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**FACTORS DETERMINING THE SPENDING ON RECREATIONAL ACTIVITIES:  
AN ANALYSIS OF SOCIO-DEMOGRAPHIC CHARACTERISTICS OF  
HOUSEHOLDS IN SRI LANKA**

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**ABSTRACT**

The purpose of this study is to investigate the determinants of socio-demographic characteristics of individuals on spending on recreational activities. Findings of this research will be of immense use to policymakers of the country in formulating better policies for entrepreneurs in the business sector. This study is based on secondary data gathered through the Department of Census and Statistics (DCS), with an annual sample of 21,756 households representing all 25 districts in the country and it utilized the methods of descriptive statistics and chi-square distribution to derive quantitative data and information in a meaningful way. This research examines how different socio-economic and demographic characteristics of households can affect their expenditure on recreational activities. From the present study, it is evident that, highest spending by both Male Headed Households (MHHs) and Female Headed Households (FHHs) are on sacred goods. It is respectively 23.85 percent and 24.13 percent. Furthermore, it is revealed that most spending on recreation activities was done by Sinhalese households (78.86 percent). Moreover, highest spending on recreational activities is recorded by married head of the households (80.29 percent) while the lowest is by the divorced heads (0.64 percent).

**Keywords:** *Recreational Activities, Socio-Demographic Characteristics, Spending*

**1 INTRODUCTION**

The leisure and entertainment sector of economy of countries with a high standard of living is rapidly expanded in business activities such as marketing, financing, research & developing and manufacturing. According to the research done by (Kakinami et al., 2018) to analyze the relationship between income and leisure time physical activities (LAPA) remain after considering about person's all non-leisure time physical activities and socio-demographic

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characteristics and the result indicate that there is the known relationship between lower socio-economic status and lower leisure time physical activities.

Whereas, the study identified patterns in household entertainment, cultural & religious activities from the nationally representative 2016 Household Income and Expenditure Survey (HIES) of the DCS. In this they identified entertainment, cultural & religious activities in 12 patterns. Such as Cinema, Drama, Video films (CDVF), Books / Newspapers / Magazines (BNM), Lotteries / Betting (LB), Excursion / pilgrimages (EP), Arts /Music / Dancing (AMD), Sports, Pets / Aquarium (PA), Toys, Maintenance of Radio, Television & Video deck (MRTV), Sacred goods (SG), Cable and satellite TV payments (CSTVP) and Astrology/exorcism (AE).

Statistics report by the DCS indicates that the mean monthly income was Rs.62,237, while the mean monthly household expenditure on recreational activities was only Rs.908 (2.5% of total non-food expenditure). Past literature has much focused on how socio-demographic characteristics can affect the spending on recreational activities. However, no comprehensive study on this subject has been conducted to date in Sri Lanka. Although the DCS captures household expenditure on recreations, their expenditure patterns are not separately analyzed based on households' socio-economic and demographic characteristics. As such, the study addresses this research gap, by highlighting the significance of recreational activities with in-depth insights. The new findings gathered from this research will be of immense use to Government of Sri Lanka in formulating better policies for entrepreneurs in the business sector, who are one of those stakeholders in recreational activities in the country. Furthermore, this is an opportunity for all national stakeholders to discover untapped market segments. Thus, these insights are important for investors in the social sector including leisure and entertainment industries, covering cultural and religious activities too.

The main purpose of this study is to investigate the determinants of socio-demographic characteristics of individuals on spending on recreational activities.

## **2 LITERATURE REVIEW**

The factors affecting to the households' consumption on recreation, entertainment, cultural and religious activities can be depending on their income level and demand on those activities. People consume goods and services for satisfy their various kinds of needs and wants and their consumption behavior on those activities rely on their spending ability. Furthermore, as evidenced by past research studies, these households'

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expenditure patterns can be differed according to their socio-economic and demographic factors.

As stated by the research studies of HIES on leisure activities in US countries, Chacón-Araya and Crow (2015) applied descriptive statistics, hypotheses testing and the standard error to examine the household income and expenditure patterns in leisure activities in Costa Rica using primary data of 5220 urban & rural houses. Finally, they found out that the expenses associated to the recreation and leisure activities was slightly more increased for the people who are in the lowest and highest income quantile since 1988. However, the Costa Rican study need to be further analyzed on the consumer's expenditure compared to the other international surveys and it should be analyzed to extent to which these surveys vary as far as revenue and & expenditure is concerned in order to determine consumer price index.

the research that is done by Kostakis, Papadaki, and Marketos (2014) to analyze the various demographic, socioeconomic and psychological characteristics on people's expenditures on recreation activities in Greece households. It has been done using a dataset of 800 customers in Athens from 2010 to 2011. This research revealed that there is a strong relationship between demographic, socioeconomic and psychological factors and Greece household's expenditures patterns in recreation activities. The observational outcomes of the study proposed that recreational expenses are impacted by peoples' income. As the topic, interrelationship between recreation expenditures and socio-economic status of consumers is a widely discussed topic around the world. There are proofs that show especially micro- economic findings that reveal there is an existing relationship between recreational activities and consumers' economic status.

Another research conducted by Turkey researchers revealed Turkish peoples' behavior on same subject area. According to the findings by applying multivariate TOBIT analysis it was found that, age of head of the household, household size and consumption, level of education and household location are most important factors when it comes to their expenditure on recreation and cultural activities in Turkey (Uraz, 2008). According to this research, numerous socio-economic dimensions can be built to analyze the household's income and expenditure patterns on recreational activities. It is interesting to examine the households who are excluded in the data set because there is a growing rate of family participations and spending activities. Further, it is fascinating to take a gander at the individuals who are actually participated but those who rather did not take part in spend on recreation and cultural activities.

According to all those research results and findings, it can conclude that the household's income, race, place of resident, age, gender and level of the education of the head of the household and also women's empowerment are

most important factors when it comes to the household expenditure patterns on recreation, leisure, religious and cultural activities. Regarding to our reading and findings even though there are many studies conducted on this subject there is no significant study has been conducted in Sri Lanka. Therefore, this research is mainly directed towards how head of the households spent their monthly income for the leisure, entertainment and religious activities and, how these recreational, entertainment and cultural activities will be demanded with the households' demographic characteristics.

### 3 METHODOLOGY

This research is focused on quantitative data and data are gathered from HIES which has been conducted once in every five years by the Department of Census and Statistics Sri Lanka since 1980. The study is focused on latest survey in 2016 with an annual sample of 21,756 households representing all 25 districts in the country and they used stratified sampling technique as the sample design of the survey. This research suggests investigating the determinants of socio-demographic characteristics of individuals on spending on recreational activities. As such, it utilized the methods of descriptive statistics chi-square distribution to derive quantitative data and information in a meaningful way.

Chi square test is the statistical hypothesis test and it is also known as the Pearson's chi squared test. The sample distribution of the study is a chi squared when the null hypothesis is true. This test is used to testing the relationship between the categorical variables to conduct a chi square test first of all study has to develop two hypotheses. Null hypothesis indicates that there is no relationship exists between the variables. That mean they are independent while related hypothesis demonstrates the significant of the variables.

$$\chi^2 = \sum \frac{(O_i - E_i)^2}{E_i} \quad (1)$$

$\chi^2$  = Chi-square value

I = Number of cases

O = Observed data in each category

E = Expected data in each category

This chapter described about the methodology followed by the study to overcome the research gap and to collect data and techniques that used to analyze the data. However, this chapter is mainly focus on the results and discussions of the analyzed data. This chapter presented results are based on the Sri Lankan household's income and expenditure. The information's are

collected from the HIES 2016 report which is presented by the DCS. The study also discusses the how Sri Lankan household income and expenditure patterns impact on spent on recreational activities.

**Table 1: Distribution of spent and not spent on recreational activities by sector, province**

	Spent on Recreation %	Not spent on Recreation%
<b>Sri Lanka</b>	56.19	43.81
<b>Sector</b>		
Urban	58.23	41.77
Rural	55.69	44.31
Estate	57.4	42.6
<b>Province</b>		
Western	62.9	37.1
Central	59.28	40.72
Southern	70.52	29.48
Northern	55.27	44.73
Eastern	21.68	78.32
North Western	58.29	41.71
North Central	41.99	58.01
Uva	63.48	36.52
Sabaragamuwa	49.02	50.98

*Source calculated data from(DCS, 2016).*

Based on the data of the DCS the study analyses how socio-demographic characteristics affect recreation, entertainment, cultural and religious activities of households. This section is consisting of preliminary results of the objective.

According to the Table 1 clearly indicates that there is a Province-wise household variation in spending on recreation activities. As indicated, 56.19 % of the individuals spent on recreational activities from Sri Lanka while 43.81 % are not spending.

The higher degree of spending on recreational activities was 70.52 % recorded in the Southern province. However, Eastern province recorded a lower extent for spend on recreation activities which is 21.68%.

**Table 2: Demographic characteristics of the Sri Lankan households**

Demographic and Social Characteristics	Population		Head of the households	
	Spend on recreations	Not spend on recreations	Spend on Recreations	Not Spend On recreations
<b>Gender</b>				
Male	47	46.6	76.53	71.3
Female	53	53.4	23.47	28.7
<b>Ethnicity</b>				
Sinhala	76.82	62.42	78.86	65.13
Sri Lankan Tamil	13.05	19.01	12.4	18.23
Indian Tamil	4.03	3.68	3.72	3.51
Sri Lanka Moors	5.81	14.53	4.71	12.74
Malay	0.16	0.28	0.17	0.28
Burgher	0.14	0.08	0.14	0.12
<b>Religion</b>				
Buddhist	72.76	59.1	74.55	61.66
Hindu	13.75	18.55	13.08	17.93
Islam	5.9	14.84	4.89	12.97
Christian	7.59	7.51	7.47	7.44
<b>Employment Status</b>				
Government employee	13.49	9.71	10.89	8.49
Semi government employee	3.6	2.41	3.73	2.39
Private sector employee	43.13	48.51	40.63	46.13
Employer	2.36	1.3	3.91	1.85
Own account worker	30.33	31.25	40.21	40.44

Table continue to next page,

Demographic and Social Characteristics	Population		Head of the households	
	Spend on recreations	Not spend on recreations	Spend on Recreations	Not Spend On recreations
<b>Marital Status</b>				
Unpaid family worker	7.09	6.81	0.63	0.71
<b>Marital Status</b>				
Never Married	22.01	21.88	1.75	2.75
Married	67.57	65.52	80.29	74.5
Widowed	8.77	10.21	15.25	18.63
Divorced	0.46	0.49	0.64	0.66
Separated	1.19	1.9	2.06	3.46

*Source: Calculated data from(DCS, 2016).*

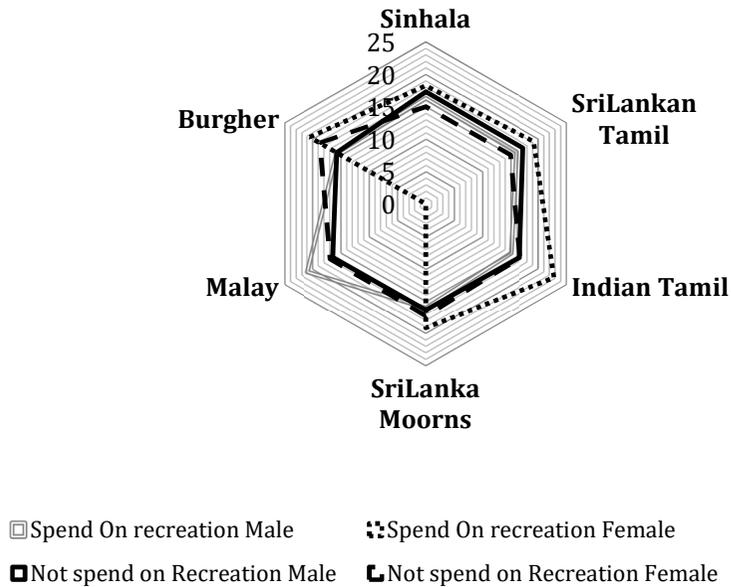
### 3.1 Gender

According to the Table 2 overview, gender can be considered as a significant variable since it demonstrated noteworthy outcomes on the recreational exercises where the 76.53% of the males are spent on recreational exercises while just the 23.47 % of the females are spent on it. One of the reasons for that is the male headed family units have a higher normal yearly salary than their female partners and subsequently, have more prominent spending power than female-headed families.

Among the all recreational categories the greatest number of both MHHs and FHHs are spent on the sacred goods. It is respectively 23.85 % and 24.13 % on MHHs and FHHs. The findings demonstrate that the lowest number of MHH's are recorded from the AMD category (0.77 %) while the lowest number of FHHs are recorded from the sport category (0.66 %).

### 3.2 Ethnicity

Ethnicity is the category of people who identify with each other based on the common culture. Ethnicity distribution demonstrates that the majority of



headed households who spent on recreation activities are Sinhalese (Table 2). From that Sinhala FHHs indicate the most noteworthy number for recreational activities which is 32.61%. Among the MHHs it is confirmed that 27.23% MHHs who spent on recreations are Sinhalese. However, the lowest number of FHHs who spent on recreation activities was Malay among the MHHs least number of MHHs who spent on recreations are Burgher.

**Figure 1: Ethnicity of spent and non-spent FHHs and MHHs**

### 3.3 Religion

According to the religion categories, the highest number of heads of the households spent on recreational activities is reordered from the Buddhist category (74.55 %) while the lowest amount recorded from the Islam (4.89 %). However, results indicate that the most noteworthy number of households not spent on recreational activities is also recorded from the Buddhist category (61.66 %).

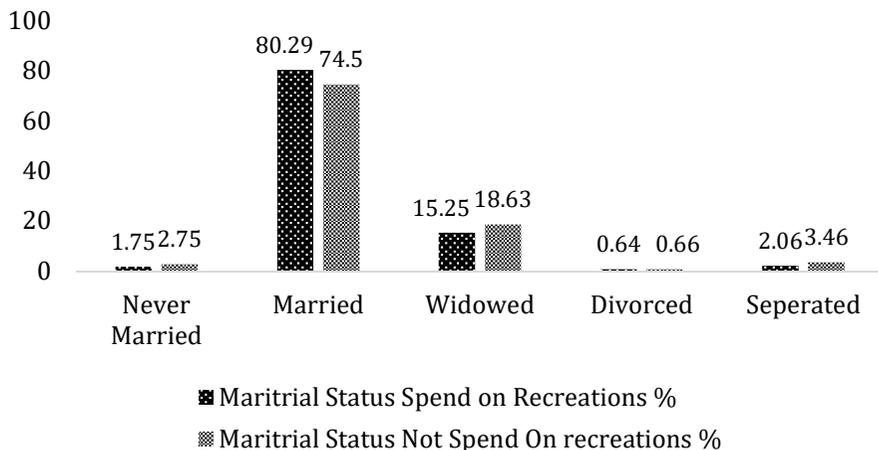
When considering about the MHHs and FHHs' distribution of the religion category, Buddhist MHHs are presented the highest number for spent on recreational activities (43.86 %) while the Christian MHHs are presented the

lowest amount (18.57 %). However, Hindu, Islam and Christian MHHs relatively recorded very low number than the Buddhist MHHs. Moreover, FHHs of the Buddhist and the Hindu category presented the 23.94 % among the all FHHs while Christian FHHs indicated the highest number for spent on recreational activities (25.96 %).

### 3.4 Marital Status

Person's marital status can have a significant impact to maintain the bond of the family. Usually head of the households are male in the society. In the case of separation, divorced, widowed etc., the women are getting the headship of the family.

When take the head of the household's marital status in Sri Lanka the overall idea that the study can develop is that the Sri Lankan married head of the households record the highest number for spent on recreational activities (80.29 %) while divorced head of the households records the lowest number for spent on recreations. Moreover, among the FHHs widowed FHHs are record the highest number for spent on recreational activities although among the

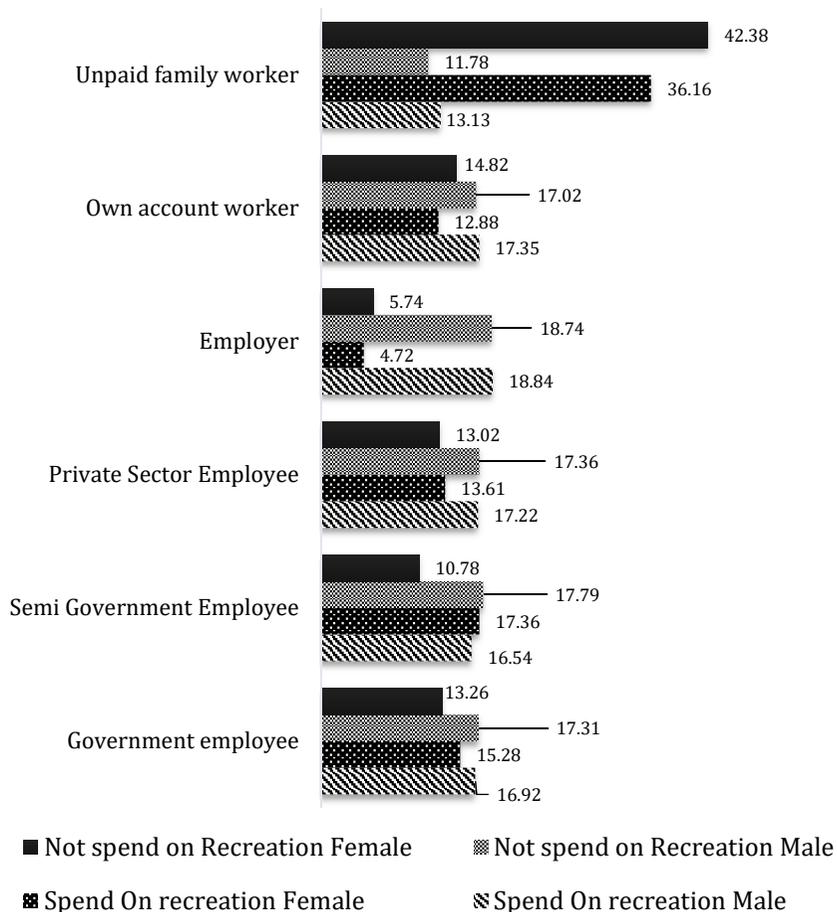


MHHs married MHHs are record the highest number for recreations. However, the table shows that there is a significant different in those MHHs and FHHs who spent on highest number for recreational activities that is relatively 9.76 % and 52.49 %. The Figure 3 exhibit that lowest number who spent on recreational activities is demonstrated by both divorced MHHs and FHHs. Further widowed MHHs are record 15.63 % for recreations while widowed FHHs are record only 3.82 %.

**Figure 2: Marital status of spent and non-spent FHHs and MHHs.**

### 3.5 Employment Status

According to the employment status of the individuals there are some important findings that occurs from the HIES results. DCS separated the employment status in to the 4 main categories. (I) Employee-people who are working for salary, commissions and etc the salary can be earned monthly, weekly or daily basis and can be worked in temporary or permanent basis. (II) Employer-people who are doing his/her own business or own family enterprises and engaging with one or more paid employees. (III) Own Account Worker-people who are doing his/her own business without engaging one or more paid employees. (IV) Unpaid Family Worker people who are supporting family finance activity without any payment (DCS, 2016).



**Figure 3: Employment status of spent and non-spent FHHs and MHHs.**

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According to the Figure 3 Private sector employees indicated the highest number for spent on recreational activities among the other categories which is 43.13 % while employer category recorded the lowest which is 2.36 %. Furthermore, Own Account Worker category recorded the considerable number after the Private sector employees (30.33 %). However, among the male households, Employer category records the most noteworthy number which is 23.96 % while male households in the private sector category recorded 19.28. Moreover, among the female households, unpaid family Worker category recorded the highest number for spent on recreational activities. (33.29) while employer category indicates the lowest amount (5 %).

#### **4 CONCLUSION**

This research examines how different socio-economic and demographic characteristics of households can affect their expenditure on recreational activities. From the present study, it is evident that, highest spending by both MHHs and FHHs are on sacred goods. Furthermore, it is revealed that most spending on recreation activities is done by Sinhalese households. Moreover, highest spending on recreational activities is recorded by married head of the households while the lowest is by the divorced heads. Findings of the present research will be of immense use to policymakers of the country in formulating better policies for entrepreneurs in the business sector. Furthermore, this is an opportunity for all national stakeholders to discover untapped market segments. Thus, these insights are important for investors in the social sector, which includes industries such as leisure and entertainment industries, as well as different cultural and religious activities.

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