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### THE INFLUENCE AND EFFECT OF DIGITAL DIVIDE ON STUDENTS PURCHASE: COMPARISON OF URBAN AND RURAL CASES

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# The Influence and Effect of Digital Divide on Students Purchase: Comparison of Urban and Rural Cases

Masuma RAHAMAN<sup>1</sup>, Arifur RAHAMAN<sup>2</sup>

## Abstract

The advent of new media can change the world more quickly than the old media. We are living in the world in which the media take part in daily life. New technology brings blessing to those who adopt compare to those who are not willing to adopt or passing through the digital divide. Students use new technologies and social media for various purpose but now social media is used as a platform of business. For this article, this research has covered quantitative research method and the sample was divided by 700 students in two different countries, the questionnaire was used as a research tool. Most of the students of developing countries in the world is facing ‘‘ Digital Divide’’ which forces people to depend on old media such as television contains audio and visual content which is undergoing considerable change that creates obstacle to those people are living with ‘‘ Digital Divide’’ as consequence transforming the rural lives differently due to old media. The purpose is to determine if there is a significant difference in students influence on social media and television advertisements. The major contribution of this paper is new (social media) and old technologies (television) to what extent they influenced by those advertisements. A study conducted between Turkish Republic of Northern Cyprus (urban) and Bangladesh (rural) at analyzing the influence of digital divide of country-level factors, such as gender, technological infrastructure, income which would be provided to identify that by adopting of new media and old technology.

*Keywords:* digital divide, advertisements, social media, television, social status, social networks.

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## Introduction

The study is focusing on two different challenges for old media and social media, the similarities and differences regarding the acquisition of media literacy and patterns of the digital divide. This study based on the local contexts of two countries Bangladesh and Turkish Republic of Northern Cyprus. The aim of this study is analyzing the digital and old Media students who are shaped by the digital culture. But many societies' students deprived of the technological advancement of global networking. Contemporary societies are facing a lot of challenges which is as a result of the new media revolution. The purpose of this study is not only focusing on two different media but also the two different cultures (urban and rural). As a comparative study, the analysis has been presented in this article, dealing with the premises and challenges of media literacy and the digital divide in Bangladeshi rural areas. This study focuses on how 'Digital Divide' influences students buying decisions in the context of urban and rural area. 'Digital Divide' means 'The lack of access to communication technology by some people' (Baran & Davis, 2012). People are divided by color, social status, disabled or who are living in a rural or village or communities. This comparative study shows, how social media bring new opportunities to the urban students and how the rural people are deprived of these opportunities for being part of old media such as Television. The communication process can change enormously due to the implementation of digital technologies that provide us the various opportunities with the new media tools for sharing and expression of our ideas and spreading information on a global scale.

A case study of Bangladesh and the Turkish Republic of Northern Cyprus aims to analyze the media literacy and the digital divide. First, this study needs to understand both countries technological infrastructure, educational system for the understanding digital divide. The study revealed the media literacy for both social media and television group how they influenced by the advertisements. Digital generation especially, the teenagers were interested to participate which is common in both countries than senior citizens. People's interaction on social media is producing information about their preferences and establishing a relationship with people and brands (Broeck, Poels & Walrave, 2017). This research is to understand contemporary digital culture and appreciation of profound the roles media are playing and motivating our lives. Purchasing of product is a part of our everyday lives. Life is sometime determined by media depend on whether people like it or not. Engaging with the media contributes our lives more convenient. Over the past decade rising of social media platforms infiltrated all aspects of life also impacted social institutions particularly the old media of television, platforms such as Facebook, and YouTube affect the social practice of television and its cultural form as a consequence of disrupting broadcaster's conventional production and distribution logistics (Williams, 1974). This article explores how the rising of social media advertisements has affected television advertisements.

We will investigate the encounter between urban and rural areas students how they have faced the rapid emergence of social media platforms in the context of the digital divide. Over the past few years, advertisers are willing to invest in social media as a global platform, such as Facebook, and YouTube to promote brand content to constantly engaging their consumers (Chu, Kamal & Kim, 2013). Past few years' luxury brands are adopted social media and some people experts notice that marketing through social media increase to promote consumer engagement with luxury brands .This article is organized as follows. First, we would discuss the theoretical background by reviewing the literature on television and social media advertisements, brand loyalty and purchasing pattern of urban and rural communities of two different under developing countries.

In the second steps, we would develop our research model and research questions. Then we will test the model through survey data from the urban and rural students of television and internet users. Finally, we will conclude the interpretation of findings.

## Literature review

Last past years consumers are adopting social networking services to make convenient their daily lives that are demonstrated by the growing number of users worldwide. Social media has captured the attention of many companies that they started to give their advertising efforts to social media users. Plenty of information's are available on social media in marketing. People chose social media according to their needs and demands. This article will explore the concept of internet-based social media advertisements and television based advertisements. Social media can build communities that can bring people together on the internet (Dijck & Poell, 2014). Today, we are living in information centered society, internet-based social media and social networks are being used as tools for online exchange, connection, and communication that allows users to manage or maintain existing relationships while creating new ones (Ryan & Jones, 2009).

When people adopt new technologies and innovations are not equally distributed with in the groups and societies. The choice of adoptions may include an assessment of various risks, whether economic, social, or cultural (Carlson & Isaacs, 2018). Certain groups find themselves beneficial use of innovation with the initial resistance to its adoption risk and leave the entire obstacle behind them. Many factors within such as racism, culture sexism or ageism may deny access to the innovation to specific groups, and legacies of historical events may cause of creating barriers to adoption (Rogers, 2003).

'Digital Divide' means 'The lack of access to communication technology by some people' (Baran & Davis, 2012). The term 'digital divide' likely lies in the mid-1990s in news articles which were discussing the impact of unequal computer access on the prospects of students (Poole, 1996; Wolinsky, 1996). The term

'digital divide' has been used for increasing awareness in the ability of individuals and groups for adopting and benefiting from new technologies (Carlson & Isaacs, 2018). Using of internet and other communication technologies are associated with a variety of positive outcomes which are included with higher income (DiMaggio & Bonikowski, 2008), improved mental health (Rains & Young, 2009), greater community engagement and larger individual social networks (Hampton, Sessions, & Her, 2011). Having a computer and internet connection is easy now a day but who is going through the digital divide faces several problems. The first problem is the access problem related to the mental barrier, touching elderly people, of housewives, illiterates, and the unemployed people. The second problem is an inadequate digital skill that lowers the skills of operation, managing hardware and software (Dijk & Hacker, 2003). Sometimes people view as a temporary phenomenon would finish after the purchase of a computer and internet connection. People have different usage of internet technologies that are presumed to be the free choice of consumers and users in postmodern society (Dijk & Hacker, 2003). Social media influencers are utilizing and referring to those people who have built a sizeable social network of people following them. Those are seen as trusting tastemaker in one or several niches (Veirman, Cauberghe, & Hudders, 2017). To continue brands traditional advertising techniques are used with low efforts that products are purchasing among their followers and beyond. Understanding of the culture is important when advertiser is a thing about global advertisements. Different cultures associate with different values and belief systems. Culture plays an important role in purchasing behavior. The internet and digital media have changed the student's perceptions of buying. As a developing country the students of Turkish Republic of Northern Cyprus are already introduced with the concept of "New Media" which demonstrated new developments related to the media studies. Students are immersed by the digital culture for example use of the internet, chatting, video sharing and online purchasing are made by order and involving in multitasking with the mobile phone as daily routines. These all happens because students of Turkish Republic of Northern Cyprus do not go through "digital divide" and more privileged by the technologies compare to other developing country such as Bangladesh. Purchasing behavior is shaped by their culture which they prefer to buy from online shopping. Social media platforms are gradually taking place in everyday life. In the field of television, social media such as Facebook, Twitter, and YouTube affect the social practice of television and form of cultural, also disrupting broadcaster's conventional production of television and distribution logistics (Williams, 1974). Social network sites are promoting their services as neutral utilities. When people are not privileged by the new technology as consequences forced to adopt old media such as television. Moving from the "older" media such as television to "newer" such as social media is challenging for rural people (Tanuja & Joe, 2010). Majority numbers of people in Bangladesh especially, in the rural area are living under poverty lines even are not able to fulfill the five fundamental needs. Many villagers in Bangladesh are depriving from the

technologies such as electricity, computer, and internet in such case accessibility of new technologies are almost impossible.

## Methodology

Data for this study have been collected from students of Barisal University in Bangladesh and Eastern Mediterranean University in the Turkish Republic of Northern Cyprus. The questionnaire was divided by two groups Group A was responsible to respond to Social media advertisements and Group B was responsible to respond Television advertisements also the first section was mandatory for both groups including demographic or background questions.

Respondents for this study were selected on campus by the authors, and all were assured confidentiality. Approximately 700 questionnaires and five-point Likert scale have been used as data collection tools. We did not allow those students who do not use social media. We choose the students of the rural areas who were faced digital divide. Finally, we have collected data from sample of 700 students from both countries. After two weeks the completed raw data were returned to us and ready for the analyses. As a comparative study, this study used social media and Television as the medium to investigate the research questions related to the effects of students buying decisions because it is dominant by social media and television. The items have been used five-point Likert scales; from strongly agree to strongly disagree. Because this study was conducted between two countries, the survey instrument was not translated into Bangla or Turkish we kept it in English because we surveyed on Universities students.

### *Research Questions and Data Analysis*

This study examines social media advertisements and television advertisements on students buying decisions compare the effectiveness of social media and television content in obtaining consumer responses across different preference. This article is to propose an analytical framework for two countries data supposedly related to the concept of the so-called “digital divide.” This divide depends on growing divides among different categories of income, social status, employment, education, age, and ethnicity (Dijk & Hacker, 2003). For this study data analysis has been made by using the software SPSS (SPSS, 2012) and MS Word. This study focused on four research questions Two way ANOVA and One way ANOVA were tested. Each research question was challenged using Alpha=.05. This study proposes to answer the following four research questions:

*RQ1: How does the income level of urban and rural students affect their buying patterns?*

*RQ2: How does social media and television advertisements influence urban and rural students buying decisions?*

*RQ3: What is the reason that urban and rural students use social media and television?*

*RQ4: Which kind of social media and television advertisements urban and rural students like to watch?*

## Results

Analysis of variance model (ANOVA) has proven useful and applicable, especially as a tool for experimental design, in a large variety of disciplines ranging from biostatistics to economics. The models have several advantages; they are generally robust and produce powerful tests (Hill & Lewicki, 2007).

*How does the income level of urban and rural students affect their buying patterns?*

There are different processes are involved in consumer behavior. Many factors are influencing in the decision-making process, shopping habits, purchasing behavior. The purchase decision is the result of these factors (Ramya & Mohamed Ali, 2016). Consumer buying pattern is determined by the social class. Social class is not only determined by a single factor, such as income but also the combination of various factors, such as income, occupation, education, property, lifestyles, consumption, pattern, etc. (Ramya & Mohamed Ali, 2016). There are three social classes in our society, upper class, middle class, and lower class and they have differed in their buying behavior. Income level is the major factors for the different consuming pattern. Upper-class consumers expense more and want luxurious products to maintain their social status, for example, urban students who belong to the upper class would purchase high-class products. Middle-class consumers do not buy expensive products more and lower-class consumers likely to buy on impulse such as rural people because their income is less and difficult to meet the basic needs. So, marketing managers must concentrate on the relationship between the income of consumers and their buying pattern.

*Table 1. Dependent Variable: Urban Rural (Descriptive Statistics)*

Income	Preference_socialmedia_ television	Mean	Std. Deviation	N
300 USD and Less	Low effort to buy	1.61	.48	113
	Choose from many designs	1.63	.48	150
	Use of famous model	1.29	.45	84
	Cheap	1.56	.50	41
	Total	1.54	.49	388

301 USD– 500 USD	Low effort to buy	1.56	.50	66
	Choose from many designs	1.50	.50	90
	Use of famous model	1.24	.43	65
	Cheap	1.40	.50	27
	Total	1.43	.49	248
501 USD– 1000 USD	Low effort to buy	1.37	.51	8
	Choose from many designs	1.58	.50	24
	Use of famous model	1.50	.52	10
	Cheap	1.44	.52	9
	Total	1.50	.50	51
1001 USD and above	Low effort to buy	1.00	.00	3
	Choose from many designs	1.50	.70	2
	Use of famous model	1.25	.50	4
	Cheap	1.00	.00	4
	Total	1.15	.37	13
	Low effort to buy	1.57	.49	190
	Choose from many designs	1.58	.49	266
	Use of famous model	1.28	.45	163
	Cheap	1.46	.50	81
Total	Total	1.50	.50	700

Descriptive table (*Table 1*) provides the mean and standard deviation for each combination of the groups of the independent of income level. Looking at the mean for example four levels of income level by preference of buying social media and television advertisements products. *Table 1* shows that, who has the income level between 1001 and above prefer because of low effort to buy and cheap both have the same low mean scores (M=1.00) and who has the the income level between 300 USD and less prefer because choose from many designs which is higher mean score (M=1.63).

*Table 2.* Levene’s Test of Equality of Error Variances<sup>a</sup> (Dependent Variable: Urban\_Rural)

F	df1	df2	Sig.
10.292	15	684	.000

Levenes test for homogeneity of variances, it demonstrates, it will reject assumption because  $p < 0.001$ , rejection of assumption we are not violating this assumption of homogeneity of variances for this analysis.

Table 3. Tests of Between-Subjects Effects ( Dependent Variable: Urban\_Rural)

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta squared
Corrected Model	14.85 <sup>a</sup>	15	.99	4.23	.00	.08
Intercept	274.36	1	274.36	1171.85	.00	.63
Income	2.27	3	.75	3.23	.02	.01
Pref_socialmedia_television_Income *	1.00	3	.33	1.43	.23	.00
Pref_socialmedia_television	1.85	9	.20	.87	.54	.01
Error	160.14	684	.23			
Total	1750.00	700				
Corrected Total	175.00	699				

a. R Squared = .085 (Adjusted R Squared = .065)

A 2-way ANOVA was conducted to compare the main effects of income and preference of social media and television and the interaction between income and preference of social media and television on urban and students. From the Table3 results for the two-way ANOVA indicates a significant main effect for income,  $F(3,684) = 3.23$ ,  $p < .02$  and not significant main effect for preference of buying social media and television advertisements products,  $F(3,684) = 1.43$ ,  $p > .23$ . Results show not significant interaction between income and preference of buying social media and television advertisements products,  $F(9, 684) = 0.87$ ,  $p > .54$ . Income has statistically significant difference on the dependent variable of urban rural students for independent of income statistically significant,  $p < .02$ , less than .00 which is alfa level. It has also partial eta square. The effect of income ( $\eta^2 = .01$ ) is almost twice as strong as preference of buying social media and television advertisements products ( $\eta^2 = .00$ ).

Table 4. Pairwise Comparisons for Income (Dependent Variable: Urban\_Rural)

(I) Income	(J)Income	Mean Diff (I-J)	Std. Error	Sig. <sup>a</sup>	95% Confidence Interval for Difference <sup>a</sup>	
					Lower Bound	Upper Bound
300 USD and less	301 USD-500 USD	.09	.04	.14	-.01	.21
	501-1000 USD	.05	.07	1.00	-.15	.26
	1001 and above	.34	.14	.10	-.03	.71
301-500 USD	300 USD and Less	-.09	.04	.14	-.21	.01
	501-1000 USD	-.04	.08	1.00	-.26	.16
	1001 and above	.24	.14	.56	-.13	.62
501-1000 USD	300 USD and Less	-.05	.07	1.00	-.26	.15
	301- 500 USD	.04	.08	1.00	-.16	.26
	1000 and above	.28	.15	.41	-.13	.70
1001 USD and above	300 USD and Less	-.34	.14	.10	-.71	.03
	301-500 USD	-.24	.14	.56	-.62	.13
	501-1000 USD	-.28	.15	.41	-.70	.13

Based on estimated marginal means

a. Adjustment for multiple comparisons: Bonferroni.

From the Table 4, it has pairwise comparisons of income. In pairwise it contains four independent variable from Table 4 it shows that (M= .09, SD= .04) ,  $p > .14$  , there is no statistically significant difference between 300 USD to less and 301 USD to 500 USD income levels in independent variable. There is no statistically significant difference between 300 USD to less and 501 USD to 1000 USD because  $p > .10$ , (M= .052, SD= .079) and there is no statistically significant difference between 300 USD to less and 1001 USD to above because  $p > .103$ , (M= .34, SD= .14) , from the second row (Table 4) it shows, (M= -.047, SD= .082) ,  $p > .10$  means, there is no statistically significant difference between 301 USD to 500 USD and 501 USD to 1000 USD, also there is no statistically significant difference between 301 USD to 500 USD and 1001 USD to above because  $p > .56$ , (M= .24, SD= .14), from the third row, (Table 4), it shows (M= .28, SD= .15),  $p > .41$  means, there is no statistically significant difference between 501 USD to 1000 USD and 1001 USD to above .

Table 5. Pairwise Comparisons for Preference\_Socialmedia\_Television (Dependent Variable: Urban\_Rural)

(I) Pref_Socialmedia_Television	(J) Pref_Socialmedia_Television	Mean Diff (I-J)	Std. Error	Sig. <sup>a</sup>	95% Confi Interval for Difference <sup>a</sup>	
					Lower Bound	Upper Bound
Low effort to buy	Choose from many design	-.16	.12	1.00	-.49	.16
	Use of famous model	.06	.11	1.00	-.23	.36
	Cheap	.03	.11	1.00	-.26	.34
Choose from many design	Low effort to buy	.16	.12	1.00	-.16	.49
	Use of famous model	.23	.11	.29	-.07	.54
	Cheap	.20	.12	.56	-.11	.51
	Low effort to buy	-.06	.11	1.00	-.36	.23
	Choose from many designs	-.23	.11	.29	-.54	.07
Use of Famous model	Cheap	-.03	.10	1.00	-.31	.25
Cheap	Low effort to buy	-.03	.11	1.00	-.34	.26
	Choose from many designs	-.20	.12	.56	-.51	.11
	Use of famous model	.03	.10	1.00	-.25	.31

Based on estimated marginal means

a. Adjustment for multiple comparisons: Bonferroni

From the Table 5, it has pairwise comparisons of preference of buying social media and television advertisements products . In pairwise it is associated with four independent variable from (Table-5), it shows,  $p > .10$ , there is no statistically significant difference between low effort to buy and choose from many designs preference of buying social media and television advertisements products levels in independent variable. There is no statistically significant difference between low effort to buy and use of famous model because  $p > .10$  and there is no statistically significant difference between low effort to buy and cheap because  $p > .10$ , from the second row it shows,  $p > .10$  means, there is no statistically significant difference between choose from many design and low effort to buy in independent variable. There is no statistically significant difference choose from many design and use of famous models because  $p > .29$  and there is no statistically significant difference between choand cheapose from many design, because  $p > .56$ , from the third row,

it shows,  $p > .10$  means, there is no statistically significant difference between use of famous models and low effort to buy, there is no statistically significant difference between use of famous models and choose from many design because  $p > .29$  and there is no statistically significant difference between use of famous models and cheap because  $p > .10$ , from the last row (Table 5), it shows,  $p > .10$  means, there is no statistically significant difference between cheap and low effort to buy. There is no statistically significant difference between cheap and choose from many designs because  $p > .56$  and there is no statistically significant difference between because  $p > .10$ . From the Table 5 results and use of famous model did not find any statistically significant differences.

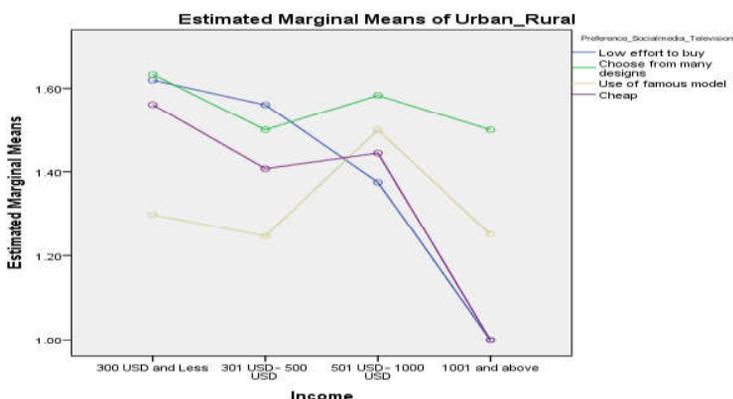


Figure 1. Estimated marginal means of urban and rural student’s income and preference of social media and television

From the plot, it demonstrates that low effort to buy is decreasing with 1001 and above income level, although urban and rural students also decreasing 1001 to above income level for choose from may design. The urban and rural students are highly increased in 501 USD to 100 USD and decreasing with 1001 to above income level for use of famous model. The line for cheap is decreasing at the 1001 to above income level. The low effort to buy and cheap lines are meeting at the same point. Since the lines are representing the four options for preference in this plot are not parallel, this implies that there is an interaction effect between preference and income of urban and rural students. So, how urban and rural students buying social media and television advertisements products changes with preferences depend on income.

*How does social media and television advertisement influence urban and rural students buying decisions?*

To answer this research question, we need to understand what is “Social media”, social media is considered a trend that can influence consumers in the buying process (Permatasari & Kartikowati, 2016). Through social media, customers can directly interact and share their buying experience (Kshetri & Jha, 2016). When the consumer uses social media, they can able direct response to opinions, comments, and suggestions and share their experience about products that they are offered as a result consumers can get the desired products that they want and need. Advertising is a marketing concept to influence the buying behavior of customers. Whereas consumer behavior is the process and activity by which people select, purchase, evaluate and consume the product or service to satisfy the need or want (Guolla, 2011). A television advertisement is a major source of entertainment for rural people. Television advertisements contain a lot of products advertisements which demonstrate plenty of products and give the message the consumers about the benefits of those products. So, consumers can differentiate with other brands. When consumers are pursued by the advertisements they tend to buy the products and easily switch from the one brand to another. In developing countries, the majority of people live in rural areas such as Bangladesh the effects of a television advertisement are very much higher than urban.

Table 6. Descriptives (Urban- Rural)

	N	Mean	Std. dev.	Std. Error	95% Confi. Interval for Mean		Mini	Maxi
					Lower Bound	Upper Bound		
Easy to access	244	1.41	.49	.03	1.35	1.47	1.00	2.00
Available to them	216	1.56	.49	.03	1.49	1.63	1.00	2.00
Cheap for them	112	1.63	.48	.04	1.54	1.72	1.00	2.00
Entertainment	128	1.43	.49	.04	1.35	1.52	1.00	2.00
Total	700	1.50	.50	.01	1.46	1.53	1.00	2.00

Table 7. ANOVA (Urban-Rural)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5.22	3	1.74	7.13	.00
Within Groups	169.77	696	.24		
Total	175.00	699			

There is significant difference between influence groups ( $p = 0.001$ )

Table 8. Multiple Comparisons (Dependent Variable: Urban- Rural) Tukey HSD

(I) Influence_ socialmedia_ television	(J) Influence_ socialmedia_ television	Mean Diff (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Easy to access	Available to them	-.15*	.04	.006	-.26	.03
	Cheap for them	-.21*	.05	.001	-.36	-.07
	Entertainment	-.02	.05	.972	-.16	.11
Available to them	Easy to access	.15*	.04	.000	.03	.26
	Cheap for them	-.06	.05	.626	-.21	.07
	Entertainment	.12	.05	.096	-.01	.26
Cheap for them	Easy to access	.21*	.05	.001	.07	.36
	Available to them	.06	.05	.626	-.07	.21
	Entertainment	.19*	.06	.012	.03	.36
Entertainment	Easy to access	.023	.05	.972	-.11	.16
	Available to them	-.12	.05	.096	-.26	.01
	Cheap for them	-.19*	.06	.012	-.36	-.03

\*. The mean difference is significant at the 0.05 level.

From Table 7, there was a statistically significant difference at the  $p < .001$  level in urban-rural students' scores for four groups according to their influence  $F(3, 696) = 7.13, p < .001$ . The results have found that, despite reaching statistical significance, the actual difference in mean scores between groups was small. We calculated the effect size by using eta squared, was  $d = .02$ . According to Cohen (1988), the groups have small effects ( $d = .02$ ). The Post-hoc comparisons using the Turkey HSD test (Table 6-Table 8) indicated that the mean score for easy to access ( $M = 1.41, SD = .49$ ) was statistically significant different from available to them ( $M = 1.56, SD = .49$ ) and cheap for them ( $M = 1.63, SD = .48$ ) but was not

statistically significant difference between easy to access ( $M = 1.41$ ,  $SD = .493$ ) and entertainment ( $M = 1.43$ ,  $SD = .49$ ). The mean score for available to them ( $M = 1.56$ ,  $SD = .496$ ) was not statistically significant difference from cheap for them ( $M = 1.63$ ,  $SD = .483$ ) and entertainment ( $M = 1.43$ ,  $SD = .498$ ). The mean score for cheap for them ( $M = 1.63$ ,  $SD = .483$ ) was statistically significant different from entertainment ( $M = 1.43$ ,  $SD = .498$ ).

*What is the reason that urban and rural students use social media and television?*

Social media is an important form of new media including social interactions. There are some reasons that urban students use social media because it makes life convenient for students. The students of urban largely depend on the internet that helps them for online buying, there are plenty of advertisements are available on social media and give a platform to choose desire products they prefer to order their products through online that is easier than go shopping also social media is very easy to operate and cheap from them. Students use social media for buying products, interactions with their family and friend. Traditional media such as television is utilized by a small number of social entities to deliver information and messages to media consumers, such as TV programs, advertisements which exemplify a one-way communication model but social media, on the other hand, has evolved to a two-way experience (Shen & Bissell, 2013). Digital divide occurs in rural so rural students gratify them to watch TV to get entertainment because the internet connection and computer are not affordable and available to them. There are some other reasons that rural students prefer to use television, easy to operate cheaper to buy television than internet also available to them. Urban student's income, lifestyle and educational backgrounds are different from rural students they largely depend on technological communication for their daily lives on the other sides rural students are going through "Digital Divide" as consequence deprives of new communication technologies. Not only Bangladesh most of the under developing countries face the same condition. Urban students can view the advertisements as entertainment and part of daily life purchasing but rural people view the advertisements as an aspiration of their lives. Rural students do not have adequate media literacy as convinced by the advertisements

Table 9. One way ANOVA results for reason of advertisements urban rural students like social media and Television products, Descriptives (Urban\_Rural)

	N	Mean	Std. dev.	Std. Error	95% Confi. Interval for Mean		Mini	Maxi
					Lower Bound	Upper Bound		
Use of celebrity	190	1.57	.49	.035	1.50	1.64	1.00	2.00
Attractive present	266	1.58	.49	.030	1.52	1.64	1.00	2.00
Promotional message	163	1.28	.45	.035	1.21	1.35	1.00	2.00
Trustable	81	1.46	.50	.055	1.35	1.58	1.00	2.00
Total	700	1.50	.50	.018	1.46	1.53	1.00	2.00

Table 10. Urban\_Rural ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	10.38	3	3.46	14.63	.000
Within Groups	164.61	696	.237		
Total	175.00	699			

Table 11. Multiple Comparisons (Dependent Variable:Urban\_Rural) Tukey HSD

(I) Reason_socialmedia_television	(J) Reason_socialmedia_television	Mean Diff (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Use of celebrity	Attractive present	-.00	.04	1.000	-.12	.11
	Promotional Message	.29*	.05	.000	.15	.42
	Trustable	.10	.06	.324	-.05	.27
Attractive present	Use of celebrity	.00	.04	1.000	-.11	.12
	Promotional message	.29*	.04	.000	.16	.41
	Trustable	.11	.06	.255	-.04	.27
Promotional message		-.29*	.05	.000	-.42	-.15
	Attractive present	-.29*	.04	.000	-.41	-.16
	Trustable	-.18*	.06	.032	-.35	-.01

Trustable	Use of celebrity	-.10	.06	.324	-.27	.05
	Attractive representation	-.11	.06	.255	-.27	.04
	Promotional message	.18*	.06	.032	.01	.35

\*. The mean difference is significant at the 0.05 level.

From *Table 10*, there was a statistically significant difference at the  $p < .001$  level in urban rural students' scores for four groups of reasons  $F(3, 696) = 14.63$ ,  $p < .001$ . Results have found that, despite reaching statistical significance, the actual difference in mean scores between groups was quite small. We calculated the effect size by using eta squared, was  $d = .05$ . According to Cohen (1988), the groups has small effects ( $d = .05$ ). The Post-hoc comparisons using the Tukey HSD test (*Table 9 - Table 11*) indicated that the mean score for use of celebrity ( $M = 1.57$ ,  $SD = .495$ ) was not statistically significant different from attractive representation ( $M = 1.58$ ,  $SD = .49$ ). Use of celebrity ( $M = 1.57$ ,  $SD = .49$ ) was statistically significant different from promotional message ( $M = 1.28$ ,  $SD = .454$ ). Use of celebrity ( $M = 1.57$ ,  $SD = .49$ ) was not statistically significant different from trustable ( $M = 1.46$ ,  $SD = .50$ ). The mean score for attractive representation ( $M = 1.58$ ,  $SD = .49$ ) was statistically significant different from promotional message ( $M = 1.28$ ,  $SD = .45$ ). Attractive representation ( $M = 1.58$ ,  $SD = .49$ ) was not statistically significant different from trustable ( $M = 1.46$ ,  $SD = .50$ ). Promotional message ( $M = 1.28$ ,  $SD = .45$ ) was statistically significant different from trustable ( $M = 1.46$ ,  $SD = .50$ ).

*Which kind of social media and television advertisements urban-rural students like to watch?*

Advertising is a marketing concept to influence the buying behavior of customers. Whereas consumer behavior is the process and activity by which people select, purchase, evaluate and consume the product or service to satisfy the need or want (Guolla, 2011). Social media advertisements such as a car, mobile, stylish products advertisements or any celebrities work as an ambassador of particular products are more likely to watch by urban students. In developing countries, the majority of people or students live in rural areas such as Bangladesh the effects of a television advertisement are very much high than urban. In these remote areas, television advertisement is enhancing the satisfaction level of those products and people prefer to buy that product. Women students of rural areas are influenced by celebrities that is one of the most influential factors for influencing the buyer of the product. Provocative advertising and celebrity or models involvement promotes and raises potential customers. There are many organizations are spending huge amount of money to create marketing messages. Television advertisements are

considered as most important for affecting buying pattern and because of the demand side. Television advertisement has a relationship with the consumers' buying behavior. Television advertisements help to create awareness, knowledge in consumers mind about a particular product that assists in their purchasing of daily lives. However, people especially rural students are attracted towards those advertisements by using of the portrayal of women also this increases buying decision regarding those products.

Table 12. One way ANOVA results which kind of advertisements urban rural students like for social media and Television products (Descriptives Urban\_Rural)

	N	Mean	Std. dev.	Std. Error	95% Confidence Interval for Mean		Mini	Maxi
					Lower Bound	Upper Bound		
Electronics	116	1.38	.48	.045	1.29	1.47	1.00	2.00
Fashion products	226	1.28	.45	.030	1.22	1.34	1.00	2.00
Luxurious product	232	1.69	.46	.030	1.63	1.75	1.00	2.00
Mobile phone	126	1.63	.48	.043	1.54	1.72	1.00	2.00
Total	700	1.50	.50	.018	1.46	1.53	1.00	2.00

Table 13. ANOVA (Urban\_Rural)

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	23.10	3	7.70	35.28	.000
Within Groups	151.89	696	.21		
Total	175.00	699			

Table 14. Multiple Comparisons (Dependent Variable: Urban\_Rural ) Tukey HSD

(I) Kind_ advertisement	(J) Kind_ advertisement	Mean Diff (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Electronics	Fashionable products	.10	.05	.203	-.03	.24
	Luxurious product	-.30*	.05	.000	-.44	-.16
	Mobile phone	-.24*	.06	.000	-.40	-.09

Fashionable products	Electronics	-.10	.05	.203	-.24	.03
	Luxurious product	-.41*	.04	.000	-.52	-.29
	Mobile phone	-.35*	.05	.000	-.48	-.21
Luxurious product	Electronics	.30*	.05	.000	.16	.44
	Fashionable products	.41*	.04	.000	.29	.52
	Mobile phone	.05	.05	.664	-.07	.19
Mobile phone	Electronics	.24*	.06	.000	.09	.40
	Fashionable products	.35*	.05	.000	.21	.48
	Luxurious product	-.05	.05	.664	-.19	.07

\*. The mean difference is significant at the 0.05 level.

From *Table 13* it shows, that there was a statistically significant difference at the  $p < .001$  level in urban-rural students' scores for four groups of advertisements according to their kind of likeness  $F(3, 696) = 35.28, p < .001$ . Results have found that, despite reaching statistical significance, the actual difference in mean scores between groups was quite small. We calculated the effect size by using eta squared, was  $r = .13$ . According to Cohen (1988), the groups have small effects ( $r = .13$ ). The Post-hoc comparisons using the Tukey HSD test (*Table 12- Table 14*) indicated that the mean score for electronics products ( $M = 1.38, SD = .48$ ) was not statistically significant different from fashionable products ( $M = 1.28, SD = .45$ ), but the mean score for electronics products ( $M = 1.38, SD = .48$ ) was statistically significant different from luxurious products ( $M = 1.69, SD = .46$ ) and mobile phone ( $M = 1.63, SD = .48$ ). The mean score for fashionable products ( $M = 1.28, SD = .45$ ) was statistically significant different from luxurious products ( $M = 1.69, SD = .46$ ) and mobile phone ( $M = 1.63, SD = .48$ ). There was no statistically significant difference in mean scores between luxurious products ( $M = 1.69, SD = .46$ ) and mobile phone ( $M = 1.63, SD = .48$ ).

## Conclusion

This paper has explored the aspects of the digital divide in Bangladesh and the Turkish Republic of Northern Cyprus. There are many factors are involved with the digital divide such as social, geographical and economic factors. It shows the privileges of developed and under developing countries. Developing countries like Bangladesh, rural students have low income and salary compare to the Turkish Republic of Northern Cyprus students. Many rural students cannot think of a computer with an internet connection. There is a significant gap between rural

and urban students regarding use of internet and television. A two-way ANOVA there was no statistically significant interaction between the effects of income and preference of buying social media and Television advertisements products on urban and rural students,  $F(9, 684) = 0.87, p = .54$ . Pairwise comparisons for income the four independent variables. We found the same results there is no statistically significant difference between income levels on urban and rural students. In pairwise we have 4 independent variables, all shows that there is no statistically significant difference between preference of buying social media and Television advertisements products on urban and rural students. The results indicate that, despite reaching statistical significance, the actual difference in mean scores between groups was small. By calculating the effect size by using eta squared, was  $d = .02$ . According to Cohen (1988), the groups has small effects ( $d = .02$ ). The results have found that despite reaching statistical significance, the actual difference in mean scores between groups was quite small. By calculating the effect size by using eta squared, was  $d = .05$ . According to Cohen (1988), the groups has small effects ( $d = .05$ ). The results have found that despite reaching statistical significance, the actual difference in mean scores between groups was quite small. After calculated the effect size by using eta squared, was  $r = .13$ . According to Cohen (1988), the groups has small effects ( $r = .13$ ). Students who are living in the rural areas of Bangladesh show lower probabilities of Internet use than those living in the urban areas of the Turkish Republic of Northern Cyprus. The findings from this study indicate the digital divide between rural and urban students in Bangladesh and Turkish Republic of Northern Cyprus has a great influence on buying decisions. The students of TRNC largely depend on online shopping, online banking transactions but students of rural areas like Bangladesh rely upon cell phones for everyday banking transactions and do not have an opportunity for online shopping because of the Internet. Urban students have media literacy and higher educational background as consequence they take advertisements as entertainment and gaining knowledge about purchasing decisions, rural students especially women students are grabbed by the advertisements viewed as a part of real-life rather than entertainment. So, the influence of advertisements is higher on women students compared to men. The government plays a significant role in bridging the digital divide in developing countries like Bangladesh. The government should create awareness in rural uneducated people about media literacy and take some necessary steps to prevent effects of television advertisements also investments in the internet and communication technologies that would be affordable for them especially in the urban areas.

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