

# Subjectivity Study on Broadcasting of Civil Defense Exercise in Nation : Focused on Fire-fighting Officers

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## 국가 민방위 훈련 방송에 대한 주관성 연구 : 소방공무원을 중심으로

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**Abstract** The purpose of this study was to provide basic data for developing strategic programs based on broadcasting of civil defense exercise in nation focused on fire-fighting officers. 33 Q-population (concourse) was selected based on the media related literature review described above, and interviews targeting the general public. As the next step representative statements were chosen randomly and reduced in number to a final 25 statement samples for the purposes of this study. The methodology of a Q-study does not infer the characteristics of the population sample from the sample, selecting of the P-sample is likewise not governed probabilistic sampling methods. Finally, in this research, 41 people were selected as the P-sample.

**Key Words** : Subjectivity, Broadcasting of civil defense exercise, Fire-fighting officers, Q methodology, Self-consciousness

**요약** 본 연구의 목적은 소방공무원의 민방위 훈련 방송에 근거한 전략적인 프로그램의 기초자료를 제공하고자 하는데 있다. 소방공무원을 대상으로 민방위 훈련에 대한 문헌 고찰을 하였고, 일반인들에 대한 인터뷰를 수행하였다. 연구 목적에 맞는 25개의 진술문을 토대로 하여 33명의 소방공무원들에게 Q방법론 설문지를 실시하였다. Q방법론은 집단의 특성만을 추론하지 않으며, P 자료는 자료수집방법에 영향을 받지 않는다. 이 연구에서 최종적으로 41명이 P자료로 선정되었다.

**주제어** : 주관성, 민방위훈련방송, 소방공무원, Q방법론, 자아의식

## 1. Introduction

This paper examines broadcasting of civil defense exercise in nation focused on fire-fighting officers.

In other terms, this study tries to analyze broadcasting about broadcasting of civil defense exercise in nation focused on

fire-fighting officers, and how the types are sorted out. Examining opinions on broadcasting of civil defense exercise in nation focused on fire-fighting officers is an important direction for research at the level of multiple discussion in which we can look at it from the main of omnidirectional issues, and significant for the

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development of the related researches in days to come[1].

Most of all, it is possible to objectively analyze statistics for the acceptance type of the impact on reception effect about broadcasting of broadcasting of civil defense exercise in nation focused on fire-fighting officers with existing quantitative methodology(research-methodology). Analytic paper applying a Q-method can draw insightful analysis in that it can grasp even factors in receivers, people's self schema[2].

Therefore, this study based on the common image and disposition about broadcasting of civil defense exercise in nation focused on fire-fighting officers attempted to sort out their subjective recognition[5,6].

In other terms, this research, unlike the existing a methodology of research that draws deductive hypotheses from the existing theory, aims at a new hypothesis abduction by the subjective image people commonly come to have.

This study aims at to look at the characteristics and the subsequent implication of reception type about broadcasting of civil defense exercise in nation focused on fire-fighting officers' self consciousness and to suggest subsequent utility value.

## 2. Theoretical Background and Discussion

### 2.1 Discussion of Related Researches

This paper is to look into the types of civil defense exercise in nation focused on fire-fighting officers.

Therefore, this paper tries to discover a type of acceptance in which respondent peoples themselves define and structuralize the impact about broadcasting of civil defense exercise in nation focused on fire-fighting officers through Q-methodology approach.

And Q-method was designed by William Stephenson and integrated the conceptions related to philosophical, psychological, statistical and psychological measuring to study human attitude and conduct, which is a special statistical technique to analyze quantitatively human subjectivity[3,4].

Also, it is very effectual for consumer behavioral research in that it can explore in depth individuals or small groups compared to research method with traversing feature for many number of samples.

This methodology is scientific in that it applies systematic and objective course, and also, a statistical methodology called factor analysis. Factor analysis in research method makes variables factors while Q-methodology, peoples factors.

So far, the conceptual variables of aesthetic source applied is useful to be measured and to be replaced by the variables that can include fire-fighting officers' speciality of cultural specialities[5-7].

Therefore, discovering subjective perception of civil defense exercise in nation focused on fire-fighting officers throughout Q-method approach, the opportunities to be create a new hypothesis in research may be given[8,9].

Q Methodology is frequently used in psychology and in social sciences to study people's subjectivity, that is, their viewpoint. Q was developed by psychologist William Stephenson. It has been used both in clinical settings for assessing a patient's progress over time (intra-rater comparison), as well as in research settings to examine how people think about a topic (inter-rater comparisons)[3,10].

The name "Q" comes from the form of factor analysis that is used to analyze the data. Normal factor analysis, called "R method," involves finding correlations between variables (say,

height and age) across a sample of subjects. Q, on the other hand, looks for correlations between subjects across a sample of variables. Q factor analysis reduces the many individual viewpoints of the subjects down to a few "factors," which are claimed to represent shared ways of thinking. It is sometimes said that Q factor analysis is R factor analysis with the data table turned sideways. While helpful as a heuristic for understanding Q, this explanation may be misleading, as most Q methodologists argue that for mathematical reasons no one data matrix would be suitable for analysis with both Q and R[11].

The sample of statements for a Q sort is drawn from and claimed to be representative of a "concourse"—the sum of all things people say or think about the issue being investigated. Commonly Q methodologists use a structured sampling approach in order to try and represent the full breadth of the concourse[12].

One salient difference between Q and other social science research methodologies, such as surveys, is that it typically uses many fewer subjects. This can be a strength, as Q is sometimes used with a single subject, and it makes research far less expensive. In such cases, a person will rank the same set of statements under different conditions of instruction. For example, someone might be given a set of statements about personality traits and then asked to rank them according to how well they describe herself, her ideal self, her father, her mother, etc. Working with a single individual is particularly relevant in the study of how an individual's rankings change over time and this was the first use of Q-methodology. As Q-methodology works with a small non-representative sample, conclusions are limited to those who participated in the study.

## 2.2 Research Agendas

This paper purposes to analyze functional quantity which has been used for acceptance effect of pattern of interpersonal communication among people, over-more, to utilize Q-research method which is one of the qualitative analysis methods to access deeper, and fundamental significance.

This paper focused on Q-method types through the interview with peoples about reception effect of pattern of interpersonal communication among peoples, plans to good opportunity to recognize the factors to have influence on the size which is created by the new pattern of interpersonal communication among peoples and the agenda elements about it.

This paper aims to arrange and investigate the acceptance effect about broadcasting of civil defense exercise in nation focused on fire-fighting officers by the existing research and literature analysis. And this paper plans to look at the many sided investigation through positive and in-depth Q-analyses, the contents of the result are expected to be help for more actual awareness.

And this thesis viewed the subjectivity research analytical method in order to get answer of the facts which are proposed from above, and upon this, the research problem about it is as follows.

## 3. Research Question and Method

The current study uses Q-methodology that can measure subjective behaviour which tends to be ignored in survey-based research.

This study investigates the characteristics of each types based on the analysis of the various interests, feelings and opinions on the participation in the acceptance effect about broadcasting of civil defense exercise in nation

focused on fire-fighting officers.

With that in mind, the research question is as follows : first, how can the university students' perceptions who participated on the acceptance effect about broadcasting of civil defense exercise in nation focused on fire-fighting officers?

With regard to this research question, the types of the acceptance effect about broadcasting of civil defense exercise in nation focused on fire-fighting officers and the characteristics of each types and relation between the implication and the phenomena are investigated.

Secondly, what are the differences between the acceptance effect about broadcasting of civil defense exercise in nation focused on fire-fighting officers.

For this research question, in contrast to the first research question, the similarities of responses will be analyzed by type.

A small number of respondents will be used to elucidate these similarities determined by ranking of opinion and subjective response.

### 3.1 Research Method

In the survey question mentioned above, reception behaviour of the reception effect about broadcasting of civil defense exercise in nation focused on fire-fighting officers, is more effectively answered with Q-method Table 1.

Q-method is based on the viewpoint of the respondent and it can explain the various types of responses with respect to the more subjective responses.

When we consider that the previous research method was not capable of measuring the subjective reception behaviour, because it is based on deduction rather than inductive implicative-laden conclusions, we expect that Q-method will make the analysis of the study

results more meaningful.

In this paper, Q-method will be applied to the sorting of statement cards to determine peoples' reception type come from the effect of a behaviors.

As a forms for statement cards, a Q-concourse was developed based on newspaper articles, specifically various materials about broadcasting of civil defense exercise in nation focused on fire-fighting officers. In Table 2, demographic characteristics of the respondents were analyzed and from this data a Q-statement(opinions) was written and persons were selected.

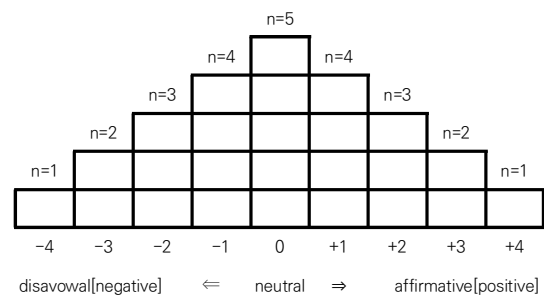


Fig. 1. Sample sorting board and record sheet

In Fig. 1, sorting out was done to determine the Q-sort, which was then analyzed using a PC QUANL program Fig. 1. Table 1 showed the Q sort distribution based on Fig. 1.

### 3.2 Research Mapping

#### 3.2.1 Q-sample and P-sample

The Q-sample of Table 3 is composed from the statements about broadcasting of civil defense exercise in nation focused on fire-fighting officers, in order to document their subjective opinions and values.

A total of 38 persons were assigned by way of the review of the published articles focused on the university students.

As the next step representative statements

were chosen randomly and reduced in number to a final 25 statement samples for the purposes of this study.

There were three kinds of balance including positive, neutral, and negative.

Also, as the methodology of a Q-study does not infer the characteristics of the population

sample from the sample, selecting of the response is likewise not governed probabilistic sampling methods.

At last, in this paper, 41 people were selected as the responses.

**Table 1. Q-sort distribution**

rank	-4	-3	-2	-1	0	1	2	3	4
score	1	2	3	4	5	6	7	8	9
number of statement	1	2	3	4	5	4	3	2	1

**Table 2. Demographic characteristic & weight by types of subject of investigation**

Type	ID	Sex	Age	Education	Marriage Status	Job	Working Year	Religion	Major	Weight
I (N=11) 5	3	M	30s	Univ. graduates	Married	Fire man	under 3	Buddhism	Ambulance	1.2396
	6	M	30s	Univ. graduates	Married	Fire man	3 ~ 5	Religious absence	Rescue	1.1133
	7	M	30s	Univ. graduates	Married	Fire instructor	5 ~ 10	Religious absence	Fire suppression	.3216
	11	M	30s	Col. graduates	Unmarried	Fire instructor	5 ~ 10	Buddhism	Fire suppression	.8248
	12	M	under 29	Univ. graduates	Unmarried	Fire man	3 ~ 5	Religious absence	Ambulance	.8109
	21	M	under 29	Univ. graduates	Unmarried	Fire man	under 3	Religious absence	Fire suppression	.6677
	27	M	30s	Univ. graduates	Unmarried	Fire man	under 3	Religious absence	Ambulance	1.0223
	29	M	30s	Univ. graduates	Married	Fire man	3 ~ 5	Buddhism	Driving	.4456
	36	M	under 29	Univ. graduates	Unmarried	Fire man	3 ~ 5	Buddhism	Driving	1.1355
	37	M	under 29	Univ. graduates	Unmarried	Fire man	under 3	Religious absence	Ambulance	.5914
39	M	under 29	Univ. graduates	Unmarried	Fire man	under 3	Religious absence	Driving	1.2455	
II (N=11) 3	1	M	30s	Col. graduates	Married	Fire man	3 ~ 5	Protestantism	Administration	.2507
	5	M	under 29	high sch. graduates	Married	Fire instructor	3 ~ 5	Religious absence	Fire instructor	.8924
	9	M	30s	Col. graduates	Married	Fire man	3 ~ 5	Buddhism	Ambulance	.9906
	15	M	40s	Col. graduates	Unmarried	Fire 소방장	10 ~ 20	Religious absence	Driving	1.0155
	18	M	30s	Univ. graduates	Married	Fire instructor	5 ~ 10	Religious absence	Fire suppression	1.0482
	22	M	30s	high sch. graduates	Unmarried	Fire man	under 3	Protestantism	Fire suppression	.4242
	24	M	30s	Univ. graduates	Unmarried	Fire instructor	3 ~ 5	Buddhism	Fire suppression	.4772
	30	M	30s	Univ. graduates	Unmarried	Fire man	under 3	Buddhism	Fire suppression	.7139
	34	M	30s	Col. graduates	Married	Fire man	3 ~ 5	Religious absence	Driving	.5532
38	M	under 29	Univ. graduates	Unmarried	Fire man	under 3	Religious absence	Driving	1.3223	
41	M	30s	Univ. graduates	Married	Fire man	3 ~ 5	Religious absence	Driving	.5025	
III (N=15) 4	2	M	under 29	Univ. graduates	Unmarried	Fire man	under 3	Religious absence	Fire suppression	.6275
	4	M	30s	Col. graduates	Married	Fire man	3 ~ 5	Religious absence	Driving	.2742
	8	M	30s	Col. graduates	Married	Fire instructor	5 ~ 10	Buddhism	Fire suppression	.3712
	10	M	30s	Col. graduates	Married	Fire instructor	5 ~ 10	Religious absence	Driving	1.2570
	13	M	30s	Col. graduates	Married	Fire instructor	5 ~ 10	Buddhism	Rescue	1.6389
	17	M	30s	Univ. graduates	Married	Fire man	5 ~ 10	Buddhism	Ambulance	.5692
	20	M	30s	Univ. graduates	Married	Fire instructor	5 ~ 10	Religious absence	Fire suppression	.7360
	23	M	under 29	high sch. graduates	Unmarried	Fire man	under 3	Religious absence	Ambulance	.5997
	25	M	30s	Univ. graduates	Unmarried	Fire instructor	5 ~ 10	Religious absence	Fire suppression	.8347
	26	M	30s	Univ. graduates	Married	Fire instructor	5 ~ 10	Catholic	Ambulance	1.3319
	28	M	30s	Univ. graduates	Married	Fire man	under 3	Buddhism	Ambulance	.6894
	31	F	30s	Univ. graduates	Married	Fire man	3 ~ 5	Buddhism	Fire suppression	.4123
32	M	30s	Univ. graduates	Unmarried	Fire instructor	5 ~ 10	Religious absence	Fire suppression	2.6398	
33	M	under 29	univ. studies	Unmarried	Fire man	under 3	Protestantism	Fire suppression	.4798	
40	M	40s	high sch. graduates	Unmarried	Fire instructor	10 ~ 20	Religious absence	Ambulance	.4677	
IV (N=4) 2	14	M	30s	Univ. graduates	Unmarried	Fire man	under 3	Catholic	Fire suppression	.6175
	16	M	30s	high sch. graduates	Married	Fire man	3 ~ 5	Religious absence	Fire suppression	.3681
	19	M	30s	Univ. graduates	Married	Fire instructor	5 ~ 10	Buddhism	Rescue	1.0103
	35	M	30s	Univ. graduates	Married	Fire man	3 ~ 5	Religious absence	Ambulance	1.2619

Table 3. Z-scores by Types of Q-statements

Q-Statements (Q-samples)	Z-scores by types			
	I Type (N=11)	II Type (N=11)	III Type (N=15)	IV Type (N=4)
1. Broadcasting of civil defense exercise is important to report on the situation at the training site.	1.2	-.7	-.1	1.9
2. In broadcasting of civil defense exercise, the cause of the inexperienced fire drill must be well reported.	.9	-1.1	-.4	1.0
3. Broadcasting of civil defense exercise should be well reported in case of actual damage.	1.8	-.9	1.3	.9
4. Broadcasting of civil defense exercise should report well on rescue situation training for survivors.	.9	.0	.3	.8
5. Broadcasting of civil defense exercise is important to report on medical situation training.	.8	-.4	.0	.5
6. Broadcasting of civil defense exercise should report well on the protection training for the families of the victims of the accident.	.0	-.6	-.7	.9
7. Broadcasting of civil defense exercise is important to report the accident investigation situation training.	.4	-1.1	-.6	.8
8. Broadcasting of civil defense exercise must make a good report of measures for training by the government or related agencies.	-.2	-1.9	-1.2	.7
9. Broadcasting of civil defense exercise must make a good report of the social response to the disaster has been compromised.	.2	-1.6	-.8	.7
10. Broadcasting of civil defense exercise must make a report of an accident log of past disaster events.	-.1	-1.2	-.1	1.2
11. Broadcasting of civil defense exercise need to do a full press briefing.	-.2	-.5	-.4	.3
12. Broadcasting of civil defense exercise must make a report of safety at the scene of the disaster.	.6	1.0	1.1	.3
13. Broadcasting of civil defense exercise must make a correct report of damage situation training.	1.1	.6	.6	.3
14. Broadcasting of civil defense exercise need to provide a quick course of action for disaster training.	.8	1.5	1.0	.3
15. Broadcasting of civil defense exercise must need to report on the disaster drill quickly.	.7	.8	.6	-.5
16. Broadcasting of civil defense exercise should be a sense of scene.	-.5	.1	.4	-.4
17. Broadcasting of civil defense exercise should report the actual situation as it happened.	-.7	.0	.7	-.5
18. In broadcasting of civil defense exercise, a follow-up report on the cause of the disaster should be made.	-1.6	-.1	-.0	-.8
19. In broadcasting of civil defense exercise, the causes of the proposal are analyzed and reported using diagrams and various data.	.0	-.1	-.6	-1.1
20. Broadcasting of civil defense exercise should report live coverage of the incident training site or the situation of the task force.	-1.5	.4	.5	-1.1
21. In broadcasting of civil defense exercise, pre-education training on disaster reports is required.	-.7	1.3	.5	-.8
22. When covering a disaster accident, broadcasting of civil defense exercise must cooperate with the on-site controller's demands or instructions.	-.9	1.6	1.8	-.1
23. In broadcasting of civil defense exercise, important information such as the cause of the accident should be reported through the head or spokesman of the official agency for disaster response.	-1.0	1.7	1.0	-1.6
24. Because broadcasting of civil defense exercise is about preparing for a very urgent situation, even if the report was a little inaccurate, this need not be corrected after now.	-2.7	-.1	-2.6	-1.6
25. Broadcasting of civil defense exercise should be forbidden to show the scene of a provocative and tragic accident.	.5	1.3	-2.2	-2.3

### 3.2.2 Q-sorting and data analysis

After the selection of the Q-sample and p-population(responses), Q-sorters who were

selected as the p-population(responses) was formed from within the Q-sample ; in particular, this process is called as Q-sorting.

The purpose of Q-sorting is to display an individual's attitudes regarding a complex issue or situation by having individuals sort a Q-statements based on a fixed distribution pattern after reading the statements.

In this paper, as shown up on 'Table 1 and 2', the participants sorted out the cards which have the statements into one of the three categories, 'agreeing with,' 'disagreeing with' or 'neutral with.'

The next time, they were required to rank the 'agree with' in order from most agreement (+4) to least agreement (-4), with neutral as (0).

Additionally, these sorters were asked to explain their reasons for ranking by most agreement and least agreement.

These rankings were coded on a scale of one to ten, with most disagreement (-4) as 1, and most agreement (+4) as 9.

The scores of Fig. 1 were then coded by statement number, whether 1 or 7 in increments, and this data was analyzed using the QUANL programme.

**4. Results and Discussion**

In order to examine thoroughly the subjectivity types of the fire-fighting officers' participation in receptions effect about broadcasting of civil defense exercise in Nation,

Q-factor analysis was conducted and three factors were found.

As the result of the using QUANL program, 11 fire-fighting officers were in type 1, 11 fire-fighting officers were in type 2, 15 fire-fighting officers were in type 3, and 4 fire-fighting officers were in type 4.

At this place, the number of fire-fighting officers are meaningless and these four types accounts for about 40%(0.4004) of total variance. Since the people whose factor weight is higher than 1.0 is 5, 3, 4, and 2 for each group, we can say that type 1 is the biggest factor. Also, the representative Eigen values are 7.2607, 6.2487, and 2.9074 each.

Table 3 showed the correlation coefficient between the types and it represents the similarities and affirmation among types.

**Table 4. Eigen value and the variance**

Chosen Eigen values	7.2607	6.2487	2.9074
Percentages of variance	.1771	.1524	.0709
Cumulative	.1771	.3295	.4004

**Table 5. The relation between types**

	1 Type	2 Type	3 Type	4 Type
1 Type	1.000	-	-	-
2 Type	-.165	1.000	-	-
3 Type	.253	.427	1.000	-
4 Type	.605	-.595	.214	1.000

**Table 6. The statements and Z-scores of type 1**

	Q statements	Z-scores
positive	3. Broadcasting of civil defense exercise should be well reported in case of actual damage.	1.79
	1. Broadcasting of civil defense exercise is important to report on the situation at the training site.	1.24
	13. Broadcasting of civil defense exercise must make a correct report of damage situation training.	1.07
negative	23. In broadcasting of civil defense exercise, important information such as the cause of the accident should be reported through the head or spokesman of the official agency for disaster response.	-1.04
	20. Broadcasting of civil defense exercise should report live coverage of the incident training site or the situation of the task force.	-1.49
	18. In broadcasting of civil defense exercise, a follow-up report on the cause of the disaster should be made.	-1.57
	24. Because broadcasting of civil defense exercise is about preparing for a very urgent situation, even if the report was a little inaccurate, this need not be corrected after now.	-2.68

4.1 Analysis of each type

The statements and z-scores, and analysis are higher than ±1 in each type as follows. Fig. 2 show the final analysis of type by Q methodology Fig. 2.

4.1.1 Type 1 (N=11) : Reporting to keep an eye on the actual

Table 6 showed that the "type 1" is the statement 3, 1, 13 in the "agreeing with" statement and statement 23, 20, 18, and 24 in

"disagreeing with" statement show the characteristics of this type the best.

4.1.2 Type 2 (N=11) : Reporting important information in quick cooperation

Table 7 showed that the "type 2" is the statement 23, 22, 14, 25, 21 in the "agreeing with" statement and statement 7, 2, 10, 9, 8 in "disagreeing with" statement show the characteristics of this type the best.

**Table 7. The statements and Z-scores of type 2**

	Q statements	Z-scores
positive	23. In broadcasting of civil defense exercise, important information such as the cause of the accident should be reported through the head or spokesman of the official agency for disaster response.	1.66
	22. When covering a disaster accident, broadcasting of civil defense exercise must cooperate with the on-site controller's demands or instructions.	1.56
	14. Broadcasting of civil defense exercise need to provide a quick course of action for disaster training.	1.54
	25. Broadcasting of civil defense exercise should be forbidden to show the scene of a provocative and tragic accident.	1.29
	21. In broadcasting of civil defense exercise, pre-education training on disaster reports is required.	1.29
negative	7. Broadcasting of civil defense exercise is important to report the accident investigation situation training.	-1.06
	2. In broadcasting of civil defense exercise, the cause of the inexperienced fire drill must be well reported.	-1.06
	10. Broadcasting of civil defense exercise must make a report of an accident log of past disaster events.	-1.19
	9. Broadcasting of civil defense exercise must make a good report of the social response to the disaster has been compromised.	-1.57
	8. Broadcasting of civil defense exercise must make a good report of measures for training by the government or related agencies.	-1.94

**Table 8. The statements and Z-scores of type 3**

	Q statements	Z-scores
positive	22. When covering a disaster accident, broadcasting of civil defense exercise must cooperate with the on-site controller's demands or instructions.	1.77
	3. Broadcasting of civil defense exercise should be well reported in case of actual damage.	1.27
	12. Broadcasting of civil defense exercise must make a report of safety at the scene of the disaster.	1.14
negative	8. Broadcasting of civil defense exercise must make a good report of measures for training by the government or related agencies.	-1.19
	25. Broadcasting of civil defense exercise should be forbidden to show the scene of a provocative and tragic accident.	-2.16
	24. Because broadcasting of civil defense exercise is about preparing for a very urgent situation, even if the report was a little inaccurate, this need not be corrected after now.	-2.63



4.1.3 Type 3 (N=15) : Broadcasting cooperatively at covering a disaster incident

Table 8 showed that the "type 3" is the statement 22, 3, 12 in the "agreeing with" statement and statement 8, 25, 24 in "disagreeing with" statement showed the characteristics of this type was the best.

4.1.4 Type 4 (N=4) : Importance of situation reporting

Table 9 showed that the "type 4" is the statement 1, 10, 2 in the "agreeing with"

statement and statement 20, 19, 23, 24, 25 in "disagreeing with" statement show the characteristics of this type the best.

The Q-statements in consensus are three types including 2: "disagreeing with" and 3 "agreeing with."

Based on the analysis of thus consensus, we could be conclude a few solutions on what the most important role is civil defense exercise in nation focused on fire-fighting officers.

**Table 9. The statements and Z-scores of type 4**

Q statements		Z-scores
positive	1. Broadcasting of civil defense exercise is important to report on the situation at the training site.	1.94
	10. Broadcasting of civil defense exercise must make a report of an accident log of past disaster events.	1.21
	2. In broadcasting of civil defense exercise, the cause of the inexperienced fire drill must be well reported.	1.00
negative	20. Broadcasting of civil defense exercise should report live coverage of the incident training site or the situation of the task force.	-1.09
	19. In broadcasting of civil defense exercise, the causes of the proposal are analyzed and reported using diagrams and various data.	-1.11
	23. In broadcasting of civil defense exercise, important information such as the cause of the accident should be reported through the head or spokesman of the official agency for disaster response.	-1.57
	24. Because broadcasting of civil defense exercise is about preparing for a very urgent situation, even if the report was a little inaccurate, this need not be corrected after now.	-1.57
	25. Broadcasting of civil defense exercise should be forbidden to show the scene of a provocative and tragic accident.	-2.27

**Table 10. Consensus items and average z-scores**

Q statements	Z-scores
12. Broadcasting of civil defense exercise must make a report of safety at the scene of the disaster.	0.74
13. Broadcasting of civil defense exercise must make a correct report of damage situation training.	0.64
4. Broadcasting of civil defense exercise should report well on rescue situation training for survivors.	0.51
16. Broadcasting of civil defense exercise should be a sense of scene.	-0.10
11. Broadcasting of civil defense exercise need to do a full press briefing.	-0.20

**5. Conclusion**

This paper used Q-method in order to view over the subjective propensity about receptions effect about broadcasting of civil defense exercise in nation focused on fire-fighting officers.

At 4 types of analyzed results, it's not unskilled conceptions compared to the past, the most of respondents shown the various opinions as a matter of the expanding and understanding reception effect about broadcasting of civil defense exercise in nation focused on fire-fighting officers.

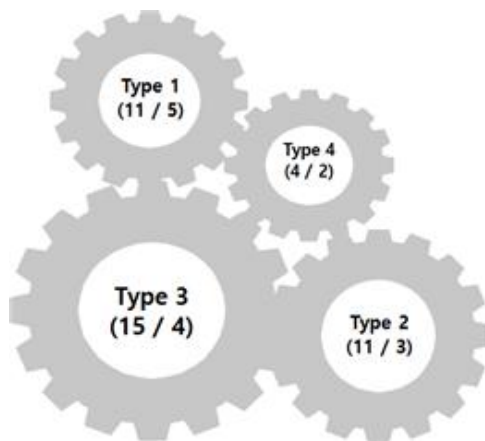


Fig. 2. Final analysis type of Q methodology

Thus, reception effect about broadcasting of civil defense exercise in nation focused on fire-fighting officers is probably the part which must be practised in the various directions like all courses, etc., and it is useful to be improved more, hereafter.

Finally, in this thesis, the p-samples recognized more heavily various uses and participations and were interested in multilateral effects rather than the strength and weakness of the reception effect about broadcasting of civil defense exercise in nation focused on fire-fighting officers.

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