

## How Japanese Newspapers Contribute to Community Engagement

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Community Engagement, Media Use, Newspapers,

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### Abstract

This work aims to investigate how Japanese newspapers contribute to community engagement. Ninety percent of households in Japan subscribe to newspapers. Moreover half of Newspaper circulation is concentrated on major newspapers whose head-quarters are located in a few major cities such as Tokyo and Osaka. Nation-wide news and topics are the main content of these major papers. This style is similar to Japanese TV programs. As prior studies have shown, not nation-wide mass media but localized media such as community radio, contributes to community engagement as a part of production of social capital. This study quantitatively investigates the impact of newspapers by comparing them with other media such as TV, radio, magazines, PCs and mobile phones.

The result of the regression shows that the impact of newspapers is different from that of TV. The former is positively correlated to community engagement; on the other hand, the latter is negatively correlated. Although a large part of Japanese newspapers traditionally focus on national news, the result suggests that they also support everyday life activities in local communities. Furthermore, new digital media affects community engagement negatively. The length of PC and mobile phone use negatively correlates to community engagement. The authors discuss factors that could cause these different effects of the above media on community engagement.

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1. Introduction<sup>1</sup>

This work aims to investigate how Japanese newspapers contribute to community engagement. Moreover half of their circulation is concentrated on major newspapers whose headquarters are located in a few major cities such as Tokyo and Osaka.

Japanese newspapers are characterized by a large circulation and delivering system. As Hatanaka and Hayashi (2012) pointed out, 21 Japanese newspapers are ranked within the top 100 world-wide (Table. 1), and all of these are national papers. According to WAN 『World Press Trends (2009)』, the Japanese newspaper total circulation is the ranked third place next to China and India, which have enormous populations. Furthermore, even the circulation of one Japanese newspaper company is large. The rate of the home delivery system is also notable. About 95% of households use the home delivery system in Japan (Table. 2), contributing to their enormous circulation.

Additionally, Japanese newspapers have a high level of support regarding in local information. The Japan Newspaper Publishers & Editors Association (2011)<sup>2</sup> did a survey for newspapers, tv, radio, magazine, and Internet. As a result of this research, newspapers get the highest support in the field of ‘everyday topics’ and ‘coherence for local community’ among the five media. In addition to this, articles on local information are ranked fifth place within 20 kinds of articles that readers usually read. From this survey,

we could say that newspapers in Japan are strongly related to everyday life and the local community. In this paper, the authors aim to examine the effects of newspaper on community engagement.

Table 1 World's 100 Largest Newspapers

Rank	Title	Circulation (000)
1	Yomiuri Shimbun Japan	14, 067
2	The Asahi Shimbun Japan	12, 121
3	Mainichi Shimbun Japan	5, 587
4	Nihon Keizai Shimbun Japan	4, 635
5	Chunichi Shimbun Japan	4, 512
6	Bild Germany	3, 867
7	Sankei Shimbun Japan	2, 757
8	Canako Xiaoxi (Beijing) China	2,627
9	People's Daily China	2, 509
10	Tokyo Sports Japan	2, 425

Source: “World Press Trends (2005)”, World Association of Newspapers.

Table 2 The transition of home delivery rate in Japan

year	Home delivery	Meeting sale	Mail	Others
2012	94.94	4.57	0.04	0.45
2011	94.97	4.52	0.04	0.48
2010	94.86	4.6	0.04	0.5
2009	94.73	4.73	0.04	0.5
2008	94.6	4.84	0.05	0.51

1 This research is based on a presentation of “e-tech & e-case 2013”. This research paper was written by the first author. The author would like to express his gratitude to Tanaka, who gave advice on analyzing this data.

2 This research provide us many aspects of newspaper and its readers, such as time of reading, popular genres of articles, where and how people read newspaper, subscription time for newspaper etc.

2007	94.35	5.06	0.05	0.54
2006	94.32	5.09	0.05	0.54
2005	94.15	5.29	0.05	0.51
2004	93.94	5.47	0.05	0.54
2003	93.87	5.55	0.05	0.53
2002	93.8	5.63	0.05	0.52
2001	93.38	6.06	0.05	0.51
2000	93.49	5.95	0.05	0.5

Source: "The transition of home delivery rate in Japan," The Japan Newspaper Publishers & Editors Association.

## 2. Related literature

This section reviews previous studies related to our field of study.<sup>3</sup> Furthermore, the authors explain limitations of those studies and propose research questions of this paper.

### 2.1 Related literature

There are many studies on media use and social capital, and most of the studies in this field response to Putnam's "Bowling Alone" thesis (Shah et al., 2009, p.207). Putnam (1995, 2000) argued that society's social capital and the level of face-to-face association had declined because people tend to spend more time watching television in private. His study found that watching television is negatively related to social capital, whereas the same correlation with newspaper reading was found to be positive.

However, Putnam's study had been criticized by many researchers who pointed out Putnam selected TV use time as a variable. However, they showed that not only the media use time, but also the contents of TV programs is important. These results clarified that TV viewing of hard contents

had a positive effect on social capital indicators. For example, Norris (1996) investigated the impact of the media on civic engagement and political participation. The result showed that newspaper readership is significantly associated with six out of eight activities. Furthermore, Shah (1998) argues that the use of TV is not necessarily negative with regards to mutual trust and social capital; it depends on the type of television content. The relationship between TV and social capital seems to be dynamic and highly contextual. Shah (2009) review the researches on the relationships between civic participation and media use from the five points of view. Especially, in the part of "usage patterns, attending to disaggregated media effects on civic life", newspaper reading has a positive effect on political or community participation (McLeod et al., 1999; Sotirovic & McLeod, 2001). On the other hand, television watching is not the monolithic danger, but it is more conditional.

These arguments have been extended to the Internet, and studies on use of the Internet have been conducted in comparison with the use of TV and newspapers. Kraut et al (1998), argued that the Internet use had a negative effect on social involvement and psychological well-being. In a later follow-up investigation, a similar result was not observed. This result also found that people with a diplomatic character tend to participate more in their communities. On the other hand, introverted people tend to avoid community participation (Kraut et al, 2002). Shah et al. (2001) showed that use of the Internet for information exchange further influences trust in people and civic participation than do uses of traditional print

<sup>3</sup> We assume that social capital is a necessary condition for involvement in community engagement, so we mainly review prior studies on social capital.

and broadcast news media. The viewing time of television was negatively correlated with civic engagement and contentment with life, whereas only in case of hard news on TV, they were positively correlated. Conversely, both the reading time of newspaper and hard news reading were positively correlated with civic engagement. The usage of the Internet for information exchange was a key contributor in accounting for individual's social capital in civic engagement. Hampton (2003) demonstrates that ICT facilitates community participation and collective action by creating large, dense networks of relatively weak social ties and through the use of ICT as an organizational tool. Tsuji (2006) assessed the relation between three social capital indicators and media use, Internet use did not have an effect on these indicators. However, newspaper reading was positively correlated, while TV viewing had a weak correlation with these indicators. These researches showed that the local online community has a positive effect on participation in the local community (Kobayashi, et al., 2006; Kobayashi, et al., 2007; Shimura and Ikeda, 2009).

Regarding on the effect of mobile phone and SNS is being conducted as well. Miyata and Kobayashi (2008) showed that PC email may increase the size of personal social networks, whereas mobile phone email is useful in maintaining existing strong ties that provide social support. Some of the researchers focus on social media (Steinfeld et al., 2008; Valenzuela et al., 2009), investigating the relationship between the intensity of SNS use and social capital.

Recently, many researchers focus on the usage of ICT for social participation. Are newspapers effective for social capital or community engagement in this circumstances? To investigate this, the authors surveys how Japanese newspapers

contribute to community engagement.

## 2.2 Research Questions

This study aims to investigate the relation between newspaper reading and community engagement. There are numerous studies with regard to social capital. Although prior studies regarding social capital or civic engagement have argued the effect of media use, they have investigated each media effect separately or at most four media format: TV, newspaper, PC and mobile. In our research, we used six media, focusing on use time. For example, radio is one variable that is not frequently treated in the precedent studies. Funatsu (2006) wrote that community media, such as CATV and community FM radio, plays an important role for citizen to participate in their community [18]. Therefore, considering the role of media in fostering this kind of community participation, the authors intend to investigate newspapers' effect on community engagement in relation time use of six specific media: TV, newspaper, radio, magazine, PC and mobile.

Hence, we investigate the following research question:

*RQ : When compared with other media, how is the influence of the newspaper different?*

## 3. The Data

### 3.1 Data

Data for this study came from the 2011 J-READ (Japan Readers and Areal Data), directed by Video Research Ltd. This study is based on a random sample survey (RDD method) of 28,859 respondents in all over Japan.<sup>4</sup> Depending on the population scale of each metropolis and districts,

six types of sample size was set. Potential respondents were chosen among 15-69 years. Self-administered questionnaire were sent to respondents by post, and sent back by post. Data collection occurred between 16<sup>th</sup> October and 22<sup>th</sup> October 2011.

### 3.2 Variables

#### *Criterion variables*

*Community engagement.* As explained in 3.1, we utilize J-READ data in our analysis. So, the authors choose the items from the set of question about the genre of “politics”, “region”, and “environment and social activity”. The items were chosen based on the following criteria: “the information on local events or news,” “communication with neighborhood” and “participation intention of local events.”

Community engagement was measured by eight items: “7. I am interested in local politics or administration.” “32. I would rather participate in

a local event or festival.” “33. I would rather participate in a neighborhood association or children’s group meeting.” “34. The area living in is easy to live.” “35. Local information is more important than national information.” “36. I have an attachment to my living place.” “160. I am interested in the environmental problem of the town where oneself lives in.” “169. I am interested in disaster prevention and area security maintenance.”<sup>5</sup> Community engagement is a 8-item additive index consisting of dichotomous (yes/no). These eight items were summed into one scale (KR-20=0.68, M=4.66, SD=2.08, N=27052) (Table 3).

#### *Controlling variables*

*Demographic variables.* We use demographic variables as controlling variables. They were as follows: sex (Male=50.1%, Female=49.9%), age group, years of residence (M=6.18, SD=1.66, N=28579), educational background (M=2.74,

Table 3 Fundamental statistics eight items of community engagement

Question	the percent of "Yes"
“7. I am interested in local politics or administration.”	72.37
“32. I often participate in a local event or festival.”	44.98
“33. I often participate in a neighborhood association or children’s group meeting.”	37.32
“34. The area living in is easy to live.”	85.02
“35. Local information is more important than national information.”	50.13
“36. I have an attachment to my living place.”	77.65
“160. I am interested in the environmental problem of the town where oneself lives in.”	52.77
“169. I am interested in disaster prevention and area security maintenance.”	48.21
Local interest (min0-max8) KR-20= .68, N=27052	
Average	4.66
SD	2.08

4 RDD method is limited in that household residents who do not have a land line phone connection cannot be reached.

5 We choose the items from “Q-37(J-READ)” which are related to community engagement. The number of item is the consecutive numbers of “Q-37”.

SD=0.92, N=25537), full time employed (41.1%), household income (M=6.36, SD=3.07, N=27108), house ownership (82.1%), children (under elementary school) (27.1%), and household member (M=3.52, SD=1.49, N=28281).

#### *Media use*

*Media use variables.* In this survey, we use the length of media usage time as dependent variable. Media use was assessed using a measure, which required respondents to indicate how many hours they spent using six different media. Respondents were asked, “How long do you spend on each of following on a day?” The categories majored were Newspaper/Television/Radio/Magazine/Internet (PC)/Internet (mobile).<sup>6</sup> Possible answered were: (0) don’t use; (1) 5 minutes; (2) 15 minutes; (3) 25 minutes; (4) 35 minutes; (5) 45 minutes; (6) 55 minutes; (7) 75 minutes; (8) 105 minutes; (9) 150 minutes; (10) 210 minutes; (11) 270 minutes; (12) 300 minutes.

## 4. Analysis

### 4.1 The Model

In order to examine the relationship of newspaper reading and community engagement, we performed a multiple regression analysis as follows<sup>7</sup>:

$$Y = \alpha + \beta_1 age + \beta_2 gender + \beta_3 education + \beta_4 living\ together + \beta_5 Children + \beta_6 house\ owing + \beta_7 Grandchild + \beta_8 Household + \beta_9 living + \beta_{10} Mediause\ (Newspaper) + \beta_{11} Mediause\ (TV) + \beta_{12} (Radio) + \beta_{13} (Magazine) + \beta_{14} (PC) + \beta_{15} (Mobile) + \varepsilon$$

The model assesses affects of newspaper reading on community engagement by controlling for demographic data such as gender, age, years of residence, educational background, fulltime employed, households, house owing, household, and children (under elementary school).

In this study, our sample size was exceptionally large (N = 20709), so we need to discuss the result based on not only its “statistical significance,” but also its “effect size”. Cohen (1988), in dealing with a large data set, established the criteria of “f<sup>2</sup> effect size.” To measure the size of effect: small = 0.02, medium = 0.15, and large = 0.35. Our studies effect size is 0.12. This number is similar in value to Cohen’s medium effect size (0.15).

J-READ asked respondents about their media use time during both weekdays and weekends. In this study, we decided to focus on media use time during weekdays, since Tsuji (2006) showed that there was no significant difference between weekday media use and weekend media use. To verify this, we performed a multiple regression analysis using Saturday and Sunday media use data.

### 4.2 Analysis

Table 4 shows the result of the regression analysis. Firstly, the characteristics of people who participating in community engagement was as follows. The most effective variables was “children”. Having children has a significant positive effect on community engagement, while “fulltime employed” has a significant negative effect.

Secondly, our study found the following effects of media use on community engagement. To

6 e-mail use is removed from Internet use (PC and mobile phone).

7 When we performed a multiple regression analysis, we standardized a criterion variable and media use variables.

Table 4 Regression analysis predicting the community engagement

	<i>B</i>	(SE)	<i>t</i>
<b><i>Demographic variables</i></b>			
Sex	0.015	0.03	0
Number of people in household	0.009	0.018	10.177
Educational background	0.09	0.009	4.918
Years of residence	0.038	0.008	8.941
Household income	-0.03	0.032	3.947
House ownership	0.033	0.005	7.966
Having Children(under elementary school)	0.053	0.037	16.904
Fulltime employed	0.155	0.034	-2.774
Age group 15-29	0.154	0.041	-10.879
Age group 50-69	0.072	0.011	15.598
<b><i>Media use</i></b>			
TV	-0.042	0.007	-5.942
Radio	0.044	0.006	6.501
Newspaper	0.109	0.007	14.919
Magazine	0.028	0.007	4.131
PC	-0.024	0.007	-3.447
Mobile	-0.001	0.008	-0.201
R <sup>2</sup> (%)	10.5		
adjR <sup>2</sup> (%)	10.5		
N	20709		



compare the effect of newspapers with the effect of other media, we used the other media use variables, such as TV, radio, magazine, PC and mobile phone. After controlling for demographic variables and five other media measures, the effect of newspapers was positively correlated to community engagement. The effect of newspapers reading time is the most strongly effective on community engagement among the six media use variables. In addition to newspapers, radio and magazines are positively correlated to community engagement. On the other hand, TV and PC usage are negatively correlated to community engagement.

## 5. Discussion

The purpose of our study is to explore how Japanese newspapers contribute to community engagement. Our analysis shows that the standardized coefficient of reading newspapers on community engagement shows the highest value among the other five media's coefficients. Although a large part of Japanese newspapers traditionally focus on national news, the results suggest that they also support everyday life activities in local communities.

The effect of newspapers and TV on social capital has been examined previously, but in this research, we focus on community engagement. Compared with these prior studies, the characteristics of this study can point to new directions, since it used a large number of media use variables. The number of variables in prior studies is at most four, whereas our study incorporates a more comprehensive number of use time variables for a wider range of media.

Our findings can be summarized in two main points: first, is related to demographic factors;

second, is related to media use. In the following, we discuss the details about each one.

### 5.1 Demographic Variables

Regarding demographic variables, there are three main findings: one strong negative effect, broad positive effects, and an age effect. Importantly, in our analysis, only one negative effect factor appeared: the "working style" variable had a significantly negative effect. People who work long hours are unable to become engaged in their respective communities due to their long time constraints.

The second finding is the positive effect factor, which was very wide. In our analysis, all the variables except "fulltime employed" and "sex" had a significantly positive effect. Among these variables, the one with the strongest effect was "having children". That is, people who have children are more likely to become engaged in their respective communities than those who do not have children. In addition to this variable, "years of residence," "household members", "house ownership" had a significant strong effect as well. These results are consistent with prior studies on social capital.

Finally, the age variable showed a significant effect. In our analysis, we established three dummy categories: 15-29 age group, 30-49 age group, and 50-69 age group. When we performed a multiple regression analysis, we set the 30-49 age group as the base category. As a result, the 30-49 age group was shown to be more likely to become engaged in their communities than the 15-29 age group. However, when compared with the 50-69 age group, the 30-49 age group is less likely to become engaged in their community. The effect of aging on community engagement was confirmed in this result.



## 5.2 Media Use Variables

Regarding media use variables, newspapers, radio and magazine are positively correlated to community engagement, whereas TV and PC are negatively correlated to community engagement. The two main findings of our analysis are as follows.

The first finding concerns the relationship between newspaper reading and community engagement. Reading newspapers has the strongest effect on community engagement after having controlled for the five other media influences, which is noteworthy.<sup>8</sup> This result is consistent with prior studies. Korenaga (2010) examined this using four media use variables (TV, newspapers, PC and mobile phone), which showed very interesting results. Using “centeredness private life” variable as an independent variable, he showed that the more people read newspapers or use the Internet with PC, the more people are not private life centered. This result suggests that reading newspapers widens their interest in others, similar to our results. However, our independent variable is community engagement.

The second notable result is the effect of new media (PC): our analysis showed is the more people use this media, the less they are engaged in their communities. Regarding this result, it is important to bear in mind that we used total use time here. In fact, our results contrast with prior studies. Previous studies focus on e-mail (PC and mobile) which confirmed that sending PC and mobile e-mail has a positive effect on community participation and social capital indicators (Miyata & Kobayashi, 2008). We hypothesize this difference depends on the selection of the variable that we used. Importantly, PC and mobile phone use can

include many activities, which may or may not connect people.

## 6. Conclusion

The goal of this article was to investigate how newspapers contribute to community engagement in Japan. Our results demonstrate a connection between newspaper reading and community engagement. Although most of all Japanese newspapers’ topics focus on nationwide news, the time of reading newspaper is positively correlated with local community Engagement.

Our study has an important limitation, which is media use variables. Our research measures only overall media use time. This problem has been identified in prior research. However J-READ’s sample size and technique are solid, so in a changing media use environment, these results are still important to consider. Prior studies demonstrated that the contents of TV programming has a positive relation with social capital indicators (Norris, 1996; Tsuji, 2006). For future study, we should compare the results between the effect of “media use time” and “the every contents of media use.”

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<sup>8</sup> We can not prove that this is a casual relationship where newspaper reading causes Community Engagement.

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## APPENDIX

### Appendix A: Question Wording

#### Community engagement

- "7. I am interested in local politics or administration."
- "32. I would rather participate in a local event or festival."
- "33. I would rather participate in a neighborhood association or children's group meeting."
- "34. My area is easy to live."
- "35. Local information is more important than national information."
- "36. I have an attachment to my neighborhood."
- "160. I am interested in the environmental problem of

the town where oneself lives in."

- "169. I am interested in disaster prevention and area security maintenance."

#### Demographic variables

*Age*: (1) 15~19; (2) 20~29; (3) 30~39; (4) 40~49; (5) 50~59; (6) 60~69.

*Gender*: "Male = 1" or "Female = 0"

*Educational background*: "Which is your educational background?"

(1) junior high school; (2) high school or upper secondary specialized training school; (3) a junior college or technical college or special [vocational] school; (4) university or postgraduate college

*Household income* : " Which of following categories does your household income fall?"

(0) No income; (1) less than 1million yen; (2) 1 million yen ~2 million yen; (3) 2 million yen ~3 million yen; (4) 3 million yen ~4 million yen; (5) 4 million yen ~5 million yen; (6) 5 million yen ~6million yen; (7) 6 million yen~7 million yen; (8) 7 million yen~8 million yen; (9) 8 million yen~9 million yen; (10) 9 million yen~10 million yen; (11) 10 million yen~12 million yen; (12) 12 million yen~15 million yen; (13) more than 15 million yen

*Years of residence* : (1) less than 1year; (2)1~3 years; (3) 3~5 years; (4) 5~10 years; (5) 10~20 years; (6) 20~30 years; (7) 30~40 years; (8) more than 40

*Number of people in household* : How many people are there living together including yourself?

(1) 1; (2) 2; (3) 3; (4) 4; (5) 5; (6) 6; (7) 7; (8) more than 8 people.

*House ownership:* 0 (Rent house) or 1(owned by respondent).

*Fulltime employed:* 0 (part-time job and self-employed people) or 1 (fulltime regular employee and fulltime temporary employee)

Media use variables

*Media use:* How long do you spend on each of the

following on week days , Saturday and Sunday?<sup>9</sup>

Newspaper/ *Television*<sup>10</sup>/*Radio/Magazine/Internet (PC)/Internet (mobile):* (0) don't use; (1) less than 10 minutes; (2) 10 minutes to 20 minutes; (3) 20 minutes to 30 minutes; (4) 30 minutes to 40 minutes; (5) 40 minutes to 50 minutes; (6) 50 minutes to 1 hour; (7) 1-1.5 hours; (8) 1.5-2 hours; (9) 2-3 hours; (10) 3-4 hours; (11) 4-5 hours; (12) more than 5 hours

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9 In this study, we used the median of each category.

10 When we compared J-READ's average TV use time with other investigations, so we changed TV's (12) more than 5 hours into 687 to get closer to "NHK (Nihon Housou Kyoukai) National Time Use Survey 2010".