# Media Complementary or Media Displacement?: An Investigation of Digital and Traditional Media Usage for Obtaining Daily News among Young Adults 

# Tamamlayıcı Medya mı yoksa Medya Yer Değişikliği mi?: Gündelik Haber Edinmede Gençler Arasında Dijital ve Geleneksel Medyanın Kullanımı Üzerine Bir Araştırma 

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#### Abstract

Survey ( $\mathrm{N}=92$ ) was conducted to collect information on how university students use media. Although the result supports the fact that young adults use digital media for news consumption more than other types of media, using Internet for obtaining daily news and information didn't displace the traditional media for the same function. There was no displacement effect among different types of media for the function of news, but contrary, media supplemented or complemented each other. Heavy SNS (social network site) users listened to the radio less, that may be interpreted based on both of them may serve the same functions (e.g., entertainment). The results were discussed in the framework of media richness theory, and media displacement vs. media complementary.


Keywords: Digital Media, Traditional Media, News, Media Richness, Media Complementary vs. Media Displacement

## Öz

Üniversite öğrencilerinin medyayı nasıl kullandıklarını öğrenebilmek için anket ( $N=92$ ) yapılmiştru. Araştırmanin sonucunda gençlerin gündelik haber ve bilgi edinmelerinde dijital medyay,, geleneksel medyaya göre daha fazla kullandikları, ancak interneti bilgi ve haber edinmek için kullanmalarmin geleneksel medyayı aynı fonksiyon için kullanmalarının yerine geçmediği bulunmuştur. Haber edinme açısından,
farklı medya çeşitlerinin birbirinin yerine geçmediği, aksine, birbirini tamamlaďğl veya bütünlediği ortaya çıkmıştrr. Sosyal ağları fazla kullananların radyoyu az dinledikleri ve bunun nedeni olarak her ikisinin de eğlence gibi aynı fonksiyonu sundukları şeklinde yorumlanabilir. Sonuçlar, zengin medya teorisi, birbirinin yerine geçen medyaya karşı tamamlayıcı medya çerçevesinde tartışlmış̧tr.

Anahtar Kelimeler: Dijital Medya, Geleneksel Medya, Haber, Zengin Medya, Tamamlayicı Medyaya Karşı Medya Yer Değişikliǧi

## Introduction

Scientists working in different universities all around the world wanted to share their information with each other and this resulted in the creation of the Web. The World Wide Web (WWW) was invented by Tim Berners-Lee when he was a scientist at CERN in 1989 ("Where the web", nd.). Since then, Internet has been widely used by nations all over the world and today we are living in a dot.com society (Weiser, 2001). "Although use of traditional delivery platforms-broadcasting and print-is declining slightly, news consumption across digital platforms-including websites, cell phones, email and social networks-is increasing" (Greerand, \& Yan, 2011, p. 83). The Internet has a different nature compared to traditional media; Internet has offered more and more interaction among

[^0]people and this has created a new environment in which people can find democracy, transparency and participation (Demirtas, 2012).
"The term media usage takes various different names as media exposure, media consumption, media appropriation. Its definition also varies across different studies on media effects, media habits, media planning, consumer behavior, purchase intentions, attitudes, etc." (Bir, Suher, Şener, \& Algür, 2011, p. 4101). Reading or watching the news is an essential practice of democratic society. With the introduction of new technologies, dramatic changes happened in the pattern of news consumption (Ksiazek, Malthouse, \& Webster, 2010). In other words, change in news consumption is a result of changes in the media technologies.

In this information society, there is a need to understand the nature of media better. In this study, five leading mass media in addition to family and friends were compared to each other in terms of news and information gathering. Media comparison questions of this study were adapted from Parker and Plank's (2000) study. Parker and Plank compared 7 sources of information (print, television, family/others, radio, online service, agency/organization, and phone) for 8 different reasons (news/weather, politics, health, entertainment, shopping, campus information, job information, and consumer information) in their studies. This study extends Parker and Plank's study: six sources of information (five leading media and family \& friends) were compared for ten different news purposes (e.g., news, health, weather, shopping information) in order to learn youngsters' daily media preferences.

## Theoretical Framework

## The Media Richness Theory

Continuous evaluation of the media richness theory is important, due to the common use of advanced communication technologies among people (Liu, Liao, \& Pratt, 2009). The reasons for richness depend on the capacity for immediate feedback, personalization and so on., and therefore, according to Daft and Lengel (1986), face-to-face communication is considered as the richest medium. Daft and Lengel (1986, p. 560) state about the media richness theory (MRT) in their text below:

Information richness is defined as the ability of information to change understanding within a time interval. Communication transactions that can overcome different frames of reference or clarity ambiguous issues to change understanding in a timely manner are considered rich. Communications that require a long time to enable understanding or that cannot overcome different perspectives are lower in richness. In a sense, richness pertains to the learning capacity of a communication.

Li (2003) states that online newspapers have the power of TV and newspaper news that give it a competitive advantage. Electronic newspapers, which are considered as one of the richest medium in the history of news-spreading, offer both the advantage of newspaper news and television news plus have the capacity for personalization of news.

The Web is considered as both efficient and economic and has superiority on targeting its users compared to traditional media (Wolff, 2012). Among many media alternatives, young generations may prefer online news and online information searching over traditional media. Newspapers now have an opportunity to overcome offline obstacles via the Internet and can disseminate news to a greater population without boundaries (Himelboim, 2010). This study suggests that due to the richness of both Internet and family \& friends over traditional media, young adults may get news and information from them more than traditional media.

Yuan (2011, p. 998) states that "... news consumption is not a simple choice between the traditional and new media for today's news audiences". People who have certain media consumption in their daily lives keep consuming information and news coming from this media. In other words, for news consumption, Internet users use Internet, TV viewers use TV, newspaper readers use newspapers. Certain media consumption condition them to want to get access to news from media which has been habitually consumed (ChanOlmsted, Rim, \& Zerba, 2012).

Based on abovementioned discussions, the hypotheses were formulated as below:

H1: There is a significant relation between (a) TV viewing and news obtaining from TV, (b) radio listening and news obtaining from radio, (c) newspaper reading and news obtaining from
newspaper, (d) magazine reading and news obtaining from magazine, and (e) Internet using and news obtaining from Internet.

H2: Young adults get news and information from (a) the Internet and (b) their family and friends more than other types of media.

## The Media Displacement Theory vs. Media Complemetary Theory (or Reinforcement Effect)

Lazarsfeld researched the effects of radio on print media in 1940, when it was a new medium. He asked whether people prefer to get news by listening to the radio or by reading the newspaper and the result displayed there was an increase of radio preferences. However, in Lazarsfeld's (1940) study, radio didn't reduce newspaper reading and according to Kayany and Yelsma (2000) this is due to having different functions for radio and newspapers. At the heart of media displacement theory is that medium offering the same functions or gratifications is replaced by another medium, such as radio listening or comic reading can be replaced by TV watching. It is because TV contributes to the same 'escape' function to its users.

The traditional media is replaced by new and emerging media and technology (e.g., television, cable television, Internet). The media displacement theory propounds that people are so involved in their daily activities that they have limited amount of time to access various types of media. After all, with the introduction of new media to people's scheduled lives, they have a choice of either continue with the traditional media, reduce the time spent with the traditional media, give up the traditional one for the new one, or turn to non-media activities (Kayany \& Yelsma, 2000).

The Internet gives flexibility in information search and online audiences can get news and information at their own pace (Lee \& Leung, 2008). There is some research based on the Internet usage and its displacement of traditional media for source of information. Kayany and Yelsma (2000), for instance, investigated online usage and its effects on television viewing, newspaper reading, telephone conversation, and family conversation on 185 people in 84 households. They found that television viewing was gradually displaced by Internet usage as the primary source of
information. Lee and Leung (2008) focused on the displacement effects of the Internet and found that traditional media usage (television, newspaper, and radio) was displaced by the Internet usage. In another study, Albarran, Anderson, Bejar, Busart, Daggett, Gibson, Gorman, Greer, Guo, Horst, Khalaf, Lay, McCracken, Mott, and Way (2006) found displacement effect by comparing MP3 players to traditional radio for music listening habits.
"With this proliferation of media it is necessary to examine the communication-seeking behavior of individuals who must allocate their time among these media, and even then never use much of what is available" (McCombs, 1972, p. 32). Media compete with each other as people benefit the same functions (e.g., news or entertainment) from different media. Consequently, the new medium will drive the traditional one out of existence (Nguyen \& Western, 2006).

The consumption of news and information is important area of concern in the media displacement studies (Lee \& Leung, 2008). Vyas, Singh, and Bhabhra (2007, p. 30) emphasize the importance of investigation on displacement effect and their state of line is: "Despite increasing influence of internet, relatively little research has been conducted on displacement effect of Internet".

Nguyen and Western (2006), on the other hand, debate that each medium is unique to serve individuals' different media related needs; thus, one complements the other, and none of the medium should be seen as an absolute functional alternative to other media. Nguyen and Western compared online news and information usage with traditional news and information sources and found positive association between new media and traditional media. Their findings supported that there is no replacement or absolute displacement of traditional media which will exist to complement online sources of information in gratifying people's news and information needs. Tsao and Sibley (2004) examined to what extend Internet is reinforeced or displaced by other types of media as scources of advertising information and found that Internet was not displaced by any other type of media. Instead of replacing it with another media, consumers saw Internet advertising as a complementary medium to other media. Kitamura (2013) examined the Internet use on mobile phones and personal computers with traditional media according to informa-
tion acquisition and the results revealed that Internet use on mobile phone complemented traditional media, but Internet use on personal computer didn't complement them.

Based on the abovementioned discussions on media displacement and media complementary theories, the following research questions are asked:

RQ1: Does time spent with a certain medium in general increase or decrease time spent with another medium?

RQ2: Does use of the Internet for getting news and information increase or decrease use of other media for getting news and information?

## Methodology

## Population, Sample and Contact Method

In this study convenience sampling was adopted. By e-mail, survey questions were sent to 401 students
who were registered to UFND020 Research Methodology course. 100 of them replied and 92 of them were in usable format. The response rate is $\% 22.9$.

## Instrumentation

Media usage information of the participants was collected by using closed-ended questions. Parker and Plank (2000) asked a student sample to indicate their sources of consumer and community information on a check list. In this study, students were queried to indicate their sources of news and information by using a 5-point Likert scale ranging from "Never Use" to "Frequently Use". In this study, six sources of information (e.g., Internet, television, magazine) were compared for 10 different subject areas (e.g., news, health, weather, shopping information).

## Reliability

Cronbach alpha of this study can be seen on the following Table 1.

Table 1. Reliability Results for Items

| Items $\quad$ Cronbach alpha |  |
| :--- | :---: |
| Radio | .872 |
| Family \& friends | .878 |
| Television | .921 |
| Internet | .763 |
| Newspapers | .843 |
| Magazines | .841 |

## Validity

The validity of the types of media was assessed by maximum likelihood in factor analysis. 6 factors (radio, family \& friends, television, magazine, newspaper, and Internet) for the type of media were valid (see Table 4).

## Independent Variables

Independent variables are Internet year, Internet usage frequency, Internet usage duration, TV viewing, radio listening, newspaper and magazine reading.

## Dependent variables

Using six types of media for gathering information and news are independent variables of this study.

## Applied Statistics

Frequencies, mean scores, regression analysis, correlation analysis, and factor analysis were used for interpreting the results of this study. The findings were significant at $p \leq 0.05$ level. For producing data, SPSS statistical package was employed.

## Results <br> Descriptive Results <br> Demographic Background

More than half of the respondents (60.9\%) were between 21 to 23 years old. Females (66.3\%) were more than males (33.7\%). Although convenient sampling was used, the students were representing all the departments (seven faculties and one vocational high school) of the university, since it was a fundamental and a compulsory course for graduation. The participation was higher from the faculty of economics and administartive science (28.3\%), and the percentages of Freshmen (30.4\%), sophomore (27.2\%), and junior students (28.3\%) were close to each other.

Table 2. Demographic Profile of Respondents

| Age | Frequency | $\%$ |
| :--- | ---: | ---: |
| \%-20 |  |  |
| $21-23$ | 25 | 27.2 |
| $24+$ | 56 | 60.9 |
| Gender | 11 | 12 |
| Male |  |  |
| Female | 31 | 33.7 |
| $\quad$ Department | 61 | 66.3 |
| Faculty of Communication |  |  |
| Faculty of Engineering | 10 | 10.9 |
| Faculty of Science \& Letters | 13 | 13.0 |
| Faculty of Law | 14.1 |  |
| Faculty of Architecture | 17 | 18.5 |
| Facult. of Econ. \& Admin. Sci. | 6 | 6.5 |
| Faculty of Art \& Design | 26 | 28.3 |
| Vocational Highschool | 3 | 3.3 |
| $\quad$ Year in University | 5 | 5.4 |
| Freshman |  |  |
| Sophomore | 28 | 30.4 |
| Junior | 25 | 27.2 |
| Senior | 26 | 28.3 |

Note: $\mathrm{N}=92$

## Media Usage

Daily Internet users were $97.8 \%$ of the total participants. They used the Internet 4-5 hours hours a day with $41.3 \%$ rate. Their TV watching hours varied from I don't wacth (19.6\%) to I watch 3-5 hours a day (16.3\%). Half of the participants didn't listen to radio; but almost half of them (47.8\%) read newspapers daily. Almost one quarter of them (22.8\%) didn't read magazine, and half of the participants reported that they read magazines 1-2 times a month.

Table 3. Media Use of Respondents


Note: $\mathrm{N}=92$

## Factor Analysis Results

As a result of maximum likelihood, factor loadings for six media (See Table 4) were found. Television had factor loadings of ten items, Internet had eight items, family \& friends had ten items, radio had six items, newspapers had eight items, and magazines had eight items of factor loadings.

## Hypotheses

## Hypothesis 1

H1 states that there is a significant relation between (a) TV viewing and news obtaining from TV, (b) radio listening and news obtaining from radio, (c) newspaper reading and news obtaining from newspaper, (d) magazine reading and news obtaining from magazine, and (e) Internet using and news obtaining from Internet. The hours of watching television $(\beta=0.500$, $p \leq 0.05)\left(R^{2}=0.250\right)$ was positively associated with using television for news and information gathering. The respondents who used for news purposes were

Table 4. Factor Analysis Results for Media Types

| Items | Factor |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 |
| 1. Health news on TV | . 845 | . 219 | . 137 | . 056 | . 045 | . 035 |
| 2. Daily news on TV | . 748 | . 027 | . 046 | . 083 | . 095 | . 137 |
| 3. Product, service, and brand news on TV | . 736 | . 090 | . 235 | . 082 | . 027 | . 046 |
| 4. Computer and new technologies on TV | . 726 | . 150 | . 171 | . 137 | . 053 | . 122 |
| 5. Entertainment such as music and cinema news on TV | . 718 | . 110 | . 128 | . 230 | . 011 | . 012 |
| 6. Education, schools, and scholarship news on TV | . 675 | . 011 | . 012 | . 015 | . 152 | . 130 |
| 7. Healing herbs, how to cook and food recipes on TV | . 673 | . 240 | . 030 | . 080 | . 159 | . 200 |
| 8. Weather news on TV | . 662 | . 101 | . 099 | . 085 | . 110 | . 074 |
| 9. Travel and holiday news on TV | . 606 | . 090 | . 071 | . 086 | . 131 | . 073 |
| 10. Occupation and job application news on TV | . 580 | . 130 | . 079 | . 002 | . 203 | . 058 |
| 11. Occupation and job application news on Internet | . 048 | . 748 | . 035 | . 094 | . 040 | . 003 |
| 12. Travel and holiday news on Internet | . 115 | . 730 | . 101 | . 058 | . 135 | . 172 |
| 13. Entertainment such as music \& cinema news on Internet | . 001 | . 669 | . 038 | . 117 | . 099 | . 128 |
| 14. Education, schools, and scholarship news on Internet | . 088 | . 612 | . 071 | . 062 | . 066 | . 025 |
| 15. Health news on Internet | . 055 | . 413 | . 018 | . 009 | . 038 | . 005 |
| 16. Product, service, and brand news on Internet | . 074 | . 410 | . 102 | . 007 | . 029 | . 048 |
| 17. Computer and new technologies on Internet | . 203 | . 402 | . 202 | . 011 | . 167 | . 071 |
| 18. Daily news on Internet | . 045 | . 376 | . 050 | . 039 | . 119 | . 008 |
| 19. Computer and new technologies from family/friends | . 036 | . 020 | . 781 | . 127 | . 117 | . 123 |
| 20. Travel and holiday news from family/friends | . 086 | . 106 | . 742 | . 051 | . 068 | . 014 |
| 21. Entertainment news from family/friends | . 065 | . 044 | . 711 | . 078 | . 062 | . 131 |
| 22. Occupation and job application news from family/friends | . 077 | . 061 | . 704 | . 010 | . 013 | . 177 |
| 23. Product, service, and brand news from family/friends | . 015 | . 006 | . 692 | . 111 | . 044 | . 013 |
| 24. Education, schools, and etc. news from family/friends | . 007 | . 063 | . 628 | . 118 | . 020 | . 157 |
| 25. Health news from family/friends | . 009 | . 024 | . 533 | . 005 | . 118 | . 054 |
| 26. Healing herbs, food recipes from family/friends | . 107 | . 054 | . 506 | . 049 | . 115 | . 154 |
| 27. Daily news from family/friends | . 087 | . 255 | . 502 | . 160 | . 139 | . 085 |
| 28. Weather news from family/friends | . 102 | . 021 | . 476 | . 196 | . 100 | . 110 |

## Table 4. Factor Analysis Results for Media Types

| 29. Daily news on radio | . 087 | . 019 | . 082 | . 873 | . 122 | . 042 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 30. Weather news on radio | . 011 | . 014 | . 183 | . 797 | . 025 | . 169 |
| 31. Health news on radio | . 104 | . 145 | . 161 | . 768 | . 040 | . 049 |
| 32. Computer and new technologies on radio | . 032 | . 198 | . 066 | . 759 | . 045 | . 102 |
| 33. Education, schools, and scholarship news on radio | . 049 | . 090 | . 117 | . 631 | . 297 | . 416 |
| 34. Entertainment such as music and cinema news on radio | . 124 | . 064 | . 043 | . 624 | . 014 | . 071 |
| 35. Weather news in newspaper | . 029 | . 009 | . 066 | . 112 | . 644 | . 029 |
| 36. Education, schools, and scholarship news in newspapers | . 198 | . 127 | . 165 | . 132 | . 626 | . 040 |
| 37. Entertainment news in newspaper | . 140 | . 282 | . 110 | . 009 | . 616 | . 093 |
| 38. Daily news in newspaper | . 047 | . 122 | . 017 | . 106 | . 603 | . 064 |
| 39. Occupation and job application news in newspaper | . 269 | . 013 | . 039 | . 018 | . 535 | . 059 |
| 40. Travel and holiday news in newspaper | . 346 | . 033 | . 131 | . 043 | . 525 | . 004 |
| 41. Computer and new technologies in newspaper | . 283 | . 117 | . 152 | . 216 | . 510 | . 052 |
| 42. Health news in newspaper | . 057 | . 129 | . 030 | . 158 | . 474 | . 059 |
| 43. Healing herbs, food recipes in magazine | . 180 | . 012 | . 051 | . 140 | . 206 | . 734 |
| 44. Education, schools, and scholarship news in magazine | . 063 | . 018 | . 030 | . 042 | . 102 | . 638 |
| 45. Health news in magazine | . 130 | . 256 | . 027 | . 016 | . 003 | . 562 |
| 46. Computer and new technologies in magazine | . 025 | . 054 | . 033 | . 075 | . 093 | . 561 |
| 47. Travel and holiday news in magazine | . 003 | . 030 | . 182 | . 139 | . 007 | . 551 |
| 48. Entertainment news in magazine | . 063 | . 017 | . 140 | . 016 | . 154 | . 542 |
| 49. Product, service, and brand news in magazine | . 141 | . 056 | . 056 | . 085 | . 087 | . 511 |
| 50. Occupation and job application new in magazine | . 086 | . 046 | . 066 | . 035 | . 056 | . 392 |

Note: Bold indicates a significant factor loading identifying the item and factor associated with it. All items shared a common prompt: "Indicate how much you agree with each option by marking the appropriate response" and were measured with a 5 -point Likert-scale ranging from "I never use" to "I often use".
the ones who viewed television for more hours. The hours of listening to the radio ( $\beta=0.568, p \leq 0.05$ ) ( $R^{2}=0.323$ ) was positively associated with using radio. Increased newspaper reading ( $\beta=0.355, p \leq 0.05$ ) ( $R^{2}=0.126$ ) was positively associated with using newspaper. Increased magazine reading ( $\beta=0.435, p \leq 0.05$ )
( $R^{2}=0.190$ ) was positively associated with using magazine. The exception is Internet which was not associated with more hours of Internet usage for information gathering $(\beta=0.196, p>0.05)\left(R^{2}=0.038\right)$. H1 a, b , $c$, and d were confirmed; but e was rejected.

Table 5. Regression Results for Media Using and News from Media

|  | TV | Radio | Newspaper | Magazine | Internet |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | viewing | listening | reading | reading | using |
| TV | $.500^{* * *}$ | .066 | .038 | .150 | .091 |
| Radio | .053 | $.568^{* * *}$ | .030 | .042 | .017 |
| Newspapers | .058 | .009 | $.355^{* * *}$ | .035 | .042 |
| Magazines | .032 | .018 | .070 | $.435 * * *$ | .130 |
| Internet | .034 | .087 | .011 | .058 | .196 |

${ }^{*} p \leq 0.05,{ }^{* *} p \leq 0.01,{ }^{* * *} p \leq 0.001$

## Hypothesis 2

H2 states that young adults get news and information from (a) the Internet and (b) their family and friends more than other types of media. The comparison of the mean scores of six types of media showed that young adults got news and information from the Internet ( $\mathrm{M}=4.69, \mathrm{SD}=.39$ ) and family and friends ( $\mathrm{M}=3.56, \mathrm{SD}=.84$ ) more than other types of media, namely TV ( $\mathrm{M}=3.06, \mathrm{SD}=1.04$ ), newspapers ( $\mathrm{M}=2.55, \mathrm{SD}=.89$ ), magazines ( $\mathrm{M}=2.17, \mathrm{SD}=.88$ ), and radio ( $\mathrm{M}=1.74, \mathrm{SD}=.79$ ). H 2 was confirmed.

## Research Questions

## Research Question 1

Research question 1 elicits information if time spent with a certain medium in general increases or decreases time spent with another medium. A zero-order correlation was conducted to find an aswer to research question 1 as well as to find a possible connections among major variables.

SNS using frequency was negatively correlated with the number of SNSs ( $\mathrm{r}=-.247$; $\mathrm{p}=.018<.05$ ) and with the year of using SNSs ( $\mathrm{r}=-.265$; $\mathrm{p}=.012<.05$ ). SNS users whose frequency of connecting to the SNSs was less, had more number of SNSs, more experience of using SNSs. In other words, SNS users who frequently connected to the SNSs, had less number of SNSs, and less experience of using SNSs. Because they have less experience and number of SNSs, they may have nee-
ded to frequently connect to the SNSs to learn and get enough experience of using it.

SNS using frequency was positively correlated with Internet using frequency ( $\mathrm{r}=.269 ; \mathrm{p}=.010<.05$ ). That is, youngsters who frequently connected to the Internet, connected it for mainly using SNSs. SNS connection hours were positively correlated with Internet connection hours ( $\mathrm{r}=.387$; $\mathrm{p}=.000<.05$ ), but it was negatively correlated with SNS using years ( $\mathrm{r}=-244$; $\mathrm{p}=.021<.05$ ). Less hours of Internet using resulted in less hours of SNS usage: This result supports the notion that individuals used the Internet heavily for connecting to SNSs. Experienced SNS users spent less time on SNSs; while less experienced users spent more time on them. This finding confirms the findings on negative correlation for SNS using frequency, the number of SNSs, and the year of using SNSs.

The more numbers of friends and followers on SNSs were positively correlated with the number of SNS ( $\mathrm{r}=.330 ; \mathrm{p}=.001<.05$ ) and the years of using SNS ( $\mathrm{r}=.462 ; \mathrm{p}=.000<.05$ ). Having the more number of SNS generated a great number of SNS friends and followers. Similarly, experienced SNS users had a vast number of friends and followers.

Radio listening hours and SNS using hours were negatively correlated to each other ( $\mathrm{r}=-.272$; $\mathrm{p}=.010<.05$ ). Users who used SNSs for more hours were the ones who listened to the radio for less hours.

Table 7. Zero-order Correlation of Major Variables

|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1.Internet <br> Years |  |  |  |  |  |  |  |  |  |  |  |
| 2.Internet <br> freq. | .119 |  |  |  |  |  |  |  |  |  |  |
| 3.Internet <br> hrs. | -.138 | .131 |  |  |  |  |  |  |  |  |  |
| 4.Number <br> soci. med. | .096 | -.118 | -.088 |  |  |  |  |  |  |  |  |
| 5.Soci. med. <br> Year | $.207^{*}$ | .083 | -.036 | .186 |  |  |  |  |  |  |  |
| 6.Soci. med. <br> freq. | -.011 | $.269^{* *}$ | -.010 | $-.247^{* *}$ | $-.265^{* *}$ |  |  |  |  |  |  |
| 7.Soci. med. <br> hrs. | -.110 | .059 | $.387^{* * *}$ | -.012 | $-.244^{*}$ | .193 |  |  |  |  |  |
| 8.Friend, <br> Followers | -.004 | .021 | .004 | $.330^{* * *}$ | $.462^{* * *}$ | $-.375^{* * *}$ | -.095 |  |  |  |  |
| 9.TV view <br> hrs. | -.079 | .158 | .141 | -.097 | -.018 | .142 | -.180 | -.070 |  |  |  |
| 10. Rd liste <br> hrs. | .060 | .038 | -.024 | .064 | .025 | -.008 | $-.272^{* *}$ | .102 | .136 |  |  |
| 11.Newsp <br> read. freq. | -.079 | .035 | .014 | -.174 | .056 | .031 | -.063 | -.059 | .145 | -.096 |  |
| 12. Magaz <br> read. freq. | .157 | .042 | .022 | -.059 | -.043 | .156 | -.040 | .130 | .059 | -.008 | .190 |

${ }^{*} \mathrm{p} \leq 0.05,{ }^{* *} \mathrm{p} \leq 0.01,{ }^{* * *} \mathrm{p} \leq 0.001$

## Research Question 2

Research question 2 asks if use of the Internet for getting news and information increases or decreases use of other media for getting news and information. According to the correlation analysis results, there wasn't correlation between Internet and television ( $\mathrm{r}=.178 ; \mathrm{p}=.090<.05$ ), Internet and family friends ( $\mathrm{r}=.145$; $\mathrm{p}=.173<.05$ ), Internet and radio ( $\mathrm{r}=-$ .124; $\mathrm{p}=.246<.05$ ), Internet and newspapers ( $\mathrm{r}=.036$; $\mathrm{p}=.737<.05$ ), Internet and magazines ( $\mathrm{r}=-.096$; $\mathrm{p}=.366<.05$ ) for obtaining daily news and information. In other words, none of those media displace each other for collecting news and information. Because media displacement effect was not found for the Internet and other types of media, the possibility of media displacement and/or media complementary effect was investigated among different types of media with zero-order correlation (See Table 8).

There were positive correlations between family \& friends and magazines ( $\mathrm{r}=.342 ; \mathrm{p}=.001<.05$ ), and family \& friends and TV ( $\mathrm{r}=.359 ; \mathrm{p}=.001<.05$ ). When participants' news gathering from their near surrondings increase, their news gathering from magazines or TV increases too.

Similar positive correlation was found between radio and magazines ( $\mathrm{r}=.419 ; \mathrm{p}=.000<.05$ ); radio and TV ( $\mathrm{r}=.262 ; \mathrm{p}=.013<.05$ ); and radio and family \& friends ( $\mathrm{r}=.296 ; \mathrm{p}=.005<.05$ ). The participants whose usage of radio listening increase for getting news, their magazine reading, TV viewing, and talking with their family \& friends also increase to get news and information from them.

Finally, newspapers and television ( $\mathrm{r}=.447$; $\mathrm{p}=.000<.05$ ), newspapers and family \& friends ( $\mathrm{r}=.250 ; \mathrm{p}=.018<.05$ ), and newspapers and radio ( $\mathrm{r}=.351 ; \mathrm{p}=.001<.05$ ) were also positively correlated. In a similar fashion, the participants who read newspapers also watch TV, listen to the radio, and talk to their surrondings for obtaining news and information.

## Conclusions, Discussions, and Recommendations

The participants' media usage (viewing, reading and listening hours) affected their daily information and news gathering from these media. The more they had a habit of using the certain type of media in their

Table 8. Zero-order Correlation of Media

|  | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1. Internet |  |  |  |  |  |
| 2.Magazines | -.096 |  |  |  |  |
| 3.TV | .178 | .201 |  |  |  |
| 4.Family \& Friends | .145 | $.342^{* * *}$ | $.359^{* * *}$ |  |  |
| 5.Radio | -.148 | $.419^{* * *}$ | $.262^{* *}$ | $.296^{* *}$ |  |
| 6.Newspapers | .036 | .094 | $.447^{* * *}$ | $.250^{* *}$ | $.351^{* * *}$ |

${ }^{*} \mathrm{p} \leq 0.05,{ }^{* *} \mathrm{p} \leq 0.01,{ }^{* * *} \mathrm{p} \leq 0.001$
daily activities, the more they obtained news and information (e.g., health, daily news, weather, finance, and so on) from this media. As a result, there was no cross media effect. Which media type the participants choose to view, listen to or read, this becomes their primary source of information. However, the Internet using and news obtaining from Internet was not supported.

Different media may serve the same functions for users; new media and its new function and usage eventually drive traditional media out of existance (McCombs, 1972; Nguyen \& Western, 2006). Listenning to radio music for the function of escape or entertainment can be replaced by using and spending time on SNSs. Therefore, they may serve the same functions. However, using Internet for news and information gathering didn't displace the traditional media for the same function. In other words, Internet use for information gathering didn't displace existing modes of media, since the displacement effect of the Internet was not significant. However, other types of media supplemented or complemented each other. It might be due to the fact that each medium is special for satisfying different functional needs (Nguyen \& Western, 2006) for collecting news and information and cannot be replaced by one another. Another possible explanation of this might be as Kitamura (2013) says while users using the Internet to get daily information and news they don't use it efficient and effective enough; thus, in turn, this insufficient information gathering may need further complementary or reinforcement effect from other modes of media. Insufficient use of not only Internet but also traditional media for getting news might be possible among young adults in this study, and this in turn may result in complementary effect of each traditional medium.

Albarran et al (2006) found in their studies that MP3 players were preffered over traditional media; the result of this study extends their study by including SNSs and confirms that heavy SNS users listened to the radio less. Widespread use of new technologies is a threat to traditional use of media and this threat should be turned into opportunities as in the case of Samsung, Panasonic, and Sony. Soon after young generations' use of Internet for connecting to SNSs increased, those brands for TV adapted their technologies to allow SNS users for the connection to SNS sites on their television sets. Thus, radio stations should find a way to turn this threat into an opportunity, as much as the characteristics of the radio stations allow them to do so. The case of traditional newspapers is a good example for turning threat into opportunites as they have taken the advantage of the Internet and found a way to gain competitive advantage by offering electronic newspapers which have the strength of newspaper and television news (Li, 2003). We can see the online versions of traditional newspapers as well as blogs such as the Huffington Post which is one of the most visited blogs in the US and the Observer newspaper of London wrote about it "the most powerful blog in the world". Those online newspapers and blogs have become important especially for obtaining political news and have influence on shaping the minds of the majority of people including the opinion leaders.

Both opening new SNS accounts and by that way having more numbers of SNSs, and having experience of using SNSs have positive effects on owing a great deal of online social connections, friends and followers. However, less experience on SNS usage and having less number of SNSs may put pressure on young adults' shoulders and in order to reduce the lack of
experience and the gap in the number of having friends (compared to their peers who have more friends and experience), they may frequently connect to the SNSs. They may see it as a new trend and may believe that it contributes to their popularity which may be worth for further investigation.

Although, young adults use the Internet heavily for connecting to SNSs, when compared to six leading medium specifically to gather news and information, the Internet was found to be the most used medium (and face-to-face communication followed it). Compared to other types of media, radio was the least used medium. According to the media richness theory, to be a rich medium, media shoud have a capacity to give immediate feedback to its audiences and it should be personalized; therefore, the Internet in addition to face-to-face communication are considered as the richest media (Daft \& Lengel, 1986). The Internet as one of the richest media offers to its users convenience to reach sources of information. Furthermore, it is more personal media and immediate feedback can be given when it is compared to traditional media. Thus, participants agreed that they used the Internet as their main source of news and information. As it was expected, getting news and information from family \& friends was the second most used media environment after the Internet. Although, the result was consistent with the media richness theory, it was not consistent with the findings by Parker and Plank (2000) whose study's resulted in overwhelming dependence on print media for information needs. There may be many factors played a role for the different results; however, the main reason for this difference may be because of more than a decade passed since Parker and Plank's research. During these periods of time, people started to see digitalization in every aspect of their lives.

The main limitation of this study is that young adults' time spent with their family and friends was not asked them and therefore it was not assessed for their daily news and information obtaining. In further studies, younger and older generations' media usage and habits not only for news but also entertainment may be compared to each other to get more detailed and comprehensive results.

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