.
- UNFPA 2020. State of the World Population. United Nations Population Fund.
- Wikipedia 2014. Osun State, Nigeria. http://en.wikipedia.org/wiki/Osun_State. Accessed on 12-06-2014.
- Wu, Q., Bi, X, Grogan, K.A. & Borisova, T. 2018. Valuing the recreation benefits of natural springs in Florida. *Water*, 10, 1379; doi:10.3390/w1010379.