# Determinants of Programme Preferences and Watching Hours of Television: With Special Reference to Gampaha District 

K.V.A.H.P Wijenayake (paviydbsusl@gmail.com) Sabaragamuwa University of Sri Lanka, Sri Lanka<br>G.R.S.R.C Samaraweera (sumadirangika@gmail.com)<br>Sabaragamuwa University of Sri Lanka, Sri Lanka


#### Abstract

Although there is a great demand for the television as one of the main recreational options enjoyed by people, its market is lagging behind in value addition to the gross domestic product of the country due to failures in strategic management of television companies. This study seeks to identify determinants that affect people's preference to watch television and the period of time they spend watching television. Identifying as to why people prefer to watch television and what determined the time period they spend watching television could provide better insights for television companies and other stakeholders to improve their viewer base in the oligopolistic market. This in turn, would help to increase the value addition of the industry through well targeted and relevant programmes and advertisements which are telecast at the most appropriate time.


Primary data for the Study has been gathered from four Grama Niladari divisions of the Gampaha Divisional Secretariat in the Western province. Sample was selected using the simple random sampling method and data was collected during the period from February 2015 to April 2015. The sample comprises of 168 households that include 609 individuals. Models for the Study have been derived on individual basis. The binary logistic regression model has been used to identify determinants of programme preferences while the semi log regression model has been used to identify determinants of the number of hours spent watching television.

Through the binary logistic regression model, it has been found that the age of the respondents and other factors such as the respondent being a male, married and employed have a significant positive relationship with the demand for knowledge based programmes. Age, marital status and employment status have reported a significant positive relationship with the number of hours spent watching television. Out of the employed respondents, those who spend more than eight hours of their time engaged in work have a strong negative relationship with the number of hours spent watching television. Middle aged and elderly individuals are more interested in programmes that contain news and politics while females are more interested in programmes with soft content such as teledramas and religious programmes when compared with males. "Hiru News" appears to be the most preferred news programme while "Atapattama" telecast in ITN appears to be the most preferred knowledge programme among the respondents. "Satana" telecast in Sirasa TV appears to be the most popular political programme according to the survey. The teledrama "Me Adarayai" telecast in Sirasa TV is the most favorite teledrama among the respondents while the programme called "Hiru Countdown" is recorded as the number one musical programme. Identifying the characteristics of the viewers would be helpful in targeting different segments of the viewers through suitable television programmes and plan economically effective advertising campaigns in the market.

Keywords: Demand for Watching Television, Hours Spent Watching Television, Programme Specific Demand

## INTRODUCTION

Today, the television has become an instrument that dominates the daily routine of many people. The Sri Lanka Demographic and Health Survey 2006/2007, notes that watching television is ranked the first ( 77.6 percent) among recreational sources of the country (Demographic and Health Survey of Sri Lanka, 2006/2007). While 77.4 percent of the total households in the country have televisions, the television set is ranked the second among other durable goods (Demographic and Health Survey, 2006/2007). According to current data, 3.8 million households own a television out of a total of 5.2 million households in Sri Lanka with a recorded 73 percent TV penetration ${ }^{1}$ (Sri Lankan Television Market-2012/2020, 2013).

According to the Nielsen Television Audience Report (2011), household tuning of television is at an average of 59 hours and 28 minutes per week and nearly $81 / 2$ hours of tuning per day all over the world (Nielsen Television Audience Report for Universe, 2011). In the Asian region, people watch television averagely for 3 hours and 14 minutes per day (Nielsen State of the Media Trends in TV Viewing, 2011). The above mentioned statistics reveal that the television holds a significant place in people's daily activities as a recreational source.

Demand for television makes a great impact on the economy in both macro and micro aspects. From a macroeconomic perspective, television watching can be absorbed into the national production as a leading leisure activity among the people. However, the television industry seems to be neglected and not duly portrayed in the economic and social growth of the country. The role of the television industry in promoting broader development could be highlighted by taking people's behavior towards the television watching into consideration. Although the services sector is the largest component of the national GDP, the contribution made by the information and communication sector (including the broadcasting sector) to the service sector appears to be only 0.5 percent in 2015 (Central Bank Annual Report, 2015). However, the growth of programming, broadcasting activities and audio video production sector has seen an increase from 3.8 percent to 5.5 percent during the period of 2014-2015 (Central Bank Annual Report, 2015). That shows the possibility of expanding the capacity of the broadcasting sector rapidly and competitively as a key contributor in the service sector to make a higher value addition to the GDP. Enhancing the value addition of domestic television programmes would help to achieve this target. To verify the possibility of

[^0]increasing the domestic value addition to the television industry, it is necessary to study the preferences of the viewers regarding television programmes.

From a micro economic aspect, the behavior of firms and the individuals could be explained separately. Sri Lankan domestic television market shows the features of an oligopolistic market and performs dualistic actions, i.e., providing information and entertainment to the people and earning profit from broadcasting advertisements (Kind et al, 2006; Wilbur, 2008). Broadcasting service providers are trying to attract more viewers to their channel to maximize profit and are using various strategies to attract a wider viewer base (Kind et al, 2006).

On the other hand, it is important to consider the fact that individual viewers are targeting their utility maximization through recreational activities. However, Zillmann and Bryant (1986, cited in Gillespie, n.d.) have found that people pay little attention to their preferences of television programmes and reasons for watching those although recreation is an important economic service for them. While some people enumerate the reasons for their watching preference, the majority of people are not aware of the actual reasons behind their watching preferences. Therefore, this could be varied depending on long term factors such as demography, employment characteristics and other inborn individual characteristics as well as short term factors such as mood of the viewer in a given period of time. Gender differences, age differences and occupational differences have an effect on the utility maximization through various television programmes according to Tavakoli and Cave (1996). Improving the validity and the relevance of the programmes to the viewers would help in marketing programmes and promoting those programmes among sponsors. Advertising firms and producers also are interested in knowing the programme preferences of viewers to identify the best time and the best programmes to advertise their product. This would help to increase the value addition of the television industry to the country's GDP.

Therefore, this study answers the following questions.
Can personal behaviors be used to decide television preferences of viewers? Which personal components are leading?

What would influence the viewers to keep them in front of the television for a longer period of time?

These two will provide better guidance to the suppliers of television programmes and advertisers for the profit maximization while the helping consumers maximize their utility.

## OBJECTIVES

Main objective of the Study is to identify determinants of the demand for watching television by viewers. There are two sub objectives.

They are:

- To identify the factors associated with the watching preferences of television programmes.
- To identify the factors associated with the number of hours spent watching television.


## LITERATURE REVIEW

Literature review of this study is divided into two; determinants of the watching preference of television and the determinants of the number of hours of watching television.

## Determinants of Watching Preference of Television

Wilbur (2008) has mentioned that broadcasting industry is a two sided market as it has demands from the viewers as well as advertisers or business firms. According to him, the viewer's demand for programs is mostly made in categories such as action drama, news, psychological drama, reality, movie, and scripted comedy.

A natural phenomenon that seems to occur in program selection is that people surf a greater number of programs or channels where the number of channels and programs is greater (Gillespie, n.d.).

Prior (2005) conducted a research on people's preference for News and Entertainment and found out that people who watch news are more knowledgeable in politics and current affairs and are most likely to vote. However, he found that the segment of population which preferred entertainment was less knowledgeable in politics and was less likely to vote. Therefore, the wider choice in media programmes appears to widen the knowledge gap since knowledge and resources are distributed unequally.

According to Nangong (2011), the Chinese people watch news channels as part of their daily routine and to keep updated with the current affairs. According to Zillmann and Bryant (1986, cited in Gillespie, n.d), people pay little attention to what they select and why they
select it when they are selecting a specific program. In other words, there is no "selective exposure. ${ }^{2}$ Even though people may pay little attention to their program selection, there is always a specific reason behind their choice. It can be the current mood of the viewer which may be temporary, or it can be the emotions which create short term preferences, or demographic characteristics which create long term differences. When demographic characteristics are taken into consideration, males are more likely to watch violence related content but, the female segment mostly prefers to watch programs that portray restoration of justice.

According to Madni el al (n.d.), females are the group which indicated a greater demand for television dramas. Tavakoli and Cave (1996) conducted a research on television viewing patterns of the British and found that viewing variations tend to increase with age variations. In short, they found that programs such as news, chat shows, quiz shows, art, current affairs, and documentaries are watched the most by older viewers but pop music or entertainment shows are watched the most by younger viewers.

The Guest (2013) has emphasized that television watching is the prime entertainment media among UK citizens and that it is recorded as the favorite entertainment medium of nearly 63 percent of the total respondents who consisted mainly of females and members of the young generation.

## Determinants of Watching Hours of Television

The number of hours spent watching television is a dominant factor that affected the recreational demand for television. According to Rop (2013), about $3 / 4$ of his total sample gave priority to watching television and videos rather than engaging in other indoor and outdoor recreational activities during the leisure time available to them.

According to research by Csikszentmihalyi and Kubey (1981, p.320), 7.2 percent of the time, television watching is a main activity of the respondents (344 respondents) while it is a

[^1]secondary activity 2.8 percent of the time ( 136 respondents). Furthermore, most of the respondents have stated that they start to watch television after $5.00 \mathrm{p} . \mathrm{m}$.

The situation that prevailed a decade before was slightly different to the present. US Time Use Survey - 2013 and State of the Media Trends in television viewing (2011) are also presented the evidences for increasing television watching hours by the people.

Under such circumstances, it is essential to study the demand for television as a main source of recreation. It is of importance to note that Sri Lanka has a 77.3 percent television penetration (Department of Census and Statistics, 2007)

According to Tavakoli and Cave (1996), who conducted a study on television viewing patterns of people, television watching patterns of people varied substantially with time, age and gender. The older generation appeared to be watching television more when compared with the younger age segment while females appeared to be watching television more when compared with males.

In terms of gender, Wendy Rop (2013) has recorded quite different result that males are more addicted to watching television and videos than female participants after carrying out a study among undergraduate youth in Kenya while Irby and Tolman (2003) have also presented the same results.

According to Fahey et al (2005), in Ireland, one in five boys and almost one in six girls are watching television for more than four hours a day during the week. During the weekend, it records an increasing trend.

When age variations are taken into consideration, Dennison et al (2002) have found that, almost 40 percent of the US child population watch television for approximately 4.6 hours per week than the children who do not have a television set in their bedrooms. Zimmerman et al (2007) conducted a research on television watching behavior of babies who are below the age of 2 years and results show that the watching time increases with the advancement of their age.

According to the USA Time Use Survey - 2013, when categorizations such as the age are taken into consideration, television viewing time is at the highest among American retirees
and it is at the lowest among young adults. Nielsen Cross Platform Report (2013) and Robinson and Godbey (1999, cited in Kind et al., 2006) also show the same results. A study on viewers' preference on programs was conducted by Wilbur (2008). According to him, Friday night was the most preferred night for watching television. The reason for this preference was that people enjoyed freedom after going to work or school all week and the next day which is a holiday, allowed many viewers extra leisure time.

Rust et al (1992) have conducted a research on measuring viewers' preference on television watching and results emphasize that many people are not likely to watch late night programs due to busy schedules during day time. As found by the Ericsson Consumer Insight Summary Report (2013), evening is the time during which people are most likely to watch television after returning home from work.

According to Corneo (2002), each and every decision taken by a person depends not only on the time that they have but also the concentration called psychic-energy. There appears to be a positive correlation between the number of working hours and the number of hours allocated for television watching from the available leisure time as people who work more hours tend to avoid activities which require more psychic-energy and move on to watching television which requires less physical effort.

## RESEARCH METHODOLOGY

The Study is based on primary data collected from the Gampaha District using a structured questionnaire. The questionnaire includes information on four sub-sections, i.e., basic information, details about watching TV, respondents' willingness for recreation and respondents' interest in the promotion strategies on TV.

The sample comprised of 609 individuals from 168 households located in four Grama Niladari Divisions of Indigolla, Medagama III, Embaraluwa I and Bandiyamulla North at the Gampaha Divisional Secretariat Division of the Western province. The Western Province and the Gampaha Divisional Secretariat were selected using purposive sampling technique while the final sample was assorted using simple random sampling technique.

## Method of Estimation

Binary Logistic Regression Model was used to identify programme specific demand preferences while semi $\log$ regression model was used to analyze watching hours of television.

Binary Logistic Model: The logit function is typically based on the linear probability model because logit model has been constructed to reduce the limitations of Linear probability model. The basic function was as in equation (1). (Gujarati, 2004)

Pi $=E(Y=l \mid X i)=\frac{\mathbf{1}}{\mathbf{1 + \mathbf { e } ^ { - \alpha }}}=\frac{\mathbf{e}^{\alpha}}{\mathbf{1 + \mathbf { e } ^ { \alpha }}}$
If $\mathrm{Y}=0$, the equation would be as in equation (2).
$P i=E(Y=0 \mid X i)=\frac{1}{1+\mathrm{e}^{\alpha}}$
The basic equation for Binary Logistic Model was given follows. (equation 3)

Where,

$$
\begin{equation*}
\ln \left(\frac{\mathrm{p}}{(1-\mathrm{p})}\right)=\beta_{0}+\beta_{1} X_{1}+\ldots .+\beta_{n} X_{n}+\varepsilon \tag{3}
\end{equation*}
$$

$\ln =$ Natural logarithm
$\mathrm{P}=$ Probability of dependant variable that equals a case
$\beta_{0}=$ Intercept
$\beta_{1} X_{1}=$ Regression Coefficient multiplied by some value of the predictor
$\varepsilon=$ Exponential function / Error term
Although people watch various programmes and television channels, their priority was given to a certain program/s or channel/s. Demand for watching television was estimated according to the programme preference under two categories, i.e., demand for knowledge (1) and demand for entertainment (0). In the model, the demand for knowledge related programmes were identified relative to the entertainment programmes such as teledramas and music. This classification is based on the number of hours allocated for each of the above events. If the number of hours for knowledge based programme is higher than the number of hours allocated for entertaining programmes, the viewer is classified into the category, 'the knowledge based programme viewer'. If data shows otherwise, the viewer is categorized as an 'entertainment programme viewer'. Therefore, the viewers are mutually exclusive although they may have a certain preference for the other programmes. Demographic factors and employment related factors were used to determine the relationship with the knowledge related programme demand for television watching.

After the model was built, the influential factors for the programme preference of the public were identified and applied to the model as follows: $\mathrm{X}_{1}$; Age of the respondent, $\mathrm{X}_{2}$; Gender of the respondent, $\mathrm{X}_{3}$; Marital Status of the respondent and $\mathrm{X}_{4}$; Employment Status of the respondent.

Semi - Log Regression Model: In estimating the recreational demand for television watching, the number of hours spent watching television watching is a rather important factor. To identify the effect that the number of hours spent watching will have on recreational demand of watching television, the Semi Log Regression model of data analyzing was used.

Here, several factors had an influence in determining the number of hours of television watching as given in equation 4 .

$$
\begin{equation*}
\ln \mathrm{Hrs}=\beta_{0}+\beta_{1} X_{1}+\cdots+\beta_{n} X_{n} \tag{4}
\end{equation*}
$$

Where $\mathrm{X}_{1}$; Gender of the respondent, $\mathrm{X}_{2}$; Age of the respondent, $\mathrm{X}_{3}$; Marital Status of the respondent $\mathrm{X}_{4}$; Employment Status of the respondent, $\mathrm{X}_{5}$; Level of education of the respondent, $\mathrm{X}_{6}$; Working hours of the respondents, $\mathrm{X}_{7}$; Employment Nature of the respondent The employment related variables were inserted under a separate model for employed respondents in the sample.

## RESULTS

## Determinants of Programme Preferences of Television

The final descriptive results show that females mostly prefer teledramas ( 46.6 percent) while males mostly prefer news programmes ( $\mathbf{5 3 . 4}$ percent). Zillmann and Bryant (1986, cited in Gillespie, n.d) have also found that females demand more soft programmes like teledramas while males mostly prefer violence related content like news.

In terms of trends within different age groups, it appears that 0-14 year age group mostly prefer teledrama/ cartoon programmes ( 64.7 percent). Elderly people whose age is above 55 years mostly prefer news. With the increasing age, the demand for tele-dramas reduced from 50 percent in the 15-29 year age group to 23.9 percent in the $30-54$ year age group. Then, finally it reduced to 22.9 percent in the abovementioned age group over 55 years. According
to Tavakoli et al (1996) young viewers are mostly interested in watching operas, films and pop music shows. This preference is followed by comedy shows and quiz shows for both male and female viewers while the older population tends to watch news, art, current affairs and documentary shows (Tavakoli et al, 1996)

In terms of programme specified demand according to the marital status of the respondents, it appears that married people mostly prefer to watch news ( 41.9 percent) while unmarried people mostly prefer teledramas ( 41.8 percent). The demand for news in the secondary and the tertiary levels of educational is 38.2 percent and 34.3 percent respectively indicating a high demand. It appears that with increasing knowledge, the demand for knowledge also increased.

On the other hand, demand for teledramas and cartoons is high among respondents who have no school education and respondents who have only primary level education. Especially, the lowest demand for news was recorded at 6.3 percent among the category with only primary education. The primary educational level is represented by schooling children who demanded for more teledramas and cartoons.

Demand for musical programmes is high among respondents who have only the primary educational qualifications while the knowledge based demand was the highest among those with education up to the secondary level. These findings are reinforced with the findings of the research carried out by Nangong (2011) which are similar. People who are employed demanded for news telecasts with 54.3 percent of the respondents from the total employed population demanding the same. The unemployed and economically inactive persons were demanding for more teledramas. Among the respondents of the Study who preferred political programmes, Satana political programme is preferred by most while Balaya and Rathu Ira programmes came next.

Hiru TV is the channel which most respondents preferred to watch news as 33.1 percent among total respondents.


Figure 1: Mostly preferred programme distribution regarding drama/cartoon watching

As seen in figure 1, Me Adarayai is the teledrama that recorded the highest preference out of teledramas while the most preferred channel is the Sirasa TV. Hiru TV is the channel which most respondents preferred for watching musical programmes. Most respondents prefer the musical programme called the Countdown which is broadcast on Hiru TV. In terms of knowledge and religion based programmes, Atapattama and the Doramadalawa programmes appear to have recorded the highest preference and the most preferred channel for those is the Independent Television Network (ITN). Overall, most respondents prefer the Sirasa TV and the Hiru TV came in second.

## Statistical Analysis for Identifying Factors Affecting Programme Specific Demand for Television Watching

## Identifying Factors Affecting Programme Specific Demand for Television Watching:

 The statistical analysis was conducted using SPSS statistical package and the factors that affected programme specified demand was identified as follows.Table 1: Programme specified demand - Binary Logistic Model

| Variable | B | Wald | $\boldsymbol{\operatorname { E x p } ( \boldsymbol { \beta } )}$ |
| :--- | :--- | :--- | :--- |
| Age of the respondent $\left(\mathrm{X}_{1}\right)$ | 0.726 | 8.167 | 2.067 |
| Gender of the respondent(Male) $\left(\mathrm{X}_{2}\right)$ | 0.584 | 9.088 | 1.793 |
| Marital status of the respondent $\left(\mathrm{X}_{3}\right)$ | 1.045 | 25.000 | 2.845 |
| Employment nature of the respondent ( $\mathrm{X}_{4}$ ) | 0.583 | 8.192 | 1.792 |
| Intercept | -1.514 | 79.817 | 0.220 |
| Nagelkerke $\mathrm{R}^{2}$ | 0.216 |  |  |
| Number of observations | 609 |  |  |
| Reference Categories | Below 55 years in age, Female, Unmarried, |  |  |
|  | Unemployed |  |  |

According to Table 1 , the $\beta$ value for the constant was recorded as -1.514 which emphasizes that when there is no effect from the independent variables, news/knowledge based programmes are not watched by the respondents.

The demand for news and knowledge programmes are 2.067 times higher among the above 55 year old's than the below 55 year old's. In the Sri Lankan context, 55 years of age is considered to be the age at which people start to enjoy more leisure time. The basic retirement age in Sri Lanka is the 55 years. With more hours of leisure, people tend to engage in many leisure and recreational activities. However, after the age of 55 years, the physical ability of the people starts to depreciate. Therefore, elderly people prefer more indoor recreational activities than energetic activities. Television watching dominates in the indoor recreational activity field thus older people tend to watch the television for longer periods of time. Especially with the maturity that comes with old age, they prefer more knowledge based and topical programmes than entertainment programmes. This finding was also proven by Tavakoli et al (1996).

The demand from males for news and knowledge programmes appears to be more than 1.793 times the demand made by females. It is possible to interpret that male respondents prefer more news and knowledge related programmes than females because males naturally prefer political, economic, knowledge and current affair related programmes. Zillmann and Bryant
(1986, cited in Gillespie, n.d) also have proven that males demand more for violence related content such as news, political programmes and documentary programmes but female segment mostly prefers to watch justice restoration programs and soft programmes like teledramas and music programmes.

In terms of the marital status of the respondents, demand from the married respondents for news and knowledge based programmes was 2.845 times more than the demand made for the same by unmarried respondents. Most of the married people were above the age of 30 years, with some spending their middle ages. With maturity that comes with age, married person were watching more news and knowledge based programmes than unmarried people.

When the demand for news and knowledge based programmes is considered based on the nature of employment of the respondents, the demand of employed persons was 1.792 times greater than the demand of unemployed persons. The employed are more knowledgeable regarding current affairs and political situations thus more news, knowledge and political programmes are preferred by them. However, the unemployed are not connected with the society to a large extent and mostly prefer entertainment based programmes.

## Trends in the Number of Hours Spent Watching Television:



Figure 2: Television Watching Time Trends
According to the Figure 2, many people prefer to watch television between 7.00 p.m. and 10.00 p.m. People are less likely to watch television between 12.00 noon and $1.00 \mathrm{p} . \mathrm{m}$. as it is the lunch time for many people.

It appears that most people prefer to watch television in the evening; especially after 7.00 p.m. Residential sector wise television watching behavior indicates that people from rural areas watch television for a greater number of hours than those in the urban sector, scoring 2.8 and 2.5 mean hours respectively.

In the urban sector, it appears that female respondents watch a greater number of hours of television than males. In the rural sector, males recorded a greater number of hours of television watching than females. Overall, females appear to be watching a greater number of hours of television than the male respondents, scoring 2.6 and 2.3 means hours per day respectively.

When the age-wise distribution of the number of hours of television watching is considered, it appears that groups aged 55 years and above, record the highest number of hours with a 2.9 mean watching hours per day. The second highest watching hours are record by the 15-29 year age group with 2.4 watching hours per day. When the level of education is considered, it is evident that people with primary education watch television for 3.2 hours per day recording the highest contribution in the category.

Differences in television watching hours could be noted according to the nature of employment of the respondents. As emphasized by the results, economically enactive persons are watching television for a greater number of hours than the employed with the unemployed having a mean value of 3.2 hours per day. The employed records the least value of 2.3 mean hours per day.

Within the unemployed category, females are dominant in terms of the number of hours spent watching television. The economically inactive males watch more hours of television than the economically inactive females. Within the employed category, married males watch more hours of television than the married females. On the contrary, single females watch more hours of television than single males.

The number of hours that respondents dedicate to their work has a direct influence on the number of hours they spend watching television. When the number of working hours increases, the number of hours spent watching television reduces. When the employment status of the respondents is taken into consideration, self-employed people appear to be
watching television for a greater number of hours while respondents who were employers recorded the least number of hours spent watching television.

Statistical Analysis for Identifying Factors Affecting the Number of Hours Spent Watching Television by People: Using the one-way ANOVA test, the availability of relationships between the independent and dependent variables were estimated. Variables selected for use in the model are within $10 \%$ significant level. The number of hours spent watching television was used as the dependent variable. The number of hours spent watching television was converted into log values to normally distribute the continuous data on the number of hours spent watching television.

## Setting the Model for Determining the Factors Affecting the Number of Hours of Television Watching:

Table 2: Semi Log - Regression analysis for the television watching hours (demographic factors)

| Variable | B | S.E | t | Sig |
| :--- | :--- | :---: | :---: | :---: |
| Intercept | 0.807 | 0.097 | 8.339 | 0.000 |
| Male Respondents ( $\mathrm{X}_{1}$ ) | -0.029 | 0.059 | -0.483 | 0.629 |
| Old age respondents ( $\mathrm{X}_{2}$ ) | 0.133 | 0.074 | 1.805 | 0.072 |
| Married respondents ( $\mathrm{X}_{3}$ ) | 0.110 | 0.064 | 1.720 | 0.086 |
| Unemployed/Economically Inactive respondent (X4) | 0.219 | 0.064 | 3.421 | 0.001 |
| Respondents having tertiary level education ( $\left.\mathrm{X}_{5}\right)$ | 0.071 | 0.073 | 0.979 | 0.328 |
| $\mathrm{R}^{2}$ | 0.037 |  |  |  |
| Number of observations | 609 |  |  |  |
| Reference categories | Female, below 55 years in age, single, |  |  |  |
|  | employed, below tertiary level education |  |  |  |

Under the enter method, the variables were fitted with the model under $10 \%$ of the significant interval. There was a $90 \%$ of confidence to say that age, marital status and the employment status of the respondents were influencing the number of television watching hours.

Table 3: Semi Log - Regression analysis for the television watching hours (employed sample)

| Variable | B | S.E | T | Sig |
| :--- | :--- | :--- | :--- | :--- |
| Intercept | 0.798 | 0.094 | 8.501 | 0.000 |
| Male respondents $\left(\mathrm{X}_{1}\right)$ | 0.016 | 0.080 | 0.202 | 0.840 |
| Married respondents $\left(\mathrm{X}_{3}\right)$ | -0.052 | 0.098 | -0.529 | 0.597 |
| Respondents having high working hours ( $\mathrm{X}_{6}$ ) | -0.260 | 0.087 | -2.993 | 0.003 |
| Non professional workers ( $\left.\mathrm{X}_{7}\right)$ | 0.057 | 0.084 | 0.681 | 0.497 |
| $\mathrm{R}^{2}$ | 0.043 |  |  |  |
| Number of observations | 245 |  |  |  |
| Reference categories | Female, | Unmarried, below 8 | hours of |  |
|  | working, professional workers |  |  |  |

Under the enter method, the variables were fitted with the model under $10 \%$ of the significant interval. There was a $90 \%$ of confidence to say that only the high number of working hours variable was influencing the number of television watching hours of the employed respondents.

## Interpretation of the Regression Results for Hours of Watching Television:

The regression line for the hours of watching television of the total sample which is based on the multiple regressions is similar to equation (7).
$\operatorname{Ln}(\mathrm{Y})=0.807-0.029 \mathrm{X}_{1}+0.133 \mathrm{X}_{2}+0.110 \mathrm{X}_{3}+0.219 \mathrm{X}_{4}+0.071 \mathrm{X}_{5}$

Using the above regression equation, factors affecting the number of hours spent watching television could be identified effectively. The number of hours spent watching television depends on the age of the respondent and creates a positive relationship with the number of hours spent watching television.

Tavakoli and Cave (1996) also have found the same result to the effect that older age population is watching more hours of television than the young population. Nielsen Cross Platform Report (2013) has identified that the younger age group is the group which records the least number of hours of watching television. It was identified that the young age group is utilizing more hours for education and employment thus the number of hours they had for
leisure is reduced. The older population records the highest number of watching hours out of all age groups because the group consists mostly of retirees who have more hours for leisure and are unable to engage leisure activities that require a great amount of energy.

Marital status of the respondent is also positively related to the number of hours they spend watching television. Married respondents are spending more hours watching television than unmarried respondents. Reason behind this is that unmarried people consume more leisure activities than married people, thus having more choices for spending leisure.

The employment status is also positively related to the number of hours spent watching television. A person being unemployed or economically enactive increases the number of hours of television watching hours per day relative to the employed person. The economically enactive population mostly consists of the retirees and children who are engaged in studies thus they remain more hours to watch television. The USA Time Use Survey- 2013 notes that the television viewing time was the highest among American retirees and was the lowest among young adults.

The regression line for the hours of watching television applicable for the employed sample which was based on the multiple regressions is similar to equation (8).
$\operatorname{Ln}(\mathrm{Y})=0.798-0.016 \mathrm{X}_{1}+0.052 \mathrm{X}_{3}+0.260 \mathrm{X}_{6}+0.057 \mathrm{X}_{7}$
(0.094) (0.080) (0.098) (0.087) (0.084)

The number of hours spent watching television shows a negative relationship with the number of hours spent working by the respondent. According to the relationship between the two variables, the number of television watching hours reduced when working hours of the respondent is more than 8 hours relative to the workers with less than 8 hours of work. Long working hours reduce the available leisure hours, resulting in a reduction of the number of television watching hours. According to the findings of Corneo (2002), it creates a positive correlation between working hours and the hours allocated for television watching from the available leisure time (Corneo, 2002, p.21). The labour - leisure model in labour economics also prove the above fact.

When the impact made by gender variations among married respondent on television watching time is taken into consideration, it is evident that the sign is acceptable although it does not provide a significant relationship with the number of hours of television watching. This is because the non-market activities of the employed males are less than that of the employed females. Employed females hold triple burdens by engaging in market activities, non-market activities and also dedicating time for the family thus reducing time available for leisure.

## CONCLUSIONS AND POLICY RECOMMONDATIONS

Binary logistic statistical model was used to identify factors associated with the demand for television programmes. When the demand for television programmes is considered it is evident that the demand for news and knowledge related programmes are higher among the elderly, males, married persons and the employed. Tavakoli et al (1996) and Zillmann and Bryant (1986, cited in Gillespie, n.d.) also have presented the same results.

Taking above trends into consideration, channels can include a greater volume of advertisements that are of interest to men, like advertisements on finance services, vehicle parts, gents' clothing and cosmetics during the broadcasting of news and political programmes. On the other hand, during the broadcasting of teledramas, channels can include advertisements on beauty, cosmetics, teen products, clothes for females, children and younger generation etc. paving way for the channels to gain more profit through advertisements. Broadcasting programmes with romantic themes and programmes that have dominating female characters and actors wearing beautiful clothes would enable television channels to attract more female viewers to their channels. On the other hand, telecasting women empowerment programmes would be an act of social responsibility that will help attract female contribution to the national GDP.

The Semi-Log regression statistical model was used to identify the factors associated with the number of hours spent watching television. Age, marital status and the employment status of the total sample show positive relationships with the number of hours spent watching television while a higher number of working hours leads employed respondents to reduce the time allocated to watching television.

The study of Corneo (2002) and the labor leisure model also presented the same results regarding the number of hours spent watching television and the working hours of the respondents. When the age of the respondents is taken into consideration, the elderly population appears to be spending more hours in front of the television. In consideration of this fact, television channels can telecast programmes which contain morally significant messages that enhance virtuous and lead to the betterment of society.

The unemployed and economically enactive persons spend a greater number of hours in front of the television. In consideration of this fact, television channels can telecast advertisements and programmes on self-employment and employment opportunities to encourage the unemployed population to engage in any kind of employment activity and to earn income while that would be indirectly help in increasing the national GDP, per capita income and employment rate in the country.

The overall contribution of this study mainly focuses on providing a scientific approach to identify people's television viewing patterns and trends of the television. Long term factors including demographic factors and employment characteristics were analyzed with respect to the preference and length of watching television. Although several authorities in Sri Lanka conduct annual surveys on television viewing patterns of people, the long term determinants of viewing patterns have not been analyzed scientifically. Therefore, the contribution made by those studies for policy making of the respective market is relatively low. The current study analyzes people's choices on television viewing in terms of policy aspects.

The findings of the study clearly reveal that personal, employment and in-built characteristics of people have a direct influence on their preferences in watching television. On the other hand, it is indicative of various television watching preferences of people. Both these aspects are highly useful for decision making in the television industry. Clearly identifying the viewing patterns of people would lead television channels to broadcast efficient and viewer based content. That would lead to attracting more viewers to the channel while generating more advertisements for the channel to maximize profit.

## REFERENCES

Anon., 2009. Sri Lanka Demographic and Health Survey 2006/2007, Colombo: s.n.
Anon., 2011. US Time Use Survey, Washington DC: s.n.
Anon., 2013. Ericsson Consumer Insight Summary Report, Stockholm: s.n.
Anon., 2013. US Time Use Survey, Washington DC: s.n.
Anon., 2015. Central Bank Annual Report, Colombo: Central Bank of Sri Lanka.
Berman, S. J., Duffy, N. \& Shipnuck, L. A., 2006. The End of Television as We Know It: A Future Industry Perspective, New York: IBM Corporation.

Corneo, G., 2002. Work and Television. CESifo Working Paper, December.Volume 829.
Csikszentmihalyi, M. \& Kubey, R., 1981. Television and the Rest of Life: A Systematic Comparison of Subjective Experience. The Public Opinion Quarterly, 45(3), pp. 317-328.

Dataxis, 2013. Sri Lankan Television Market-2012/2020, Mauritius: Dataxis Company.
Dennison, B. A., Erb, T. A. \& Jenkins, P. J., 2002. Television Viewing and Television in Bedroom Associated With Overweight Risk Among Low-Income Preschool Children. PEDIATRICS, 01 June.109(6).

Fahey, T., Delaney, L. \& Gannon, B., 2005. School Children and Sport in Ireland, Dublin: s.n.
Foundation, Kaiser Family, 2005. Media Multi-tasking' Changing the Amount and Nature of Young ...a0129973924. [Online] Available at: https://www.thefreelibrary.com/'Media Multi-tasking' Changing the Amount and Nature of Young ...-a0129973924
[Accessed 2504 2015].
Gillespie, B., n.d. Determinants of Television Viewer Preferences, s.1.: s.n.
Guest, M., 2013. Media consumer Survey: Love in a Cold Climate, London: The Creative Studio at Deloitte.
Gujarati, D. N., 2004. Basic Econometrics. 4 ed. s.l.:The McGraw-Hill Companies.
Irby, M. \& Tolman, J., 2003. World Youth Report, s.1.: s.n.
Kind, H. J., Nilssen, T. \& Sorgard, L., 2006. Competition for Viewers And Advertisers in a TV Oligopoly. CESifo working paper, Volume 1862.

Madni, A. R., Hassan, S., Aziz, F. \& Amin, S., 2014. Gender Interaction Pattern on Private Television Channels' Turkish and Pakistani Dramas and Viewer's Perception. Asian Journal of Empirical Research, 4(3), pp. 172 179.

Nangong, D., 2011. Chinese Audiences' Preference for, Dependenceon, and Gratifications Derived from CCTV 1,Dragon TV and Hunan TV News Programs, s.l.: s.n.

Nielsen, 2011. Nielsen Television Audience Report, New York: Nielsen Company.
Nielsen, 2011. State of the Media Trends in TV Viewing-TV Upfronts, New York: s.n.
Nielsen, 2013. Viewing on Demand, The Cross - Platform Report, New York: s.n.
Prior, M., 2005. News vs. Entertainment: How Increasing Media Choice Widens Gaps in Political Knowledge and Turnout. American Journal of Political Science, July, 49(3), p. 577-592.

Rop, W., 2013. Leisure Time Use in Kenya, an assessment of University Undergraduate Students in Eldoret Town. Research on Humanities and Social Sciences, 3(3), pp. 76-81.

Rust, R. T., Kamakura, W. A. \& Alpert, M. I., 1992. Viewer Preference Segmentation and Viewing Choice Models for Network Television. Journal of Advertising, 21(1), pp. 1-18.
Tavakoli, M. \& Cave, M., 1996. Modelling Television Viewing Patterns. Journal of Advertising, 25(4), pp. 7186.

Wilbur, K. C., 2008. A Two-Sided, Empirical Model of Television Advertising and Viewing Markets. Marketing Science, 27(3), pp. 356-378.

Zimmerman, F. J., Christakis, D. A. \& Meltzoff, A. N., 2007. Television and DVD/Video Viewing in Children Younger Than 2 Years. ARCH PEDIATR ADOLESC MED, May, Volume 161, pp. 473-479.


[^0]:    ${ }^{1}$ Television Penetration: available amount of viewers for the television watching

[^1]:    2 "Behavior that is deliberately performed to attain and sustain perceptual control of particular stimulus events" (Zillmann and Bryant (1986, cited in Gillespie, n.d))

