

DETERMINANTS OF LEISURE SATISFACTION AMONG UNDERGRADUATE STUDENTS AT A SOUTH AFRICAN UNIVERSITY

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—Abstract —

In a diverse learning environment, students' involvement in leisure activities may be influenced by different factors. This study aims to assess the effect of socio-demographic characteristics on different factors of leisure satisfaction among undergraduate university students. A self-administered questionnaire, based on leisure satisfaction score, was used to collect data from a randomly selected sample of 443 undergraduate students from a South African university. Descriptive statistics, correlation analysis and multiple linear regressions were used to test how self-reported leisure satisfaction is influenced by factors such as family environment; socio-economic status, school or academic environment, contextual and other demographic factors such as age and gender. Findings of this study revealed that students' age, monthly expenditure, the size of a student's household, level of dependence on parents and level of study significantly affected the leisure satisfaction; whereas factors such as race, place of residence during the school term, mode of transport to school and the student's academic discipline had no significant influence on leisure satisfaction. The results from this study may assist in developing strategies to improve students' lives in a diverse environment within the institutions of higher learning.

Key Words: *leisure satisfaction, socio-demographic factors, undergraduate university students, South Africa*

JEL Classification: D63; D80, I20, I31, J17

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1. INTRODUCTION

The university environment tends to be complex for undergraduate students who are required to balance their social and academic lives. Part of the campus social life involves students' participation in leisure activities. This participation in leisure activities, such as taking part in physical and outdoor activities, is important for students as it is associated with increased happiness and lower levels of depressive symptoms (Chiu & Kayat, 2010; Menec, 2003). Additionally, participation in leisure activities can promote an active lifestyle and improve students' health and social functioning (Davison & Lawson, 2006; Drakou et al., 2008.) which may eventually contribute to better academic performance. Hence, it is important to explore how various factors affect students' participation in leisure activities. According to the utility theory, participation in leisure activities should link with leisure satisfaction. This was confirmed by Hsieh (1998) who found that participation in leisure activities is linked with leisure satisfaction. This implies that leisure satisfaction is often considered as proxy of participation in leisure activities (Kuo, 2011). Leisure satisfaction can be defined as positive perceptions or feelings formed or gained by an individual engaging in leisure activities and choices (Beard & Ragheb, 1980). In other words, leisure satisfaction refers to the degree to which an individual is content or pleased with their general leisure experiences and situations (Beard & Ragheb, 1980).

Leisure satisfaction is a complex human need fulfilled by the production and consumption of individually defined pleasant experiences (Ateca-Amestoy et al., 2004). Each individual defines the limits of leisure on the basis of their tastes and the availability of different resources to fulfil their needs. Leisure satisfaction differs from one individual to another as each individual may value leisure in many different ways depending on their aspirations. For example, a certain activity that brings positive pleasure to one person may not necessary mean that such an activity would bring the same positive pleasure to another person. Thus, leisure satisfaction depends upon an individual's tastes and skills, and the availability of time and resources (such financial means, goods, and social interaction). Leisure satisfaction can therefore be affected by personal characteristics such as gender, age and income (Ateca-Amestoy et al., 2004); and other factors such as home environment (Siegenthaler & O'Dell, 2000).

Previous studies (Ateca-Amestoy et al., 2004; Badia & Orgaz, 2013; Berg et al., 2001; Borke et al., 2009; Lapa, 2013; Longo et al., 2009; Misra & McKean, 2000) have investigated the relationship between leisure satisfaction and socio-demographic factors. Findings of these studies show that the influence of demographic and environmental factors of leisure satisfaction changes with context. In some studies (Ateca-Amestoy et al., 2004; Kuo, 2011; Lapa, 2013; Longo, 2013; Lu & Kao, 2009; Shikako-Thomas et al., 2013), for example, income was found to have an effect on leisure satisfaction; while a study by Badia et al. (2011) found no link between these two variables. With other demographic variables, there appear to be no consistent results on how they affect leisure satisfaction. With gender, some studies (Lapa, 2013; Lu & Hu, 2005; Misra & McKean, 2000; Place & Beggs, 2012) found no difference between male and female leisure satisfaction; while Gökçe (2008); Kabanoff (1982) and Ngai (2005) concluded that gender has an effect on leisure satisfaction. Different results on the effect of gender on leisure satisfaction may be explained by different levels of gender equality among societies investigated by these studies. In a society with more gender equality, males and females may have equal access to resources; whereas this opportunity may not necessarily be the same for males and females in a society with high levels of gender inequality. Thus, the link between leisure satisfaction and gender may not only be affected by individual characteristics between males and females but also by the level of gender equality within the society under investigation.

In a university environment, one could expect leisure satisfaction to be affected by factors such as students' financial ability which may be linked to a student's income or expenditures and the place of residence, where a student staying at a university residence and one staying at home with a family may have different views of leisure satisfaction. For example, students living with other people, such as a partner or family members, are likely to enjoy higher levels of leisure satisfaction than those living alone (Ateca-Amestoy et al., 2004); suggesting that leisure satisfaction is also affected by social dimensions. A factor such as the mode of transport to and from school can also describe how students experience leisure. On one hand, students with their own cars may have advantages in accessing off-campus leisure activities; while access of off-campus leisure activities may be difficult for students without their own transport. Similarly, walking or cycling to campus involves engagement in physical activities which affect students' satisfaction with leisure.

Considering that there is no consensus on socio-demographic factors influencing leisure satisfaction; this study attempts to identify the key determinants of leisure satisfaction among undergraduate university students. Thus, the empirical objectives of this study are; to assess the effect of various demographic factors on leisure satisfaction among undergraduate university students; and to test whether the effect of demographic factors differ across the different dimensions of leisure satisfaction.

2. METHODOLOGY

3.1. Research instrument and demographic information

This study used data collected from undergraduate students at a university situated in the Gauteng province of South Africa. A random sampling process was used to ensure that the information included in the sample is a true reflection of the population. A total of 500 questionnaires were administered however 443 (88.6% response rate) completed questionnaires were considered for analysis. The questionnaire comprised two sections. The first section of the questionnaire captured demographic information. The second section comprised of the short version of the leisure satisfaction scale (LSS) developed by Beard and Ragheb (1980). With this LSS, leisure satisfaction is measured by self-reported measures of leisure experience valuation. LSS was scored on a five-point scale as follows: (1) almost never true, (2) seldom true, (3) sometimes true, (4) often true and (5) almost always true. The scale has 24 questions categorised into six subscales of four questions each. These sub-scales refer psychological, educational, social, relaxation, physiological and aesthetic aspects. The total score from the four questions for each sub-scale is calculated and a higher score is associated with high leisure satisfaction. A test done for internal consistency showed that Cronbach's α of the overall leisure satisfaction scale was 0.84; while Cronbach's α of the six sub-scales of leisure satisfaction was found to be between 0.76 and 0.88. These values (of Cronbach's α) are above the benchmark of 0.6 (Pallant, 2013), implying that leisure satisfaction scales, used in this study, were reliable.

Based on properly completed questionnaires, the total number of participants was 443. From this total, 47.2% were senior (2nd and 3rd year) students; while 52.8% were 1st year students. More female students (53.5%), compared to 46.5% male

students, participated in the study. Race distribution showed that the majority (82.2%) of the participants were African students and most of them (71.2%) were from the Gauteng province. A large number (84%) of the sampled students were doing commerce studies; while the remaining 16% were enrolled in the humanities faculty. The majority of the sampled students (84.7%) depended solely on their parents for financial support towards their studies. Additionally, 41.8% of the sampled students stayed at home, while the remaining 58.2% stayed at university residence or private accommodation near campus. Regarding the mode of transport to school, 76.7% of the participants used vehicles (private or public) to school, while 23.3% of them walked or cycled to school.

3.2. Model specification

This study used descriptive statistics, correlation analysis and multiple linear regressions to assess how different socio-demographic variables affect each factor of leisure satisfaction. Seven multiple linear regressions (one for the overall LSS and one for each of the six sub-scales) were estimated based on the following equation:

$$\text{Log}Y_i = \beta_0 + \beta_1 \text{LogEXP}_i + \beta_2 \text{AGE}_i + \beta_3 \text{HHS}_i + \beta_4 D_{1i} + \beta_5 D_{2i} + \beta_6 D_{3i} \\ + \beta_7 D_{4i} + \beta_8 D_{5i} + \beta_9 D_{6i} + \beta_{10} D_{7i} + u_i$$

Where: LogY represents the logarithm of the overall LLS or a sub-scale score; LogEXP is the logarithm of total monthly expenditure for a student (the logarithm was used to minimise the range among these two variables so that they can be aligned with categorical variables in the model); AGE is the age of a student *i*; HHS is the total number of members in a student's household, D_1 is the dummy variable for the gender of a student (0= male and 1= female); D_2 is the dummy variable for the race of the student (1= black and 0 = otherwise); D_3 is the dummy variable for the mode of transport used to school by a student (0= walking or cycling and 1= student uses private or public car.); D_4 is the dummy variable for financial dependence (1 = solely dependent on parents/guardians and 0 = otherwise); D_5 is the dummy variable for the place of residence while at school (1 = student stays at home and 0 = otherwise); D_6 is the dummy variable for the faculty (and 0 = humanity studies and 1 = commerce); D_7 is the dummy for the level of study (1 = first year student and 0 = otherwise); $\beta_1, \beta_2, \dots, \beta_{11}$ represent

the coefficients to be estimated; while β_0 and u_i represent the constant and the error term, respectively.

3. RESULTS

3.1. Descriptive analysis

In addition to the categorical variables described in the previous section, a descriptive summary of the continuous variables, considered in this study, is presented in Table 1. The mean age of the participants was 19.88 (± 2.07) years. The average total monthly expenditure per student was R3289.81 (± 2181.14). The minimum expenditure was R40.00² and the maximum R953.00, implying that the range was R913.00. This implies that there was a high level of spread among this total expenditure and it is confirmed by a high standard deviation of R2181.14. The total expenditure included monthly spending on items including but not limited to food, toiletries, transport, clothing, entertainment, stationery, textbooks, airtime/data bundles and grooming. The average household size was approximately 5 members per household with a minimum and maximum of 2 and 15 members, respectively.

Table 1: Descriptive statistics of continuous variables

	Minimum	Maximum	Mean	Std. Deviation
Age	17	29	19.94	1.81
HH size	2	15	4.64	1.72
Total expenditure (R)	40.00	9530.00	3289.81	2181.14
Psychological Sub-scale	4	20	13.77	3.79
Educational Sub-scale	4	20	14.43	3.81
Social Sub-scale	4	51	13.92	4.05
Relaxation Sub-scale	4	20	14.93	3.65
Physiological Sub-scale	4	20	11.54	4.08
Aesthetic Sub-scale	4	20	13.58	3.58
Overall Leisure SS	24	120	82.15	16.92

² R (rand) is the South African currency and R1 exchanged for \$0.1 when this data was collected.

In analysing students' satisfaction with leisure, a summation of students' scores on each question of LLS was used to calculate the total scores for the overall LLS and each sub-scale. Possible scores ranged from 24 to 120 for the total LLS and from 4 to 20 for each of the six sub-scales. The overall LLS was between 24 and 120 scores, as expected, with a mean of 82.15 (± 16.92). The average scores of the six sub-scales was between 11.54 (± 4.08) and 14.93 (± 3.649), with the psychological sub-scale reporting the lowest average score, while the relaxation sub-scale had the highest average score.

3.2. Correlation analysis

Table 2 reports correlations between leisure satisfaction scores and demographic variables, considered in this study. This correlation tends to vary from one sub-scale to another. There is a significant positive correlation between the overall LLS and variables such as monthly expenditure, age, gender, student's dependence on parents, the current place of residence and the level of study. This implies that the overall LLS score increases with expenditure, age and household size. For the gender variable, being a female student, as compared to being male, tends to be associated with an increase in the overall LLS. Similarly, dependence on parents, staying at home and being a first year student are associated with an increase in overall LLS. There is no significant correlation between overall LLS and variables such as race, transport to school and the faculty.

Table 2: Correlations between demographic variables and leisure satisfaction scales

	Overall LSS	Psychol ogical	Educa tional	Social	Relaxa tion	Physiol ogical	Aesthet ic
Log Exp	.198**	.206**	.192*	.197*	.196*	.066	.200**
AGE	.201**	.198**	.216**	.223**	.267**	.203**	.213**
HHS	.196**	.036	.194*	.041	.215**	.009	.190*
Gender (D ₁)	.109*	.110*	.198*	.008	.181*	-.013	.041
Race (D ₂)	.056	-.012	.186	.018	.052	-.197*	.001
Transport to school (D ₃)	.046	.040	.036	.078	.072	-.046	.015
Financial dependence (D ₄)	.189**	.009	.201*	.137	.047	.128	.058
Current residence (D ₅)	.184**	.026	0.009	-.071	-.012	-.097	-.057
Faculty (D ₆)	.096	-.051	-.020	-.005	.054	.051	.047
Level of study (D ₇)	.206**	-.009	0.010	.206**	.199**	.062	.208**

** Significant at the 0.01 level of significance, * significant at the 0.05 level of significance

When it comes to the sub-scales, a significant positive association between psychological factors and students' monthly expenditures, age and gender was observed. Educational factors of leisure satisfaction also have a significant positive correlation with these three variables plus the variable of solely depending on parents. However, other variables are not significantly correlated to educational factors, at the 5% level of significance. The social sub-scale has a significant correlation (at the 5% level of significance) with two variables being significant, namely, the age of a student and the level of study. This implies that the scores for the social sub-scale increase when a participant is a first year student (compared to being a senior student) and it also increases with age. The relaxation sub-scale is positively correlated with age, house hold size, gender and level of study while the physiological sub-scale is positively correlated with age and negatively correlated with race. The negative correlation between physiological factors of leisure satisfaction and race implies that being a black participant (as compared to other races) decreases the score of the physiological sub-scale. Finally, the aesthetic sub-scale is positively correlated with participants' expenditures, age, household size and level of study.

3.3. Multiple regression analyses

This section presents the results from the seven multiple regression analyses (one for the overall LSS and one for each of the six sub-scales) used to assess the effect of demographic factors and the sub-scales of leisure satisfaction. Results from the regression of the logarithm of the overall LSS and socio-demographic variables (defined in Equation1) are presented in Table 3. The F-test for overall fitness of model is significant at the 1% level of significance [F (sig.) = 47.23(.000)]; implying that all the explanatory variables jointly have a significant effect on the log of the overall LLS. The socio-demographic variables, included in the model, explain 78% ($R^2 = 0.78$) of growth in the overall LLS score.

Coefficients of LogEXP, AGE, HHS, financial dependence on parents and level of study are statically significant at the 1% level of significance, while gender and faculty are significant at the 5% and 10% levels of significance, respectively. This implies that these variables influence the overall LSS. More specifically, when other factors are held constant, a 1% increase in a participant's expenditure increases the overall LSS by 0.149%. Holding other factors constant, an additional

year in participants' age tends to increase the overall LSS score by 0.115%. Similarly, when the participants' household size increases by 1 member; the score of the overall LSS tends to increase by 0.113% (holding other factors constant). Also, if other factors are held constant, being a female (compared to being a male) increases the score of the overall LSS by 0.071%; while depending solely on parents (compared to having other support) increases this score by 0.106%. A significant coefficient for the level of study implies that being a first year student (compared to being a senior student) increases the score of the overall LSS by 0.157%. Finally, a weak significant relationship between the overall leisure satisfaction score and the faculty of study implies that being a commerce student (compared to being a humanities student) tends to increase the score by 0.113%.

Table 3: Regression results (Overall LSS as independent variable)

Explanatory variables	Beta	Std. Error	T-values	Sig. (P-values)
LogExp	.149	.017	8.678	.000
AGE	.115	.007	16.336	.000
HHS	.131	.036	3.616	.000
Gender (D ₁)	.071	.032	2.240	.026
Race (D ₂)	.059	.043	1.375	.170
Transport to school (D ₃)	.042	.038	1.113	.266
Dependence on parents (D ₄)	.106	.038	2.789	.006
Current residence (D ₅)	.011	.012	.938	.349
Faculty (D ₆)	.113	.064	1.767	.078
Level of study (D ₇)	.157	.036	4.318	.000
Constant	.128	.071	1.81	.070
R ² = .78 F(sig.) = 47.23 (.000)				

Table 4 summarises regression results from each of the six sub-scales of leisure satisfaction and demographic variables. The first independent variable, LogExp, is significant (at the 5% level of significance) in five of the six multiple regression analyses; there is no significant difference between this variable and leisure satisfaction for the physiological sub-scale. This implies that participants' total monthly expenditure influences the psychological, educational, social, relaxation and aesthetic factors of leisure satisfaction. The positive coefficients mean that an increase in the monthly expenditure leads to an increase in the scores of these 5 leisure satisfaction sub-scales. For example, an increase of 1% in the participants'

monthly expenditure increases the score on the psychological sub-scale by 0.594%. These results confirm the findings from the correlation analysis, which reported a significant positive correlation between participants' monthly expenditure and these 5 factors of leisure satisfaction.

Table 4: Regression results (Six sub-scales)

Independent variables	Dependent variable for each sub-scale*					
	Y ₁	Y ₂	Y ₃	Y ₄	Y ₅	Y ₆
LogExp	.594 (.003)	.397 (.047)	.610 (.004)	.559 (.004)	.266 (.205)	.578 (.002)
AGE	.402 (.000)	.443 (.000)	.412 (.000)	.376 (.000)	.539 (.000)	.396 (.000)
HHS	.267 (.525)	1.001 (.018)	.410 (.363)	1.521 (.000)	.069 (.875)	.786 (.048)
Gender (D ₁)	.755 (.042)	.941 (.012)	.082 (.836)	.757 (.037)	-.103 (.792)	.414 (.240)
Race (D ₂)	-.312 (.532)	.961 (.056)	.182 (.735)	.280 (.568)	-1.137 (.031)	.031 (.947)
Transport to school (D ₃)	.375 (.399)	.336 (.452)	.78 (.100)	.719 (.100)	-.465 (.322)	.156 (.713)
Dependence on parents (D ₄)	.749 (.091)	.272 (.542)	.837 (.079)	.470 (.279)	.802 (.087)	.584 (.167)
Place of Residence (D ₅)	-.085 (.553)	.026 (.856)	-.035 (.819)	.091 (.516)	-.209 (.045)	.055 (.686)
Faculty (D ₆)	-.241 (.749)	-.252 (.740)	-.790 (.329)	-.216 (.770)	-.973 (.222)	-.570 (.428)
Level of study (D ₇)	.492 (.242)	.282 (.504)	-.045 (.921)	.543 (.187)	.569 (.200)	.237 (.553)
R²	.73	.73	.72	.74	.69	.73
F(sig.)	57(.00)	61(.00)	50(.00)	65(.00)	36(.00)	60(.00)

Psychological (Y₁), Educational (Y₂), Social (Y₃), Relaxation (Y₄), Physiological (Y₅) and Aesthetic (Y₆);
P-values (sig.) in brackets

Similar to the correlation results, the age of the participants is positive and significant (at the 1% level of significance) in all six sub-scales. This implies that age has an effect on all six aspects of the leisure satisfaction scale. An increase in the participant's age leads to an increase in the score of leisure satisfaction sub-scales. This finding suggests that participants tend to be satisfied with leisure

activities as their age increases. The effect of the size of the household is positive and statistically significant in educational (at the 5% level of significance), relaxation (at the 1% level of significance) and aesthetic (at the 5% level of significance) multiple regression analyses. This implies that there is a positive relationship between household size and the educational, relaxation and aesthetical factors of leisure satisfaction.

Similar to the correlation results, race seems not to have a statistically significant effect on most of the sub-scales of the leisure satisfaction. The coefficient for race is negative and statistically significant at the 5% level of significance; in the physiological sub-scale multiple regression. Holding other factors constant, being black (compared to other races) decreases the score of the physiological sub-scale. This implies that black undergraduate students tend to experience less the physiological benefits of leisure satisfaction than other races. Contrary to the correlation results, the relationship between factors of leisure satisfaction and variables such as the mode of transport to school (D_3), financial dependence on parents (D_4), place of residence during the school term (D_5), faculty of study (D_6) and the level of study (D_7) were found not to be statistically significant at the 5% level of significance. This implies that these variables have no effect on the satisfaction from leisure activities.

4. DISCUSSION

Results from the correlation and multiple regression analyses suggest that leisure satisfaction is mostly influenced by the students' age, their monthly expenditure, the size of a students' households, sole dependence on parents and level of study. This was confirmed by the regression results. These findings are in line with other studies (Ateca-Amestoy et al., 2004; Badia et al., 2011; Kuo, 2011; Longo, 2013; Lu & Kao, 2009; Shikako-Thomas et al., 2013), which found that leisure satisfaction is influenced by personal characteristics such as demographics and environmental related factors including residential environment. Similar findings were also observed in the study by Lapa (2013) which found that leisure satisfaction varies with age and levels of income. Moreover, Longo (2013) found that income, age and the size of the household had a significant influence on the participation in leisure activities among Spanish children and adolescents (those aged 12 to 18 years). The plausible explanation behind the findings of this study is

that the effect of expenditure on leisure satisfaction depends on the availability of income to these undergraduate students, which allows them to spend on various factors of leisure including entertainment. Additionally, having more members in the household setting seems to increase the involvement in leisure activities, which increases leisure satisfaction.

Contrary to the findings of this study, Longo (2013) found that gender was not a significant predictor of participation in leisure activities among Spanish children and adolescents. Studies on university students (Lapa, 2013; Lu & Hu, 2005; Misra & McKean, 2000; Place & Beggs, 2012) also concluded that there was no significant relationship between male and female leisure satisfaction levels. However, other studies (Gökçe, 2008; Kabanoff, 1982; Ngai, 2005) concluded that leisure satisfaction changed with gender. Hence, there appears to be no consistent effect of gender on leisure satisfaction.

Both correlation and multiple regression analyses revealed that race and the faculty of study have no effect on the various factors of leisure satisfaction. The explanation behind these findings on race and field of study (faculty) could be the skewed distribution of respondents within these two variables. There seemed to be no variation in these two variables as the race was biased towards black participants (82.2%), while the majority (84%) of the students were from commerce studies. The mode of transport used to school can have an effect on leisure satisfaction in many ways. Firstly, having one's own transport can facilitate the access to leisure activities. Secondly walking and cycling to school involves some physical activities which can be viewed as part of leisure. The mode of transport to school was found to have no significant effect on all factors of leisure satisfaction. This suggests that various modes of transport to school do not affect students' satisfaction with leisure and does not probably not limit access to leisure activities.

Place of residence during school was found to have no significant effect on various factors of leisure satisfaction. This is similar to findings by Badia et al. (2011) which revealed no link between type of residence and leisure satisfaction. However, this is contrary to the assumption that staying at a university residence may have an influence on leisure satisfaction. The physiological factor of leisure

satisfaction seems to be affected by place of residence. This significant link between place of residence and the physiological factor of leisure satisfaction may be explained by the role of having family support from the home environment towards the participation in leisure activities. This is supported by Shikako-Thomas et al. (2013) who found that factors related to family environment had a significant influence on the participation in leisure activities, where living with more people tends to increase participation in leisure activities. Thus, participating in leisure activities increases one's leisure satisfaction as the utility theory suggests that participation in leisure activities would increase the level of leisure satisfaction (Ateca-Amestoy et al., 2004)

5. CONCLUSION

This study assessed the effect of various socio-economic and demographic factors on self-reported leisure satisfaction among undergraduate students at a South African university. It was confirmed that the self-reported benefits of leisure activities are influenced by the family environment such as household size and dependence on the family (parent or guardian); socioeconomic factors such as monthly expenditure and level of financial dependence; and school/academic environment such as faculty and level of study. Leisure satisfaction was not found to be affected by contextual factors such as the mode of transport to school and the place of residence during the school term. The key findings of the current study suggest that there is a link between students' satisfaction with leisure activities, academic related factors and financial means. Furthermore the link between satisfaction with leisure activities and academic related factors suggest that universities should consider strengthening programmes that promote access to leisure activities on campus so that students can be more involved in these activities. The findings are important in improving strategies that promote a balanced life on campus so that undergraduate students can cope with the complex university environment.

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