学術論文

Influences of channel viewing and local identity on the effect of a community channel — A case study of the town of Takino —

コミュニティ・チャンネルの効果に及ぼす視聴行動と地域アイデンティティの影響 —滝野町を事例にして—

Keyword：
community channel, channel viewing, local identity, an interest effect, a topic effect, a participation effect
キーワード：
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Abstract

This paper describes a study of the way in which both channel viewing and local identity influence the effect of a community channel run by the town of Takino. The effect of a community channel consists of the following sub-effects: an interest effect, a topic effect, and a participation effect. Three influential factors on the effects are taken up: contact as channel viewing, and two aspects of local identity, namely, attachment to Takino and involvement in public activities. The study was carried out based on a questionnaire survey of residents with some interesting findings.

(1) The community is well-established in Takino. Channel 15 has a good reputation with residents and fully plays the role of community media.

(2) The closer contact, the deeper attachment, and the more active involvement grow, the more easily each sub-effect is produced.

(3) There are three dominant groups of respondents, as far as sub-effects are concerned: a group with all sub-effects, a group with an interest and a topic effect, and a group with none of them.

(4) An interest effect and a topic effect are inclined to form a strong combination. A participation effect depends much on the combination.

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(5) Channel 15 creates an interest effect, together with a topic effect, and subsequently produces a participation effect, based on the two effects.

(6) An interaction effect is recognized between contact and attachment. Both the factors interdependently yield the combination of an interest effect and a topic effect. Involvement independently joins a participation effect to the combination.

(7) For enhancing the effect of Channel 15, it is an efficient means to decrease residents seldom watching the channel, with high or medium attachment and those having low attachment, with daily or sometimes watching the channel, to increase those with high involvement, and to decease those with little involvement.

要　旨

この論文は滝野町が運営するコミュニティ・チャンネルの効果（以下，コミュニティ効果）に住民の視聴行動と地域アイデンティティがどのように影響しているかを論じた研究である。コミュニティ効果には町への関心を高める「関心効果」，町民の話題を増やす「話題効果」，そして町内の公的活動への参加を促す「参加効果」の3つの下位効果を設定した。さらに効果に影響を及ぼす要因として視聴行動では「番組接触」，地域アイデンティティでは「町への愛着」と「公的活動への参加実績」を取り上げた。研究は住民へのアンケート調査をもとに行われ，いくつかの興味ある知見を得た。

(1) 滝野町では地域コミュニティがうまく機能しており，コミュニティ・チャンネルは住民の高い評価を受けて地域メディアの役割を十分果している。

(2) 番組との接触が増えるほど，町への愛着が強いほど，そして公的活動への参加が多いほど，下位効果を認識している回答者は多くなる。

(3) 下位効果の認識いかんによって回答者は概ね3つの大きなグループを形成する。第一は3つの下位効果をすべて認識しているグループ，第二は「関心効果」と「話題効果」を認識しているグループ，そして第三はいずれの効果も認識していないグループである。

(4)「関心効果」と「話題効果」の発現は相互に結びつく傾向が強い。そして「参加効果」の発現はその結びつきに大きく依存している。

(5) コミュニティ・チャンネルは「話題効果」と一緒に「関心効果」を生み出し，その成果のうえに「参加効果」を生み出す。

(6)「番組への接触」と「町への愛着」の間にはコミュニティ効果を生み出すうえで交互作用が存在する。つまり両者は互に影響し合いながら「関心効果」と「話題効果」の結合効果を生み出す。そして「公的活動への参加実績」はそれとは独立に結合効果のうえに「参加効果」を生み出す。

(7) コミュニティ効果を高めるには，滝野町に相当あるいは幾分か愛着をもちながら番組をほとんど観ない住民と，番組を毎日あるいは時々観ているが滝野町にほとんど愛着をもたない住民を減らすか，あるいは公的活動によく参加する住民を増やして，ほとんど参加しない住民を減らすのが効果的である。

1. Introduction

Community channels of cable television have been introduced in attempt to activate local communities (Kiyohara et al 1996). A number of studies have been carried out on the effect of these community channels with many interesting findings. Some studies showed that channel viewing enhances community spirit of residents (New Media Study Group 1984), and promotes community involvement by residents (Takeshita 1990, Ivantysyn 2000). Other studies showed the converse relationship, where it is local identity that promotes channel viewing (Takeuchi 1989, Lundby 1992). The causal relationship between channel viewing and local identity is not certain (Oishi 1992). The results of such studies do not perfectly agree with each other, although they show that community channels have an effect on residents by means of both channel viewing and local identity. This confusion seems to stem from the following reasons. Firstly, the studies were carried out on the channels with different conditions. The characters of communities are quite different between urban and rural areas. Kobayashi (1995) proposes a hypothesis that channel viewing can activate communities which are well-established, but cannot activate communities which are not well-established. The effect of a community channel depend on how active communities are. Secondly, there seems to be some confusion with the way in which the effect is interpreted. Enhancing community spirit, improving human relationship, and reinforcing community bonds are each often regarded as an important effect, but these effects are varied and not well defined. Thirdly, the wording of local identity is ambiguous and local identity also depends on actual experiences and personal attributes besides channel viewing. Therefore, it is not fruitful to adhere to the causal relationship in the above. This paper clarifies the condition of a community, the effect of a community channel, and the concept of local identity, and then determines how channel viewing and local identity influence on the effect of a community channel.

2. Framework of study

2.1 The role of a community channel

Urbanization has weakened the function of local communities, and recently the development of multi-purpose media is accelerating this trend. Residents' communication seems to be bipolar: one pole is mass communication and the other is personal communication (Tokunaga 1993). This is one of the reasons why communication among residents is getting poor, reducing residents concerns in their community. These days, the role of communities is now reevaluated in order to solve regional problems related to planning and development (Takamizawa 2000). To reinforce the function of local communities, it is indispensable to activate communication among residents. Local community channels of cable TVs were introduced into many areas in order to achieve this goal in 1980s (Hayashi 1996). They belong to what we call 'community media', which can be placed between the mass media and personal media (Takeuchi 1989). Since deregulations and technological innovations developed in the second half of 1990s, cable TVs came to be able to provide various services as multi-purpose media. Community channels of cable TVs enable residents to share local information by means of programs, keeping direct contact with each other within their community. Moreover residents are viewers, performers, information providers, and critics in community channels. These characteristics are expected to improve the function of community.

One point to be noted here is that cable TVs in Japan are roughly classified into two types from a viewpoint of management. They are an 'urban type' cable TV

managed mainly by a private sector and a 'rural type' cable TV managed mainly by a public sector[1]. In the former, a community channel is operated to pursue profits. In the latter, it is operated as one of public services. Cable TV operators began competing with telecommunication carriers and digital broadcasting satellite operators in order to increase subscribers, and a community channel, which is not profitable, becomes a financial burden to some operators (Torii 1998). As a result, not a few concern that the initially expected role of community channels cannot be sustained because of the severe competition (Funatsu et al 1997).

However, this is not always the case. In rural type cable TVs, all residents of a community are generally subscribers from the start. Therefore, the operators of rural types still regard a community channel as important media, although some of them have recently expanded their services to Internet and local telephone (Funatsu 1999). As Torii (1998) pointed out, in such a case, the improvement in the quality of community information is vital for urban type cable TVs to survive the competition. This is because cable TVs have the advantage of close relationship with local communities compared with other media. Even if the situations surrounding cable TVs are changing, they are required to develop a community channel as long as they are community media. In addition it can be expected that the number of cable TVs will increase in rural areas where local communities are well established. In these cases, what are the effect of a community channel is quite an important question.

2.2 The questionnaire survey

The survey was carried out in the town of Takino, which is roughly in the center of Hyogo Prefecture. It covers an area of 19.77km^2 and had a population of 10,823 as of the time of the survey in 1996. Takino operates a rural type cable TV, TCC. There are some reasons why the town was chosen for study. Firstly, all residents have access to a community channel, and the population for sampling is thereby large and well defined. Secondly, five years had passed since the opening of TCC and consequently residents were expected to be familiar with the channel. Thirdly, the study area is quite small and therefore residents could be expected to identify with the town.

At the time of the survey, TCC ran two community channels in addition to the re-transmission of general television programs. One channel, which is Channel 15, provides video programs, while the other channel provides programs comprising still pictures and texts. The Channel 15 is used in this study. It shows three types of programs. Firstly, the news program provides information on events in the town. Secondly, the projects program provides a series of programs focusing on special themes. Finally, the topics program provides just one program on a particular topic. All these programs are transmitted eleven times each day.

The survey was carried out in February 1996. Questionnaire sheets were mailed to 500 residents older than 20 years old, randomly extracted from the residents' resister. Responses were anonymous and resulted in the collection of 255 effective cases, a response rate of 51%.

2.3 Preparation for analysis

The conditions of a local community have a strong influence on residents' evaluation of their living conditions (Ueno 1998). Further, communities are now expected to cope with the regional problems as mentioned above. Residents play an important role in improving their community, and community channels can help their efforts by providing programs, which promote communication and social interaction within communities (Ivantysyn 2000). This study names this effect as a 'community effect', which is here divided into three sub-effects. The first is to enhance the interest of residents in their community. The interest is

a fundamental condition to improve their community. The second is to increase common topics of their interest. Even if residents have a certain interest in their community, cooperative relationship cannot be built without sufficient communication. The third is to promote residents' participation in public activities. Even if residents have much interest and enough communication, it is impossible to improve the community without their practice.

As Nakagawa (1993) shows, almost all cities and towns in Japan were created through the merger of small communities and they are substantially an aggregate of small local communities. In case of Takino, the old town of Takino and the village of Kamo merged in 1954, and subsequently the town consists of two elementary school wards with a number of small communities. A community effect might be different in the areas of different scale. This study took up the town area which Channel 15 just covers. In the questionnaire, the sub-effects were asked by three questions. 'Do you have more interest in the town than before the channel opening?' shows an 'interest effect'. 'Do you discuss more community topics with your families, friends, or colleagues in your workplace than before?' shows a 'topic effect'. 'Do you participate more in public activities in the town area than before?' shows a 'participation effect'. Respondents were required to choose a fitting response, 'yes' or 'no'. Furthermore, three factors were asked, which were expected to influence a community effect. The first is 'contact', and viewing frequency of Channel 15 was asked (Table 1). The second is local identity.

According to a dictionary, identity is a strong feeling of belonging to a particular group, race etc. Therefore, the indicator of local identity is supposed to express a strong feeling of belonging to Takino. This study paid attention to two aspects of local identity. One is respondents' attachment to Takino, which is named 'attachment'. As shown in Table 7, there was a bias toward affirmative responses in the frequencies. This made 'neither,' 'little,' and 'none' gathered to one level. Then, 'much', 'some', and 'the level' were respectively renamed 'high', 'medium', and 'low' exclusive of 'others' (Table 2). The other is 'involvement', and the degree of involvement in public activities in Takino was asked (Table 3). Attachment is the mental aspect of local identity and involvement is its practical aspect. The third are personal attributes. Gender, age, and household type were asked (Tables 4, 5, and 6).

Table 1 Contact

Daily	Some-times	Seldom	N.A	Total
42	181	32	0	255
0.16	0.71	0.13	0.00	1.00

Note: Lower row is ratio

Table 2 Attachment

High	Medium	Low	Total
113	109	30	252
0.45	0.43	0.12	1.00

Note: Lower row is ratio

Table 3 Involvement

High	Some	little	N.A	Total
35	153	61	6	255
0.14	0.60	0.24	0.02	1.00

Note: Lower row is ratio

Table 4 Gender

Male	Female	N.A.	Total
97	157	1	255
0.38	0.62	0.00	1.00

Note: Lower row is ratio

Table 5 Age

20-39	40-59	Over 60	N.A.	Total
72	122	60	1	255
0.28	0.48	0.24	0.00	1.00

Note: Lower row is ratio

Table 6 Household type

Single	Couple	Two gens.	Three gens.	Others	N.A	Total
10	38	108	85	11	3	255
0.04	0.15	0.42	0.33	0.04	0.01	1.00

Note1: Gens. is an abbreviation of generations
Note2: Lower row is ratio

Table 7 Attachment to Takino

Much	Some	Neither	Little	None	Others	Total
113	109	23	6	1	3	255
0.44	0.43	0.09	0.02	0.00	0.01	1.00

Note: Lower row is ratio

Table 8 Willingness to live in Takino

To continue living	To migrate in time	To migrate at once	Others	Total
226	20	2	7	255
0.89	0.08	0.01	0.03	1.00

Note: Lower row is ratio

Table 9 Satistaction with Channel 15

Good	A little good	Neither	A little bad	Bad	N.A.	Total
19	157	49	15	8	7	255
0.07	0.62	0.19	0.06	0.03	0.03	1.00

Note: Lower row is ratio

Table 10 Reflection of residents' interest

Good	A little good	Neither	A little bad	Bad	N.A	Total
35	129	59	16	8	8	255
0.14	0.51	0.23	0.06	0.03	0.03	1.00

Note: Lower row is ratio

3. Analysis of the results of survey

3.1 Overview of the situation of Channel 15

To begin the analysis, it is helpful to outline the situation of the community and Channel 15. Table 7 shows the degree of attachment of respondents to Takino, where 87% adding up 'much' and 'some' are attached to their hometown. Table 8 shows how willingly respondents want to live continuously in Takino, where 89% answering affirmatively. Hence, it can be said that the community is well established. Table 1 shows that 16% watch Channel 15 daily and 71% watch it sometimes. Considering repeat broadcasting, it does seem that respondents have a high contact with programs. Their satisfaction with Channel 15 is shown in Table 9, with 69% satisfied and only 9% dissatisfied, which does indicate a high level of satisfaction with the programs. Table 10 shows how far respondents think the programs reflect their interests, where 65% answering affirmatively and only 9% negatively. Table 11 shows how far respondents recognize Channel 15 as their common channel, where 63% answering affirmatively and 11% negatively. It is safe to say that Channel 15 has a good reputation with residents and it works well as community media.

Table 11 Recognition of Channel 15 as their common channel

Have	Neither	Hardly	N.A.	Total
161	58	29	7	255
0.63	0.23	0.11	0.03	1.00

Note: Lower row is ratio

3.2 The relationship among the factors

The relationship among personal attributes, contact, attachment, involvement, and sub-effects were examined by making use of the χ^2-test. Contact has a significant relationship with age, of which coefficient of concordance is 0.21. Attachment has a significant relationship with age and household type, of which coefficients of concordance are respectively 0.28 and 0.25. Involvement has no significant relationship with any attribute. These show that personal attributes have

Table 12 An interest effect and gender

	Male	Female	Total
Yes	53 **	121 **	174
No	34 **	30 **	64
Total	87	151	238

Note 1: Level of significance: **<0.01.

Note 2: The underlined frequencies are more than the expected and the other significant frequencies are less than the expected.

Table 13 Relationship of contact with sub-effects

Sub-effects / Contact	Interest (0.32) **			Topic (0.37) **			Participation (0.24) **		
	Yes	No	Total	Yes	No	Total	Yes	No	Total
Daily	35 *	6 *	41	36 **	3 **	39	27 *	12 *	39
Sometimes	129 *	39 *	168	127	41	168	83	78	161
Seldom	10 **	20 **	30	8 **	21 **	29	7 **	22 **	29
Total	174	65	239	171	65	236	117	112	229

Note1: Level of significance: **<0.01, *<0.05, +<0.10

Note2: ( ) is a coefficient of concordance

Note3: The underlined frequencies are more than the expected and the other significant frequencies are less than the expected.

Table 14 Relationship of attachment with sub-effects

Sub-effects / Attachment	Interest (0.33) **			Topic (0.32) **			Participation (0.23) **		
	Yes	No	Total	Yes	No	Total	Yes	No	Total
High	94 **	16 **	110	91 **	18 **	109	67 **	38 **	105
Medium	68	31	99	69	28	97	41 *	53 *	94
Low	10 **	18 **	28	10 **	18 **	28	9 *	19 *	28
Total	174	65	239	171	65	236	117	112	229

Note: The same as Table 13

Table 15 Relationship of involvement with sub-effects

Sub-effects / Involvement	Interest (0.19) *			Topic (0.24) **			Participation (0.34) **		
	Yes	No	Total	Yes	No	Total	Yes	No	Total
High	30 *	3 *	33	30 **	2 **	32	27 **	4 **	31
Some	107	40	147	106	37	143	75	65	140
Little	34 *	21 *	55	32 **	24 **	56	15 **	40 **	55
Total	171	64	235	168	63	231	117	109	226

Note: The same as Table 13

Table 16 Contact and attachment

	Attachment (0.28) **			
Contact	High	Medium	Low	Total
Daily	24	16	2	42
Sometimes	84	76	18	178
Seldom	5 **	17	10 **	32
Total	113	109	30	252

Note: The same as Table 13

Table 17 Attachment and involvment

	Involvement (0.28) **			
Attachment	High	Some	Little	Total
High	27 **	64	21	112
Medium	6 **	73	28	107
Low	2	16	12 *	30
Total	35	153	61	249

Note: The same as Table 13

weak relationship with these three factors. Therefore, their influence on the three factors was not considered in this study. An interest effect has a significant relationship only with gender, of which coefficient of concordance is 0.34. A topic effect and a participation effect have a significant relationship only with age, of which coefficients of concordance are both 0.20. Therefore, only the influence of gender on an interest effect was considered in the followings. Table 12 suggests that an interest effect is more easily produced for female than for male. Tables 13, 14, and 15 show respectively the relationship of contact, attachment,

Table 18 Involvement and contact

Involvement	Contact (0.21) * High	Some times	Seldom	Total
High	6	28	1	35
Some	27	110	16	153
Little	8	38	15 **	61
Total	41	176	32	249

Note: The same as Table 13

and involvement with sub-effects. They are all significant. These indicate that the closer contact, the deeper attachment, and the more active involvement grow, the more easily each sub-effect is produced. Coefficients of concordance at a participation effect in Tables 13 and 14 are relatively small. Coefficients of concordance at an interest and a topic effect in Table 15 are relatively small. These suggest that contact and attachment more easily produce an interest and a topic effect than a participation effect, and involvement more easily produces a participation effect than the other two effects. The relationships among the three factors were examined by making use of the χ^2-test. Tables 16, 17, and 18 show that there is a significant relationship between any pair, in which coefficients of concordance are respectively 0.28, 0.28, and 0.21. Therefore, these factors are expected interdependently to produce sub-effects shown in Tables 13, 14, and 15.

3.3 Analysis of the relationship among the sub-effects

Concerning the effective cases, 225 respondents were divided into eight groups based on their response to the sub-effects (Table 19). This shows that several groups

Table 19 Distribution of cases in sub-effects

Sub-effects	Interest	Topic	Partici-pation	No. of cases	Ratio
Group 1	1	1	1	94	0.42
Group 2	1	1	0	43	0.19
Group 3	1	0	1	7	0.03
Group 4	0	1	1	8	0.04
Group 5	1	0	0	17	0.08
Group 6	0	1	0	16	0.07
Group 7	0	0	1	5	0.02
Group 8	0	0	0	35	0.15
Total				225	1.00

Note: 1 is 'yes' and 0 is 'no'

contain only a few respondents, and that 76% of all respondents are in three groups (groups 1, 2, and 8). This indicates that some combinations of the sub-effects are easily produced and others are difficult. The number of respondents with a participation effect is 114 (groups 1, 3, 4, and 7). 94 out of 114, 82% have the other two effects at the same time. This indicates that a participation effect depends much on the other two effects. The number of respondents with either an interest effect or a topic effect is 185 (groups 1, 2, 3, 4, 5, and 6). 137 out of 185, 74% have both an interest and a topic effect. This indicates that the two effects are inclined to form a strong combination. It can be thought that an interest effect, together with a topic effect, is first produced, and a participation effect is subsequently produced based on the two effects.

Three dominant groups 1, 2, and 8 were examined by making use of the χ^2-test in order to show the way in which contact, attachment, and involvement produce sub-effects (2). Table 20 shows how these factors relate to the difference between sub-effects that groups 2 and 8 have respectively. Contact and attachment have a

Table 20 The difference in sub-effects between groups 2 and 8

	Contact (0.48) ** Daily	Some times	Seldom	Total	Attachment (0.37) ** High	Medium	Low	Total	Involvement High	Some	Little	Total
group 2	8 *	34 *	1 **	43	22 +	19	1 **	42	3	23	16	42
group 8	1 *	18 *	16 **	35	11 +	13	11 **	35	0	20	14	34
Total	9	52 0	17 0	78	33	32	12 0	77	3 0	43 0	30 0	76

Note: The same as Table 13

Table 21 Frequencies of gender in groups 2 and 8

	Male	Female	Total
group 2	11 ·	32 ·	43
group 8	18 ·	16 ·	34
Total	29	48	77

Note1: Level of significant: *<0.05
Note2: A coefficient of concordance is 0.27
Note3: The other notes are the same as Table 13

highly significant relationship with the difference between groups 2 and 8. In other words, both factors can produce the combination of an interest and a topic effect. Group 2 has an interest and a topic effect, but group 8 has no effect. An interest effect is influenced by gender. Then, this pair was examined in the influence of gender by making use of the χ^2-test. Table 21 shows that female frequency is more than the expected, whereas male frequency is less than the expected in group 2 but that the converse is also true in group 8. As shown above, an interest effect is possibly more easily produced for female than for male. These show that the difference in the composition of gender distinguishes group 2 from group 8. This does not, however, influence the following analysis, because the three factors have no relationship with gender.

Furthermore, there is a significant relationship between contact and attachment. This means that an interaction effect of both factors possibly works on the difference shown in Table 20. In order to certify that, three way-table was adopted and examined by making use of the χ^2-test. Table 22 shows a three-way table in which the difference between groups 2 and 8 caused by contact is examined controlling the level of attachment. It indicates that contact can influence the difference at the levels of 'high' and 'medium' in attachment. Both coefficients of concordance are relatively large. Table 23 shows a three-way table in which the difference between the two groups caused by attachment is examined controlling the level of contact. It indicates that attachment can influence the difference only at the levels of 'daily' in contact. The coefficient of concordance is rather large. Thus, one factor's capability of producing sub-effects depends on

Table 22 The difference in sub-effects between groups 2 and 8 at three levels of attachment

Attachment	High (0.44 *)				Medium (0.51 **)				Low			
Contact	Daily	Some times	Seldom	Total	Daily	Some times	Seldom	Total	Daily	Some times	Seldom	Total
group 2	4	18	0 ·	22	4	14	1 ··	19	0	1	0	1
group 8	0	8	3 ·	11	0	6	7 ··	13	1	4	6	11
Total	4	26	3	33	4	20	8	32	1	5	6	12

Note: The same as Table 13

Table 23 The difference in sub-effects between groups 2 and 8 at three levels of contact

Contact	Daily (0.71 *)				sometimes				Seldom			
Attachment	High	Medium	Low	Total	High	Medium	Low	Total	High	Some	Little	Total
group 2	4	4	0 ··	8	18	14	1 ·	33	0	1	0	1
group 8	0	0	1 ··	1	8	6	4 ·	18	3	7	6	16
Total	4	4	1	9	26	20	5	51	3	8	6	17

Note: The same as Table 13

Table 24 The difference in sub-effects between groups 1 and 2

	Contact				Attachment				Involvement (0.34 **)				
	Daily	Some times	Seldom	Total	High	Medium	Low	Total	High	Some	Little		Total
group 1	23	68	3	94	59	31	4	94	24 ·	61	9 ··		94
group 2	8	34	1	43	22	19	1	42	3 ·	23	16 ··		42
Total	31	102	0 4 0	137	81	50	5	0 136	27	0 84	0 25	0	136

Note: The same as Table 13.

the level of the other. In other words, an interaction effect is recognized between contact and attachment. In the effect, both factors interdependently produce the combination of an interest and a topic effect. Looking at the frequencies in Table 22, it is found that, in the both significant frequency tables, the frequency of 'seldom' is less than the expected in group 2 and the converse in group 8. Looking at the frequencies in Table 23, it is found that the frequency of 'low' is less than the expected in group 2 and the converse in group 8 in the significant frequency table. The same trend can be seen in the frequency table of 'sometimes', although the table is not significant. These suggest that for enhancing an interest and a topic effect, it is an efficient means to decrease respondents who 'seldom' watch the channel when they have 'high' or 'medium' attachment, and those who have 'low' attachment when they 'daily' or 'sometimes' watch the channel.

Table 24 shows how three factors relate to the difference between sub-effects that groups 1 and 2 have respectively. Group 2 has an interest and a topic effect, and group 1 has all effects. Involvement is recognized to be highly significant. A coefficient of concordance is small compared with the case of Table 20. It is only involvement that can join a participation effect to the combination of the other two effects. Contact and attachment produce an interest and a topic effect, as shown in Table 20. This is because a participation effect needs practical experience, while the other two effects need awareness and communication. Since groups 1 and 2 have an interest effect, this pair was not examined in the influence of gender. Looking at the frequencies, it is found that a frequency of 'high' is more than the expected and a frequency of 'low' is less than the expected in group 1, and the converse in group 2 in the significant frequency table. This suggests that for enhancing a participation effect, it is an efficient means to increase residents who have 'high' involvement, and to decease those who have 'little' involvement.

4. Conclusions

This paper has tried to determine the way in which contact, attachment, and involvement influence the community effect of Channel 15. We got interesting findings.

(1) The community is well-established in Takino. Channel 15 has a good reputation with residents and fully plays the role of community media.

(2) The closer contact, the deeper attachment, and the more active involvement grow, the more easily each sub-effect is produced.

(3) There are three dominant groups of respondents, as far as sub-effects are concerned: a group with all sub-effects, a group with an interest and a topic effect, and a group with none of them.

(4) An interest and a topic effect are inclined to form a strong combination. A participation effect depends much on the combination.

(5) Channel 15 produces an interest effect, together with a topic effect, and subsequently produces a participation effect based on the other two effects.

(6) Such a difference in the way of production of sub-effects is because a participation effect needs practical experience, while the other two effects need awareness and communication.

(7) An interaction effect is recognized between contact and attachment. These factors interdependently yield the combination of an interest and a topic effect. Involvement independently joins a participation effect to the combination.

(8) For enhancing the community effect, it is an efficient means to decrease residents seldom watching the channel, with high or medium attachment and those having low attachment, with daily or sometimes watching the channel, to increase those with high involvement, and to decease those

with little involvement.

At the same time, however, some questions still remain to be answered.

(1) The findings reflect the conditions of community in Takino and the contents of programs of Channel 15, as well as the definition of the community effects. It is not certain that the findings hold true for other local community channels.

(2) The number of respondents answering 'daily' and 'seldom' in contact, or 'high' and 'little' in involvement was so small that this might influence the results of analysis.

(3) Coefficients of concordance were generally small. This means that the findings include uncertainty caused by factors that we did not consider in this study.

It is not possible to fully evaluate the impact of new media on local communities, because the process of change within communities takes many years to evolve (Lundby 1992). For this reason, studies on the influence of a local community channel will be continually required in various cases.

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Notes

(1) A 'rural type' is MPIS (Multi-Purpose Information System), which is one of the projects to activate rural areas, financially supported by the Ministry of Agriculture, Forestry and Fisheries. It is almost managed by towns and villages. A cable TV selected for this study is one of them.

(2) We tried to examine the rest pairs of groups in the same way. However, the frequencies of both or each of the groups were so small that the differences between the pairs could not be fully analyzed.

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