WHAT DETERMINES RECREATIONAL TELEVISION BEHAVIOUR OF PEOPLE? A STUDY WITH REFERENCE TO THE GAMPAHA DISTRICT[1]

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ABSTRACT

Although the television industry carries great importance in micro and macroeconomic aspects and supports a great demand as a recreational or leisure source among people, it seems that the television industry is lagging behind its actual capacity and is widely contributing to the domestic GDP. Less effective management and poor identification of choices of people has driven the industry toward poor conditions. Therefore, this study contributes to identify the factors that support the television program preferences of people, selection of public or private channels and time spent in front of the television. These identifications would indeed help the television industry to achieve maximum capacity while competing effectively in an oligopolistic market and achieving higher contribution to the national GDP.

In order to obtain the statistical analysis, primary data has been gathered from four Grama Niladari Divisions of the Gampaha Divisional Secretariat in the Western Province, Sri Lanka. Simple random sampling procedure has been carried out in the sample selection process and data has been gathered from 609 individuals in 168 households; from February 2015 to April 2015, to identify determinants of programme preferences and public/private channel choices, the binary logistic regression model has been applied. The semi log regression model is used to identify the determinants of television watching hours of the people.

Results in the binary logistic model of programme preferences emphasize that old, male, married and employed individuals are showing more interest in news and knowledge related programmes while creating positive significant relationships with the news and knowledge based programme demand. When a person is being employed, public channels were mostly preferred creating significant positive relationship while when a person is having specific political norm, they prefer mostly private channels and create significant negative relationship in the model. Regarding the hours allocated for watching television by the people, age, marital status and employment status shows positive relationships within the model. Considering the employed segment; when a person has more than 8 hours of working time, it shows a significant negative relationship with television watching hours. In descriptive statistics, it shows that old and middle aged people are more interested in watching news and politics related

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programmes while females mostly prefer programmes containing soft content such as tele-dramas and religion based programmes.

Considering news preference in separate, Hiru TV was leading among other channels. "*Atapattama*" on ITN was the most preferred knowledge based programme followed by "*Doramadalawa*" on ITN. "*Satana*" programme on Sirasa TV was the mainly preferred political programme among individuals. On the other hand, when it came to tele-dramas, the largely favoured Indian mega dramas were "*Me Adarayai*" and "*Sapna*", telecast by Sirasa TV. "Hiru CountDown" was leading among the respondents when it came to their most preferred musical programmes.

Keywords: Demand for Watching Television, Hours Spent Watching Television, Programme Specific Demand, Public/Private Channel Choices

1. Introduction

Television, in modern times cannot be considered a mere electronic instrument since it has become the dominant indoor recreational source among people. As evident by the Nielsen Television Audience Report, 2011 and Nielsen State of the Media Trends in TV Viewing Report 2011, the household tuning of television is recorded as an average of 59 hours and 28 minutes per week and nearly 8 ½ hours of tuning per day all over the world (Nielsen Television Audience Report for Universe, 2011) and for the Asian region, people watch television on average for 3 hours and 14 minutes per day (Nielsen State of the Media Trends in TV Viewing, 2011) emphasizing the importance given by the people to the television. Even though people tend to access many digitalized instruments due to the ever changing technology, people mostly prefer television to spend their leisure time (Viewing on Demand: The Cross-Platform Report, 2013).

In the Sri Lankan context, many data sources emphasize the importance given by people to the television. As revealed by the Sri Lanka Demographic and Health Survey 2006/2007, watching television is ranked as the first (77.6 percent) amongst the recreational sources enjoyed by people in Sri Lanka (Demographic and Health Survey of Sri Lanka, 2006/2007). 77.4 percent of the total households in the country have televisions and is ranked as the second among other durable goods available in a Sri Lankan household (Demographic and Health Survey, 2006/2007). In exact values 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[3] (Sri Lankan Television Market-2012/2020, 2013).

Not only as a recreational source, television holds a significant economic value in both micro and macro level aspects. Considering the Cultural and Creative Industries (CCI) in the world, the television industry generates the most revenue as 477 bn US $ and generate 3,527,000 employment opportunities across the world **(**Cultural times: The First Global Map of Cultural and Creative Industries, 2015). The massive demand for television annually generates considerable income in the broadcasting sector while holding a noticeable importance in microeconomics; the behavior of which could be explained separately for individual firms and persons.

[3] Television penetration: Available number of television viewers.

Currently the Sri Lankan broadcasting sector operate under an oligopolistic market structure and functions under both public and private partnership. Most importantly the television industry performs a dualistic action; (i) providing content for the viewers towards information and entertainment and (ii) earning profits through broadcasting advertisements of other firms (Kind et al, 2006; Wilbur, 2008) which generates contradiction between viewers' interest on advertisements and television programmes. To avoid that matter, service providers are always tending to practice different strategies to attract a wider viewer base as well as to maximize profit through advertisements while maintaining fair balance between these two dissident components (Kind et al, 2006).

Under that fact, it is important to deeply consider about the viewers' television behaviour. 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. While some people are aware of the reasons for their watching preferences, a majority of the people do not produce actual reasons behind their watching preferences. Therefore, the watching behaviour among people could be varied according to 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. Further, according to Tavakoli and Cave (1996), gender differences, age differences and occupational differences lead to considerable effect on utility behaviour in watching television.

In the macro aspect, many broadcasting sectors in many economies now target the outside world and produce television contents and earn large incomes through exporting those contents.

Even though the television industry dwells in the world of broadcasting and generate high income to the global economy, the Sri Lankan television industry does not show significant influence even towards the national GDP over time. In the past year, the information and communication sector along with the broadcasting sector contribution to the national GDP records as 0.5 per cent which is extremely inadequate with the massive demand generated through the people. But as a plus point, the growth of programming, broadcasting activities and audio video production sector has increased from 3.8 percent to 5.5 percent during the period of 2014-2015 (Central Bank Annual Report, 2015) and evinces a growth potential in the industry. However, it seems that the domestic television industry had been neglected for a long time and still does not show substantial contribution towards the economy and is lagging behind in its actual capacity for development.

As mentioned above, currently the domestic television market functions under public and private partnership. The private sector is currently performing in a preferable manner along with the utilization of new technology. However, the public sector, which could be used as a worthy component to capture higher government income is showing feeble behaviour in the industry.

Considering all the above matters it seems that the television industry holds significant value in the domestic economy as a key sector with higher growth potential but has not achieved the expected development yet. Under that fact, finding new and effective ways to enhance the capacity of the television industry may achieve its actual growth potential while contributing to the national GDP as

expected. In the micro aspect, providing more accurate and valid contents to the viewers would attract more viewers while attracting more advertisers. For that clear identification of viewers' preferences is a must as advertisers and producers also tend to know the viewers' preferences to put their advertisements on trending programmes at the most suitable time. This would help to increase the value addition of the television industry to the country's GDP.

On the macro aspect, enhancing the value addition of domestic television programmes would help to earn export income through domestic television contents as practiced in many other countries. To verify the possibility of increasing the domestic value addition in the television industry it is necessary to study the viewers' preferences regarding television programmes. Therefore, this study provides answers to the following questions:

- Does personal behaviours affect television preferences of viewers? Which components are leading among these behaviours?
- What are the failures of government owned channels in attracting a wider viewer base with maximum profit?
- What would influence the viewers to spend longer time in front of the television?
- These three will provide better guidance to the suppliers of television programmes and advertisers for the profit maximization while the helping consumers maximize their utility.

The main objective of the study is focused on identifying the television viewing behavior as a recreational component. There are three sub-objectives and 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; and
- to identify the factors associate with the public/private channel choices among viewers.

2. Literature Review

Literature review of this study is arrayed under three sections; determinants of the watching preferences of television, determinants of public/private television channel choices among people and determinants of the number of hours of watching television.

2.1. Determinants of Watching Preference of Television

Wilbur (2008) has noted that the broadcasting industry has a two sided market where it demands from the viewers as well as from advertisers or business firms. According to Wilbur's findings, the viewer's demand for programmes are mostly captured and divided into categories such as action drama, news, psychological drama, reality, movie, and scripted comedy.

According to a research on people's preference for News Vs Entertainment by Prior (2005), people who watch news are more knowledgeable in politics and current affairs and are showing more participation in voting. However, the people

who prefer entertainment than news were less knowledgeable in politics and was showing less interest to vote. As a conclusion, Prior (2005) points out that having more content for people to select, widens the knowledge gap when the knowledge and resources are unequally distributed.

According to Nangong (2011), the Chinese people watch news channels to keep updated with the current knowledge and maintain it as a daily habit. Zillmann and Bryant (1986, cited in Gillespie, n.d), have noted that, when a person selects a programme, he/she is pays little attention to what they select and why they select that content; simply without "selective exposure."[4] However, even though people pay little attention on their programme selections, there is always a specific reason to select that content according that person's current mood or emotions which is a temporary/ short term phenomenon or a demographic/inborn characteristic which leads to creating long term preferences. Under demographic characteristics which create long term preferences, males are more likely to watch violence related content like war related contents while the females prefer mostly to watch programmes that relate to peace and justice, (Zillmann and Bryant 1986, cited in Gillespie, n.d).

Madni el al (n.d.) noted in their study that females showed a higher demand for television dramas. According to Tavakoli and Cave's (1996) study on television viewing patterns of the British, it shows age variations as a leading factor to increase the viewing variations among people. In other words, programmes like news, chat shows, quiz shows, art, current affairs, and documentaries are watched mostly by older viewers while pop music or entertainment shows are mostly watched by younger viewers. According to Guest (2013), television watching is the leading entertainment media among UK citizens and recorded as the most favorite entertainment source among nearly 63 percent of the total respondents of wchich majority were females and youngsters.

2.2. Determinants of Public/Private Channel Choices among Viewers

As emphasized by Bacha and Norris (2000) after the 1980's all the countries in the world allowed the private sector to participate in broadcasting through commercialization of mass media to increase the media choice of the viewers, where the public sector held a monopoly except in UK and Italy before the 1980's. Further, the common aim of the public television channel was laid on providing entertainment with serious information in related to the common issues.

In most of the countries, people mostly prefer commercial channels than traditional public channels. According to their findings, the knowledge of the people was positively correlated with the higher watching of public channels; especially the regular exposure to the news. They measured the exposure to the programmes in two methods as selection effect and media effect. According to the selection effect people select the private or public channel according to the prior social and attitude effects. People who are more knowledgeable tend to regularly watch public channels because, in general, public channels mostly telecast things about politics, current issues, world trends and etc.

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

"In most countries, better knowledge is positively and significantly correlated in general with preferences for public broadcasting, and in particular with preference for public TV combined with regular exposure to news" (Bacha and Norris, 2000, 8). Here they emphasized that private channel growth may compliment, not replace, public channels. People may increase the demand for both public and private channels during a given leisure time as per the requirement of exposure to both knowledge and entertainment. Heap et al (2005) pointed out that, within a decade, the available channel choice of a viewer increased from 3 channels to nearly 100 channels in most countries worldwide. Although public sector broadcasting or Public Service Broadcasting (PSB) highly intervened in the broadcasting industry, the considerable reason of lack of competition continuously reduced over time due to multi- channel availability within households. They suggest the supply side policies as to encourage public broadcasting while reducing fully commercializing the public broadcasters. Enabling competition to generate efficient outputs in both public sector and the fully commercialized private sector. According to the Nangong (2011) Chinese graduates were willing to watch government oriented news channels as China's more educated population were more interested in government jobs.

Noam (n.d) have developed a model regarding the political influence on the channel broadcasting and emphasized government intervention in private channels. When government intervention increased on programme diversification, unusual political biases were raised. But on the other hand, when the government reduced intervention in the industry, the advertising captured television market tend to reduce the quality of the programmes. So, proper a management process should be introduced for the public and private channels in the television market.

According to the Grunnet, et al (2005), the Assessment of the need for a Radio and TV Journalist Training Unit in Sri Lanka report, emphasized the high political influence on the media editorial positions and that they cannot make proper decisions in allowing licenses for the private broadcasters. Mahsud et al (2011) have found out that the people were watching more private channels to gain knowledge regarding issues of national importance like politics and economics, terrorism, poverty and etc. The reason for the preference was identified as private channels were providing insight and balanced information regarding the above facts. Also the results revealed that, young generation was highly depended on private channels than the older generation.

In the Sri Lankan context, Devenesan (2006, 5), emphasizes the political influence on the private participation allowance to the industry.

> Most private TV and radio stations are affiliated with politically influential private groups, and their ability to obtain licenses from the government sometimes relies more on this influence and the discretion of the Media Minister than their potential to produce better quality programming.

But allowing the private satellite and cable TV providers, like CBNSat[5], to the industry given the huge competition between both private and public sector broadcasters encouraged quality and diversified output of media content.

> The Sri Lanka Broadcasting Corporation Act states, quite simply, that the Minister in charge of Media is empowered to issue licenses for the establishment of private stations‖. The discretionary broadcast licensing system has completely lacked transparency, accountability and consistency. As a consequence of this, some editorial positioning risks to become dictated by the business and political priorities of media owners and editors (Devenesan, 2006, 5).

2.3. Determinants of Watching Hours of Television

Considering the recreational demand for television, the number of hours spent watching television holds a significant importance. According to Rop (2013), during the available leisure time, about ¾ of his total sample were watching television and were showing less preference to engage in other indoor or outdoor recreational activities.

According Csikszentmihalyi and Kubey (1981, 320), 344 respondents out of the total sample were watching television as the primary activity; recording 7.2 percent of the time. While 136 respondents recorded it as their secondary activity with 2.8 percent of the time. Importantly, a majority of the sample were watching television after 5.00 pm. US Time Use Survey (2013) and State of the Media Trends in television viewing (2011) also presented the same results related to television watching hours. In the Sri Lankan context, the television penetration among people was recorded as 77.3 percent (Department of Census and Statistics, 2007) which provide evidence to the greater demand to the television industry.

Tavakoli and Cave (1996) conducted a study on television viewing patterns of people and found that time, age and gender factors as factors affecting the variations in television viewing patterns. Considering age as an influential factor, older people showed higher demand for watching television compared with the younger age groups. On the gender aspect, females showed higher preference to watch television than males (Tavakoli and Cave, 1996). However, Wendy Rop (2013) has recorded quite different result in her study among undergraduate youth in Kenya as males are more addicted to watching television and videos contents than females. Irby and Tolman (2003) have also presented the same results.

According to the study of Fahey et al (2005) which was conducted in Ireland, one in five Irish boys and almost one in six Irish girls are watching television for more than four hours per day within a week while during the weekend, it records an increasing trend.According to Dennison et al (2002), almost 40 percent of the US child population who are having own television sets in their bedrooms watch television approximately for 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

[5] CBNSat is one of the two prior private television broadcasters in Sri Lanka as it abbreviation of Communique Broadband Networks which providing direct to home satellite TV operation in the television industry owned by the Dialog Telekom Ltd.

television watching behavior of babies who are below the age of 2 years and found out that the watching time increases as they become older increases.

According to the USA Time Use Survey – 2013, television viewing time is highest among American retirees and it is lowest among young adults. Nielsen Cross Platform Report (2013) and Robinson and Godbey (1999, cited in Kind et al., 2006) also cited the same results. A study on viewers' preference on programmes was conducted by Wilbur (2008) and found out that, Friday night was the most preferred time for watching television among people. As the reason for this preference, Wilbur (2008) has mentioned that Friday was the day that people enjoyed freedom after going to work or school for a whole week and the next day which is a holiday thus allow people to consume extra leisure time.

Rust et al (1992) have conducted a research on measuring viewers' preference on television watching. According to their results, many people do not prefer late night programmes due to busy schedules during day time. As found by the Ericsson Consumer Insight Summary Report (2013), evening is the time that people are most likely to watch television as it is the time which people spend leisurely after returning home from work. According to Corneo (2002), each and every decision of a person depends not only on the time they have but also on the mental-energy they have. Thus it creates positive correlation between the number of working hours and the number of hours watching television from the available leisure time. Simply, as people who spend more hours working tend to avoid engaging in activities which require more mental-energy and move to activities which require less mental-energy like watching television.

3. Research Methodology

The Study is mainly based on primary data. Using structured questionnaire. Relevant data has been gathered under four sub-sections as basic information, details about watching TV, respondents' willingness for recreation and respondents' interest in the promotion strategies on TV.

Data were collected in four Grama Niladari Divisions which were selected randomly as Indigolla, Medagama III, Embaraluwa I and Bandiyamulla North at the Gampaha Divisional Secretariat Division of the Western province. Using purposive sampling technique, the Western Province and the Gampaha Divisional Secretariat were selected. For the final sample random sampling technique was applied.

3.1. Method of Estimation

Binary Logistic Regression Model has been used to identify programme specific demand preferences and determinants of public/private channel choice while semi log regression model was used to analyse the watching hours of television.

Binary Logistic Model

The logit function is typically based on the linear probability model which was introduced to reduce the limitations of LPM. The basic function of logit model was referred in equation (1) (Gujarati, 2004).

$$Pi = E(Y = 1 \mid Xi) = \frac{\mathbf{1}}{\mathbf{1}+\mathbf{e}^{-\propto}} = \frac{\mathbf{e}^{\propto}}{\mathbf{1}+\mathbf{e}^{\propto}} \quad (1)$$

If Y = 0, the equation would be as in equation (2).

$$Pi = E(Y = 0 \mid Xi) = \frac{1}{1+e^{\propto}} \quad (2)$$

The basic equation for Binary Logistic Model was mentioned as follows (equation 3):

$$\ln\left(\frac{p}{(1-p)}\right) = \beta_0 + \beta_1 X_1 + ... + \beta_n X_n + \varepsilon \quad (3)$$

Where,

Ln = Natural logarithm
P = Probability of dependant variable that equals a case
β_0 = Intercept
$\beta_1 X_1$ = Regression Coefficient multiplied by some value of the predictor
ε = Exponential function / Error term

Taking the people's preferences on television programmes into consideration, it seems that although people watch different programmes in different channels, some programmes and channels were given special preference and priority. Thus the watching preferences of television programmes and channels were estimated under two categories, i.e., demand for knowledge (1) and demand for entertainment (0) to measure the demand for television watching. The model identifies demand patterns for knowledge based programmes/News over entertainment programmes such as tele-dramas and musical programmes. Through measuring the number of hours allocated to each segment, the most preferable programme category was selected. If a person allocated more hours to watch knowledge related programmes than entertainment programmes the viewer is identified as, 'the knowledge based programme viewer' and as the vice versa as an 'entertainment programme. Therefore, it shows mutual exclusion among viewers even though they are showing significant preferences over other programmes. To estimate the relationship of programmes preferences on television watching demand a model was constructed under demographic factors and employment factors. Finally, the influential factors for the model was identified and applied as, X_1; Age of the respondent, X_2; Gender of the respondent, X_3; Marital Status of the respondent and X_4; Employment Status of the respondent, X_5;Educational level of the respondents.

In identifying public / private channel choices among people, the model was constructed by categorizing the dependent variable as demand for public channels (1) and demand for private channels (0). If the viewer prefers public channel than watching private channel, the viewer is identified as a 'public channel viewer'; while if the viewer prefers private channels than public channels, the viewer is identified as a 'private channel viewer'. As same as in the previous model, employment factors and political preference details were considered to measure the relationships with the television watching demand. For the public/private channel choice model, the influential variables were applied as, X_1; Employment nature of the respondent and X_2; Political norm of the respondent.

Semi - Log Regression Model

Considering the third objective of measuring demand for watching television; the effect of number of hours spent watching television seems a rather important factor. To identify the certain effects on television watching demand by the number of television watching hours, Semi Log Regression model was used as the analytical tool.

Here, the basic equation for Semi-Log regression model was mentioned in equation 4.

$$\ln \text{Hrs} = \beta_0 + \beta_1 X_1 + \cdots + \beta_n X_n \quad (4)$$

X_1; Gender of the respondent, X_2; Age of the respondent, X_3; Marital status of the respondent, X_4; Employment Status of the respondent, X_5; Level of Education of the respondent, X_6 ; Respondents not spending time for another leisure activity, X_7; Working hours of the respondents, X_8; Employment nature of the respondent were identified as influential factors to the relationships. Importantly, two separate models were constructed for a common sample under demographic factors and for an employed sample under employment factors.

4. Results

4.1. Determinants of Programme Preferences of Television

According to the descriptive results, it shows that females mostly prefer tele-dramas (46.6 percent) while males mostly prefer news (53.4 percent). The same result was mentioned in the findings of Zillmann and Bryant (1986, cited in Gillespie, n.d.) as females mostly demand soft content programmes like tele-dramas while males mostly prefer violence related content like news.

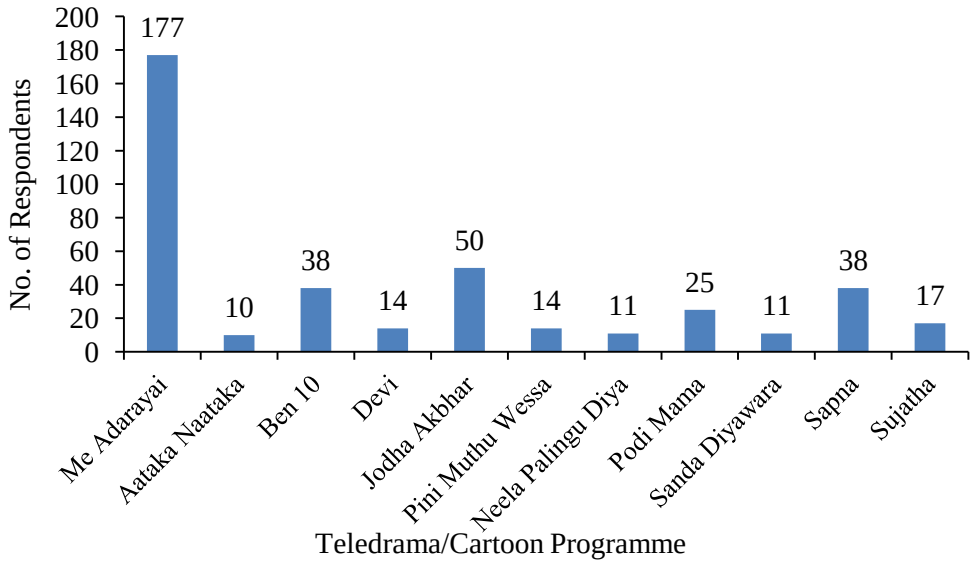
Considering programme preferences under age variations, it shows that tele-dramas/ cartoon programmes preferences are mostly captured by 0-14 year age group (64.7 percent) while the preferences for news are captured by the people whose age is above 55 years. With the increasing of age, it shows a decreasing preference trend for the tele-drama/cartoon programmes. As exact values, 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 within the group of people whose age is above 55 years. Same result appeared in the findings of Tavakoli et al (1996) as young viewers mostly preferred to watch operas, films and pop music shows while the older population showed a tendency to watch news, art, current affairs and documentary shows (Tavakoli et al, 1996).

Considering the Marital status under programme preference variations, it shows that the married segment mostly prefer watching news (41.9 percent) while the unmarried segment show more preference to watch tele-dramas (41.8 percent). With the educational level variances, in the secondary and the tertiary educational levels, 38.2 percent and 34.3 percent from total sample are showing more preferences in watching knowledge related programmes. The least demand for news was recorded by the people whose educational level is only up to primary level or no educational attainment as 6.3 percent and recording higher demand for tele-dramas and cartoons. Importantly, it emphasises an increment in demand for knowledge with the increasing educational level.

On the other hand, Demand for musical programmes is high among the people whose education level is up to the primary level. The people with secondary education level record the highest demand for knowledge related programmes. The same findings were interpreted in the study of Nangong (2011) as most demand for news telecasts were generated by the employed segment with a 54.3 percent contribution while unemployed and economically inactive persons were demanding more tele-dramas.

Considering the exact programme preferences of the people under the news/knowledge programme preference category, *Satana* political programme is the most preferred political programme by the people followed by *Balaya* and *Rathu Ira* programmes. Hiru TV ranked as the 1st which people mostly prefer to watch news. Considering knowledge and religion based programmes, *Atapattama* and *Doramadalawa* programmes captured the highest preference among related programmes and the most preferred channel for watching knowledge and religion based programmes is the Independent Television Network (ITN).

FIGURE 01
Mostly Preferred Programme Distribution Regarding Drama/Cartoon Watching



Source: Author constructed based on research data.

In the Entertainment category, *Me Adarayai* teledrama on *Sirasa TV* recorded the highest preference among tele-dramas. Considering the mostly preferred musical programme, *Countdown* in *Hiru TV* ranked 1st. Under overall channel preference, *Sirasa TV* and *Hiru TV* achieved 1st and 2nd place in peoples' preference for watching any kind of programme respectively.

4.2. Statistical Analysis for Identifying Factors Affecting Programme Specific Demand for Television Watching

Identifying Factors Affecting Programme Specific Demand for Television Watching

The SPSS statistical package was used to analyze data and final results were tabulated as follows:

TABLE 01
Programme Specified Demand - Binary Logistic Model

Variable	B	Wald	Exp(β)
Age of the respondent (X_1)	0.727	8.194	2.070
Gender of the respondent(Male) (X_2)	0.598	9.184	1.819
Marital status of the respondent (X_3)	1.061	24.746	2.891
Employment nature of the respondent (X_4)	0.567	7.435	1.763
Educational level (X_5)	-0.096	0.147	0.909
Intercept	-1.443	33.782	0.236
Nagelkerke R^2	0.216		
Number of observations	609		
Reference Categories	Below 55 years in age, Female, Unmarried, Unemployed, and Secondary and above educational level		

Source: Author constructed based on research data.

According to Table 01, the demand for news and knowledge related programmes are 2.070 times higher among the people whose age is above 55 years than the people whose age is below 55 years. Considering the Sri Lanka, Age of 55 is the 1st boundary for retirement and where people start to consume more time in leisure. With having more time for leisure, people require more recreational and leisure activities. But the thing is, after the age of 55 years, the physical ability of the people starts to depreciate while limiting them to engage in activities which require less energy; i.e., indoor recreational activities. As Television watching dominates among indoor recreational activities, elderly people show a higher tendency to watch television for a longer time period.

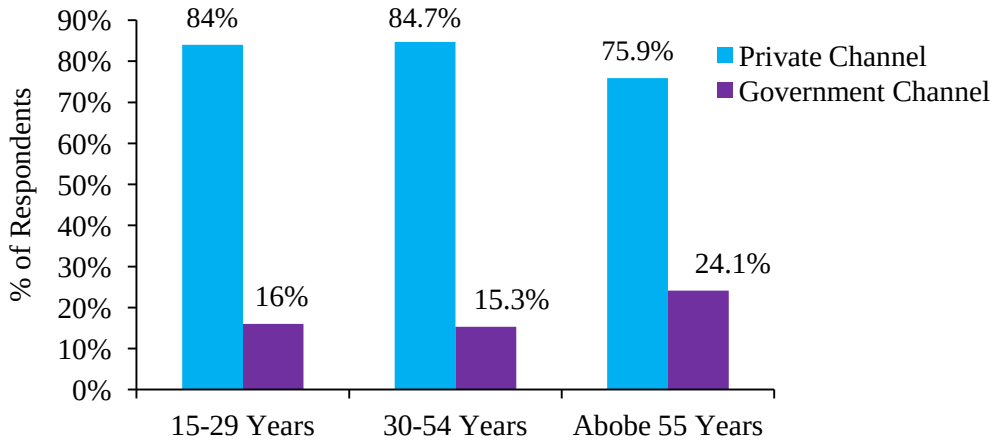
On the other hand, as people get more life experiences with maturity they prefer more actual and realistic contents like knowledge based programmes than entertainment programmes and this was also mentioned in the findings of Tavakoli et al (1996). Considering gender variances, the demand for news and knowledge related programmes are 1.819 times higher among males than females. Staying on the basis of natural preferences, males seem to mostly prefer political, economic, knowledge and current affair related programmes while females mostly prefer soft content

programmes. Zillmann and Bryant (1986, cited in Gillespie, n.d) also have proven the same fact in their study as males demand more for violence related content such as news, political programmes and documentaries while femalse mostly prefer soft programmes and justice reinstating programmes like tele-dramas and music programmes.

Taking the marital status of the respondents in to consideration, married people demand 2.891 times more news and knowledge based programmes than unmarried respondents. As many married respondents are above 30 years in age, spending their middle age and experiencing maturity, married person demand more news and knowledge based programmes than unmarried people. When the demand for news and knowledge based programmes are considered along with the employment nature of the respondents, the demand of employed persons on news/knowledge related programmes was 1.763 times higher than the demand by unemployed persons. As employed people are more aware of current affairs and political concerns it shows a higher preference for news, knowledge and political programmes than the unemployed/economically enactive segment who lack knowledge of current affairs and political situations and demand more entertainment based programmes.

5. Trends in the Public/Private Channel Choices among People

FIGURE 02
Public/Private Channel Preference According to Age



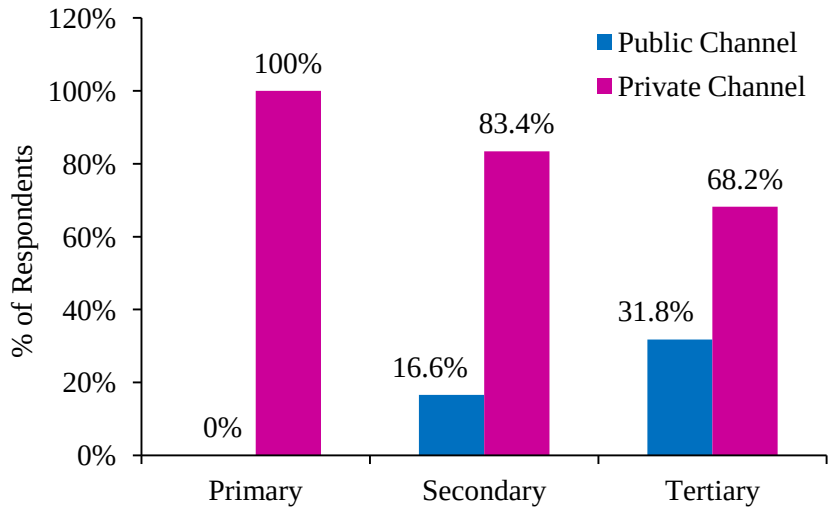
Source: Author constructed based on research data.

According to Figure 02, the preference for government channels was highest among the above 55 years old age group, as 14 out of 168 respondents prefer government channels than private channels. As the government channels mostly broadcast knowledge/religious based programmes as they are concerned with social responsibility, young and schooling respondents mostly preferred government channels. With the effect of profit maximizing, private channels always tend to

broadcast entertainment based programmes. Thus in the schooling ages and the matured ages, people tend to watch more government channels.

Considering the private channel preference within age groups, respondents who were 21 years of age, and 72 middle aged respondents and 44 old aged respondents preferred private channels than government channels. Middle aged group showed the highest demand for private channels. Overall, within every age category, the private channel demand dominated.

FIGURE 03
Public/Private Channel Preference According to Educational Level



Source: Author constructed based on research data.

As shown in Figure 03, when the educational level increased, the preference on private channels reduced and preference for government channels increased. The result was according to the general fact, that, people prefer more knowledge and information based programmes when they are more educated as government channels mostly offer programmes of this kind.

5.1. Statistical Analysis for Identifying Factors Affecting the Public/Private Channel Choice among People

TABLE 02
Public / Private Channel Choice - Binary Logistic Model

Variable	B	Wald	Exp(β)
Employment nature of the respondent	0.960	3.809	2.611
Political norm of the respondent	-0.984	2.936	0.374
Constant	-1.989	20.651	0.137
Nagelkerke R^2	0.070		
Number of observations	168		
Reference categories	Unemployed, Not having specific political norm		

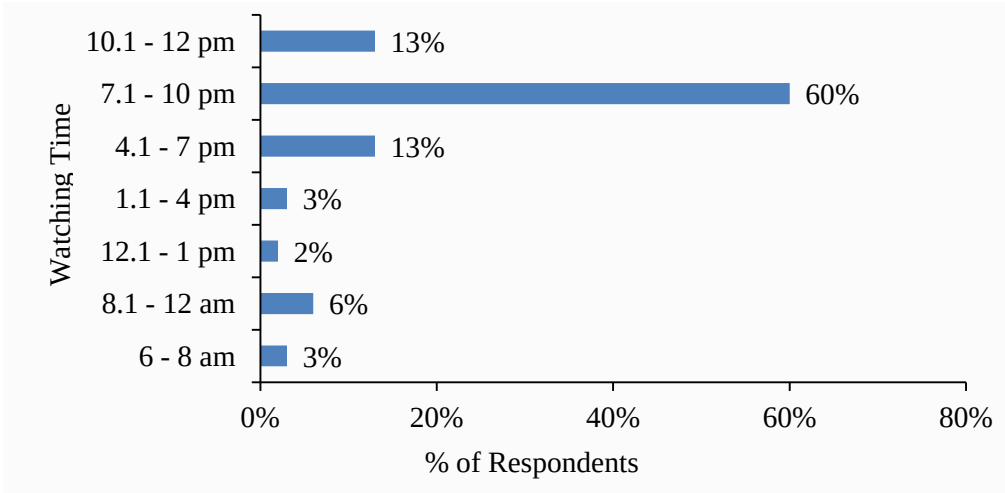
Source: Author constructed based on research data.

Considering the public channel preference in relation to the employment nature, employed people preferred public channels 2.611 times more than the unemployed people. As emphasized in the programme preference demand model for television watching, employed people were more knowledgeable regarding current affairs and the knowledge on common society. Thus they prefer more knowledge related programmes. Considering that public channels provided more knowledge based programmes those programmes were mostly preferred by the employed people. Considering working hours, most employed people have leisure time nearly after 7.00 pm. During the time, many public channels provide knowledge based programmes than private channels.

If a person had a specific political norm, such people tend to watch public channels 0.374 times lesser than the people who did not have that specific political norm; considering the public channels', political biases could be seen up to some extent. People who were strictly interested in politics, seek factual information which was free from biases, regarding the current political situation, thus more private channels were preferred, that offer less political biased information.

6. Trends in the Number of Hours Spent Watching Television

FIGURE 04
Television Viewing Time Trends



Source: Author constructed based on research data.

According to Figure 04, many people prefer to watch television during 7.00 p.m. and 10.00 p.m., as many channels broadcast many knowledge related and entertainment related programmes during this time. During the time between 12.00 noon to 1.00 pm, people show less preference to watch television as this time was the lunch time for many people.

Overall, people mostly prefer to watch television in the evening as many of the respondents spend their leisure time after school, work or other day to day activities during this time. Considering residential sector variances in watching hours of television, people from rural areas watch television for more hours than the people from the urban sector, denoting 2.8 and 2.5 mean television watching hours respectively.

Considering the urban sector, female respondents recorded more mean television watching hours than urban sector males. In the rural sector, males dominate in the watching hours of television than rural females. Overall, females recorded greater numbers of mean television watching hours than females, presenting 2.6 and 2.3 mean television watching hours per day respectively.

When taking in to consideration the age-wise distribution on television watching people who are 55 years and above, recorded the highest number of mean watching hours, as 2.9 mean watching hours per day, followed by the 15-29 year age group with 2.4 mean watching hours per day.

Under the level of education, it showed that people with primary education recorded the highest contribution in the category, as 3.2 mean watching hours per day. Economically enactive persons watch television for more hours than the employed, with 3.2 mean watching hours per day. The employed category records the least mean hours of television watching as 2.3 mean hours per day.

Considering the unemployed category separately, females show higher mean watching hours than unemployed males. In the economically inactive segment, males show a greater number of watching hours than the economically enactive females. Under the employed category, married males watch television for more hours than the married females as employed and married females have to carry a triple burden and hav less time to be at leisure. However, single females seem watch television for more hours than single males as single females consume more hours at leisure.

The number of hours that respondents engage in their earnings work show a direct influence on the number of leisure hours spent by them. As proven by the Labour-Leisure Model of Labour Economics, when the number of working hours increase, the number of hours remain to spend in leisure reduces. When television watching dominates the leisure activities of the people, it automatically reduces the television watching hours of the employed people since they are have more working hours. Under the employment segment, self-employed people consume more hours in leisure and show a higher watching hours, while employed segment records the least number of television watching hours.

6.1. Statistical Analysis for Identifying Factors Affecting the Number of Hours Spent Watching Television by People

Using the one–way ANOVA test, the relationships between the independent and dependent variables were estimated and variables were selected for the model under a 10% significant level. As the dependent variable, the number of hours spent watching television was used by converting it into log values to keep the normal distribution of continuous watching hours.

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

TABLE 03
Semi Log - Regression Analysis for Television Viewing Hours
(Demographic Factors)

Variable	B	S.E	t	Sig
Intercept	0.640	0.075	8.565	0.000
Male Respondents (X_1)	-0.031	0.059	-0.524	0.600
Old age respondents (X_2)	0.208	0.074	2.825	0.005
Married respondents (X_3)	0.091	0.062	1.475	0.141
Unemployed/Economically Inactive respondent (X_4)	0.207	0.063	3.262	0.001
Respondents having tertiary level education (X_5)	0.064	0.073	0.877	0.381
Not spending time on other leisure activity (X_6)	-0.383	0.310	-1.234	0.218
R^2	0.038			

(Table 03 continued)

(Table 03 continued)

Number of observations	609
Reference categories	Female, below 55 years in age, single, employed, below tertiary level education, spending time on other leisure activities

Source: Author constructed based on research data.

Under the 10% significant interval there was a 90% chance to say that age, marital status and the employment status of the respondents were influencing the number of television watching hours.

TABLE 04
Semi Log - Regression Analysis for Television Viewing Hours
(Employed Sample)

Variable	B	S.E	T	Sig
Intercept	0.798	0.094	8.501	0.000
Male respondents (X_1)	0.016	0.080	0.202	0.840
Married respondents (X_3)	-0.052	0.098	-0.529	0.597
Respondents having high working hours (X_6)	-0.260	0.087	-2.993	0.003
Non professional workers (X_7)	0.057	0.084	0.681	0.497
R^2	0.043			
Number of observations	245			
Reference categories	Female, Unmarried, below 8 hours of working, professional workers			

Source: Author constructed based on research data.

For 10% of the significant interval there was a 90% chance to say that only a 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 on hours of watching television for total sample is shown in equation (7).

$$\text{Ln}(Y) = 0.640 - 0.031X_1 + 0.208X_2 + 0.091X_3 + 0.207X_4 + 0.064X_5 - 0.383X_6 \quad (7)$$

(0.075) (0.059) (0.074) (0.062) (0.063) (0.073) (0.310)

The above regression equation supports the effective identification of the factors that affect the number of hours spent watching television by people. Age as the first factor that affects television watching hours, which is denoted by $X_{1,}$ is creating a positive relationship with the number of hours spent watching television. Tavakoli and Cave (1996) also cited the same result in their study as the older age population watching television for more hours than the younger population. According to the Nielsen Cross Platform Report (2013), the younger age group watches television for the least number of hours as the younger age group utilizes more hours for education and employment; as they are getting the least number of leisure hours. Importantly, the older age population, who are mainly above 55 years in age and retirees, records the highest number of watching hours out of all the other age groups as they occupy more leisure time and engage in leisure activities that require less physical energy. Marital status of the respondent is also another important factor that shows a positive relationship with the number of hours spent watching television; as unmarried respondents consume more leisure hours and have more choices to spend leisure time, unmarried segment recorded a lesser number of television watching hours than the married segment.

Considering the employment status of the respondents, when a respondent is unemployed or economically enactive the hours spent watching television increases by creating a positive relationship as they are consuming more leisure hours than the employed people. Basically, the economically enactive category mainly consists of the retirees and children who consume more leisure time. According to the USA Time Use Survey (2013), American retirees recorded the highest television viewing time while it was the least among young adults.

Considering the employed fraction of the sample, following the regression line in the equation (8) shows the factors affecting television watching hours among employed people.

$$\text{Ln}(Y) = 0.798 - 0.016X_1 + 0.052X_3 + 0.260X_7 + 0.057X_8 \quad (8)$$

(0.094) (0.080) (0.098) (0.087) (0.084)

Considering the number of hours spent on work by a person, it shows a negative relationship with the number of television watching hours; which was also proven by the Labor-Leisure Model in Labor Economics. Simply when a person works for more than 8 hours per day it eventually reduces the leisure time available for that person and lowers the television watching hours. According to Corneo (2002), a positive correlation has been noted between working hours of a person and the hours allocated for television watching from the available leisure time (Corneo, 2002, 21).

Considering the gender variations in television watching hours among employed people, even though it does not create a significant relationship with the hours for watching television, the sign is acceptable. The reason is that, when a female is employed, she has to bear a triple burdens, engaging in market activities, non-market activities and dedicating her time to her family. That condition automatically reduces the available leisure time for employed females. Employed

males, most of them, only engage in market activities and consume more time in leisure.

7. Conclusions and Policy Recommendations

Using the Binary logistic statistical model, factors associated with the demand for television programmes were identified. Considering the results, age, gender, marital status and employment status appeared to be positively correlated with the demand for news and knowledge related programmes. Tavakoli et al (1996) and Zillmann and Bryant (1986, cited in Gillespie, n.d.) have also presented the same results in their studies.

As recommendations for people's preferences on programme and channel choices; channels can broadcast advertisements that are of interest to men during the broadcasting of news or political programmes like advertisements on finance services, vehicle parts, gents' clothing and cosmetics etc. On the other hand, channels can broadcast advertisements on beauty cosmetics, teen products, clothes for females, children and younger generation etc. during the broadcasting of tele-dramas. These practices would support channels to gain more profit through advertisements by broadcasting the right thing at the right time. Programmes with romantic content or dominating female characters and actors wearing attractive and trendy clothes would also help television channels to attract more female viewers to their channels. Most importantly, telecasting programmes with content about empowering women would fulfil social responsibility requirements of the television channels while helping to capture more female contribution to the national production.

The public/private channel choice model was also presented under the binary logistic statistic model which revealed that employed people are most likely to watch public channels, and also that people who have specific political norms are like to watch private channels. As people are of the opinion that public channels are politically biased they try to go for private channels which contain current political trends. To avoid that problem, public channels should always try to present unbiased and balanced content while being impartial.

To identify the factors associated with the number of hours spent watching television, Semi-Log regression statistical model has been used. Age, marital status and the employment status of the total sample appear to be positively correlated with the number of hours spent watching television while a higher number of working hours lower the available time for watching television for the employed people.

Corneo (2002) and the labour leisure model also presented the same results on television watching hours and the relationship between television watching hours and the working hours of the respondents. The elderly population showed more preference to spend it in front of the television; thus television channels could telecast programmes which hold morally significant messages to enhance virtue while enhancing the betterment of society.

The unemployed and economically enactive individuals showed greater number of hours spent in front of the television. Under that fact, by telecasting advertisements and programmes which promote self-employment and employment opportunities channels would encourage the unemployed population to engage in any kind of employment activity to earn income and would eventually help to increase the

national GDP, per capita income and employment rate in the country at the macro level.

The overall contribution of this study flow towards identifying the patterns and trends of television viewing among people and providing a scientific approach for identification. Demographic factors, employment characteristics and political preferences details were absorbed to the models to measure the factors that affect the recreational demand for watching television under programme preferences, public/private channel choices and hours spent watching television.

Even though several authorities in Sri Lanka conduct some annual surveys related to the television industry, those do not provide significant approaches to understand the variations as they do not provide scientific analysis for the long term determinants of viewing patterns and does not provide better approaches to policy making. Thus the current study targets the television industry's policy aspects.

According to the findings of the study, it is clearly reveal that personal, employment and in-built characteristics of people directly influence the preferences in watching television forthem and indicate different television watching preferences of people. Both these aspects would highly support the television industry to make the right decisions at the right time as clear identification of the viewing patterns of people would support television channels to broadcast efficient and productive content. That would eventually help television channels to attract more viewers to the channels and keep them for a longer time while capturing more advertisements in order to gain more profit.

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