

**The Role of Recreational Media Use in Youth Socialization:
Extending the Citizen Communication Mediation Model**

Min-Woo Kwon, University of Wisconsin at Madison, USA

Dave Wilcox, University of Wisconsin at Madison, USA

Dhavan V. Shah, University of Wisconsin at Madison, USA

Abstract

By analyzing data from a national panel survey of adolescents (age 12-17) conducted around the 2008 general election, this study explores the varied roles of television, online gaming, the Internet, and interpersonal communication in youth socialization. In particular, this study proposes and tests an advanced citizen communication mediation model by adding recreational media use, soap opera viewing and playing (social) online game. The conceptualized model of this study is composed of a set of media use types such as informational and recreational media use, interpersonal communication on social issues offline and online. The findings of this study indicate that informational media use such as television news and online news consumption as well as interpersonal communication regarding social issues play a crucial role in youth socialization. In addition, this study found mixed roles by use of recreational media in the outcome, through interpersonal communication activities both offline and online.

Keywords: Television, Recreational Media Use, Online Game, Media Effect, Youth Socialization, Internet, Interpersonal Communication, the Citizen Communication Mediation Model

Over the past three decades, the gap between younger and older generations in social participation such as engaging in community activities and voting has generally grown wider in most Western democracies, even though some reverse trends have occurred (Shah, Rojas, & Cho, 2009). That is, younger citizens have engaged in social participation at lower levels than previous generations. In line with the argument of Shah, Rojas, et al. (2009), Twenge, Campbell, and Freeman (2012) recently offered evidence supporting this trend. In an analysis of longitudinal data, they found that the degree to which American young people (e.g. teenagers and young adults) make contributions to their society, as evidenced in actions such as charitable donation, fund raising, and community services, has declined slightly. However, this declining trend moves younger citizens toward the sidelines in their communities, and this segregation from the greater community hinders the democratic system's ability to fulfill the collective demands of society (Ødegård & Berglund, 2008). This potential risk to the health of American democracy has drawn increasing concern and attention among political science and sociology scholars (Campbell & Kwak, 2010). Participation in social activities (e.g. charitable donations, volunteer work, community activities, and voting) are crucial for any democracy (Krampen, 2000) because social participation strengthens norms of obligation and cooperation, and encourages additional involvement in community life (Ostrom, 1990; Putnam, 1995a, 1995b; Shah, Kwak, & Holbert, 2001). In line with this notion, Flanagan and Sherrod (1998) indicated that civic (and political) participation is considered a prerequisite for a successful democracy. In addition, research in political science has been more focused on interventions further enhancing the level of civic engagement among young people (i.e. youth socialization) (McLeod, 2000). As Niemi (1973) highlighted that political thoughts and participation are “like the consumption of cigarettes and hard liquor-do not suddenly begin with one's eighteenth birthday” (p. 117), it is very important for any democracy to educate young people and experience democratic activities in advance. In addition, previous research indicates that younger generations are particularly apathetic to civic and political life (Lee, Shah, & McLeod, 2012). For this reason, youth socialization has gained scholarly attention, specifically addressing the development of youth socialization for society and democracy.

With regard to the causes of the declining trend of citizens' involvement in society, Putnam (1995b) mentioned such factors as business, time pressure, residential mobility, and the breakdown of the family. In addition, Putnam (2000) concluded that among the possible causes for this declining social trend, television viewing is most to blame because the number

of hours Americans spend with television on a daily basis increased during the period of the decline. However, this conclusion is unconvincing among some communication scholars, who had already known about differences in media programming and media usage types as well as their distinctive effects (Cappella, Lee, & Southwell, 1997; Norris, 1996; Shah, 1998). To refute Putnam's argument regarding the cause (television) communication scholars have provided some evidence that certain types of television programming, such as watching television news programs, are positively associated with civic participation and political participation. Communication scholars have also found that informational media use such as reading newspaper on public affairs is positively associated with citizens' socialization (e.g. civic participation) (see McLeod et al., 2001; Shah, 1998; Shah et al., 2007; Shah, Cho, Eveland, & Kwak, 2005). In addition, communication scholars have explored the role of interpersonal communication (e.g., face-to-face discussion), finding that interpersonal communication on civic issues such as politics is positively related to participation in civic activities (e.g. voting, volunteer work, and community activities) (McLeod et al., 1996; Mutz, 2002; Mutz & Martin, 2001; Shah, McLeod, & Yoon, 2001). In an effort to further specify the role of media and interpersonal communication in citizens' social participation, Shah and colleagues (Shah et al., 2005) suggested the citizen communication mediation model based on the perspective of the communication mediation model (McLeod et al., 2001).

Although Shah and colleagues (Shah et al., 2005) expanded this perspective in terms of the role of media, especially information media use and communication in socializing citizens, this model did not address the role of recreational media use in the outcome. In terms of the effect of recreational media use on citizens' socialization, literature has contained mixed findings. While Shah, McLeod, et al. (2001) found the negative effect of the Internet use for recreation or entertainment (e.g. chatting room activities) on civic engagement, Shah (1998) found that certain types of television recreational media use (e.g. social drama) is positively associated with civic engagement (or social participation). Although certain types of recreational media use play an important role in the development of citizens' socialization, recent research on this topic seems not to consider the role of recreational media use on the outcome.

Given the centrality of the issue, youth socialization, and the potential importance of the media-communication roles in youth socialization, the principal purpose of this study is

twofold: (1) to identify (media/communication-oriented) factors facilitating youth social participation and (2) to assess the effect of recreational media use on the outcome.

Literature Review

Citizen Communication Mediation Model

The citizen communication mediation model suggested by Shah et al. (2005) is grounded in the perspective of the communication mediation model proposed by McLeod and colleagues (McLeod et al., 2001). One of the strengths of the communication mediation model is the integration of factors of media use and interpersonal communication on civic issues into a casual mechanism to predict individual's social participation (e.g., charitable donation, participation in community projects and boycott campaign) (Cho et al., 2009). This model found that informational media use (e.g. newspaper reading and television news consumption) and interpersonal communication regarding public affairs in general and politics in particular has a crucial and positive role in individual's socialization. However, this model lacks information about the role of new communication technologies (e.g., the Internet) on the behavioral outcomes (e.g. participation in volunteer work). In an effort to further specify and identify the role of the new communication technology media in citizen's participatory behavior in society, Shah and colleagues (Shah et al., 2005) suggested the citizen communication mediation model, by adding the role of the Internet on the outcome.

The citizen communication mediation model theorized and found that the role of media use for information in citizens' participation is strong but generally indirect for civic participation through the impact of interpersonal communication (Shah et al., 2005). In other words, the citizen communication mediation model found the indirect effect of informational media use online and offline (e.g., online news consumption, TV hard news consumption, and newspaper on public affairs) on the index variable of democratic citizen activities such as civic and political participation, and the mediational effect of interpersonal communication both offline (e.g., face-to-face discussion on social issues) and online (e.g., emails, interactive messaging, and online activities in a discussion board in terms of social issues) between the informational media use and the citizen democratic behavior (Shah et al., 2005). In short, the frequency of informational media use may increase opportunities in terms of interpersonal communication with others on civic issues, both offline and online, and the frequency of interpersonal discussion on civic issues with others may expose citizens to a variety of

opinions on social issues, leading to a higher degree of interest in social problems and citizen actions addressing these problems (Cho et al., 2009; Gastil & Dillard, 1999).

Although the citizen communication mediation model has strong potential for explanation of the role of informational media use and interpersonal communication on citizen's participatory behavior, regardless of online and offline, this model lacks the role of recreational media use (or entertaining media use) on the outcome. In addition, many previous studies on this framework have been constructed with adult samples, leaving uncertain whether the same manner occurs among adolescents (Lee et al., 2012). Therefore, considering the recreational media use in the citizen communication mediation model as well as the use of an adolescent sample in the model, are necessary next steps.

Communication Competence and Conceptualization

Many competencies are necessary for participation in democracy and public life. These competencies provide young citizens with the capacity to enter into public life with confidence, and they are powerful predictors of a range of participatory behavior (Lee et al., 2012). Among a variety of elements of youth socialization, this study considers communication competency as a key factor in encouraging youth social participation. Through a comprehensive literature review, this study found that communication competencies include news consumption of public affairs via broadcast, print, and online sources; recreational media use; media use for building and maintaining relationships with others; interpersonal communication either on social issues and everyday life both in a face-to-face manner and on the Internet; and democracy-related activities at home, in school, and among peers. Given the findings of previous research, this study will explore the roles of three key agent groups leading to youth socialization: (1) family/school/peer; (2) traditional/new media; and (3) interpersonal communication offline and online.

Family/School/Peers

Classroom Activities and Concept-Oriented Family Communication

Schooling plays a crucial role in youth civic engagement and achieves excellent results in fostering civic engagement (Torney-Purta, 2002). This is especially the case when schools rigorously teach civic principles and skills to students, make an open classroom climate for discussion and debate on civic issues, and encourage students to participate in school-based

democracy activities including political processes. For example, in terms of discussion climate in class, Hess (2002) indicated that discussion of controversial public issues may enhance students' willingness to participate in the political world. This logic may also be found within the family context. In other words, frequent discussion with family members may enhance students' willingness to participate in the political world. In line with the notion, McLeod (2000) indicated that communicative activities within the family are thought to play an important role in young people's engagement with political life. Given this finding and implication, our study also posits that the family discussion climate affects young people's willingness to be civically engaged. In addition, McFarland and Thomas (2006) suggested that politically-related curricular/extracurricular activities, such as learning about how government works and participation in political role playing within the context of school, play an important role in the process of youth political socialization.

To explore the role of school and family in socialization, the present study refers to classroom activities as activities related to democracy or politics within the context of school. Additionally, this study conceptualizes concept-oriented family communication as an open discussion climate in the household. It refers to children's contribution to family decisions via family conversation and acceptance of disagreement between children and adults.

Opinion Leadership

Opinion leadership was first introduced by Lazarsfeld and colleagues in 1944 (Lazarsfeld, Berelson, & Gaudet, 1944), and scholarly interest has encouraged political communication researchers to explore this concept and its contribution to civic engagement (Shah & Scheufele, 2006). With respect to opinion leadership, Noelle-Neumann (1999) argued that "personality strength—that is, individuals' self-perceived leadership qualities and aptitude at shaping others' opinions—is directly relevant to research on political action and civic engagement" (cited in Shah & Scheufele, 2006, p. 2). However, Shah and Scheufele (2006) indicated that whereas the roles of demographics, social structural factors, and communication patterns on civic engagement have been well studied, considerably less attention has been paid to the certain personality-related features promoting civic engagement.

To investigate the effect of the concept on the current study's outcome variables, this study follows Hellevik and Bjørklund (1991) definition of opinion leader as “a person who exerts influence on the opinions of others” (p. 158).

Media Use

News Media Use

Previous research has found that the use of television for hard news, excluding entertainment news such as gossip news about celebrities, has substantial direct and indirect effects on civic and political participation. With respect to news media consumption, Shah and colleagues (2007) indicated that news media use may encourage knowledge and awareness regarding society issues, and provide a resource for discussion on civic issues. In turn, these types of discussion may help citizens solve collective problems and encourage involvement in society (Shah et al., 2007; Walsh, 2004). In addition, recent research on the effects of online news use indicates that the online news media consumption positively affects political participation either directly or indirectly (e.g. Shah et al., 2007; Cho et al., 2009; Gil de Zúñiga, Veenstra, Vraga, & Shah, 2010). Building on these findings, this study suggests that TV hard news use and online news consumption will be positive predictors of civic engagement. In the study, *news media use* refers to the news consumption on civic issues.

Entertainment Media Use

The relationship between media use for entertainment and engagement in civic life has been of increasing research interest (Shah, McLeod, et al., 2001). In general, research has shown media use for entertainment to have a negative effect on civic engagement. For instance, Sotirovic and McLeod (2001) observed a negative association between sitcom viewing and the willingness to participate politically. However, certain types of recreational media use generated positive effects on social outcomes (Cappella et al., 1997). For example, Shah (1998) found a positive association between social drama viewing and civic participation.

To further investigate and clarify the effect of recreational media use, in this study recreational media use refers to media use centering on high action, imaginative fantasy, and a diversion from real world that satisfies an entertainment need.

Interpersonal Communication

Face-To-Face Communication on Social Issues

Recent research indicates that interpersonal communication among citizens plays a crucial role in civic and political participation. In the context of political communication, Pan and colleagues (Pan, Shen, Paek, & Sun, 2006), using National Election Study panel data, found that political discussion with family and friends positively affects political campaign participations. In addition, with national panel survey data sets drawn in 1999, 2000 and 2002, Shah and colleagues (2005; 2007) found that frequency of political discussion with family and friends is positively associated with civic participation. Given the findings of previous studies, this study posits there are similar consequences in terms of the relationships between two types of discussion on civic issues including political issues and social participation. In the study, face-to-face (FtF) interpersonal communication on civic issues refers to FtF discussion of civic issues in order to communicate (or exchange) one's ideas, thoughts, and feelings with family, friends, or other people.

Interactive Civic Messaging

Communication researchers have more recently directed their attention to citizens' interactive communication via Internet and mobile devices (e.g., Campbell & Kwak, 2010; Correa, Hinsley, & de Zúñiga, 2010; Gil de Zúñiga et al., 2010) recognizing the substantial changes in communication technology, in turn, affecting the relationships between media venues and citizens' civic engagement. Interactive civic messaging offers many of the same potential benefits and effects as face-to-face interpersonal discussions serving as civic engagement (Shah et al., 2005). Further, Shah et al. (2007) found that online activities such as using email to coordinate community activities and communicate with a politician or a news editor, participating in chat rooms or online forums, and expressing opinions online are all positively associated with civic participation and political participation. Given these findings, this study suggests that the logic of online activities will hold in the present study. In this study, interactive civic messaging refers to online activities in terms of communication-oriented activities on civic issues with other people.

Participation

Civic Participation

As an important and crucial individual-level determinant of community engagement and integration, civic participation has received attention from social science scholars (Brehm & Rahn, 1997; Erickson & Nosanchuk, 1990; Shah et al., 2005; Sullivan & Transue, 1999; Uslaner, 1998). Civic participation refers to individual or collective actions designed to identify and address the issues of community concern. In terms of the construction of civic participation, relevant literature indicates that civic participation includes a wide range of activities ranging from a charitable donation to working with others to address problems in the community. Given these meanings, in this study civic participation is represented as individual or collective civic activities for positive community building.

Political Participation

Political participation can be defined as “activity that has the intent or effect of influencing government action - either directly by affecting the making or implementation of public policy, or indirectly by influencing the selection of people who make those policies” (Verba, Scholzman, & Brady, 1995, p. 38). As such, political participation is referred to as a mechanism by which citizens can let government and politicians know their interests and needs and can strongly generate pressure on various elements of the social system to deal with its inadequacies for citizens (Cho & McLeod, 2007).

Theoretical Model

With respect to relationships between communication competence factors and civic engagement, this study follows the causal mechanism of the citizen communication mediation model. In other words, the newly theorized model offered in this study is constructed based on the findings of previous studies and the assumption of the citizen communication mediation model. Given past findings and assumptions, this study posits that the frequency of informational media use (offline and online) may increase the opportunities for interpersonal discussion with others on civic issues (offline and online), positively affecting citizens’ social participation in civic life. The sequential order from informational media use (to interpersonal communication offline and online and then from the interpersonal communication factors) to civic engagement (e.g. civic participation and political participation) has been well documented (see Shah et al., 2005; Shah et al., 2007).

In addition, consistent with the research aims of this study, we also examine the role of recreational media use in youth socialization. Although the roles of news media use and interpersonal communication have been identified through the communication mediation-related models (e.g. the communication mediation model and the citizen communication mediation model), it is the first attempt of the integration of recreational media role in the model mechanism. Thus, this study put forth the following research question, instead of hypotheses.

RQ: To what extent do the types of entertainment media use, TV recreational media use and online gaming influence interpersonal communication, resulting in youth civic and political participation?

Recognizing there are many hypotheses tested in this study due to the construction on three competency factors, this study presents all hypotheses as well as the research question as a figure rather than in-text for purposes of clarity (see Figure 1).

Method

Data

This study tests the theorized model by analyzing data from a national panel survey of adolescent-parent pairs. This survey data was collected between May 20 and June 25, 2008, by Synovate, a commercial survey research firm, employing a stratified quota sampling technique to recruit respondents (Shah, McLeod, & Lee, 2009). To collect data, the survey firm aggregated contact information for millions of Americans from commercial list brokers, who gathered identifying information from a variety of sources such as drivers' license bureaus, telephone directories, and others. Study participants were provided with small incentives. The rates of research agreement varied across demographic categories. For instance, 5% to 10% of those classified as middle-class gave participation consent for the research, whereas less than 1% of urban minorities were recruited. Demographically balanced samples drawn from the pre-recruited survey pool of roughly 500,000 people were utilized for data collection, and stratified quota sampling procedures were employed. The sample was drawn to reflect the characteristics of the population within each of the nine census divisions in terms of household income, population density, age, and household size; and it was

further adjusted within a range of subcategories that include race, gender, and marital status in order to compensate for expected differences in return rates.

For the purposes of this study, a sample of 4000 households with children aged 12–17 was generated based on the processes and techniques above. First, parents in selected households were contacted via mail, asked to complete an introduction portion of the survey, and then asked to pass the survey to the 12–17-year-old child in the household who had most recently celebrated a birthday. This child answered a majority of the survey content and then returned the survey to the parents to complete a closing section and return the survey. Of the 4,000 mail surveys distributed, 1,325 responses were received, representing a response rate of 33.1%. Due to incomplete or inconsistent information, about 5% of the received responses were omitted (see Lee et al., 2012; Shah et al., 2005; Shah, McLeod, et al., 2009 for details).

Measurements

Civic Participation and Political Participation

Civic participation, which refers to activities involving community service, was measured by asking adolescent participants the frequency with which they engaged in volunteer work, community projects, and fundraising for a charitable cause. In addition, to measure the political participation of adolescents, this study assessed the four behavioral items by asking adolescents' electoral campaign participation through political displays, political event attendance, monetary contribution to a political campaign, and working for a political party or candidate. For the variables, an 8-point scale, ranging from 1 = 'not at all' to 8 = 'very frequently,' was used and an index was constructed by averaging the score from the items for civic participation (Cronbach's $\alpha = .85$) and political participation (Cronbach's $\alpha = .87$).

Face-To-Face Interpersonal Discussion on Civic Issues

The measure of interpersonal discussion on civic issues consisted of four questions gauging how often adolescent respondents talked about civic issues with family members, friends, adults outside their family, or people who disagreed with them. An 8-point scale, ranging from 1 = 'not at all' to 8 = 'very frequently,' was used and an index was constructed by averaging the score from these items (Cronbach's $\alpha = .89$).

Interactive Civic Messaging

This area was measured using four items that assessed how frequently adolescent respondents discussed civic issues by (1) exchanging emails with friends and family, (2) by reading comments by other people or comments posted on a news website or political blog, (3) by sending or receiving text messages about politics, (4) or forwarding or receiving a link to a political video or news article. An 8-point scale, ranging from 1 = ‘not at all’ to 8 = ‘very frequently,’ was used and an index was constructed by averaging the score from these items (Cronbach’s $\alpha = .88$).

Media Use

To measure adolescents’ media consumption in terms of news content and entertainment content, we assessed the frequency with which adolescents use the following four categories: two news content types (TV news viewing and online news use) and two recreational media types (recreational TV viewing and online game). Two items assessing adolescent participants’ exposure to national network news and local news programming measured TV news viewing. Online news use measurement consisted of three items assessing the frequency of visiting websites of national newspaper, TV news, and local newspapers. Recreational TV viewing was tapped by five TV programs that were ranked within top five TV programs in this survey frequently watched in typical week by adolescent participants: (1) Primetime comedy programs (e.g. Two & Half Men, The Office), (2) Primetime cartoon programs (e.g. Family Guy, Simpsons), (3) teen programs (e.g. Hannah Montana, Zoey 101), (4) Daytime cartoon programs (e.g. SpongeBob, Scooby-Doo), and (5) MTV programs (e.g. The Hills, Cribs, Real World). With respect to online recreational use (or online gaming), the measure is composed of three items assessing the number of days in a typical week respondents played online game on their own, with their friend(s), or someone available online. These media variables were measured on an 8-point scale, ranging from 1 = ‘None’ (for TV viewing) or ‘Not at all’ (for online game) to 8 = ‘7 days’ (for TV viewing) or ‘Very frequently’ (for online game), and an index was constructed by averaging the score from these items (Cronbach’s $\alpha = .85$ for TV news; $\alpha = .71$ for online news; $\alpha = .81$ for online game).

Concept-Oriented Family Communication

Concept-oriented family communication consisted of two items and measured by the degree of agreement with the following statements: “In our house, kids are often asked their opinions

about family decisions.” and “In our house, kids learn it’s OK to disagree with adults’ idea about the world.” The variables were measured on a 5-point scale ranging from 1 = ‘strongly disagree’ to 5 = ‘strongly agree.’ This variable was used as an index variable and constructed by averaging the score from the two items ($r = .45$).

Opinion Leadership

Opinion leadership, which concerns the extent to which adolescents perceive the importance of their existence in the peer group, was measured by a single item asking the degree of agreement to the corresponding statement: “My friends often seek my opinion about politics,” on a 5-point scale, ranging from 1 = ‘strongly disagree’ to 5 = ‘strongly agree.’

Classroom Activities

The classroom activities variable was comprised of five items gauging the extent to which adolescent participants experienced certain types of citizen behaviors in a society in class: (1) learning about how government works; (2) discussing/debating political or social issues; (3) participating in political role playing; (4) following the news as part of a class assignment; (5) being encouraged to make up their own mind about issues, on an 8-point scale ranging from 1 = “not at all” to 8 = “very frequently” (Cronbach’s $\alpha = .86$).

Control Variables

Some items were used as controlling variables to isolate the effects stemming from demographics (age, sex), family background (household income, parental education level of father and mother), the total time of media use (television and the Internet), home media environment in terms of multichannel TV and high-speed internet, and community integration (size of friendship network). These controlling variables were treated as exogenous variables in the communication mediation models of the current study. Although these control variables will be analyzed in the model, they will not be appeared in the model illustrations.

Statistical Analysis

The SEM was constructed using Mplus6.0. Because this study used some variables measured on Likert-type scale responses, which are, by definition, not normally distributed, this study analyzed the models with the MLR estimator, which is a robust full information ML

estimator, to handle the effects of non-normality on standard errors, and tests of model fit (Kaplan, 2009). The present study also analyzed the models on the assumption that missing data in this study were handled under the assumption of missing at random (Kaplan, 2009).

Results

Model Specification and Modification

Two structural equation models were produced to test the theorized associations. Based on the findings of previous studies, the present study started with a theorized full-path model and by fitting the theorized model, described in Figure 1, into the data. To refine the models, the study followed standard modification approaches (Bollen, 1987; Kline, 2010). On the approaches, the study removed statistically non-significant paths in each model to identify the best fitting model. The final modified models of the present study yielded a better fit than the originally theorized models. These modification processes produced parsimonious models fitted in the data without considerably changing the theorized relationships (Shah et al., 2007).

Effects on Civic Participation

Model Fit

Figure 2 indicates the Mplus estimates of the structural associations among family communication/leadership/classroom activities, media use, interpersonal communication variables, and civic participation. Overall, the finalized model was acceptable based on several goodness-of-fit statistics except for the chi-square value, which could be affected by sample size [$\chi^2 = 154.927$ ($df = 23$, $p < .001$); RMSEA = .067 (90% C.I = .057 and .077); CFI = .94; SRMR = .019].

Path Model

The path analysis of the civic participation model confirmed the existence of the effects of classroom activities, opinion leadership, and concept-oriented family communication on media usages, which, in turn, contribute to face-to-face discussion/interactive messaging. Then, both face-to-face discussion and interactive civic messaging encourage youth civic participation. In detail, the results of the study classroom activities have positive effects on TV news ($\gamma = .07$, $p < .05$), online news ($\gamma = .19$, $p < .001$), online game use ($\gamma = .12$, $p < .001$), interactive messaging ($\gamma = .05$, $p < .05$). Opinion leadership positively (and marginally) affected TV news ($\gamma = .05$, $p < .10$) and interpersonal discussion ($\gamma = .04$, $p < .10$). In addition,

opinion leadership is negatively associated with online news consumption ($\gamma = -.11, p < .001$). Concept-oriented family communication has a positive relationships with online game use ($\gamma = .05, p < .05$), and two negative relationships with online news ($\gamma = -.06, p < .05$) and recreational TV use ($\gamma = -.04, p < .10$). With respect to the relationships between media use variables and face-to-face discussion/interactive civic messaging, the TV news variable was positively associated with both face-to-face discussion ($\beta = .51, p < .001$) and interactive civic messaging ($\beta = .47, p < .001$). In addition, TV news consumption positively affected civic participation ($\beta = .13, p < .001$). Online news has positive effects on face-to-face discussion ($\beta = .05, p < .05$) and interactive civic messaging ($\beta = .04, p < .10$). TV recreational media use was positively associated with interactive messaging ($\beta = .06, p < .05$). Online game use positively affected interpersonal discussion in the study ($\beta = .07, p < .01$). Finally, both face-to-face discussion ($\beta = .44, p < .001$) and interactive civic messaging ($\beta = .13, p < .001$) have positive effects on youth civic participation.

Indirect Effects

Plus estimates of indirect effects suggest that classroom activities exerted a significant indirect impact on civic participation, operating through media and/or communication factors: 1) classroom activities \rightarrow TV news consumption \rightarrow civic participation ($\gamma = .008, p < .05$), (2) classroom activities \rightarrow TV news consumption \rightarrow face-to-face discussion \rightarrow civic participation ($\gamma = .015, p < .05$), (3) classroom activities \rightarrow online news consumption \rightarrow face-to-face discussion \rightarrow civic participation ($\gamma = .004, p < .05$), (4) classroom activities \rightarrow online game \rightarrow face-to-face discussion \rightarrow civic participation ($\gamma = .004, p < .05$), and (5) classroom activities \rightarrow TV news consumption \rightarrow interactive messaging \rightarrow civic participation ($\gamma = .004, p < .05$). With respect to the observed variable R^2 , 44.0% of the variance of the civic participation variable was accounted for by the model (see Figure 2).

Effects on political participation

Model Fit

Figure 3 indicates the results of structural equation modeling for political participation. Similar to the civic participation model fit, the political participation model yields an acceptable fit to the data, with an estimated chi-square value of 152.10 ($p < .01$), 24 degrees of freedom, and other goodness-of-fit indexes [RMSEA = .064 (90% C.I = .055 and .074); CFI = .951; SRMR = .019].

Path Model

The path analysis of the political participation model confirmed the existence of the effects of classroom activities, opinion leadership, and concept-oriented family communication on media usages, which, in turn, contribute to communication variables resulting in the increase in political participation. In detail, classroom activities have positive effects on media usage variables (TV news: $\gamma = .07, p < .01$; online news consumption: $\gamma = .19, p < .001$; online game: $\gamma = .12, p < .001$; interactive civic messaging: $\gamma = .05, p < .05$). In terms of opinion leadership, the variable positively (and marginally) affected TV news ($\gamma = .05, p < .10$) but the variable negatively affected online news ($\gamma = -.11, p < .001$). Concept-oriented family communication is positively associated with online game ($\gamma = .05, p < .05$) and negatively associated with online news consumption ($\gamma = -.06, p < .05$) and recreational TV viewing ($\gamma = -.04, p < .05$). With regard to the effects of media usages on political participation, the study found that TV news consumption has positive effects on face-to-face discussion ($\beta = .51, p < .001$), interactive civic messaging ($\beta = .47, p < .001$), and political participation ($\beta = .10, p < .01$). Next, Online news is positively associated with face-to-face discussion ($\beta = .05, p < .05$) and interactive civic messaging ($\beta = .04, p < .10$). The TV recreational media use variable is positively associated with interactive civic messaging ($\beta = .06, p < .05$). In addition, online game is positively associated with in face-to-face discussion ($\beta = .07, p < .01$). Finally, face-to-face discussion and interactive civic messaging have a positive effect on political participation ($\beta = .62, p < .001$ and $\beta = .13, p < .001$, respectively).

Indirect Effects

Plus estimates of indirect effects suggest that classroom activities exerted a significant indirect impact on political participation, operating via media/communication factors: classroom activities \rightarrow TV news consumption \rightarrow political participation ($\gamma = .006, p < .05$). Additional information regarding indirect paths is shown in Table 2. With respect to the observed variable R^2 , 61.0% of the variance of the political participation variable was accounted for by the model (see Figure 3).

Discussion

The present study confirms the contribution of the three competencies: a) concept-oriented family communication, opinion leadership, and classroom activities, b) news media consumption and recreational media consumption, and c) interpersonal communication on

civic issues, to civic engagement: civic participation and political participation. In addition, the results of the study provide support that the advanced communication mediation model helps to explain the role of media and communication in youth participatory behavior in society.

First, as expected and demonstrated in previous research, this study found that informational media use such as TV news consumption and online news consumption stimulates youth offline discussion with others and online communicative activities such as email and instant messaging on civic issues with others, which, in turn, promote youth civic participation and political participation. Given the findings, this study suggests that informational media use provides citizens with social issues that they feel to deserve their attention (Shah, 1998). However, in contrast to the findings of previous studies, this study found positive effects of recreational media use on communication factors: Face-to-face discussion on civic issues and interactive messaging on civic issues. In general, previous research on recreational media use has shown negative effects on civic life. For instance, Shah and colleagues (Shah, Kwak, et al., 2001; Shah, McLeod, et al., 2001) indicated that certain media use for entertainment and diversion can be related to decreased participation. In addition, some scholars also contend that the recreational Internet use may erode public involvement, finding that Internet use displaces face-to-face interactions, as is also the case with heavy television users (Nie, 2001). However, researchers also found some positive effects of recreational media use when they recognize the different content or programming type of the media use. With respect to recreational TV use, as mentioned above, Shah (1998) found that social drama viewing played a positive role in civic engagement, and interpreted this finding to be an indication that social dramas such as *Law & Order* and *ER* provide viewers with a different set of priorities in terms of serious social problems and pull their attention into reality, resulting in more active social participation. Along with the positive finding of the TV recreational media use, the positive findings may also occur in youth media life. In terms of youth civic life, literature has indicated that communication with peers and belonging to peer group (or peer group support) each play a crucial role in youth socialization and development. In terms of the contents of interpersonal communication with others, Geiger, Bruning, and Harwood (2001) found that individuals talked more about news and prime-time television programs than other types of programs. In addition, they found that older people were more likely to discuss news programs, whereas younger people were more likely to discuss niche TV programming such as soap operas, animation, and science fiction. That is, TV drama viewing

can serve as an instrument for a peer conversation opener, or a source for maintaining such peer discussion both online and offline. During conversation young people may talk about civic issues, resulting in youth social participation. Given the findings of this study and previous studies, this study suggests that the recreational TV viewing is not the monolithic dangerous factor that some scholars on civic engagement lead us to believe (Shah, 1998).

In a similar manner, this study also found positive effects of online recreational use (online gaming) on face-to-face discussion on civic issues. The findings of this study contradict Nie (2001)'s displacement logic that received early support from scholars that found Internet use results in both the decline in face-to-face interactions and the increase in social isolation. However, instead of the effect of online recreational media use focusing on the aggregate approach that associates gross time spent online recently scholars have focused on the environment and the trend in terms of online games among adolescents. In recent years, the most emblematic and popular type of game genres is networked games known as massively multiplayer online game (MMO) (Shen & Williams, 2011). Unlike traditional computer games in where users play games alone, the content of current popular online games is largely based on social interactions (Shen & Williams, 2011). Recently, Skoric and Kwan (2011) examined whether playing video games promotes one's network ties, bridging social capital (weak ties) and bonding social capital (strong ties), or neither. Then, they found that social gaming experiences, relative to playing of massively multiplayer online games (MMOs), were positively related with online bridging social capital, whereas MMO playing was directly associated with online bonding social capital. Given the findings of this study and that by Skoric and Kwan (2011), this study suggests that certain types of online recreational media use in the form of online games, which may be differentiated from other online recreational media use such as individualized gaming and watching video-related contents online (Kwak, Campbell, Choi, & Bae, 2011), are beneficial to youth socialization either directly or indirectly. However, this study calls for follow-up studies focusing on the effect of the recreational media use due to the positive-negative mixed findings, and the dearth of relevant research on online game.

With respect to classroom activities, as identified in previous studies, this study found the positive relationship with informational media use such as TV news and online news consumption. In contrast to the expectation of this study, classroom activities were positively

associated with online gaming. However, it is not an overly surprising finding because classroom activities were measured on youth activities in class such as participation in class discussion, which, in turn, influence on peer-tie-relationship, positively. Then, this impact plays an important role in online gaming because online gaming was considerably measured by online gaming with others. In addition, this study found positive effects of concept-oriented family communication on online recreational use. Given these findings, this study seems to suggest a democratic or open atmosphere in the home gives young people more opportunities to access to recreational media use. Along with the interpretation and finding, the study also supposes that the open atmosphere also play an important role in the decline in the news media use of youth, because generally adolescents prefer media use for entertainment to news media consumption.

With regard to the findings of opinion leadership, this study found an unexpected negative relationship between opinion leadership and online news consumption. Typically, previous studies have argued that opinion leaders are exposed at a considerably higher level to news media such as newspapers, TV news, and online news media. However, Nisbet (2006) found the similar (negative) result and indicated that this unexpected finding may result from the area of measurement. In typical, media exposure to news is constructed to measure time spent or frequency of use, rather than relative degree of attention to media exposure (Nisbet, 2006). However, this time-spent approach may not sufficiently measure the level of attention to news contents which previous research has found to much higher for opinion leaders (Nisbet, 2006). In line with the argument, previous research indicates that simple measures of time-spent may not capture qualitative differences in media use between leaders and non-leader (Levy, 1978). In this light, the unexpected results of this study regarding the role of opinion leadership on online news consumption are consistent with these previous assertions. For this reason, this study calls for follow-up studies to further investigate and identify the association between opinion leadership and media use for information, meaning that follow-up studies should apply a qualitatively different manner in research rather than the degree of media exposure (e.g. amount of time on media use).

Although the present study provides substantial support for the theoretical formulations suggested above, there are some limitations that provide opportunities for future research. Even though the theorized causal model was built on the findings of previous research, our

investigation was based on cross-sectional data. Because data analysis with a cross-sectional data set lacks the ability to determine temporal sequence, causal relationships revealed in the study cannot be supported. Therefore, to address this concern, the present study recommends follow-up studies that investigate the media-mediation model with citizens' involvement in communities, to analyze longitudinal data. Second, in terms of recreational media use, this study employed some media items available in the survey. Specifically, the online recreational media variable was composed of three computer game-related items. This may have biased effects and in turn, may misinterpret the generality of the findings of the study. Therefore, follow-up studies should consider and employ a wide range of entertainment media use items in their future studies.

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Table 1. Descriptive Statistics

Variable	N	%	Minimum	Maximum	M (SD)
<i>Age</i>	1231				
12 years old	177	14.4			
13 years old	190	15.4			
14 years old	247	20.1			
15 years old	239	19.4			
16 years old	200	16.2			
17 years old	178	14.5			
<i>Gender</i>	1246				
Male	629	50.5			
Female	617	49.5			
<i>Father's education</i>	1214				
Some high school	127	10.5			
Graduated high school	515	42.4			
Graduated trade school	148	12.2			
Graduated college	297	24.5			
MA, MS, PhD., MD. JD	127	10.5			
<i>Mother's education</i>	1268				
Some high school	55	4.3			
Graduated high school	562	44.3			
Graduated trade school	138	10.9			
Graduated college	410	32.3			
MA, MS, PhD., MD. JD	103	8.1			
<i>Political affiliation</i>	1105				
Strong democrat	43	3.9			
Democrat	339	30.7			
Independent	401	36.3			
Republican	274	24.8			
Strong Republican	48	4.3			

<i>Civic participation</i>	1.00	8.00	3.18 (2.07)
<i>Political participation</i>	1.00	8.00	1.25 (.82)
<i>Face-to-face interpersonal discussion</i>	1.00	8.00	3.55 (1.84)
<i>Interactive civic messaging</i>	1.00	8.00	1.40 (.94)
<i>Television news</i>	.00	7.00	1.79 (1.96)
<i>Online news</i>	.00	7.00	.41 (.77)
<i>Recreational TV use</i>	.00	7.00	2.25 (2.18)
<i>Online game use</i>	1.00	8.00	4.55 (2.28)
<i>Concept-oriented family communication</i>	1.00	5.00	3.61 (.92)
<i>Opinion leadership</i>	1.00	5.00	2.16 (1.12)
<i>Classroom activities</i>	1.00	8.00	3.51 (1.89)

Table 2. Indirect effects of four variables on civic participation and political participation

Variable		Estimate	S.E.
<i>Civic participation</i>			
CLA → TVN → CP	*	.008	.004
CLA → TVN → FID → CP	*	.015	.006
CLA → ON → FID → CP	*	.004	.002
CLA → OR → FID → CP	*	.004	.001
CLA → TVN → ICM → CP	*	.004	.002
<i>Political participation</i>			
CLA → TVN → PP	*	.006	.003
CLA → TVN → FID → PP	*	.021	.008
CLA → ON → FID → PP	*	.005	.003
CLA → OR → FID → PP	*	.005	.002
CLA → TVN → ICM → PP	*	.004	.002

NOTE: 1) * $p < .05$. ** $p < .01$. *** $p < .001$.

2) CP: Civic participation; PP: Political participation; CFC: Concept-oriented family communication; OPL: Opinion leadership; CLA: Classroom activities; TVN: TV news; TVR: TV recreational; ON: Online news; OR: Online recreational use; FID: Face-to-face interpersonal discussion; ICM: Interactive civic messaging.

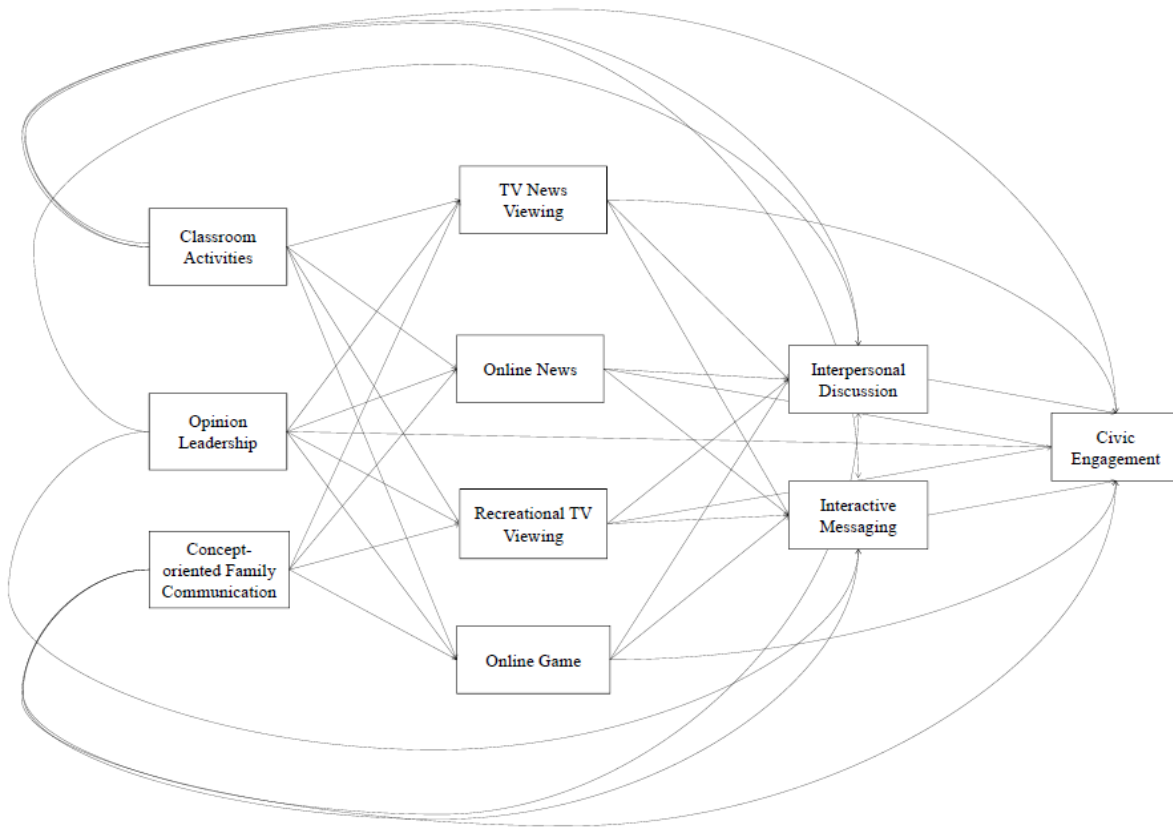


Figure 1. Theorized causal model for youth civic engagement: civic vs. political participation
Note. Each path except for paths from entertainment and online entertainment to interpersonal discussion, interactive messaging, and civic engagement: civic participation and political participation, indicates a positive association. The paths from recreational media use: recreational TV viewing and online game to communication variables: interpersonal discussion and interactive messaging indicate negative associations.

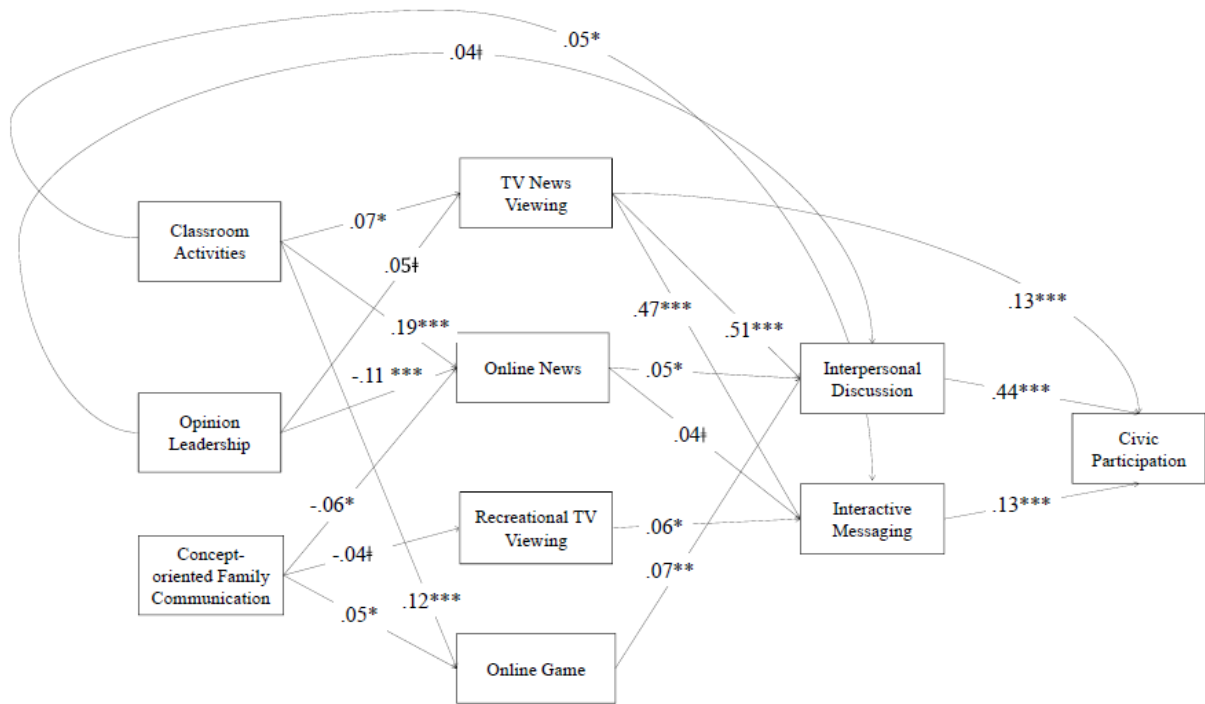


Figure 2. News-Entertainment Media mediation model for civic participation

Note. Only endogenous variables are shown. Standardized path coefficients are reported.

* $p < .05$. ** $p < .01$. *** $p < .001$.

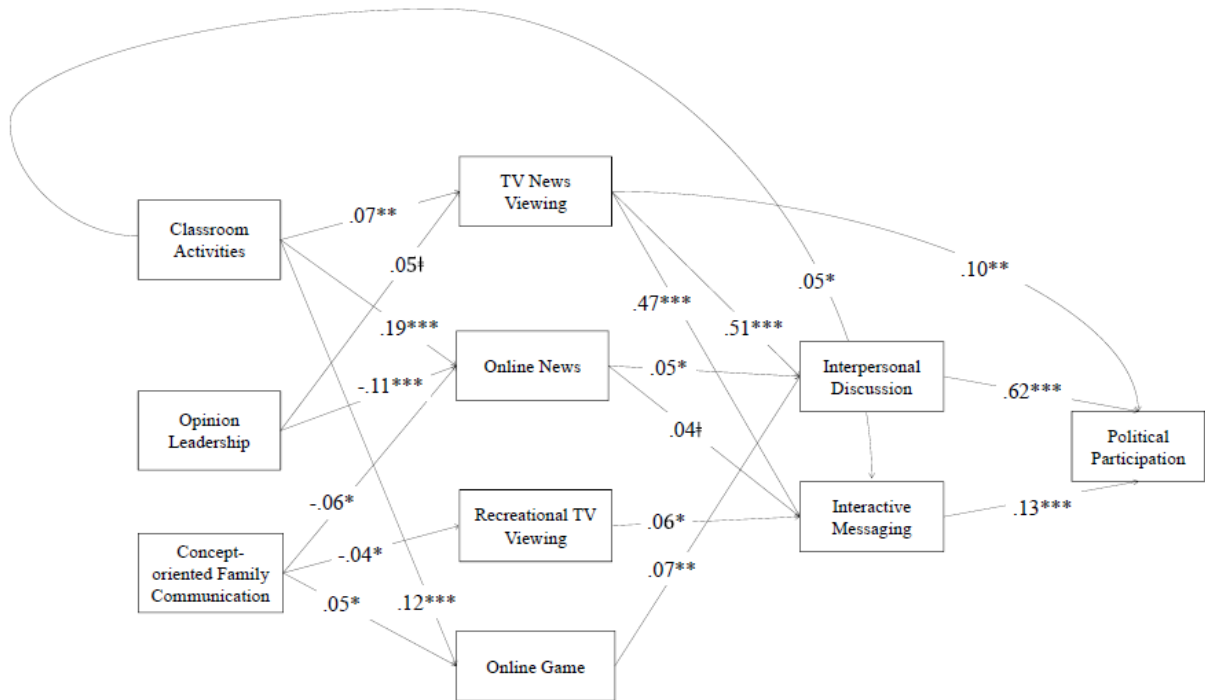


Figure 3. News-Entertainment Media mediation model for political participation

Note. Only endogenous variables are shown. Standardized path coefficients are reported.

* $p < .05$. ** $p < .01$. *** $p < .001$.