

## Utilizing regional SNSs to participate in politics

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### Introduction

The Japanese government has been planning the e-Japan Strategy since 2000, which has now been launched into the third phase. It is a comprehensive system covering seven areas: medical services, food, lifestyle, small and medium enterprise financing, knowledge, employment and labour, and public services. One of the main issues in the area of public service is constructing an e-government system and having citizens involved and utilizing it. However, very few people use the resident registration services online.

The Ministry of Internal Affairs and Communications (2009) revealed, in the 2009 WHITE PAPER Information and Communications in Japan, that sectors such as transportation/distribution and e-commerce have been advanced, but on the other hand the utilization rate of ICT systems/services is particularly low in public areas such as healthcare/welfare, education/personnel and administrative services compared with other advanced ICT countries. According from the survey, the 2009 WHITE PAPER also pointed out the fact that Japanese people “know the system, but don’t use it.” In other words, while ICT systems/services are directly connected to national issues, there is a mismatch in the demand and supply of such services.<sup>1</sup>

With this as a backdrop, in the next stage the 2010 WHITE PAPER Information and Communications focuses on regional revitalization as a product of widespread utilization of ICT in local communities; the renewal of local community bonds through the “connective power” of ICT; and how, through ICT, such bonds are renewed by improving the quality of local community lifestyles through the social participation of all citizens, by utilizing social media, and etc.

The increasing number of users of new internet communication tools, such as

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<sup>1</sup> Economic Research Office, ITC Strategy Policy Division, Global ITC Strategy Bureau, Ministry of Internal Affairs and Communications, Japan “2009 WHITE PAPER Information and Communications in Japan”

SNSs (Social Networking Services), is indeed drawing the attention of various fields in Japan. Recently a growing number of local governments or local NPOs (non-profit organizations) have also been introducing SNSs<sup>2</sup>. These services allow citizens to disseminate and exchange information freely over the internet, and there is a growing trend of local governments using this information exchange to promote community participation and interaction. Governmental committees are holding discussions on the role of local communities in the era of new internet. It is also said that to meet the challenges of ageing societies, it is necessary to create opportunities for senior citizens to play a more active role in communities. Regional SNSs promote participation of seniors in community and volunteer activities.

Since 2007, the Ministry of Internal Affairs and Communications has paid attention to communication through SNS. The 2007 WHITE PAPER Information and Communications in Japan is an earlier study by the Ministry of Internal Affairs and Communications to quantitatively understand regional SNSs on a national scale. Opinion exchange regarding city and community development—such as creating networks for improving regional problem-solving through the revitalization of local communities, promoting interaction and information exchange within the region, and encouraging awareness of the current situation by collecting community-based information—are frequently raised as the purposes for using regional social networking services.

This paper first analyses some successful cases in Japan where residents or the local government are allowed leadership roles in networking in their area, and good relationships between the two are established.

The effect of regional SNSs has yet to be studied, let alone revitalization by citizen's collaboration through SNSs. The facts and background of local governments introducing SNSs have been reported, but the mechanism of participation, communication and collaboration is still unknown. Conventional online communication between local governments and citizens depends on technologies such as internet BBs (bulletin boards) or messages from homepages. However, it has traditionally been difficult for people with a shared awareness of issues to collaborate when limited to the kind of communication found within an official and one-way-communication setting.

Second, using a nationwide questionnaire data set compiled by the Fujitsu Research Institute, factor analysis and a covariance structure analysis are presented

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<sup>2</sup> Not only social networking services by public bodies, but also such organisations have been utilizing Twitter. Aomori prefecture publishes official press releases both on the official page and Twitter's page as well, and Oita prefecture posts information on specialised sightseeing inside the prefecture. Each case is interesting and worthy to note, but this paper focuses solely on SNSs.

with the model that rich social capital has an impact on residents' participation in politics with online social networking. The question items follow the "Social Capital Harmonised Questionnaire Set" which has been created by the Office for National Statistics in the UK. The target respondents are users of the online regional social networking services in Japan, and the number of samples is 1648.

This paper will clarify how regional SNSs can be useful for community participation; the possible uses of SNSs for eGovernment; and the key components for community participation and regional revitalization. Finally, the paper will contribute to designing community participation with ICT.

## **2. Cases**

### **2.1. Japanese case: A local government Yatsushiro's "Gorotto Yacchiro" SNS**

Yatsushiro City, a city in Kumamoto prefecture, located in the South

The "Gorotto-Yacchiro" SNS has been in operation since October 2004. "Yacchiro" is a dialectal expression of Yatsushiro. Originally, the city's official site maintained a BB (bulletin board) to seek the views of residents. However, some serious problems were raised, such as the decreasing number of visitors to the site and number of opinions or comments posted. The city government thought that the site would be meaningless if it was inconvenient for residents. The government has a responsibility to help and reuse information in the city, and give benefits back to the citizens. When the site was renewed, it was accompanied by the introduction of a SNS by the government.

The SNS includes functions that allow residents to write blogs freely and upload pictures, as well as confirm maps, health-related issues, and information concerning elections, natural disasters, and so on. Even if the main site is unavailable in times of disaster, residents can get information from others' diaries on the SNS.

### **2.2. Administration of the Gorotto-Yacchiro SNS**

A city officer developed the Gorotto-Yacchiro SNS. He was familiar with a hobby-oriented SNS called mixi, which is the biggest SNS in Japan with over 8 million users. He thought this kind of communication, where users can post diaries, send messages to other users, make communities, visit other users' pages, and share information, could offer effective communication for residents in local communities.

### 2.3. Utilizing the regional SNS to participate in politics

The Yatsushiro city local government has been planning demonstration experiments for disaster information networks on the SNS. In regional SNSs, users can write about regular life from a community-based point of view. In a time of disaster, users can write about their circumstances or the specific disaster happening to them.

People tend to be thrown into a panic when a disaster occurs, and information can become disrupted. With a common practice of writing diaries, however, casual communication based on regular life can help residents gather and provide information whenever a disaster might occur. In fact, when a regional flood happened in July 2006, residents visited the SNS and gathered information regarding dangerous areas and promoted awareness among each other. Yatsushiro city also practiced a demonstration experiment for an earthquake.

### 2.4. French case: A tool for improving the efficiency of communication

In France, the Paris-based SNS Peuplade has been successful in bridging the gap between neighbours. Peuplade has several features on its site such as “Idées” (“Ideas”) or “Qui serait partant?” (“Who will start for it?”) which enhance citizen interactions by sharing ideas and engaging in local activities through face-to-face communication. Unlike many general Japanese SNSs, Peuplade doesn’t offer a tracking function which records the name and dates of the visitors to their diaries. Furthermore, Peuplade doesn’t record demographics such as age, gender, or occupation. This is based on the notion that this type of information is prone to creating prejudices. Peuplade’s emphasis on sharing knowledge, experience and emotions among people living in the same neighbourhood, and on encouraging local residents to meet face-to-face and thereby promoting dialogue beyond the virtual world of SNSs, aims at creating a hub where people contribute to local debates and can eventually translate their ideas into actions.

Some associations and local governments in Japan have tried to launch SNSs similar to Peuplade but with very limited success.

## 3. Analysis

This paper uses data from a September 2007 internet questionnaire survey conducted by FRI Economic Research Centre regarding the utilization of regional SNSs based on the question items listed below. Respondents are SNS users, and the sample is 1648 people. The attributes of the sample targets are listed in Tables 2, 3, and 4. There are roughly an equal number of men and women, and the share of those between their late

20's and early 40's is in double-digits<sup>3</sup>.

Table 1: Attribution 1(Sex)

Sex	N	%
Male	804	48.8
Female	844	51.2
Total	1648	100.0

Table 2: Attribution 2(Age)

Age	N	%
20-24	113	6.9
25-29	249	15.1
30-34	373	22.6
35-39	310	18.8
40-44	236	14.3
45-49	152	9.2
50-54	90	5.5
55-59	52	3.2
Over 60	73	4.4
Total	1648	100.0

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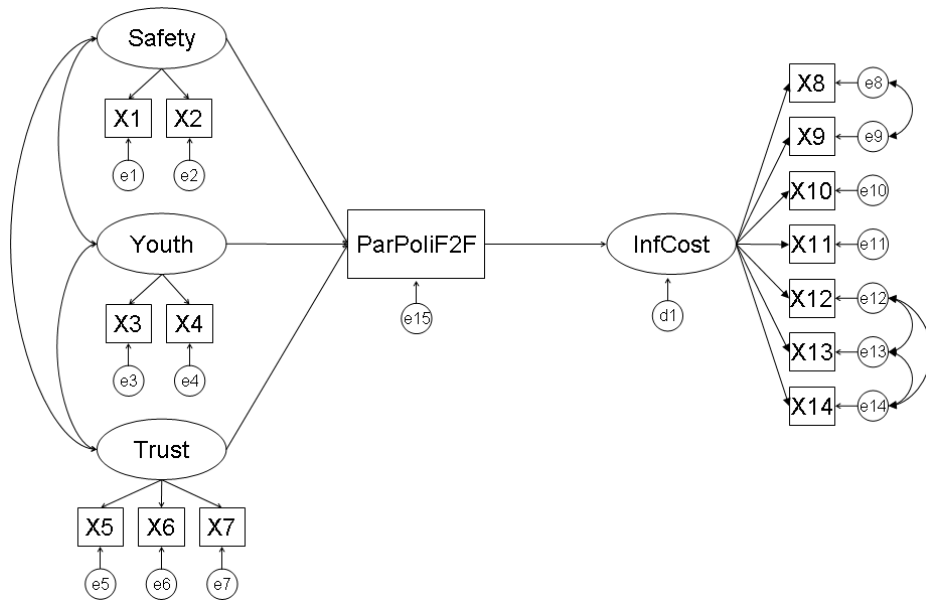
<sup>3</sup> The questionnaire survey in this paper is an internet survey conducted by Fujitsu Research Institute on the monitor of Macromill, Inc. As a first stage screening, a survey was conducted on whether one of 1. books, 2. magazines, 3. word-of-mouth, 4. general SNS, 5. regional SNSs, or 6. the internet (excluding SNSs) were used in the collection of information in everyday life. In the second stage, a detailed survey was conducted only on those who responded "5. regional SNSs" in the first stage. Respondents were not divided by age, gender, residence (prefectures and cities), or occupation. Due to budgetary constraints, only a survey on regional SNS users was conducted, and no survey was conducted on non-regional SNS users and users of general SNSs such as mixi who exchange regional information. As a result, no comparison can be made with such users. In addition, the questionnaire survey used in this paper is limited to one observation, and while "changes before and after the use of regional SNSs" was asked in the survey question items, it is not a time-series survey. The author is well aware of these problems and aims to address these issues in the future. There are, however, no other examples of demonstration analysis regarding social capital and the use of SNSs, in particular regional SNSs.

The following questions were asked in the survey regarding the result of using regional SNSs: "Was the time for collection of information decreased?"; "Was the time to acquire knowledge from key persons shortened?"; "Were the number of contacts with different backgrounds increased?"; "Were the number of contacts with the same background increased?" A five-point scale format was used to receive the responses that apply the most to each respondent: 1. Don't think so at all; 2. Don't think so very much; 3. Can't say either way; 4. Think so to a certain degree; 5. Think so very much.

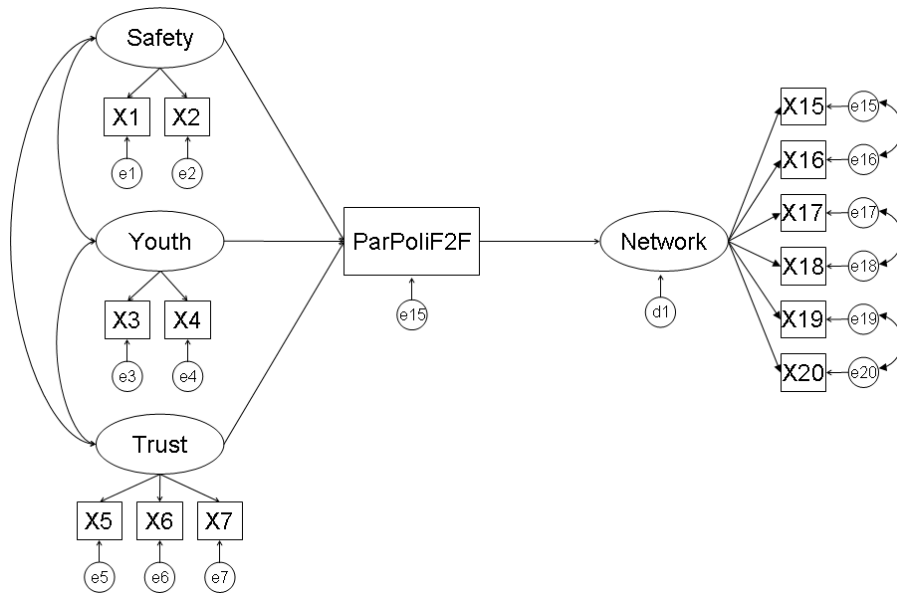
Table 3: Questions

	Questions (5-point scale)
X1	How much of a problem is property loss in your district?
X2	How much of a problem is lying in your district?
X3	How much of a problem is vandalism, graffiti and other deliberate damage to property or vehicles?
X4	How much of a problem are young people hanging around on the street?
X5	To what extent do you agree or disagree that your neighbourhood is a place where people from different backgrounds get on well together?
X6	Suppose you lost your belongings in your district. How likely is it that it would be returned to you?
X7	Would you say that your nearest neighbours can be trusted?
X8	For the following, please answer how the local SNSs have enhanced efficiency of your life.
X9	a. Decreased time for collection of information
X10	b. Decreased the cost for collection of information
X11	c. Improved the speed for decision-making
X12	d. Widened your views
X13	e. Shortened the time to find key persons
X14	f. Shortened the time to acquire knowledge from key persons
X15	g. Shortened the time to interpret knowledge and think by yourself, and take an action
X16	h. Increased # of contacts in different districts
X17	i. Increased # of contacts in the same district
X18	j. Increased # of contacts with the different background
X19	k. Increased # of contacts with the same background
X20	l. Increased # of contacts in different age groups
ParPoliF2F	m. Increased # of contacts in the same age group
	To what extent have you ever engaged in any regional activities with local residents in your district?

Model A



Model B



Model C

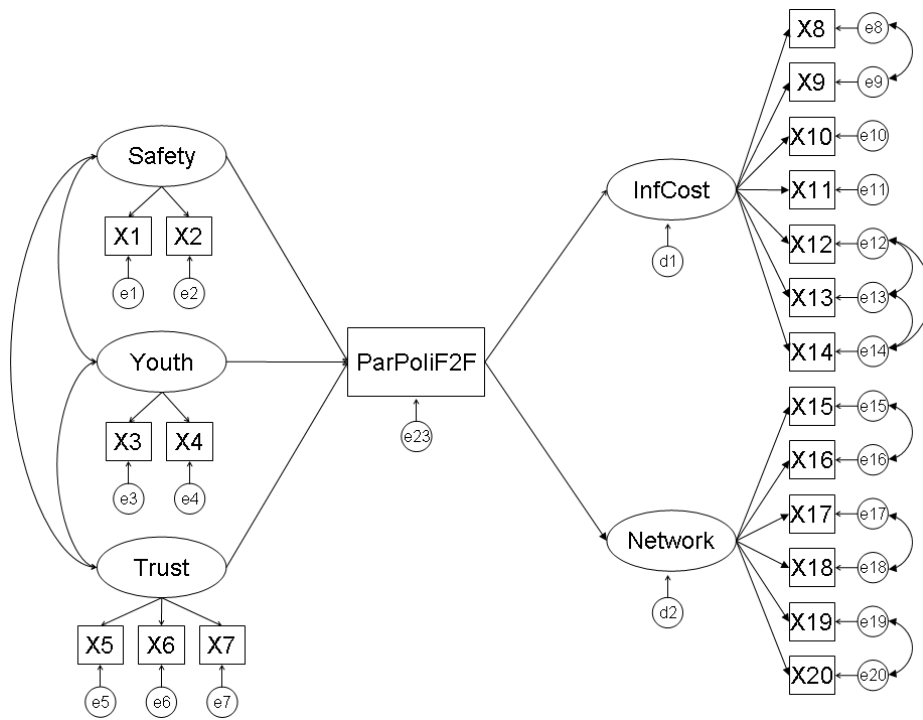




Table 4: Fit Measures

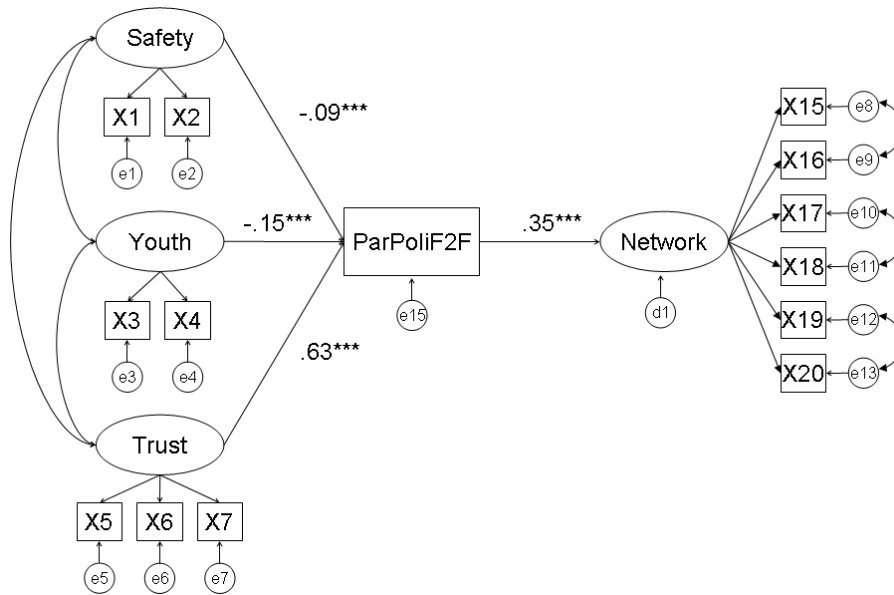
	GFI	AGFI	CFI	RMSEA
Model A	.953	.930	.971	.025
Model B	.962	.941	.979	.023
Model C	.899	.867	.933	.034

In this Paper, we use Model B and conduct analysis after dividing the database into the following four groups.

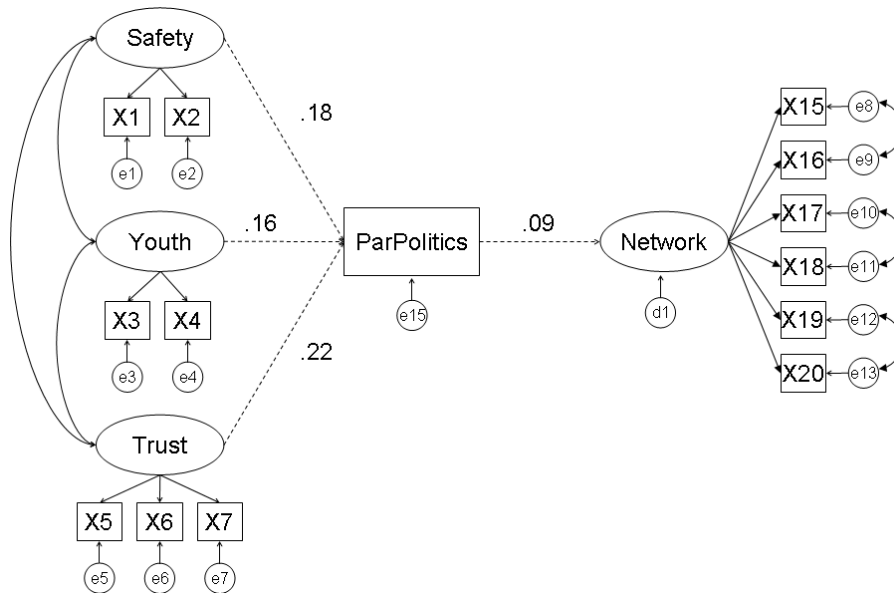
Table 5: Sample Groups

Group	n	Target
(1) Whole Sample	1648	All the target respondents who utilize any local social networking services
(2) F2F-Oriented Group	64	Those who have ever joined a decision-making process on a regional policy prioritizing F2F discussion more than SNS communication
(3) Net-Oriented Group	115	Those who have ever joined a decision-making process on a regional policy prioritizing SNS discussion more than F2F communication
(4) Both Net and F2F Group	139	Those who have ever joined a decision-making process on a regional policy prioritizing both SNS and F2F communication
(5) Neither Net nor F2F Group	1330	Those who have ever joined a decision-making process on a regional policy prioritizing neither SNS nor F2F communication

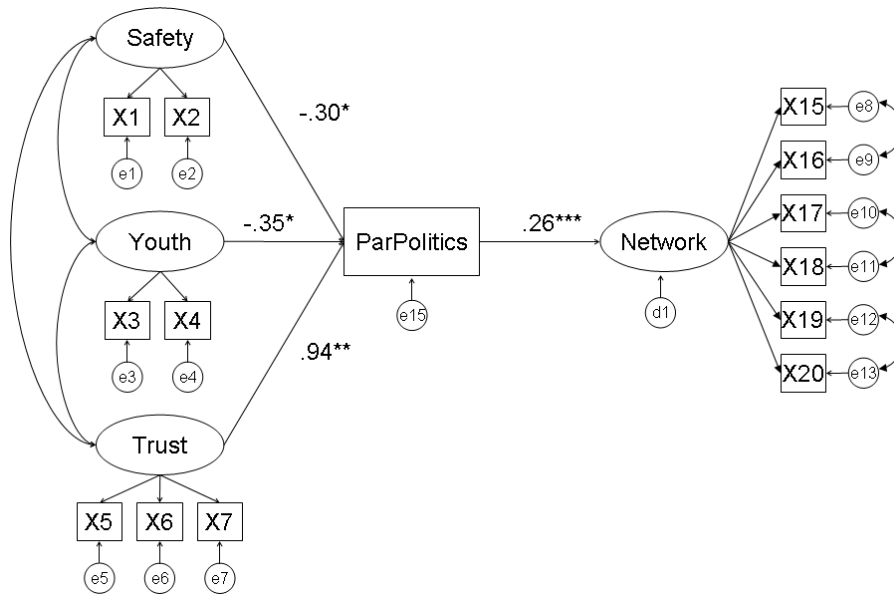
(1) Whole Sample



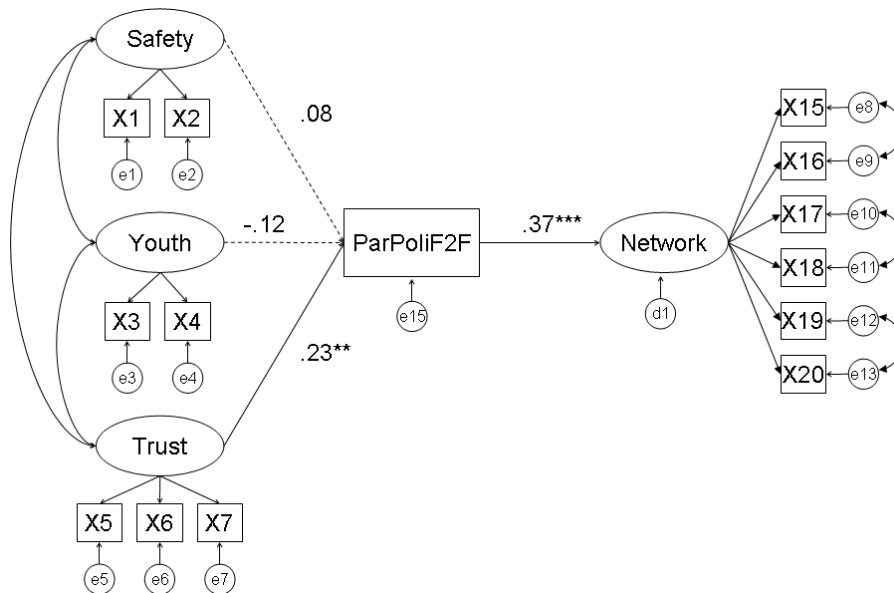
(2) F2F-Oriented Group



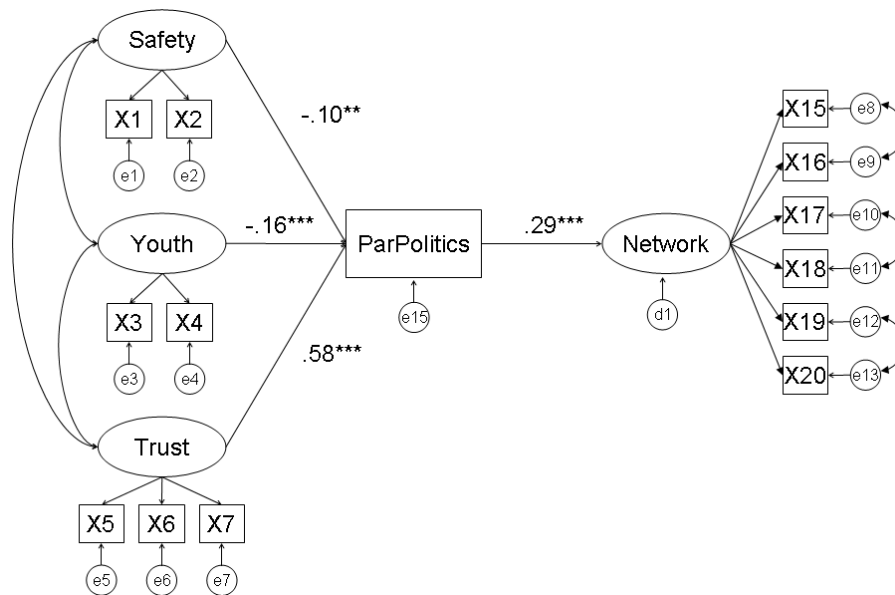
(3) Net-Oriented Group



(4) Both Net and F2F Group



(5) Neither Net nor F2F Group



Note: In (1)-(5), solid lines indicate significant paths, and dashed lines indicate non-significant paths.  
 \* $p < .1$ , \*\* $p < .05$ , \*\*\* $p < .01$

**Conclusion**

Regarding (1), we find that the general trust in neighbors affects the level of participation in politics, and there is a correlation between using SNSs and forming human networks. In addition, it is noteworthy that the impact of safety and youth on political involvement is a negative sign and significant. In other words, people are politically involved in unsafe areas with many loitering youth and so on. Regarding (2), the F2F-Oriented Group, significant results were not obtained. Regarding (3), however, while the impact of trust on participation in politics is consistent with (1), we find that the impact of safety and youth is stronger than in (1). In other words, it can be inferred that people in unsafe areas with many loitering youth and so on are utilizing the internet to participate in politics. On the other hand, the figure of the path from ParPoliF2F to Network is small. Regarding (4), the path from safety and youth to ParPoliF2F is insignificant, but, in contrast to (3), the figure of the path from ParPoliF2F to Network is high. While the figures in (5) vary, we can interpret this as the same results as (3).

In the case of Yatsushiro prefecture, a city officer developed the social

networking services by himself. However, other local SNSs in Japan use open source software with financial support from Japan's Ministry of Internal Affairs and Communications. However, after fiscal predicaments, some local SNSs have run into many difficulties.

The motivation for starting the SNS was to collect opinions from residents. They thought that they would like to understand through the communication over the SNS with casual conversations.

In regional SNSs, residents can fully engage in stimulating conversation about regional matters with those who share common awareness of the issues. Through the process of discussing and seeking solutions for specific regional issues in the SNSs, residents exchange not only problems but also feelings of local pride in words of their own. Most entries in regional SNSs are written in dialect. Some members of SNSs have a collective desire to revitalize the local areas. As this can invite fiery dispute, it is necessary to manage appropriately.

This research finds that the figure of the path from ParPoliF2F to Network is highest in the Net-Oriented Group. In other words, utilizing regional SNSs produces rich human networks. Local governments must endeavour in the future to make sure that such activity takes hold in local communities and convenience is enhanced in the everyday lives of residents.

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## **Acknowledgment**

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## Appendix

### Factor Analysis(X1-X7)

	Factor 1 (Safety)	Factor 2 (Youth)	Factor 3 (Trust)
X1	.880		
X2	.815		
*	.665		
X3		.750	
X4		.750	
X7			.648
X6			.468
X5			.385

### Cronbach (Factor 1: Safety)

Alpha	Standardized item alpha	Items
.860	.862	3

### Item-Total Statistics(Factor 1: Safety)

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Alfa if Item Deteled
*	5.43	4.424	.668	.447	.868
X1	5.62	3.955	.784	.641	.757
X2	5.39	4.455	.763	.617	.783

### Cronbach (Factor 2: Youth)

Alpha	Standardized item alpha	Items
.787	.787	2

### Item-Total Statistics(Factor 2: Youth)

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Alfa if Item Deteled
X3	3.18	1.087	.648	.420	.a
X4	3.44	1.120	.648	.420	.a

Cronbach (Factor 3: Trust)

Alpha	Standardized item alpha	Items
.525	.521	3

Item-Total Statistics(Factor 3: Trust)

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Alfa if Item Deteled
X5	6.24	2.381	.273	.077	.519
X6	7.01	1.862	.353	.135	.398
X7	6.22	1.705	.397	.159	.319

Factor Analysis(X8-X20)

	Factor 4 (InfCost)	Factor 5 (Network)
X13	.823	
X12	.822	
X14	.793	
X8	.750	
X10	.746	
X11	.709	
X9	.687	
X17		.873
X19		.844
X18		.812
X16		.807
X20		.803
X15		.716

Cronbach (Factor 4: InfCost)

Alpha	Standardized item alpha	Items
.939	.939	7

Cronbach (Factor 5: Network)

Alpha	Standardized item alpha	Items
.955	.955	6