Journal of Peace, Development and Communication

Volume 04, Issue 3, October-December 2020
pISSN: 2663-7898, eISSN: 2663-7901
Article DOI: https://doi.org/10.36968/JPDC-V04-I03-05
Homepage: https://pdfpk.net/pdf/
Email: se.jpdc@pdfpk.net

Article:	**Second Screen Phenomena and News Consumption in Pakistan**
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Published:	30th December 2020
Publisher Information:	Journal of Peace, Development and Communication (JPDC)
To Cite this Article:	Batool, Faiza, et al. (2020). "Second Screen Phenomena and News Consumption in Pakistan." *Journal of Peace, Development and Communication*, vol. Volume 4, no. Issue 3, 2020, pp. 63-88, https://doi.org/10.36968/JPDC-V04-I03-05.
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Abstract

The second screen phenomenon is a hybrid media process referring to the complementary and simultaneous use of television and a second web-connected screen for media consumption. The present study examined the impact of demographic characteristics (i.e. gender, age, education, and income) on audience activity for second screen news consumption in Pakistan. An online survey based on snowball sampling was conducted from 400 respondents. The results showed that gender only plays a role in usage during post exposure. The age was comparatively a strong predictor of audience activity. It has a positive relationship with involvement during exposure and usage during post exposure phase of second screen news consumption. Our study contributes to the existing literature by identifying the predictors for changing news consumption patterns in the new media eco-system and helps in a better understanding of contemporary media audiences.

Key words: Second Screen Phenomenon, News Consumption, Active Audience Theory, Audience Activity, Selectivity during pre-exposure, Involvement during exposure, Usage after post-exposure.

In recent times mass media has witnessed a dramatic upturn in terms of content as well as discovery, usage, consumption and interaction patterns of audience with the content. It is more apparent in diverse and rich media markets. A clear shift from old, traditional and analogue to a new advanced and digital media technology is observed (Prior, 2007). Now the audiences, especially youth, has adopted new techniques for accessing and consuming media content. Today audiences not only just receive information but also can choose what to do with that information such as; evaluating, reshaping, adding value, and passing it to others (Hayes, 2008). Their experience in the new media environment is becoming more interactive and multidimensional (Schrøder, Drotner, Murray, & Kline, 2003).

It is also noted that audiences, instead of relying on one medium, integrate several platforms and form own news repertoires for gratifying their news needs (Ksiazek, Malthouse, & Webster, 2010; Yuan, 2011). They are active in combining multiple sources of conventional and contemporary media into composite models of media usage. The integration of multiple screens for complementary and simultaneous consumption of media content is now regarded as Second Screen Phenomenon. The hierarchical connection between both the screens (first and second) is the key element. The first screen is the primary focus of attention and the second one accompanying it escalates the whole experience. The second screen usage is on the rise. People today are buying more internet connected digital devices and most of them are using various social media platforms (Pham, 2013), resulting in an increased number of second screen users.

The situation in the news media industry of Pakistan is not much different. News networks are reaching audiences through their presence on social media and other online platforms such as websites and mobile applications. News consumers are also integrating multiple screens to get daily news. The present study focuses on audience activity for news consumption in a second screen environment. By conducting survey from news audiences

using second screen, current research focuses on how audience's demographic characteristics in Pakistan relates with the variation of audience activity across time.

Literature Review

The proliferation of screens as a result of technological revolutions has influenced the habits and behaviors of TV consumers. Internet connected digital mobile devices such as smart phones tablets, and laptops have given rise to a phenomenon known as *second screen*. The second screen phenomenon lacks a proper definition in literature. However, it is generally defined as a use of second electronic device by television viewers to interact with a program that they are watching (Techopedia, 2019). Smart phone or tablet is used as a second screen with a complementary app allowing the viewer to connect with television program in a unique manner. These second screens are also termed as companion screens of television, that connects TV audience with complementary content related to game shows, TV series, sports and other live events through synchronized features, and applications (Evolumedia Group, 2012).

Sasseen, Olmstead, & Mitchell (2013) reported that there is an increase in the complementary use of second screen. They articulated that people followed the second debate of US presidential election between Barack Obama and Mitt Romney using second screen in a complementary manner using a mobile device or computer, and similarly watched the results on election night. A survey report by Nielsen (2013a) found that almost half of the second screen users look up for the information related to the television program, and roughly one-fifth of smart phone and tablet users have simultaneously perused discussions on social networks related to the show they are watching on TV. In another report Nielsen (2013b) found a reciprocal causal relationship between ratings of a TV program and Twitter conversation volume around the program. Huge media events, like awards shows and sports, draw more second screen interactions than reality shows and dramatic series on TV. The

playoff rounds and the final of FIFA World Cup in 2014 were amongst the top ten sports events that attracted a simultaneous Twitter audience that year in the United States (Nielsen, 2014).

Researches showed that, in comparison with light viewers, the heavy viewers would not replace one medium with another. They would prefer to use a combination of traditional media and other new communication platforms (Cooper & Tang, 2009; Enoch & Johnson, 2010; Jenkins, 2006). Phalen and Ducey (2012) reported that the styles of media viewing could be classified by intentionality and activity level. Intentional viewers seek for the content they want and find the more suitable device whereas the regular or habitual viewers are probably more medium oriented. The passive viewers are more likely to go for what is most convenient to watch. However, the researchers defined active viewing along a variety of behaviors that include seeking additional information, accessing related content through online sources, or interacting and conversing on social media platforms about the programs with others (Costello & Moore, 2007). Ahlers (2006) in his study hypothesized that news consumption has shifted from the traditional to the new online media and found that the online media is not substituting the traditional media but complementing it. Hence, in the domain of second screen usage, the most active and intentional users could be defined as the one who purposively seek information related to the content being watched or socially interact using another device in a complementary manner.

The concept of active audience suggests that audiences are highly selective, involved and rational in their decisions of mass media usage. News producers specifically regard audience as active and are aware of the fact that viewers desire more control and diverse options for selection of media content (Neuman, 1991). Perse (1990) attempted to fill the research gap on audience activity across temporal dimensions taking into account the development of cable subscription with multiple channel options and the new remote-control

devices at that time. He revealed that, for remote control owners and cable TV subscribers, the instrumental usage of media showed higher activity level before exposure and more involvement while watching program, but ritualistic viewing showed higher selectivity during both phases of program viewing i.e. before and during exposure and lesser involvement throughout exposure phase.

Active Audience Theory

In early 1980's Stuart Hall developed the Active Audience theory. According to Dictionary of Media and Communications (Chandler & Munday, 2011), Active Audience theory states that audience are not just passive receptacles for imposed connotations, as explained in hypodermic model, but rather they are active and individualistic in nature. They are cognitively and emotionally involved in driving meaning from the content. The term "active audience" emphasizes on the interaction between mass media and its audience that is voluntary and selective in nature (Bauer, 1973).

The two different dimensions along which audience activity varies are; qualitative dimensions and temporal dimensions (Levy, 1983; Levy & Windahl, 1984). The qualitative dimensions have further 3 nominal values, namely: audience selectivity, audience involvement and audience use. The temporal dimension, as the name suggests is related to time, is also divided into three phases: Pre-exposure phase, exposure phase and post-exposure phase. The audience activity is a combination of both, the qualitative interactions between audience members and communication process and the temporal considerations.

The first type of activity, in a communication sequence, links selectivity to the pre-exposure phase. The selectivity is an extent to which audience members consciously expose themselves to mass media. It is clear from the literature, that the term "audience selectivity" is frequently used in similar meanings of selectivity-in-exposure-seeking (Katz, Blumler, &

Gurevitch, 1974). Selectivity in the pre-exposure phase implies that individual's choices about media content are often goal-oriented.

The second type of activity focuses on the audience involvement during the exposure phase. Involvement is the degree of personal relevance of audience member with the media or message.

Third and the last type of audience activity are related to the post-exposure use of audience member's participation in a communication sequence. Utility is conceptualized as perceived usefulness of media exposure.

The researcher designed the present study in the context of contemporary news media audiences and the activity they exhibit during second screen news consumption process. Drawing on audience activity theory, the present research explicates whether there is a relationship between the predictor variables (gender, age, education and income) and the outcome variables (selectivity during pre-exposure phase, involvement during exposure phase and usage during post exposure phase) among the Pakistani audience who consume news through second screen.

Statement of Problem

Active Audience theory suggests that media audiences are active in their mass media usage and proposes audience activity as a varying phenomenon. But this theory does not provide us with the predictors to explain these variations. This study will find out how variation in audience activity occurs due to demographics characteristics i.e. gender, age, education and income specifically in the context of news consumption through second screen in Pakistan.

Research Objectives

To explore:

- the variation in types of audience activity for news consumption using second screen across gender.

- the variation in types of audience activity for news consumption using second screen across age.
- the variation in types of audience activity for news consumption using second screen across income.
- the variation in types of audience activity for news consumption using second screen across education.

1.3. Research Questions

RQ1: How does selectivity during pre-exposure phase for news consumption, using second screen, vary across demographics of gender, age, education and income?

RQ2: How does involvement during exposure phase for news consumption, using second screen, vary across demographics of gender, age, education and income?

RQ3: How does usage during post-exposure phase for news consumption, using second screen, vary across demographics of gender, age, education and income?

Method

By employing snowball sampling, the present study used survey method to explore the relationship between *independent variables* (gender, age, education and income) and *dependent variables* (selectivity, involvement and usage). Snowball sampling is a chain referral sampling where the respondents have to share the questionnaire among their acquaintances based on the criteria set in the questionnaire. The geographic focus of the study was Pakistan. In the survey questionnaire, filter questions were used by asking about the existence of usage or non-usage of TV, smart phone, tablet and laptop separately. Only those who have internet access were the participants of the survey since internet is the main component of second screen phenomenon. Before deploying the final survey, a pilot study on 50 respondents was conducted. To check the reliability Cronbach's Alpha was calculated

using SPSS. The Cronbach's value ranged from .630 to .826. After the pilot study the survey instrument was improved and deployed for data collection process.

The questionnaire was distributed online through various platforms. The total number of respondents was 520. Those respondents who used only one platform, or chose the "No" option for TV, and those who were less than 18 years, were excluded. The total number of second screen news consumers who participated in this research, with completed survey forms, was 400. A fully structured online survey questionnaire was distributed on various online platforms.

Results

Research Question 1: How does selectivity during pre-exposure phase for news consumption, using second screen, vary across demographics of gender, age, education and income?

Among the participants of this research a total of 193 participants showed high selectivity, 165 showed medium selectivity and 42 participants showed low selectivity index during pre-exposure phase using second screen for news consumption (See Table 1).

Table 1. Crosstabulation of demographic variables with selectivity index

Independent Variables	**Selectivity Index** *f* (%)			**Total**
	High	Medium	Low	
Gender*				
Male	95 (23.75%)	89 (22.25%)	25(6.25%)	209 (52.25%)
Female	98 (24.50%)	76 (19%)	17(4.25%)	191 (47.75%)
Total	193 (48.25%)	165 (41.25%)	42(10.5%)	400 (100%)
Age**				
Young Adults (18-29 Years)	100 (25%)	95 (23.75%)	28(7%)	223 (55.75%)
Adults (30-49 Years)	78 (19.5%)	63 (15.75%)	12(3%)	153 (38.25%)
Middle Aged (50-64 Years)	15 (3.75%)	7 (1.75%)	2(0.5%)	24 (6%)

Total	193 (48%)	165 (41%)	42(11%)	400 (100%)
Education* **				
Intermediate or less	7 (1.75%)	10 (2.5%)	4(1%)	21 (5.25%)
Bachelors	80 (20%)	65 (16.25%)	15(3.75%)	160 (40%)
Masters or above	106 (26.5%)	90 (22.5%)	23(3.75%)	219 (54.75%)
Total	193 (48.25%)	165 (41.25%)	42(10.5%)	400 (100%)
Income** **				
Less than 30,000 PKR	18 (4.5%)	22 (5.5%)	6(1.5%)	46 (11.5%)
30,000 - 49,999 PKR	38 (9.5%)	27 (6.75%)	9(2.25%)	74 (18.5%)
50,000 - 74,999 PKR	52 (13%)	37 (9.25%)	8(2%)	97 (24.25%)
75,000 PKR or more	85 (21.25%)	79 (19.75%)	19 (4.75%)	183 (45.75%)
Total	193 (48.25%)	165 (41.25%)	42(10.5%)	400 (100%)

* Pearson Chi-Square Sig. value was .409

** Pearson Chi-Square Sig. value was .312

*** Pearson Chi-Square Sig. value was .567

**** Pearson Chi-Square Sig. value was .694

The cross tabulation of gender with selectivity index showed that selectivity was not dependent on gender. The Chi-Square significance value (p) was .409 which means there was no relation between gender and selectivity during pre-exposure phase. Similarly, selectivity was also independent of age (significance value (p) = .312), education (significance value (p) = .567) and income (significance value (p) = .694).

Research Question 2: How does involvement during exposure phase for news consumption, using second screen, vary across demographics of gender, age, education and income?

The result on involvement during exposure phase showed that among the 400 participants, 125 showed high involvement, 192 showed medium involvement and 83 participants showed

low involvement during exposure phase for news consumption using second screen (See Table 2).

Table 2. Crosstabulation of demographic variables with involvement index

Independent Variables	**Involvement Index** *f* (%)			**Total**
	High	Medium	Low	
Gender*				
Male	*72 (18%)*	*90 (22.5%)*	*47(11.75%)*	*209 (52.25%)*
Female	*53 (13.25%)*	*102 (25.5%)*	*36(9%)*	*191 (47.75%)*
Total	*125 (31.25%)*	*192 (48%)*	*83(20.75%)*	*400 (100%)*
Age**				
Young Adults (18-29 Years)	*59 (14.75%)*	*113 (28.25%)*	*51(12.75%)*	*223 (55.75%)*
Adults (30-49 Years)	*52 (13%)*	*72 (18%)*	*29(7.25%)*	*153 (38.25%)*
Middle Aged (50-64 Years)	*14 (3.5%)*	*7 (1.75%)*	*3(0.75%)*	*24 (6%)*
Total	*125 (31.25%)*	*192 (48%)*	*83(20.75%)*	*400 (100%)*
Education***				
Intermediate or less	*7 (1.75%)*	*11 (2.75%)*	*3(0.75%)*	*21 (5.25%)*
Bachelors	*48 (12%)*	*82 (20.5%)*	*30(7.5%)*	*160 (40%)*
Masters or above	*70 (17.5%)*	*99 (24.75%)*	*50(12.5%)*	*219 (54.75%)*
Total	*125 (31.25%)*	*192 (48%)*	*83(20.75%)*	*400 (100%)*
Income**				
Less than 30,000 PKR	*8 (2%)*	*28 (7%)*	*10(2.5%)*	*46 (11.5%)*
30,000 - 49,999 PKR	*31 (7.75%)*	*33 (8.25%)*	*10(2.5%)*	*74 (18.5%)*
50,000 - 74,999 PKR	*26 (6.5%)*	*55 (13.75%)*	*16(4%)*	*97 (24.25%)*
75,000 PKR or more	*60 (15%)*	*76 (19%)*	*47(11.75%)*	*183 (45.75%)*
Total	*125 (31.25%)*	*192 (48%)*	*83(20.75%)*	*400 (100%)*

* Pearson Chi-Square Sig. value was .117

** Pearson Chi-Square Sig. value was .024

*** Pearson Chi-Square Sig. value was .713

**** Pearson Chi-Square Sig. value was .014

The cross tabulation of involvement with demographics showed that there was no relationship of gender (significance value (p) = .117) and education (significance value (p) = .713) with involvement. However, age (significance value (p) = .024) and income levels (significance value (p) = .014) were significantly related to the involvement during exposure phase.

Research Question 3: How does usage during post-exposure phase for news consumption, using second screen, vary across demographics of gender, age, education and income?

The usage during post-exposure phase for news consumption, using second screen, showed 114 participants with high usage index, 181 with medium usage index and 105 with low usage index (See Table 3).

Table 3. Crosstabulation of demographic variables with usage index

Independent Variables	**Usage Index** *f* (%)			**Total**
	High	Medium	Low	
Gender*				
Male	*76 (19%)*	*89 (22.25%)*	*44 (11%)*	*209 (52.25%)*
Female	*38 (9.5%)*	*92 (23%)*	*61(15.25%)*	*191 (47.75%)*
Total	*114 (28.5%)*	*181 (45.25%)*	*105(26.25%)*	*400 (100%)*
Age**				
Young Adults (18-29 Years)	*53 (13.25%)*	*105 (26.25%)*	*65(16.25%)*	*223 (56%)*
Adults (30-49 Years)	*49 (11.5%)*	*68 (17%)*	*36(9%)*	*153 (38%)*
Middle Aged (50-64 Years)	*12 (15%)*	*8 (2%)*	*4(1%)*	*24 (6%)*
Total	*114 (28.5%)*	*181 (45.25%)*	*105(26.25%)*	*400 (100%)*
Education***				
Intermediate or less	*8 (2%)*	*8 (2%)*	*5 (1.25%)*	*21 (5.25%)*

Bachelors	*46 (11.5%)*	*74 (18.5%)*	*40 (10%)*	*160 (40%)*
Masters or above	*60 (15%)*	*99 (24.75%)*	*60 (15%)*	*219 (54.75%)*
Total	*114 (28.5%)*	*181 (45.25%)*	*105(26.25%)*	*400 (100%)*
Income****				
Less than 30,000 PKR	*9 (2.25%)*	*18 (4.5%)*	*19 (4.75%)*	*46 (11.5%)*
30,000 - 49,999 PKR	*27 (6.75%)*	*30 (7.5%)*	*17 (4.25%)*	*74 (18.5%)*
50,000 - 74,999 PKR	*27 (6.75%)*	*46 (11.5%)*	*24 (6%)*	*97 (24.25%)*
75,000 PKR or more	*51 (12.75%)*	*87 (21.75%)*	*45(11.25%)*	*183 (45.75%)*
Total	*114 (28.5%)*	*181 (45.25%)*	*105(26.25%)*	*400 (100%)*

* Pearson Chi-Square Sig. value was .001

** Pearson Chi-Square Sig. value was .055

*** Pearson Chi-Square Sig. value was .861

**** Pearson Chi-Square Sig. value was .198

The cross tabulation showed that there was a significant relationship between gender and usage during post exposure phase. The findings were significant with (p) value of 0.001 at both α values 0.05 and 0.01. The relationship between age and usage during post exposure phase of news consumption, using second screen, was also observed. The Chi-square significance value (p) was .055, very close to being statistically significant at α value 0.05. However, there was no relationship observed between education (significance value (p) = .861) and income (significance value (p) = .198) of the participants with involvement index.

Regression Analysis

Since the selectivity during pre-exposure phase has no relationship with any of the independent variable, the two dependent variables involvement and usage were selected to investigate their relationships with independent variables. In model of the present research, the logistic regression was run and treated involvement as a binary variable.

Analyzing the results of binary logistic regression where the binary dependent variable Y is Involvement Binary as Involvement = 1, No Involvement = 0 and the independent variables were Age and Monthly Household Income. For the analysis purpose, independent variables were also converted in the binary form. For Age Binary, Age < 30 = 0 and Age ≥ 30 = 1, and for Income Binary, Income < 50k = 0 and Income ≥ 50k = 1. So, we have Involvement = f (Age, Income). The coefficient values and the t test values for independent variables are shown in Table 4.

Table 4 *Logistic Regression results for Involvement*

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	Age.Binary	1.116	.463	5.809	1	.016	3.051
	Income.Binary	-.078	.221	.125	1	.724	.925
	Constant	-.160	.184	.756	1	.384	.852

a. Variable(s) entered on step 1: Age.Binary, Income.Binary.

The age showed a significant positive relation with involvement during exposure phase of news consumption using second screen with Sig value .016 i.e. ≤ 0.05. To estimate the constant effect of the age predictor, we analyzed the odds ratio i.e. Exp(B) = 3.051 for age. As odds ratio is > 1, it was assumed that as age increases involvement also increases. Keeping other things constant odds ratio of age were calculated when score was 1 and 0. As

$$\frac{Y=1,\ X=1}{Y=1,\ X=0} = \frac{Involvement=1,\ Age\geq 30}{Involvement=1,\ Age<30}$$

Then

Age (3.051) = $\frac{3051}{1000}$

For every 3051 individuals aged 30 or more with Involvement = 1 there are 1000 individuals aged less than 30 and Involvement = 1. As individuals with more age are more involved so this proved a positive relation between the involvement and age. The other independent variable income showed no significant relation with involvement in our

regression model, so we can say that age is the only predictor of involvement during exposure phase of news consumption in second screen environment.

Analyzing the results of binary logistic regression where the binary dependent variable Y is Usage Binary as Usage = 1, No Usage = 0 and the independent variables were gender and age. The independent variables were again converted into binaries. For Gender Binary, Male = 0 and Female = 1 and for Age Binary, Age < 30 = 0 and Age ≥ 30 = 1. So, we have Usage= f (Gender, Age). The coefficient values and the t test values for independent variables are shown in Table 5.

Table 5 *Logistic Regression results for Usage*

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	Gender.Binary	-.534	.206	6.709	1	.010	.587
	Age.Binary	.878	.450	3.802	1	.051	2.405
	Constant	-.043	.143	.090	1	.764	.958

a. Variable(s) entered on step 1: Gender.Binary, Age.Binary.

The variable gender showed a significant negative relation with usage during post exposure phase of news consumption using second screen with Sig value .010 i.e. ≤ 0.05. To estimate the constant effect of the predictor age, we analyzed the odds ratio i.e. Exp(B) = .587 for gender. As odds ratio is < 1, it was assumed that as gender changes from male to female the usage decreases. Keeping other things constant we calculated the odds ratio of gender when score was 1 and 0. As

$$\frac{Y=1,\ X=1}{Y=1,\ X=0} = \frac{Usage=1,\ Gender=Female}{Usage=1,\ Gender=Male}$$

Then

Gender (.587) = $\frac{587}{1000}$

For every 587 females with Usage = 1, there are 1000 males with Usage = 1. It showed that males were more active in post exposure usage with second screen than female. Hence, there was a negative relation between usage and gender.

The second variable age showed a significant positive relation with usage during post exposure phase of news consumption using second screen with Sig value .051 i.e. ≤ 0.05. To estimate the constant effect of the predictor age, we analyzed the odds ratio i.e. Exp(B) = 2.405 for age. As odds ratio is > 1, it was assumed that as age increases, usage also increases. Keeping other things constant we calculated the odds ratio of age when score was 1 and 0. As

$$\frac{Y=1,\ X=1}{Y=1,\ X=0} = \frac{Usage=1,\ Age\geq 30}{Usage=1,\ Age<30}$$

Then

Age (2.405) = $\frac{2405}{1000}$

For every 2405 individuals with age 30 or more with Usage = 1, there are 1000 individuals aged less than 30 and Usage = 1. It showed that individuals who were older were more active in post exposure usage with second screen than younger individuals. Therefore, there is a positive relation between usage and age.

Discussion

The results suggested that the varying audience activity was partially dependent on gender and age. Firstly, the data analysis indicated that in terms of gender, audience activity varies only for usage during post exposure phase of second screen news consumption. The males were more active in discussions, sharing their opinions, publishing articles or blogs and improving their media choices in the process of second screening for news than their female counterparts. Similarly, previous studies also showed that online news consumption was affected by gender. Based on survey data, Poindexter (2008) found males to be more active online news consumers as compared to females. Chung (2008) regarded males as heavy users

of interactive features available on online news websites. The males were more likely to pay for newspaper's web editions (Chyi, 2012). The present study also found that, the gender does not prove to be a predictor of selectivity during pre-exposure phase and involvement during exposure phase of news consumption using second screen. Among the selected participants, both genders were equally selective and involved in complementary and simultaneous use of TV and other digital devices or screens in news consumption process. So, we can say that gender partially plays a role in varying audience activity.

Secondly, the investigation provided evidence for the variable age as a significant predictor of audience activity, specifically, for involvement during exposure phase and usage during post exposure phase. The age had a positive relation with both involvement and usage. As age increased the involvement and usage with second screen news consumption also increased. The second screen news audiences in this study, aged 30 or above, were more actively involved in, while watching TV, using a digital device such as smart phone, tablet or laptop for getting news. They feel more involved by participating in activities like reading, liking, commenting or sharing news related posts on online media. Similarly, the audience of this age, 30 or above, showed higher level of activity during usage phase by expressing their opinions through social media, participating in online public discussions, writing blog post and articles or for getting recommendations for better news content. However, the variable of age has nothing to do with selecting multiple screens for complementary and simultaneous news consumption as people from all age groups are equally selective. So, selectivity during pre-exposure phase was independent of age.

Other researches also established the impact of age on use of media (Dimmick, McCain, & Bolton, 1979). Harwood (2007) in his book suggested that the time adults spend in watching television increased with their age. Gauntlett & Hill (1999) and Vandebosch & Eggermont (2002) suggested that due to increase in leisure time, lack of social activity and

mobility, older people develop an increased need of information. Consequently, the use of television became important for them as it offers a range of topics for conversation (Riggs, 1998; Davis & Westbrook, 1985). The contemporary studies on use of mobile devices for news found that among individual difference age is a strong predictor that can influence the news consumption patterns of media audiences (Thorson, Shoenberger, Karaliova, Kim, & Fidler, 2015). The Swedish researchers also studied displacing and complementary effects on news consumption among various age cohorts and noted significant differences due to variable of age (Westlund & Färdigh, 2015). These studies strengthen the findings of present study that age is a strong predictor of audience activity in second screen news consumption. However, it is important to note that the direction of relationship with gender and age with second screen phenomenon in the present research was opposite to study by Gil de Zúñiga, Garcia-Perdomo, and McGregor (2015) where females and younger audiences were found to use second screen more than males and older ones.

Finally, the other two demographic predictors, educational level and monthly household income in this study indicated no effect on audience activity. Although these findings were consistent with the findings of Lee & Chyi (2015) that education and income were not significant predictors for the use of news aggregator websites for news consumption. However, these contradicts with the findings of Dutta-Bergman (2004) who found that online news consumption was positively related to both demographics of education and income. Previous studies (Stempel & Hargrove, 1996; Robinson, 1978) indicated that education and income being predictor or non-predictor of news consumption vary for various media platforms whereas present study find them insignificant across second screen usage. One reason for this finding can be the under representation of sample for these two demographics. The number of respondents from low education and low-income groups were quite low. The proportionate representation might produce different results.

Conclusion

The contemporary media eco system, that involves the use of multiple screens in a complementary and simultaneous manner for media consumption, demands from communication scholars to delve deeply and explore the emerging consumption patterns and audience activity. The present study provided the insight that gender was partially significant predictor as it only plays a role in usage during post exposure. The age was comparatively a strong predictor of audience activity as increasing age was directly related to increase in involvement during exposure and usage during post exposure phase of second screen news consumption. No variation in audience activity was shown by the variable of education and monthly income. Beside some of the limitations this study provides a base for future studies about the relationship between audience and new media environment. The study provides evidence for demographic characteristics as key player in audience activity for second screen news consumption. It also encourages future researcher to explore other predictors to better understand the audience of 21st century.

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