International journal of

terrorism & national security

2020 5(2)

International Journal of Terrorism & National Security

Examining the Effectiveness of Crisis Negotiation Specialized Education Program in KOREAN POLICE Investigation Academy

Woosuk Yun[1]

Keimyung University, Daegu, Republic of Korea

Eunju Hong[2*]

Korean Police Investigation Academy, Asan, Republic of Korea

Abstract

Purpose: Crisis negotiation has become one of the most important areas of Korean policing. The increasing number of dangerous situations such as suicide, hostage-taking and others is raising the importance of crisis negotiation. The purpose of this study is to verify the effectivenessof crisis negotiation education program for police officers in charge of crisis negotiation in the Korean police. Before and after taking the education program in Korean Police Investigation Academy, the improvement of police officers' abilities is identified and verified for the effectiveness of the education program.

Method: This study aims to achieve its purposeby analyzing the effectiveness of crisis negotiation specialized education programs designed to improve the ability of police officers in charge of crisis negotiations. For this study, the effectiveness of the crisis negotiation curriculum, which was conducted two waves between February and October 2020, was analyzed with 53 participants' evaluation data.

Results: The effectiveness of the crisis negotiation specialized education program was carried out by assessing the results of the multiple choice test by participants in the curriculum in pre and post-academic performance score. Comparative analysis of the evaluation results showed that the post-academic performance score was significantly improved compared to the pre-evaluation score. In particular, significant changes could be seen in both the pre- and post-academic performance score comparisons of individual courses. In other words, it is the result of supporting the effectiveness of the crisis negotiation specialized education program in Korean Police Investigation Academy.

Conclusion: Two-weeks crisis negotiation specialized education program for police officers in charge of crisis negotiations showed significant effectiveness. As a result, it is necessary to increase the opportunities to open the curriculum and expand the number of police officers for education. In addition, It is required to analyze the effectiveness of the crisis negotiation specialized education program in more detail. Specially, it is also necessary to analyze whether the educational effects are actually applicable in practice.

[Keywords] *Crisis Management, Crisis Negotiation, Educational Program, Police Training, Policing*

1. Introduction

Korean police have included handling not only terrorism but also crisis situations in the scope of the anti-terrorism negotiation team's work in response to rising demand for crisis negotiations in 2009. Since then, the Korean National Police Agency's investigation bureau and security bureau have formed and operated a crisis negotiation team, respectively. The Korean police's growing interest in crisis negotiations is attributable to the 2009 demolition of Yongsan redevelopment area in central Seoul, which killed six people and injured 24 others[1]. Demand for suicide attempts, abnormal behavior of mentally ill people, domestic violence, and hostage robbery, which were actually required to be negotiated, increased. In particular,

more and more crisis negotiation teams have been dispatched due to frequent attempts to commit suicide. This seems to be due to Korea's higher suicide rate. Korea has the highest suicide rate among OECD countries. The number of suicides reached 13,670 in 2018, 26.6 per 100,000 people[2]. Although the number of suicides has declined in part until recently, suicide is the number one cause of death in 10s, 20s, 30s of Korean. In 2018, 33,451 cases were taken to emergency rooms due to suicide attempts[2]. As of 2019, the number of suicide-related reports to the police reached 90,308[3]. Even if at least 1 percent of the suicide-related cases require a crisis negotiation team, more than 9,000 appearances are needed. In addition to suicide, there have been many incidents(domestic violence, hostage robbery, mentally illness) that require the presence of crisis negotiation teams as well.

Although the Korean police do not officially count the number of crisis negotiation cases, it is true that the activities of the crisis negotiation team increase every year. Although the number of cases related to crisis negotiations continues to increase and the importance of crisis negotiations is emphasized in the policing, there are many practical problems. First of all, there is a lack of manpower for crisis negotiations. As of 2018, there are a total of 118,651 police officers in South Korea[4]. However, there are only 800 police officers in charge of crisis negotiations. Since there are 255 police stations nationwide, it is hardly to assign the crisis negotiation officer to all police stations. In addition, there are police officers specializing in crisis negotiations at all police stations, but it is difficult to guarantee their actual expertise. Secondly, there are not many experts in crisis negotiations. Since 2009, the Korean police have set up a crisis negotiation team around all of the police station, but the actual experience of crisis negotiation experts at the police station level was not much and the period was short. Korea's crisis negotiation team is not a permeant team but a temporary team. Therefore, a crisis negotiation team is operated when a crisis occurs. It is difficult to mean that a police officer belonging to the crisis negotiation team has an ability to negotiate a crisis. The bigger problem is that only 800 police officers on paper belong to the crisis negotiation team. Third, it is the limitation of education and training programs to foster police officers specializing in crisis negotiations. Although the Korean Police Investigation Academy has developed and educated a specialized course for crisis negotiation, the curriculum is only four times a year(two for beginner and two for senior) and lasts for two weeks in the per educational period. There are not many training sessions and the training period is also short for training professionals.

In order to produce more police officers specializing in crisis negotiations, the Korean police needs to increase the number of police officers in crisis negotiations and expand the curriculum for crisis negotiations for police officers. However, the premise here is that it is possible when the crisis negotiation program for police officers is effective. Unfortunately, however, the existing crisis-related studies in Korea had little discussion about the crisis-negotiating curriculum[5]. There is only one research on the effectiveness of the police crisis negotiation education program in 2011[5]. Most of the crisis negotiation-related studies are focused on the theoretical discussion of crisis negotiations and the study of techniques[6][7][8][9][10][11][12][13][14][15][16]. Some studies also have in-depth analyses of actual crisis negotiation cases[17][18]. In addition, several studies have suggested ways for police to develop crisis negotiations[6][10][19][20]. However, a convincing curriculum that can produce many crisis negotiation experts is important for the development of crisis negotiations. Moreover, there has been little evaluation of the education program in previous discussion[5].

Therefore, the purpose of this study is to evaluate the effectiveness of the Korean Police Investigation Academy's specialized crisis negotiation process. To achieve the purpose of the research, the study aims to analyze the pre and post-test data of 53 participants in the two rounds program of the 2020 crisis negotiation education program at the National Police Investigation Academy. If the crisis negotiation education program was effective, participants in the follow-up survey would have performed better than the prior evaluation. By using SPSS, the

effectiveness of crisis negotiation specialized educationprogram was examined. The findings were discussed. Based on the results of the study, policy implications were also presented.

2. Theoretical Background

2.1. Crisis negotiation in policing

To understand the concept of crisis negotiations in the police, the conceptual definition of crisis in prioritized[14]. Crisis is divided into individual and public dimensions. At a personal level, a crisis means a state in which the resources, capabilities, and agility of an individual make it difficult to solve problems on their own in a crisis situation[21][22]. Meanwhile, on the public level, a crisis means difficulty in coping with a crisis with public resources. The crisis is for the disabled who have considerable difficulty in drawing up a solution to the problem[22]. A crisis usually goes through the pre-crisis phase, the crisis phase, the coordination and negotiation phase, and the resolution phase[23]. In general, the pre-crisis phase is often when people in a crisis are not aware of their own crises. In times of crisis, people often have conflicts and have emotional responses. The coordination and negotiation phase is a stage where people in crisis try to accept mediation and negotiation. The resolution phase is the stage in which the crisis is accepted and the crisis is terminated. There are many solutions to the crisis. The most common method is to resolve through tactical responses and negotiations[24]. The tactical response is a case in which an armed crackdown is required in an environment where negotiations are difficult to reach. Resolving through negotiation is the most important method of response in crisis negotiations and means c6ommunication to solve problems without physical conflict. Negotiate through dialogue between stakeholders in a crisis. And draw up a solution to the problem. Usually, police officers in crisis negotiations participate in the solution through negotiation. Therefore, the ability to communicate is very important[22][24].

Crisis negotiations are about gaining the trust of people in crisis situations and bargaining for their safety to contributed to solve the crisis[22]. In crisis negotiations, bargaining and negotiation are seemed to both identical terms[25]. In general, if bargaining is mainly used in relationships between individuals, negotiation is a term used in relations between countries or institutions.

As a result, policing in crisis situation refers to a situation in which police intervention is needed in an urgent situation in which a person's life is at risk or his or her body or property is being violated[1]. Then, crisis negotiations in the police mean negotiating to resolve a person's life, body, property are to be violated or clearly expected to be violated[1]. Negotiations often take place between normal people, but police's crisis negotiations are those taking place in irrational situations with criminals holding hostages, those attempting suicide, and mentally abnormal people[16].

2.2. Development of crisis negotiation models

Over the past 30 years, many scholars have presented various crisis negotiation models[24][26][27][28][29]. Fisher and Ury were the earliest scholars presenting the theoretical model of crisis negotiation[26]. Firsher and Ury presented a 'principled negotiation' model. They focused crisis negotiations on resolving conflicts through interactions between stakeholders based on the principle of profit[26]. However, the police's crisis negotiations were difficult to apply because there were many negotiations with people who had difficulty in rational thinking. The following is a 'crisis bargaining' model[27]. The crisis bargaining model was presented by Donohue and his colleagues as a useful strategy for hostage negotiations[27]. In hostage negotiations, bargaining is divided into crisis bargaining and normative bargaining. Crisis bargaining is the stage of forming a relationship between the hostage-taker and the po-

lice[27]. On the other hand, normative bargaining is material bargaining[27]. Therefore, the possibility of problem-solving increases only when bargaining strategically is made in the order of crisis bargaining to normative bargaining. In 2002, Taylor presented a 'cylindrical crisis communication' model[28]. In this model, Taylor analyzed nine cases of crisis negotiations and showed that the process of communication in crisis negotiations was structured in a cylindrical manner[28].

There is a 'behavioral influence stairway' model[24] developed by the FBI's crisis negotiation unit(CNU). This model focuses on active listening skills, which is the most important in modern crisis negotiations. The model also explains that the relationship between police and hostage-takers is formed through stages of empathy, lapo formation, and behavioral influence[24]. The development of individual stages is in principle predicated on active listening. Successful negotiations can be achieved through the stages of gaining empathy, forming a lapo, and getting the positive behavioral changes[24].

The SAFE model for crisis negotiations is the latest model for negotiations presented by Hammer[29]. Hammer explains that in the SAFE model, the process of crisis negotiation proceeds within the framework of the dominant component[29]. The dominant components are divided into four categories[29]. First, it is a substantial demand. 'Substantial demands' mean mechanical needs, interests, and needs expressed by negotiators and negotiators. Second, 'attunement' means the degree of trust, power, control, and relations that develop between negotiators and subjects. Third, 'face' is the 'self-image' projected by the negotiating body. The negotiating body is very sensitive to the damage to its prestige or reputation. If one's prestige is damaged during the negotiation process, (s)he takes a stubborn stance and resists the negotiation. Finally, 'emotional distress' refers to negative emotions that degrade the ability to cope with stress arising from a crisis. Crisis negotiators are required to be able to detect such negative feelings during the negotiation process[13]. In the SAFE model, the process of crisis negotiation consists of 'the identifying phase', 'the matching phase', and 'the shift phase' within the four dominant components[29]. The identifying phase refers to the process in which the negotiator identifies the framework of the dominant components that the negotiating body reveals. The negotiating body reveals its desires, demands, and feelings. Negotiators observe the attitude and behavior of the negotiating subjects and explore the four components. The matching phase is when the negotiator determines the level of communication and proceeds with the dialogue in line with the SAFE framework revealed by the negotiating body. Finally, the shift phase refers to the process of switching to the next phase of SAFE if there is some progress after communicating in accordance with the emotions and desires revealed by the negotiating body[13].

2.3. Crisis negotiation education program

2.3.1. Background

The Korean Police Investigation Academy is the only educational institution in Korea that trains crisis negotiators. The crisis negotiation education program was established in 2009 to enhance the expertise of its police officers as the National Police Agency's counterterrorism team expanded to the crisis negotiation team. Prior to 2016, the crisis negotiation team training at the Nation Police University was irregular once or twice a year. It was not until 2016 that two specialized and two advanced courses were offered at the Korean Police Investigation Academy.

The purpose of the crisis negotiation specialized education program focused in this study, crisis negotiation professional program, is to understand the need for crisis negotiation and to acquire negotiation theory and negotiation strategy. Through this, the purpose is to cultivate basic knowledge that effective negotiations can be made even in the actual crisis negotiation situation. In addition, the crisis negotiation specialized education program introduces practical cases and allows them to participate in actual role plays so that they can develop their ability

to solve problems through negotiation in real situations such as personnel situations and suicide situations. In particular, the purpose of the program is to experience the dynamic emotional changes of the crisis situation directly through participation in role plays and to ensure that negotiations are carried out effectively.

2.3.2. Summary of crisis negotiation education program

Those who are eligible for education in the crisis negotiation specialized education program are police officers with more than a year of investigation experience recommended by the head of the crisis negotiation team at the local police agencies. In fact, there is a limit to the possible existence of differences on the individual abilities of the student because the subject is selected by recommendation. Students are required to attend more than 90 percent of the classes during the two-week training period and earn a minimum of 60 percent(out of 500). In order to be certified as a professional investigator in crisis negotiations, one must earn at least 80 percent of the 350-point learning evaluation performance scores. The evaluation method is to conduct a learning evaluation through written and practical evaluations during the training period. Other evaluations of educational life and seminars are added to the total score.

The contents of the curriculum specializing in crisis negotiations are divided into theoretical and practical education. Theoretical education fosters basic knowledge essential for crisis negotiations, such as crisis negotiation system, abnormal psychology, terrorism theory and status, and tactical dialogue principle. Practical training consists of case analysis, tactical dialogue training, and role-playing training for actual crisis negotiation cases. The crisis negotiation education program focuses on practical classes so that students can experience actual field rather than theory. Among 63 hours of education in two weeks, theory classes are 10 hours, and the rest are all practical classes. Out of the total subjects, it consists of 20 percent negotiation techniques, 16 percent case analysis and 30 percent negotiation practice.

In the crisis negotiation specialized education program, theoretical education consists of crisis negotiating, terrorism, and psychology. The crisis negotiation course focuses on the theory and technique of crisis negotiation. Terrorism provides the lectures about terrorism-related theories, cases, and actual conditions of terrorism. Psychological lectures focus on types and examples of abnormal psychology. The crisis negotiation education program focuses on practical education. The actual training program analyzes and discusses existing crisis negotiation cases. It also trains the tactical communication techniques available during the actual crisis negotiation process. The training courses for tactical communication techniques are offered in stage 1 to stage 2. Finally, the key to practical training is participation in role-playing[30][31]. Real theater actors appear to show the situation of suicide, domestic violence, kidnapping and kidnapping, hostage robbery, and hostage terror, and allow trainees to participate. During the two-week training period, role-playing training is conducted for three days. Trainees get the opportunity to develop their ability to negotiate crises through participation in role-playing education.

3. Research Method

3.1. Analytical model and hypothesis

The purpose of this study is to verify the effectiveness of the crisis negotiation socialized education program. In order to achieve the purpose of this study, the researchers collected data from the staff of the crisis negotiation education program at the Korean Police Investigation Academy. Trainees conduct a learning assessment before they participate in the education program. In addition, a learning evaluation is conducted on the end of the education program. As a result, it becomes a pre-post experiment. Because there is no comparative group, a total of two rounds of data from those who completed the education program(February, May,

2020) should be used to evaluate the validity of the education program to verify the effectiveness of the education program. Validate the effectiveness of the crisis negotiation specialized education program by comparing the results of the learning evaluation before and after attending the crisis negotiation education program. In other words, the research hypothesis is that there are significant changes in students' learning abilities later than before attending the crisis negotiation education program.

3.2. Data

To analyze the effectiveness of the police crisis negotiation education program, the researchers collected data from the trainees before and after the specialized education program was implemented. The collected data is obtained from a pre-post experimental model without a comparative group. Due to the difficulty of sophisticated experimental design, it is difficult to call complete experimental design and it is pseudo-experimental design without comparison group. To ensure the validity of the experimental data, the effects of the same education program were confirmed by analyzing the data in the 7th and 8th rounds. The data used in the study are the results of the study evaluation before and after students of the Korean Police Investigation Academy's crisis negotiation program. To be more specific, preliminary and post-evaluation data of participants were used for analysis of seven and eight crisis negotiation courses, which were opened in the first half of 2020. The number of participants in the seven-time curriculum was 29 and the number of participants in the eight-time curriculum was 25. Finally, the data used in the analysis is the result of 53 participants' responses.

4. Results

4.1. Descriptive statistics

The following are the results of a demographic statistics of participants. The results of the descriptive analysis of 53 trainees are shown in Table 1. First of all, the demographic and sociological characteristics of the seventh round participants were mostly male and the average age was 41.6552. There were many participants in their 30s and 40s. The rank of the trainees was the highest in rank of assistant inspector and inspector. Simply by average comparison, the pre-score was lower than the post-score. A descriptive statistics for the eighth round can also be found. The participants were all male and the average age was 43.6 years, slightly higher than the seventh. The rank of inspector was the highest among the trainees. It can be seen that the post-score is quite high compared to the pre-score.

Table 1. Descriptive statistics of participant.

Round 7				Round 8		
Variable		Frequency	Percent	Variable		Frequency	Precent
Gender	Male	27	93.1	Gender	Male	24	96.0
	Female	2	6.9		Female	1	4.0
Age	20~39	13	44.8	Age	20~39	9	36.0
	40~49	10	34.5		40~49	10	40.0
	50~60	6	20.7		50~60	6	24.0
Rank	Senior policeman	6	20.7	Rank	Senior policeman	3	12.0
	Assistant inspector	10	34.5		Assistant inspector	7	28.0
	Inspector	12	41.4		Inspector	13	52.0
	Senior inspector	1	3.4		Senior inspector	2	8.0

Variable	Mean	SD	Min	Max	Variable	Mean	SD	Min	Max
Age	41.6552	6.794	29	54	Age	43.6000	8.4803	29	57
Pre-test	103.79	14.860	70	130	Pre-test	102.40	12.258	70	120
Post-test	119.83	11.988	90	140	Post-test	123.0	13.229	100	145

4.2. Differences across demographic characteristics

The study analyzes the effectiveness of crisis negotiation specialized education programs through quasi-experimental design. Although there are limitations in terms of experiment without comparative groups, at least experimental effects can be expected if the academic performance of the students participating in the training is not affected by their demographic characteristics. An ANOVA analysis was conducted to compare the differences in academic performance according to the demographic characteristics of the trainees. Among the demographic characteristics, gender was mostly male, so no difference analysis was conducted. First of all, differences in academic performance by age were compared. In the case of seventh-round trainees, there was no difference in their academic performance by age. In the eighth round, there was not much difference in academic performance depending on age. However, students in their 50s had significantly lower grades compared to other ages, and some of the differences in their studies were found. Next, the differences in academic performance by rank were compared. The police rank may also be related to the duration of police life and the ability of police officers, so there may be differences in academic performance. Fortunately, the academic performance of students who participated in the crisis negotiation program was not affected by their rank. The difference between pre- and post-score scores is not affected by the police rank.

Table 2. Differences across age group.

Round 7					Round 8				
Variable			Mean	SD	Variable			Mean	SD
Age	20~39	Pre-test	104.23	17.422	Age	20~39	Pre-test	99.44	12.360
		Post-test	123.46	14.051			Post-test	125.00	15.411
	40~49	Pre-test	105.50	13.006		40~49	Pre-test	109.50	7.246
		Post-test	118.00	7.528			Post-test	124.50	5.986
	50~60	Pre-test	100.00	3.416		50~60	Pre-test	95.00	14.142
		Post-test	115.00	12.649			Post-test	117.50	18.641
ANOVA		Between sum	Within sum	F	ANOVA		Between Sum	Within Sum	F
		117.951	6064.808	.253			911.278	2694.722	.041*

Note: *p<.05, **p<.01,***p<.001.

Table 3. Differences across rank.

Round 7					Round 8				
Variable			Mean	SD	Variable			Mean	SD
Rank	Senior policeman	Pre-test	106.67	14.376	Rank	Senior policeman	Pre-test	93.33	10.408
		Post-test	12583	13.197			Post-test	116.67	14.434
	Assistant inspector	Pre-test	104.00	18.827		Assistant inspector	Pre-test	105.00	13.540
		Post-test	120.00	11.055			Post-test	12929	13.973
	Inspector	Pre-test	102.50	13.056		Inspector	Pre-test	103.85	12.274
		Post-test	116.25	12.271			Post-test	122.69	12848

		Pre-test	100	-				Pre-test	97.50	10.607
Senior inspector		Post-test	125	-		Senior inspector		Post-test	112.50	3.536
ANOVA		Between sum	Within sum	F	ANOVA	Between sum			Within sum	F
		84.425	6098.333	.115		369.141			3236.859	.798

Note: *p<.05, **p<.01,***p<.001.

4.3. Relationships between age and academic performance

It has been shown that there is little difference between pre- and post-academic performance score depending on demographic characteristics. However, it seems that people in their 50s are slightly different from other groups in their 50s. Thus, the relationship between pre- and post-academic performance score was estimated with age variables as continuous variables. The relationship between pre- and post-academic performance score was also analyzed. Although pre-score and post-score will be affected by the experimental effects, it is likely that there will be a link between pre- and post-academic performance score. As a result of correlation analysis, the difference in academic performance by age was not much. However, the age and post-academic performance score of participants in the round seven showed significant relationship. The higher the age, the lower the academic performance score in the post-score. Next, it was shown that pre- and post-academic performance score had a fairly strong correlation. In other words, the higher the pre-score, the higher the post-score.

Table 4. Relationships between age and academic performance scores.

Variables		Age			Pre-test			Post-test		
		Total	Round 7	Round 8	Total	Round 7	Round 8	Total	Round 7	Round 8
Age	Total	1								
	Round 7		1							
	Round 8			1						
Pre-test	Total	-.090			1					
	Round 7		-.054			1				
	Round 8			-.123			1			
Post-test	Total	-.262			.561***			1		
	Round 7		-.393*			.630***			1	
	Round 8			-.191			.513***			1

Note: *p<.05, **p<.01,***p<.001.

4.4. Experimental effects of crisis negotiation specialized education program

To identify the most important experimental effects in this study, a paired sample T-test was performed. First of all, the results for the entire sample showed very high experimental impacts. The average of all participants' pre-scores was 103.15, but the post-score was 121.30, indicating a significant improvement in their academic performance. There was also a significant difference between pre-scores and post-scores in the seventh round of crisis negotiation specialized education program. In other words, the experimental effect has been proven. The seventh pre-score was 103.79 but after the completion of the education program, their academic performance improved to 119.83. In the eighth round of tests, participants' academic performance score rose sharply from 102.40 to 123 points. As a result, the crisis negotiation specialized education program provided by Korea Police Investigation Academy had a very positive effect on the students' ability to negotiate crisis.

Table 5. Experimental effects of crisis negotiation specialized education program.

Variables	Total			Round 7			Round 8		
	Mean	SD	T	Mean	SD	T	Mean	SD	t
Post-test	121.30	12.559	10.845***	119.83	11.988	7.299***	123.00	13.229	8.168***
Pre-test	103.15	13.608		103.79	14.860		102.40	12.258	

Note: *p<.05, **p<.01,***p<.001.

5. Conclusion

The role of crisis negotiation police officers has become important in the current demand of policing. Many Korean terrorism and police studies point out that police efforts are needed to respond to social risks[32][33][34][35][36]. In response, the Korean police attempt to expand the manpower in crisis negotiations. However, there is still a lack of specialized police officers in crisis negotiations. Therefore, it is necessary to continue to develop and distribute crisis negotiation education programs. This study attempted to verify the effectiveness of the crisis negotiation education program, which was rarely addressed in previous crisis negotiation studies. In order to achieve the purpose of this study, data from participants in the crisis negotiation education program provided by the Korean Police Investigation Academy were analyzed. A total of 53 participants participated in the first half of 2020. Participants were evaluated for pre- and post-academic performance. If the education program is effective, post-academic performance will be improved compared to prior score. In this study, a quasi-experiment without a comparative group was conducted. Statistical analysis shows that the crisis negotiation specialized education program has a significant effect on improving students' academic performance. The change in academic performance was unaffected by class. Age was partly related to some academic performance. As a result, it is concluded that the police program specializing in crisis negotiation greatly contributes to the improvement of students' ability to negotiate crisis. Therefore, it is necessary to establish an infrastructure that can further spread crisis negotiation education programs. There is a need for a system that can provide more courses that have been established so far. Also required is the expansion of faculty members who can take charge of teaching courses. Finally, since the study analyzed a small number of participants, it is necessary to analyze the experimental effects on more participants in the future.

6. References

6.1. Journal articles

[1] Choi SJ. A Study on the Introduction of Police Crisis Negotiation Team. *The Journal of Police Science*, 9(2), 265-239 (2009).

[5] Choi SJ & Hwang SW. Evaluating the Effectiveness of Crisis Negotiation Training Program. *The Journal of Police Science*, 11(2), 101-124 (2011).

[6] Kim BG. A Study on the Development of Police Crisis Negotiation Team. *Journal of Korean Criminological Association*, 4(2), 118-143 (2010).

[7] Park JS & Kim BJ. An Exploratory Study on Hostage Negotiation Tactics. *The Korean Journal of Forensic Psychology*, 4(1), 19-34 (2013).

[8] Yun MW. The Issue of Misperception and Lie in Crisis Negotiation Communication and a Policy Proposition for the Development of Crisis Negotiation Capacity. *Korean Security Journal*, 42, 309-334 (2015).

[9] Yun MW. The Management of Overseas Hostage Taking Incidents and Crisis Negotiations Techniques. *Journal of Korean Public Police and Security Studies*, 15(3), 211-232 (2018).

[10] Lee CH. The Implementation and Development of Crisis Negotiation in Korea. *Journal of Police and Law*, 7(2), 159-183 (2009).

[11] Lee CH. The Study on the Role of Third-party Intermediary(TPI) in Crisis Negotiation. *Institute of Police Science*, 11(3), 237-258 (2016).

[12] Jeon YS. A Study on On-the-spot Control of the Police Crisis Situations. *The Journal of Police Science*, 11(3), 179-207 (2011).

[13] Jung WI. Police Crisis Negations Strategies Based on S.A.F.E. Model. *Korean Association of Public Safety and Criminal Justice,* 36, 255-278 (2009).

[14] Jung WI. Critical Issues in Crisis Negotiations. *Korean Criminal Psychology Review*, 5(2), 213-235 (2009).

[15] Jung WI. The Utilization of Counselors in Crisis Negotiations. *Korean Criminal Psychology Review*, 6(1), 261-281 (2010).

[16] Cho SH. A Study on Activating Police Conversational Techniques: Focusing on Activation of Crisis Negotiation Techniques. *Korean Security Journal*, 54, 149-179 (2018).

[17] Lee JH. The Case Study on Crisis Negotiation for Legal Issues in the United States. *Journal of Police and Law*, 11(1), 127-143 (2014).

[18] Lee JH. A Study on the Failure of Government Confronting Crisis Situation: A Case Study on the Rizal Park Hostage-taking Incident. *The Journal of Police Science*, 16(2), 155-178 (2016).

[19] Cho SH. A Study on the Development Direction of Crisis Negotiations of the Police: With Focusing on the Police Department Education Development Plan. *Korean Security Journal*, 45, 161-186 (2015).

[20] Cha HJ & Jung WI. A Construction Plan of Hostage Negotiations Team in Police: Focus on Role Playing. *Korean Criminal Psychology Review,* 5(1), 145-167 (2009).

[21] Cha HJ. Crisis Situations, Negotiations and Psychology. *Korean Criminal Psychology Review,* 8(1), 197-214 (2012).

[24] Vecchi GM & Van Hasselt VB & Romano SJ. Crisis(Hostage) Negotiation: Current Strategies and Issues in High-risk Conflict Resolution. *Aggression and Violent Behavior,* 10, 533-551 (2005).

[27] Donohue W & Kaufmann G & Smith R & Ramesh C. Crisis Bargaining: A Framework for Understanding Intense Conflict. *International Journal of Group Tensions,* 21, 133-154 (1991).

[28] Taylor P. A Cylindrical Model of Communication Behavior in Crisis Negotiations. *Human Communication Research*, 28(1), 7-48 (2002).

[30] Van Hasselt VB & Romano SJ. Role-playing: A Vital Tool in Crisis Negotiation Skills Training. *FBI Law Enforcement Bulletin*, 73, 12-17 (2004).

[31] Sharp AG. The Importance of Role-playing in Training. *Law and Order: The Magazine for Police Management*, 48, 97-100 (2000).

[32] Yang SD & Kim HW. Research on Potential Terrorist Threat and National Security Crimes. *International Journal of Terrorism & National Security*, 3(2), 8-14 (2018). [Article]

[33] Lee MJ. A Study on the Possible Terrorist Attacks using Improvised Explosive Device in Republic of Korea. *International Journal of Terrorism & National Security*, 1(1), 5-10 (2016). [Article]

[34] Yun WS. Periodical and Spatial Differences of Terrorism Examining Global Terrorism Database from 1970-2018. *International Journal of Terrorism & National Security,* 5(1), 1-12 (2020). [Article]

[35] Kim HB. A study on the Improvement of the Education for Newly Recruited Police Officers. *International Journal of Police & Policing,* 5(1), 22-29 (2020). [Article]

[36] Yang SD & Lee KM. Review of Trend Analysis of Terrorism and Korea's Implications. *International Journal of Terrorism & National Security,* 5(1), 40-47 (2020). [Article]

6.2. Books

[22] Slatkin AA. Communication in Crisis and Hostage Negotiations. Thomas (2005).

[23] McMains MJ & Mullins WC. Crisis Negotiations: Managing Critical Incidents and Hostage Situations in Law Enforcement and Corrections. Anderson(2001).

[25] Rubin JZ & Brown BR. The Social Psychology of Bargaining and Negotiation. Academic (1975).

[26] Fisher R & Ury W. Getting to YES: Negotiating Agreement without Giving in. Houghton Mifflin (1981).

[29] Hammer M. Saving Lives: The S.A.F.E. Model for Resolving Hostage and Crisis Incidents. Greenwood (2007).

6.3. Additional references

[2] Ministry of Health and Welfare & Korea Suicide Prevention Center. 2020 Suicide Prevention Whitebook (2020).

[3] https://www.police.go.kr/ (2020).

[4] https://www.police.go.kr/ (2019).

7. Appendix

7.1. Authors contribution

	Initial name	Contribution
Lead Author	WSY	-Set of concepts ☑ -Design ☑ -Getting results ☑ -Analysis ☑ -Make a significant contribution to collection ☑ -Final approval of the paper ☑ -Corresponding ☑
Corresponding Author*	EJH	-Play a decisive role in modification ☑ -Significant contributions to concepts, designs, practices, analysis and interpretation of data ☑ -Participants in Drafting and Revising Papers ☑ -Someone who can explain all aspects of the paper ☑

International Journal of Terrorism & National Security

SECURITY AGENCY: Differences in Leaders' Followership in the Korean Security Police Organization according to the Educational Background and Employment Paths

Jaesung Nam[1]

Halla University, Wonju, Republic of Korea

Hoyeun Youn[2*]

Daewon University College, Jecheon, Republic of Korea

Sunggu Jo[3]

Kyungwoon University, Gumi, Republic of Korea

Abstract

Purpose: In this study, police officers of the security police organization, which is the backbone of the security of the Republic of Korea, will be analyzed for their perception of the leaders' followership and will seek policy measures to improve the positive leadership of the security police organization, the subsequent followership, and even the positive self-leadership of the members of the organization.

Method: In this study, 100 police officers in the security department of the Korean police organization were surveyed using self-administration method to analyze the perceived attitude toward leaders' followership. Educational background and employment paths were used as the main variables for measurement. Among the various characteristics of the special security police, the focus was on how the leaders' followership differed according to the educational background and employment paths of the security police department.

Results: According to the analysis, for most of the questions that showed statistical significance, security police officers with a relatively high level of education rated the leaders' followership higher. For employment paths, on most of the questions that showed statistical significance, security police officers who were police cadets were found to have a more positive assessment of the leaders' followership than those who became police officers through general recruitment or special recruitment.

Conclusion: In order to ensure that security police officers with a relatively low level of education and who were general policemen/women are reborn as more voluntary and active model followers, the overall employment paths of the entire police organization, including the security police, need to improve. That police officers with a relatively low level of education and who were general policemen/women had a negative assessment of the leaders' followership may be a negative reaction to the problems that the security police organization has been constantly undergoing changes depending on the government's political orientation. Therefore, future government, political circles, and police leaders should not make drastic changes to the security police organization in line with the government's political orientation and the micro changes in the inter-Korean relations.

[Keywords] Security, Security Police, Followership, Employment Path, Educational Background

1. Introduction

Recently, the importance of followership and self-leadership has been emphasized, focusing on leadership development through self-development, personal relationships, and community participation, promoting the growth of individuals as well as organizations. This is because we cannot promote the development of organizations and individuals solely by leaders' leadership as in the past.

But what's important is that both followership and self-leadership form in the midst of interaction with the leaders' leadership. In other words, followers and leaders are in a complementary relationship. For followers with authoritative leaders and a rigid organizational culture, blind obedience is bound to appear naturally. On the other hand, followers who belong to open-minded and progressive leaders and organizations can actively develop their positive followership and self-leadership[1][2][3].

Leadership, followership, and self-leadership are no longer an issue just for organizations seeking productivity like private businesses. In public organizations such as the police, its importance is constantly being emphasized for efficiency, effectiveness, creation of sound organizational culture, and balanced growth of individuals in it[4][5].

In particular, a police organization that secures the security and public order of the nation, such as the security police organization, can provide better security and public services when leaders' sound leadership and subsequent positive followership are formed. In addition, the leadership and followership of leaders are more important because the security police organization, which is greatly affected by changes in the security environment at home and abroad and the inter-Korean relations, can change the organization's status, role, size, and manpower structure depending on the leaders' capabilities.

Therefore, in this study, we would like to analyze the perception of the leaders' followership among police officers of the security police organization, the backbone of the security of the Republic of Korea, and explore ways for the leaders of the security police organization to improve the positive followership.

In particular, the study seeks to focus on how the leaders' followership differs according to the educational background and employment path of the police officers in the security police department among the various characteristics. So far, one of the important topics in police officers management of not only the security police but also the entire Korean police organization is the educational background and employment paths.

In fact, in the case of the Korean police, the educational background of police officers is diverse; graduated from high school, college, graduate school, and the Police Academy. In addition, the police service also consists of a wide variety of ranks, including inspector, senior inspector, superintendent, etc. from general policemen/women, police cadets, and the Policy Academy graduates.

Therefore, the educational background and employment paths of leaders and followers can be an important factor in evaluating the leaders' followership. In addition, this will lead to the discovery of a negative organizational culture that hinders the growth and development of the organization.

Therefore, the study seeks to find policy measures to improve the positive leadership in the security police organization, the followership, and even the positive self-leadership of the members of the organization through two variables: educational background and employment path.

2. Research Method

2.1. Research subjects and sampling method

In this study, among police officers in the security department as of 2020 who had experience in work related North Korean defectors, 100 trainees in the Police Human Resources Development Institute were surveyed via self-administration method. Among the collected survey questionnaires, 91 were selected as valid samples, excluding those whose answers were incomplete or missing.

Table 1. Research subjects.

	Description	N (%)	Total
Gender	Male	61(67.0%)	91
	Female	30(33.0%)	
Age	20s	7(7.7%)	91
	30s	28(30.8%)	
	40s	30(33.0%)	
	50s or older	26(28.6%)	
Education	High school	14(15.4%)	91
	Junior college	30(33.0%)	
	College	43(47.3%)	
	Graduate school	4(4.4%)	
Rank	Policemen/women	1(1.1%)	91
	Senior policemen/women	19(20.9%)	
	Assistant inspector	18(19.8%)	
	Inspector	29(31.9%)	
	Senior inspector	14(15.4%)	
	Superintendent	10(11.0%)	
Employment path	General recruitment	75(82.4%)	91
	Special recruitment	5(5.5%)	
	Police academy	2(2.2%)	
	Police cadet	9(9.9%)	
	Other	0(0.0%)	
Police work period	5 years or less	13(14.3%)	91
	6-10 years	32(35.2%)	
	11-15 years	13(14.3%)	
	16-20 years	13(14.3%)	
	Longer than 20 years	20(22.0%)	
Security department work period	2 years or less	16(17.6%)	91
	3-5 years	56(61.5%)	
	6-10 years	17(18.7%)	
	Longer than 10 years	2(2.2%)	
Number of police officers in the organization	10 or less	18(19.8%)	91
	11-15	42(46.2%)	
	15-20	24(26.4%)	
	21 or more	7(7.7%)	
Work location	Tier 1 areas(big cities)	80(87.9%)	91
	Tier 2 areas(small/medium sized cities)	11(12.1%)	
	Tier 3 areas(rural areas)	0(0.0%)	

2.2. Measuring instrument

In this study, the appropriate method for each verification method was chosen to increase the content validity and verify the construct validity of the questionnaire. Content validity was validated through consultation with relevant experts to adopt survey questions suitable for the purpose of the study, and the reliability of the survey questions was shown to be Cronbach's α coefficient .930.

In addition, open-ended questions were included to obtain data that were not included in the closed questions.

Table 2. The questions.

	Questions
Q-1	My leader's work helps me achieve social goals or personal dreams.
Q-2	My leader does not wait for instructions from the police organization, but acts by firsthand determining what is most important to achieve the organization's goals.
Q-3	My leader independently creates and actively presents new ideas that can contribute to the goals of the police organization.
Q-4	My leader tries to solve difficult problems on his/her own rather than relying on others.
Q-5	My leader helps superiors and colleagues review their ideas or plans once again, even if they express opposition.
Q-6	My leader actively and frankly acknowledges his/her strengths and weaknesses rather than avoiding the assessment on him/her.
Q-7	My leader has a habit of evaluating himself how wise the judgment was made by superiors such as superintendent or senior superintendent, rather than just taking orders.
Q-8	My leader often refuses when a superior asks him/her to do something that conflicts his/her personal interests.
Q-9	My leader decides and acts according to his/her ethical standards, not by the standards imposed by superiors and others.
Q-10	My leader insists on his/her views on important issues, even if they cause conflicts with superiors or give a bad impression to the organization.
Q-11	I think my leader's personal goal is in good harmony with the police organization's top goal.
Q-12	My leader works very devotedly as well as providing the best ideas and abilities for the organization.
Q-13	My leader enlivens colleagues with enthusiasm for work.
Q-14	My leader actively exerts his/her ability to become a more valuable member in the police organization.
Q-15	My leader tries hard to do better in the work that the police organization considers important.
Q-16	My leader takes the initiative in finding and taking the lead in his/her duties to successfully complete the work that are even outside the scope of a given task.

Q-17	My leader does and contributes more than what is given when he/she is not given the role of accountability.
Q-18	My leader helps colleagues get good reviews even if he/she is not recognized.
Q-19	My leader understands the police organization's needs or goal constraints and tries hard to meet them.

2.3. Data processing and analysis method

The data processing of this study was performed by using the SPSS 23.0, a statistical package program, to perform statistical verification for the purpose of data analysis as follows:

First, frequency analysis was conducted to identify general characteristics using the SPSS/PC+23.0 program.

Second, the Cronbach's α coefficient was calculated for the reliability verification of the questionnaire.

Third, One Way ANOVA was conducted to identify differences in leaders' followership according to educational background and employment path.

Fourth, Chi-Square was conducted to identify differences in leaders' followership according to educational background and employment path.

3. Research Results

3.1. Differences in leaders' followership according to the educational background

<Table 3> shows the differences in leaders' followership according to his or her educational background. For Q-2, graduates from junior colleges and colleges were found to be higher than those from high schools, and graduates from graduate schools were higher than those from high schools, junior colleges, and colleges(Hereinafter, graduates are referred to as just the educational institution). For Q-4, graduate school was higher than high school and junior college. For Q-6, graduate school was found to be higher than high school and junior college. For Q-10, college and graduate school were higher than high school. For Q-12, college was found to be higher than junior college and graduate school was higher than high school and junior college. For Q-13, graduate school was found to be higher than high school and junior college. For Q-14, graduate school was higher than high school. For Q-15, college was higher than high school and junior college. For Q-16, graduate schools was higher than high school and junior college. For Q-18, graduate school was found to be higher than junior college.

Table 3. Differences in leaders' followership according to the educational background.

		N	M	SD	F	Sig.	Post-hoc
Q-1	High school	14	3.6429	.63332	1.889	.137	
	Junior college	30	3.6667	.47946			
	College	43	3.8605	.60085			
	Graduate school	4	4.2500	.50000			

		N	Mean	SD	F	p	Post-hoc
Q-2	High school	14	3.2857	.61125	9.131	.000	B, C>A D>A, B, C
	Junior college	30	3.7333	.44978			
	College	43	3.8372	.53141			
	Graduate school	4	4.7500	.50000			
Q-3	High school	14	3.1429	.53452	2.725	.049	
	Junior college	30	3.4667	.62881			
	College	43	3.6279	.69087			
	Graduate school	4	4.0000	.81650			
Q-4	High school	14	3.3571	.63332	3.950	.011	D>A, B
	Junior college	30	3.4667	.62881			
	College	43	3.7442	.72680			
	Graduate school	4	4.5000	.57735			
Q-5	High school	14	3.2857	.61125	2.060	.111	
	Junior college	30	3.4333	.50401			
	College	43	3.4884	.79798			
	Graduate school	4	4.2500	.95743			
Q-6	High school	14	3.0000	.55470	5.278	.002	D>A, B
	Junior college	30	3.3333	.66089			
	College	43	3.5814	.82325			
	Graduate school	4	4.5000	.57735			
Q-7	High school	14	3.4286	.51355	3.100	.031	
	Junior college	30	3.3000	.59596			
	College	43	3.6744	.83726			
	Graduate school	4	4.2500	.50000			

Q-8	High school	14	3.2143	.57893	2.564	.060	
	Junior college	30	3.2667	.63968			
	College	43	3.6744	.80832			
	Graduate school	4	3.5000	.57735			
Q-9	High school	14	3.1429	.77033	2.134	.102	
	Junior college	30	3.1000	.66176			
	College	43	3.4419	.73363			
	Graduate school	4	3.7500	.50000			
Q-10	High school	14	2.9286	.61573	5.579	.002	C, D>A
	Junior college	30	3.4000	.56324			
	College	43	3.5814	.69804			
	Graduate school	4	4.2500	.95743			
Q-11	High school	14	3.0714	.47463	3.053	.033	
	Junior college	30	3.3000	.70221			
	College	43	3.6047	.69486			
	Graduate school	4	3.7500	.50000			
Q-12	High school	14	3.3571	.63332	6.378	.001	C>B D>A, B
	Junior college	30	3.2333	.56832			
	College	43	3.6744	.68037			
	Graduate school	4	4.5000	.57735			
Q-13	High school	14	3.2857	.72627	5.505	.002	D>A, B
	Junior college	30	3.2333	.62606			
	College	43	3.6279	.69087			

	Graduate school	4	4.5000	.57735			
Q-14	High school	14	3.2143	.80178	3.315	.024	D>A
	Junior college	30	3.4333	.50401			
	College	43	3.6047	.65971			
	Graduate school	4	4.2500	.50000			
Q-15	High school	14	3.2857	.61125	4.833	.004	C>A, B
	Junior college	30	3.3000	.65126			
	College	43	3.7907	.59993			
	Graduate school	4	3.7500	.50000			
Q-16	High school	14	3.0000	.55470	4.351	.007	D>A, B
	Junior college	30	3.1333	.73030			
	College	43	3.3953	.65971			
	Graduate school	4	4.2500	.95743			
Q-17	High school	14	3.2857	.72627	2.191	.095	
	Junior college	30	3.3000	.59596			
	College	43	3.5814	.73136			
	Graduate school	4	4.0000	.00000			
Q-18	High school	14	3.4286	.64621	3.671	.015	D>B
	Junior college	30	3.2000	.76112			
	College	43	3.6279	.72451			
	Graduate school	4	4.2500	.50000			
Q-19	High school	14	3.5000	.65044	2.598	.057	
	Junior college	30	3.3333	.54667			
	College	43	3.6512	.61271			

	Graduate school	4	4.0000	.00000			

Note: A: High school, B: Junior college, C: College, D: Graduate school.

3.2. Differences in leaders' followership according to the employment paths

<Table 4> shows the differences in leaders' followership according to the employment path. For Q-1, Q-2, Q-3, Q-4, Q-7, Q-12, Q-13, and Q-14, police cadets were found to be higher than general recruitment, and for Q-11, police cadets were found to be higher than general recruitment and special recruitment.

Table 4. Differences in leaders' followership according to the employment paths.

		N	M	SD	F	Sig.	Post-hoc
Q-1	General recruitment	75	3.6800	.54920	5.590	.001	D>A
	Special recruitment	5	4.0000	.00000			
	Police academy	2	4.5000	.70711			
	Police cadet	9	4.3333	.50000			
Q-2	General recruitment	75	3.6667	.57735	4.366	.007	D>A
	Special recruitment	5	4.0000	.00000			
	Police academy	2	4.0000	.00000			
	Police cadet	9	4.3333	.50000			
Q-3	General recruitment	75	3.4267	.66115	4.173	.008	D>A
	Special recruitment	5	3.6000	.54772			
	Police academy	2	3.5000	.70711			
	Police cadet	9	4.2222	.44096			
Q-4	General recruitment	75	3.5467	.72211	2.697	.051	D>A
	Special recruitment	5	3.8000	.44721			
	Police academy	2	3.5000	.70711			
	Police cadet	9	4.2222	.44096			
Q-5	General recruitment	75	3.4133	.69929	1.935	.130	

	Special recruitment	5	3.4000	.54772			
	Police academy	2	3.5000	.70711			
	Police cadet	9	4.0000	.70711			
Q-6	General recruitment	75	3.4133	.79003	1.960	.126	
	Special recruitment	5	3.0000	.00000			
	Police academy	2	4.0000	.00000			
	Police cadet	9	3.8889	.78174			
Q-7	General recruitment	75	3.4533	.68366	3.528	.018	D>A
	Special recruitment	5	3.4000	.54772			
	Police academy	2	4.0000	.00000			
	Police cadet	9	4.2222	.97183			
Q-8	General recruitment	75	3.4533	.72211	.613	.608	
	Special recruitment	5	3.2000	.83666			
	Police academy	2	4.0000	.00000			
	Police cadet	9	3.5556	.88192			
Q-9	General recruitment	75	3.2533	.71836	1.593	.197	
	Special recruitment	5	3.2000	.83666			
	Police academy	2	3.0000	.00000			
	Police cadet	9	3.7778	.66667			
Q-10	General recruitment	75	3.3867	.67570	2.816	.044	
	Special recruitment	5	3.2000	.44721			
	Police academy	2	4.0000	.00000			
	Police cadet	9	4.0000	.86603			

Q-11	General recruitment	75	3.3600	.65016	4.904	.003	D>A, B
	Special recruitment	5	3.0000	.70711			
	Police academy	2	4.0000	.00000			
	Police cadet	9	4.1111	.60093			
Q-12	General recruitment	75	3.4267	.64038	5.373	.002	D>A
	Special recruitment	5	3.4000	.54772			
	Police academy	2	3.5000	.70711			
	Police cadet	9	4.3333	.70711			
Q-13	General recruitment	75	3.4133	.69929	2.678	.052	D>A
	Special recruitment	5	3.4000	.54772			
	Police academy	2	3.5000	.70711			
	Police cadet	9	4.1111	.78174			
Q-14	General recruitment	75	3.4667	.62240	3.220	.027	D>A
	Special recruitment	5	3.2000	.44721			
	Police academy	2	3.5000	.70711			
	Police cadet	9	4.1111	.78174			
Q-15	General recruitment	75	3.4800	.66495	1.687	.176	
	Special recruitment	5	3.8000	.44721			
	Police academy	2	4.0000	.00000			
	Police cadet	9	3.8889	.60093			
Q-16	General recruitment	75	3.2400	.71357	1.880	.139	
	Special recruitment	5	3.0000	.70711			
	Police academy	2	3.5000	.70711			

	Police cadet	9	3.7778	.66667		
Q-17	General recruitment	75	3.4133	.69929	1.993	.121
	Special recruitment	5	3.2000	.44721		
	Police academy	2	4.0000	.00000		
	Police cadet	9	3.8889	.60093		
Q-18	General recruitment	75	3.3733	.76712	3.297	.024
	Special recruitment	5	4.0000	.00000		
	Police academy	2	4.0000	.00000		
	Police cadet	9	4.0000	.50000		
Q-19	General recruitment	75	3.4800	.60090	2.613	.056
	Special recruitment	5	3.4000	.54772		
	Police academy	2	4.0000	.00000		
	Police cadet	9	4.0000	.50000		

Note: A: General recruitment, B: Special recruitment, C: Police academy, D: Police cadet

As shown in <Table 5>, an analysis of the connection between the educational background and employment path showed that "x2=18.597 and p=0.029", indicating that there was a connection between the educational background and employment path at a significance level of <0.05.

Frequency data are as follows: for high school, 14 general recruitment(100.0%); for junior college, 27 general recruitment(90.0%); for college, 32 general recruitment(74.4%); and for graduate school, 2 general recruitment and 2 police cadets(50.0% respectively).

Table 5. Connection between the educational background and employment path.

Description	Frequency (%)				Total
	General recruitment	Special recruitment	Police academy	Police cadet	
High school	14 (100.0)	0 (0.0)	0 (0.0)	0 (0.0)	14(100.0)
Junior college	27 (90.0)	3 (10.0)	0 (0.0)	0 (0.0)	30(100.0)
College	32 (74.4)	2 (4.7)	2 (4.7)	7 (16.3)	43(100.0)

Graduate school	2 (50.0)	0 (0.0)	0 (0.0)	2 (50.0)	4(100.0)
x^2(p)	18.597(0.029)*				

Note: p*＜0.05, p**＜0.01, p***＜0.001

As shown in <Table 5>, an analysis of the connection between the educational background and employment path showed that "x2=18.597 and p=0.029", indicating that there was a connection between the educational background and employment path at a significance level of <0.05.

Frequency data are as follows: for high school, 14 general recruitment(100.0%); for junior college, 27 general recruitment(90.0%); for college, 32 general recruitment(74.4%); and for graduate school, 2 general recruitment and 2 police cadets(50.0% respectively).

4. Conclusion and Discussion

As mentioned above, this study empirically verified how the perception of leaders' followership differs according to their educational background and employment path for police officers in the security police organization.

According to the analysis, most of the questions that showed statistical significance regarding the difference in the leaders' followership according to the educational background showed that security police officers with relative higher education including college or graduate school graduates were more likely to highly evaluate the leaders' followership than those who graduated from high school or junior college.

In most of the questions that showed a statistical significance for the employment path, the security police officers who were police cadets positively evaluated leaders' followership compared to those who were hired by general and special recruitment.

After all, this analysis indicates that lower-ranking members of the police, who have relatively low educational background, tend to be negative about the leadership of their leaders in the security police organization. The analysis also indicates that security police officers, who are relatively low-educated and hired through general recruitment, are not able to exercise their positive followership under leader's authority or conservative organizational culture and are leading a passive and inactive organizational life.

Kelly classifies followership types as "alienated follower, conformist, pragmatic survivor, passive follower, and effective follower, and among the five types, effective follower, which is independent and critical in thinking and actively engages in action to solve the problem, is the most desirable one[6][7].

However, the study's analysis shows that security police officers, with a relatively low level of education and general recruitment, have an independent and critical mindset, but show a similar perception to that of "alienated followers" who show passive and inactive behavior.

"Alienated followers" show the characteristics of "effective follower" when they first enter the organization, but later, they often form a cynical attitude through unfair treatment by the organization or the leader in the course of their work life. In addition, if complaints about the organization and leaders continue to accumulate in this process, they experience low levels of job satisfaction, high levels of job stress, and burnout. This means that communication, followership, and self-leadership are important within the organization[8][9][10].

Therefore, considering the importance of the security police maintaining national security by eliminating various emerging security hazards such as cyber security, economic security, and human security, in addition to traditional security activities such as investigation and

arrest of security related criminals, such negative organizational culture and leadership should be improved as soon as possible[11][12].

Security police officers are important security assets that have been trained over a long period of time based on the security police system. Nevertheless, security police officers who have a relatively low level of education and were hired through general recruitment, who make up most of the organization's police officers structure, negatively evaluate the leaders' followership and show the form of alienated followership, and this can undermine the effectiveness of the organization as well as the ability of the security police, which is directly linked to the national security.

Therefore, from this point of view, it is necessary to improve the overall employment paths of the entire police organization, including the security police, in order to ensure that the police officers hired through general recruitment are reborn as more voluntary and active "effective followers."

For security police officers who have been working as security police officers for a long period of time through the security police system, the expertise is prioritized over rank. So, when security police officers who were police cadets and from the Police Academy are given top positions regardless of their expertise, leading and supervising those who with a relatively low level of education and hired through general recruitment, it is naturally difficult to form positive followership.

Therefore, ultimately, the unification of the police employment path of general recruitment is necessary, but realistically, if this is difficult to implement in a short period of time, police officers management, at least for the security police organization, will need to be prioritized based on expertise, not ranks. For example, a drastic selection system could be considered for security police officers who have produced long-term results based on a high level of expertise.

Second, the analysis results may indicate a kind of negative reaction to the problems where the security police organization is constantly undergoing changes, depending on the government's political orientation. In the security police organization run by the security police system, there may be a lot of veteran police officers who are likely to have served in security-related departments for a long time. That is why they can evaluate the process of the security police being repeatedly reduced and expanded, depending on the political conditions, as a lack of leadership[13].

So in the future, the government, political circles, and police leaders should not make drastic changes to the security police organization in line with the government's political orientation and changes depending on micro changes in the inter-Korean relations. The recent security environment surrounding the international community and the Korean Peninsula is facing a wide variety of security risks beyond the traditional security concept of protecting the nation, one from the Cold War era. Also, the pace of change in the inter-Korean relations is getting much faster than before[14][15].

Therefore, it would be desirable for the government or the National Police Agency to help the security police organization establish new roles and strengthen the organization's capabilities in accordance with the rapidly changing security environment. They should also ensure that security police officers, an important security asset, have no cases of losing motivation or being transferred to other areas with alienated followership.

5. References

[1] Lim YJ & Lee MS. Implications of Emotional Coaching and Integrated Art Therapy Teaching Method on Leadership Education in the AI Era. *Robotics & AI Ethics*, 5(2), 42-49 (2020). [Article]

[2] Jung HS. The Implications of Police Gender Inclusive Leadership. *International Journal of Human & Disaster*, 5(2), 10-20 (2020). [Article]

[3] Kim DW. From Management to Leadership in Diverse Workplaces: Theoretical Proposals. *International Journal of Protection, Security & Investigation*, 4(2), 40-46 (2019). [Article]

[4] Kim DS & Choi TH. A Typology of Followers in the Public Sector: Focusing on the Perception of Rule and Self-performance. *Korean Society and Public Administration,* 25(2), 183-215 (2014).

[5] Baek JW & Yoon DY & Chang JW. The Effect of Authentic Leadership on Organizational Citizenship Behavior in a Public Institution: The Mediating Effect of Followership. *Korean Corporation Management Review,* 26(6), 127-150 (2019).

[6] Park JW & Park JY. A Study on the Effect of the Followership Types of Foodservice Employee on the Job Satisfaction: Employment Status which is Moderating Variable. *Journal of Hotel & Resort*, 13(3), 317-332 (2014).

[7] Park JY & Kwon DK & Kim YS. Research Articles: A Study on the Effect of the Followership Types of Family Restaurant`s Employee on the Affective Commitment & Empowerment. *Korean Journal of Tourism Research,* 22(3), 341-357 (2007).

[8] Park SH & Kim BT & Choi BJ. Effect of High-school Athletic Majors' Self-leadership and Self-efficacy on Exercise Adherence Intention. *International Journal of Sport,* 1(1), 26-30 (2016). [Article]

[9] Cho CK & Shin MC. The Effects of Special Security Guards' Self-leadership on Organizational Citizenship Behavior and Organizational Effectiveness. *International Journal of Protection, Security & Investigation,* 2(1), 9-14 (2017). [Article]

[10] Jeon KD & Park SJ. Analysis of Domestic Research Trend in Self-leadership Found among Nursing Students in Republic of Korea. *International Journal of Crisis & Safety,* 3(4), 1-9 (2018). [Article]

[11] Chang NS & Nam JS. A New Security Paradigm for the Korean National Police and the Role of Security Police. *Korean Police Studies Review,* 8(2), 123-152 (2009).

[12] Jeong SC. Securitization, Human Security, and South Korea: An Empirical Analysis on the Threats South Koreans Feel in Their Daily Lives. *Culture and Politics,* 6(3), 39-76 (2019).

[13] Nam JS. Change of Security Police and Policy Implications Since Lee Myung-bak Government. *Journal of Korean Criminological Association,* 6(1), 3-34 (2012).

[14] Kim SB. Emerging Security and Meta-governance: Theoretical Understanding of the New Security Paradigm. *Korean Political Science Review,* 50(1), 75-104 (2016).

[15] Cho KG. Changes of Northeast Security Environment and Korean Security -Focusing on Military Expenditures and Strategies-. *Unification Strategy,* 20(3), 159-192 (2020).

6. Appendix

6.1. Authors contribution

	Initial name	Contribution
Lead Author	JSN	-Set of concepts☑ -Design ☑ -Getting results ☑ -Analysis ☑
Corresponding Author*	HYY	-Make a significant contribution to collection ☑ -Final approval of the paper ☑ -Corresponding ☑ -Play a decisive role in modification ☑
Co-Author	SGJ	-Significant contributions to concepts, designs, practices, analysis and interpretation of data ☑ -Participants in Drafting and Revising Papers ☑ -Someone who can explain all aspects of the paper ☑

International Journal of Terrorism & National Security

NATIONAL SECURITY: Differences in Leaders' Followership in the Korean Security Police Organization according to the Number of Police Officers and Work Location

Hoyeun Youn[1]

Daewon University College, Jecheon, Republic of Korea

Jaesung Nam[2*]

Halla University, Wonju, Republic of Korea

Sunggu Jo[3]

Kyungwoon University, Gumi, Republic of Korea

Abstract

Purpose: This study aims to verify differences in leaders' followership with police officers working in the security police organization, the backbone of the security of the Republic of Korea, and discusses ways for the leaders of the security police organization to improve the followership. In particular, the study focused on how the leaders' followership differs depending on the number of police officers in the security police organization and work location among different variables.

Method: In this study, among police officers in the security department as of 2020 who had experience in work related North Korean defectors, 100 trainees in the Police Human Resources Development Institute were surveyed via self-administration method to verify differences in leaders' followership according the number of police officers and place work. Frequency analysis, t-test, and One Way ANOVA were used as analysis methods.

Results :According to the analysis, the leaders' followership is forming positively in a medium-sized security police organization of about 11 to 20 members. As for the differences in the leaders' followership according to the work location, in most questions, it was showed that tier 1 area(big cities) was higher than tier 2 area(small and medium-sized cities). And the analysis of the connection between the number of police officers and work location showed that the leaders' followership were the most positive in the mid-sized organization(11 to 20 police officers) in big cities.

Conclusion: In conclusion, through a "choice and concentration" strategy, the security department should make sure that the police stations in tier 2 and 3 operate minimal functions such as analyzing trends in security crimes or supporting and protecting North Korean defectors, and that the National Police Agency, local police agencies, and police stations in tier 1 areas play most of their roles.

Second, the size of the organization will be composed of 11 to 20 people, but it will be effective for large organizations such as the National Police Agency and local police agencies to organize the overall size of the security department into 11 to 20 people in consideration of security demand in small organizations such as police stations.

[Keywords] **National Security, North Korea, Security Police, Police Organization, Followership**

1. Introduction

The global security environment has recently seen a trend of "comprehensive security," with security players diversifying and situations mixed. The security situation is getting more complicated, forecasting more difficult, and the type and case of sudden occurrences are in-

creasing. In this unpredictable, fluid security environment of the 21st century, "absolute security" cannot exist[1].

In addition, notwithstanding the mood of reconciliation and coexistence of the initial stage of the Moon Jae-in government, considering that the recent security environment surrounding the Korean Peninsula is changing unexpectedly in regards to the relations between North Korea and the U.S. as well as dynamics related to China and Japan, there is ample possibility of a sudden change that could seriously threaten the nation's security.

Therefore, the security police, who are responsible for the important part of the national security in the non-military sector, should be fully prepared for it and should be ready to respond quickly in the event of a mass defection from the North[2][3].

However, smooth communication and interaction between members of the security police organization are essential for them to establish a systematic response strategy to sudden changes in North Korea and to respond more quickly and effectively in times of crisis threatening national security. In particular, due to the nature of work of the security police that is directly related to national security, the leadership of the top or mid-level managers is essential to draw swift and active responses from members of the organization in the event of a crisis[4].

And followership that allows members of the security police organization to perform tasks and roles quickly according to the organization's authority and norms will also be an important factor that will determine the success or failure of the security police organization as well as the national security.

What a leader needs is leadership, and what a great number of members who support the organization along with the leader need is followership, which is the driving force behind the development of the organization by all its members[5][6[7].

Therefore, this study aims to verify the differences in leaders' followership in the security police organization, which is the backbone of the security of the Republic of Korea, and seeks ways for the leaders of the security police organization to improve the followership.

In particular, the study seeks to focus on how the leaders' followership differs depending on the number of police officers in the security police organization and work location among the various characteristics of the security police. This is because the analysis results based on the number of police officers and work location can serve as an important factor in the design and composition of the security police organization in the future, and can also serve as a significant basis for calculating the size of the security police organization, where the size of the security police organization is flexible depending on the president's political ideology and inclination.

2. Research Method

2.1. Research subjects and sampling method

In this study, among police officers in the security department as of 2020 who had experience in work related North Korean defectors, 100 trainees in the Police Human Resources Development Institute were surveyed via self-administration method. Among the collected survey questionnaires, 91 were selected as valid samples, excluding those whose answers were incomplete or missing.

Table 1. Research subjects.

	Description	N(%)	Total
Gender	Male	61(67.0%)	91
	Female	30(33.0%)	

Age	20s	7(7.7%)	91
	30s	28(30.8%)	
	40s	30(33.0%)	
	50s or older	26(28.6%)	
Education	High school	14(15.4%)	91
	Junior college	30(33.0%)	
	College	43(47.3%)	
	Graduate school	4(4.4%)	
Rank	Policemen/women	1(1.1%)	91
	Senior policemen/women	19(20.9%)	
	Assistant inspector	18(19.8%)	
	Inspector	29(31.9%)	
	Senior inspector	14(15.4%)	
	Superintendent	10(11.0%)	
Employment path	General recruitment	75(82.4%)	91
	Special recruitment	5(5.5%)	
	Police Academy	2(2.2%)	
	Police cadet	9(9.9%)	
	Other	0(0.0%)	
Police work period	5 years or less	13(14.3%)	91
	6~10 years	32(35.2%)	
	11~15 years	13(14.3%)	
	16~20 years	13(14.3%)	
	Longer than 20 years	20(22.0%)	
Security department work period	2 years or less	16(17.6%)	91
	3~5 years	56(61.5%)	
	6~10 years	17(18.7%)	
	Longer than 10 years	2(2.2%)	
Number of police officers in the organization	10 or less	18(19.8%)	91
	11~15	42(46.2%)	
	15~20	24(26.4%)	
	More than 21	7(7.7%)	
Work location	Tier 1 areas(big cities)	80(87.9%)	91
	Tier 2 areas(small/medium-sized cities)	11(12.1%)	
	Tier 3 areas(rural areas)	0(0.0%)	

2.2. Measuring instrument

In this study, the appropriate method for each verification method was chosen to increase the content validity and verify the construct validity of the questionnaire. Content validity was

validated through consultation with relevant experts to adopt survey questions suitable for the purpose of the study, and the reliability of the survey questions was shown to be Cronbach's α coefficient .930.

In addition, open-ended questions were included to obtain data that were not included in the closed questions.

Table 2. The questions.

	Questions
Q-1	My leader's work helps me achieve social goals or personal dreams.
Q-2	My leader does not wait for instructions from the police organization, but acts by firsthand determining what is most important to achieve the organization's goals.
Q-3	My leader independently creates and actively presents new ideas that can contribute to the goals of the police organization.
Q-4	My leader tries to solve difficult problems on his/her own rather than relying on others.
Q-5	My leader helps superiors and colleagues review their ideas or plans once again, even if they express opposition.
Q-6	My leader actively and frankly acknowledges his/her strengths and weaknesses rather than avoiding the assessment on him/her.
Q-7	My leader has a habit of evaluating himself how wise the judgment was made by superiors such as superintendent or senior superintendent, rather than just taking orders.
Q-8	My leader often refuses when a superior asks him/her to do something that conflicts his/her personal interests.
Q-9	My leader decides and acts according to his/her ethical standards, not by the standards imposed by superiors and others.
Q-10	My leader insists on his/her views on important issues, even if they cause conflicts with superiors or give a bad impression to the organization.
Q-11	I think my leader's personal goal is in good harmony with the police organization's top goal.
Q-12	My leader works very devotedly as well as providing the best ideas and abilities for the organization.
Q-13	My leader enlivens colleagues with enthusiasm for work.
Q-14	My leader actively exerts his/her ability to become a more valuable member in the police organization.
Q-15	My leader tries hard to do better in the work that the police organization considers important.
Q-16	My leader takes the initiative in finding and taking the lead in his/her duties to successfully complete the work that are even outside the scope of a given task.
Q-17	My leader does and contributes more than what is given when he/she is not given the role of accountability.

Q-18	My leader helps colleagues get good reviews even if he/she is not recognized.
Q-19	My leader understands the police organization's needs or goal constraints and tries hard to meet them.

2.3. Data processing and analysis method

The data processing of this study was performed by using the SPSS 23.0, a statistical package program, to perform statistical verification for the purpose of data analysis as follows:

First, frequency analysis was conducted to identify general characteristics using the SPSS/PC+23.0 program.

Second, the Cronbach's α coefficient was calculated for the reliability verification of the questionnaire.

Third, t-test was conducted to identify differences in leaders' followership according to the work location.

Third, One Way ANOVA was conducted to identify differences in leaders' followership according to the number of police officers in the organization.

Fifth, Chi-Square was conducted to identify differences in leaders' followership according to the number of police officers and work location.

3. Research Results

3.1. Differences in leaders' followership according to the number of police officers in the organization

Table 3. Differences in leaders' followership according to the number of police officers in the organization.

		N	M	SD	F	Sig.	Post-hoc
Q-1	10 or less	18	3.6667	.59409	.653	.583	
	11-15	42	3.7619	.48437			
	15-20	24	3.8333	.70196			
	21 or more	7	4.0000	.57735			
Q-2	10 or less	18	3.3333	.59409	5.276	.002	B, C, D>A
	11-15	42	3.8095	.55163			
	15-20	24	3.8750	.44843			
	21 or more	7	4.1429	.69007			
Q-3	10 or less	18	3.3889	.60768	.497	.686	
	11-15	42	3.5000	.70711			
	15-20	24	3.5833	.71728			
	21 or more	7	3.7143	.48795			
Q-4	10 or less	18	3.2222	.64676	3.614	.016	D>A

	11-15	42	3.6905	.64347		
	15-20	24	3.6667	.76139		
	21 or more	7	4.1429	.69007		
	10 or less	18	3.2778	.66911		
Q-5	11-15	42	3.4286	.63025	1.980	.123
	15-20	24	3.7500	.60792		
	21 or more	7	3.2857	1.25357		
	10 or less	18	3.2778	.82644		
Q-6	11-15	42	3.3333	.81650	2.270	.086
	15-20	24	3.6250	.57578		
	21 or more	7	4.0000	.81650		
Q-7	10 or less	18	3.1667	.61835	2.870	.041	D>A
	11-15	42	3.5476	.73923		
	15-20	24	3.6667	.70196		
	21 or more	7	4.0000	.81650		
Q-8	10 or less	18	3.1667	.61835	1.617	.191
	11-15	42	3.5714	.76963		
	15-20	24	3.4167	.58359		
	21 or more	7	3.7143	1.11270		
Q-9	10 or less	18	3.1111	.75840	1.207	.312
	11-15	42	3.2857	.77415		
	15-20	24	3.3333	.56466		
	21 or more	7	3.7143	.75593		
Q-10	10 or less	18	3.0556	.63914	4.213	.008	C, D>A
	11-15	42	3.4048	.62701		
	15-20	24	3.7083	.69025		
	21 or more	7	3.8571	.89974		
Q-11	10 or less	18	3.1667	.61835	2.367	.076
	11-15	42	3.3810	.66083		
	15-20	24	3.5833	.71728		
	21 or more	7	3.8571	.69007		
Q-12	10 or less	18	3.3333	.59409	2.960	.037	D>A, B

		N	Mean	Std. Dev	F	p	
Q-13	11-15	42	3.4286	.66783			
	15-20	24	3.6250	.64690			
	21 or more	7	4.1429	.89974			
	10 or less	18	2.9444	.53930			
	11-15	42	3.5238	.67130	5.965	.001	B, C, D>A
	15-20	24	3.6667	.70196			
	21 or more	7	4.0000	.81650			
Q-14	10 or less	18	3.1667	.70711			
	11-15	42	3.5238	.55163	4.357	.007	D>A
	15-20	24	3.5833	.65386			
	21 or more	7	4.1429	.69007			
Q-15	10 or less	18	3.1111	.67640			
	11-15	42	3.5952	.58683	4.031	.010	B, C>A
	15-20	24	3.7500	.60792			
	21 or more	7	3.7143	.75593			
Q-16	10 or less	18	3.0556	.72536			
	11-15	42	3.1905	.67130	2.977	.036	
	15-20	24	3.4583	.72106			
	21 or more	7	3.8571	.69007			
Q-17	10 or less	18	3.1111	.75840			
	11-15	42	3.4286	.66783	3.791	.013	D>A
	15-20	24	3.6250	.57578			
	21 or more	7	4.0000	.57735			
Q-18	10 or less	18	3.1667	.70711			
	11-15	42	3.5476	.73923	1.491	.222	
	15-20	24	3.6250	.71094			
	21 or more	7	3.4286	.97590			
Q-19	10 or less	18	3.2222	.64676			
	11-15	42	3.5000	.50606	5.021	.003	D>A, B
	15-20	24	3.6667	.63702			
	21 or more	7	4.1429	.37796			

<Table 3> shows the differences in the leaders' followership according to the number of police officers in the organization to which they belong. For Q-2, 11-15, 15-20, and 21 or more were higher than 10 or less. For Q-4, 21 or more were higher than 10 or less. For Q-7, 21 or more was higher than 10 or less. For Q-10, 15-20 and 21 or more were higher than 10 or less. For Q-12, 21 or more was found to be higher than 10 or less and 11-15. For Q-13, 11-15, 15-20, and 21 or more were higher than 10 or less. For Q-14, 21 or more was found to be higher than 10 or less. For Q-15, 11-15 and 15-20 were higher than 10 or less. For Q-19, 21 or more was higher than 10 or less and 11-15.

3.2. Differences in leaders' followership according to work location

Table 4. Differences in leaders' followership according to the work location.

		N	M	SD	t-value	Sig.
Q-1	Tier 1 areas (big cities)	80	1.3000	.46115	-1.630	.180
	Tier 2 areas (small/medium-sized cities)	11	1.5455	.52223		
Q-2	Tier 1 areas (big cities)	80	3.8125	.57575	1.457	.654
	Tier 2 areas (small/medium-sized cities)	11	3.5455	.52223		
Q-3	Tier 1 areas (big cities)	80	3.8375	.53825	3.735	.678
	Tier 2 areas (small/medium-sized cities)	11	3.1818	.60302		
Q-4	Tier 1 areas (big cities)	80	3.5625	.67212	1.781	.129
	Tier 2 areas (small/medium-sized cities)	11	3.1818	.60302		
Q-5	Tier 1 areas (big cities)	80	3.6750	.70755	1.785	.560
	Tier 2 areas (small/medium-sized cities)	11	3.2727	.64667		
Q-6	Tier 1 areas (big cities)	80	3.5000	.71157	1.003	.464
	Tier 2 areas (small/medium-sized cities)	11	3.2727	.64667		

Q-7	Tier 1 areas (big cities)	80	3.4875	.76297	1.225	.498
	Tier 2 areas (small/medium-sized cities)	11	3.1818	.87386		
Q-8	Tier 1 areas (big cities)	80	3.5875	.74109	1.736	.095
	Tier 2 areas (small/medium-sized cities)	11	3.1818	.60302		
Q-9	Tier 1 areas (big cities)	80	3.5000	.74630	1.352	.083
	Tier 2 areas (small/medium-sized cities)	11	3.1818	.60302		
Q-10	Tier 1 areas (big cities)	80	3.3375	.69252	1.462	.250
	Tier 2 areas (small/medium-sized cities)	11	3.0000	.89443		
Q-11	Tier 1 areas (big cities)	80	3.5375	.67400	3.357	.122
	Tier 2 areas (small/medium-sized cities)	11	2.8182	.60302		
Q-12	Tier 1 areas (big cities)	80	3.4750	.67458	1.763	.329
	Tier 2 areas (small/medium-sized cities)	11	3.0909	.70065		
Q-13	Tier 1 areas (big cities)	80	3.5625	.69069	1.737	.136
	Tier 2 areas (small/medium-sized cities)	11	3.1818	.60302		
Q-14	Tier 1 areas (big cities)	80	3.5625	.69069	2.937	.279
	Tier 2 areas (small/medium-sized cities)	11	2.9091	.70065		

Q-15	Tier 1 areas (big cities)	80	3.5875	.60991	2.897	.930
	Tier 2 areas (small/medium-sized cities)	11	3.0000	.77460		
Q-16	Tier 1 areas (big cities)	80	3.6000	.60796	2.021	.028
	Tier 2 areas (small/medium-sized cities)	11	3.1818	.87386		
Q-17	Tier 1 areas (big cities)	80	3.3750	.70036	3.372	.176
	Tier 2 areas (small/medium-sized cities)	11	2.6364	.50452		
Q-18	Tier 1 areas (big cities)	80	3.5375	.65495	2.960	.388
	Tier 2 areas (small/medium-sized cities)	11	2.9091	.70065		
Q-19	Tier 1 areas (big cities)	80	3.5250	.74587	1.430	.669
	Tier 2 areas (small/medium-sized cities)	11	3.1818	.75076		

Note: A: Tier 1 areas (big cities), B: Tier 2 areas (small/medium-sized cities)

<Table 4> shows the differences in the leaders' followership according to the work location. For Q-6(3.6000±.60796), tier I area(large cities) was found to be at a significant level of 5% higher than tier 2 area(small and medium-sized cities).

As results of differences in leaders' followership according to the work location, looking at the mean(M) and standard deviation(SD) of Q-2, Q-3, Q-4, Q-5, Q-6, Q-7, Q-8, Q-9, Q-10, Q-12, Q-13, Q-14, Q-15, Q-17, Q-18, and Q-19, tier I areas(large cities) were found to be higher than tier 2 areas(small and medium-sized cities), whereas for Q-1, Q-11, and Q-16, tier 2 areas were higher than tier I areas.

3.3. Connection between the number of police officers and work location

Table 5. Connection between the number of police officers and work location.

Description	Frequency (%)		Total
	Tier 1 areas (big cities)	Tier 2 areas (small/medium-sized cities)	
10 or less	9 (50.0)	9 (50.0)	18 (100.0)

11-15	41 (97.6)	1 (2.4)	42 (100.0)
15-20	23 (95.8)	1 (4.2)	24 (100.0)
21 or more	7 (100.0)	0 (0.0)	7 (100.0)
x^2(p)	30.450 (0.000)***		

As shown in <Table 5>, an analysis of the connection between the number of police officers in the organization and work location showed x2=14.499, p=0.002, indicating that there was a connection between them. Frequency data are as follows: 10 or less was 9(50.0%) for tier 1 and 2 areas, and 11-15 was 4(97.6%), 15-20 was 23(95.8%), and 21 or more was 7(100%) for tier 1 areas.

4. Conclusion and Discussion

As mentioned above, this study empirically verified how leaders' followership differs depending on the number of police officers and work location with the security police organization as the research subject.

According to the analysis, the leaders' followership is positively formed in a medium-sized security police organization of 11 to 20 people for questions that showed statistical significance in the differences in the leaders' followership according to the number of police officers in the organization such as Q-2, Q-4, Q-10, Q-12, Q-13, Q-14, Q-15, and Q-19. Therefore, it would be most desirable to organize an organization of 11 to 20 people considering the overall size of the organization, rather than an overly small or large organization.

In addition, in terms of differences in leaders' followership according to work location, it was found that in most questions except Q-1, Q-11, and Q-16, tier 1 areas(big cities) were higher than tier 2 areas(small and medium-sized cities). Therefore, big city-based organizations are likely to show high work performance by voluntary and active motivation as well as collaboration between senior managers or middle managers and lower-rank members. This is because followership formed by positive leaders can voluntarily lead to the "passionate" and "intelligent" efforts of lower rank members[8][9][10][11[12].

And as the discussions in the preceding studies support, the analysis of the connection between the number of police officers and work location shows that attitude toward the leaders' followership is the most positive in medium-sized(11 to 20 people) organizations in metropolitan areas[13].

These analyses provide the following policy implications:

First, through the "choice and concentration" strategy, the security organization should ensure that the police stations in tier 2 and 3 areas operate minimal functions, such as analyzing trends in security crimes or supporting and protecting North Korean defectors, and that the police stations in tier 1 areas should play most of their roles. This is because having police stations in big cities take charge of both traditional and new security needs such as cybersecurity crimes, as well as traditional security needs such as investigating and arresting security offenders such as spies, can guarantee higher efficiency of organizational operations.

Therefore, the integrated operation of security departments and other departments such as information and external affairs at police stations in tier 2 and 3 areas, including "Information Security Department" in small-scale in tier 1 areas as well as tier 2 and 3 areas, which currently have relatively low security needs, can be seen as an appropriate policy. This is because the retention of small scale security departments in tier 2 and 3 areas is not appropriate consider-

ing the demand for security tasks are reducing in those areas, as well as in terms of work efficiencies among the members of the organization.

In particular, with the Moon Jae-in government inaugurated, due to changes in the security situation and the inter-Korean relations, the size of the security police organization is reduced by 23.8% from 625 in 2016 to 476 at the end of August this year. The budget also fell by 26% from 9.1 billion to 6.7 billion over the same period. Of course, there are concerns about a vacuum in national security and the proper functioning of the anti-communist investigation, which will be transferred from the National Intelligence Service in the future, regarding the reduction of security police personnel and budget. However, the reality is that it is difficult to increase the number of security police officers considering the negative public opinion and the overall lack of police force[14].

Therefore, it is necessary for the security police to drastically reduce the number of security police officers in small-scale tier 1 area police stations or tier 2 and 3 police stations to reorganize their personnel into major tier 1 police stations, the National Police Agency, and local police agencies, thereby strengthening the efficiency of the security police organization.

Second, the size of the organization should be composed of 11 to 20 people. It will be effective as well for large organizations such as the National Police Agency and the local police agencies to organize the overall size of the security department into 11 to 20 people in consideration of security demand in small organizations such as police stations.

In this respect, the National Police Agency's security bureau would be more effective in expanding and setting up various small and medium-sized departments of 11 to 20 police officers within the security bureau than the current large-scale security bureau's first, second, third, and fourth divisions, taking into account the new security needs due to changes in security conditions.

In particular, the latest security demand is expanding into so-called "New Security" areas, such as industrial espionage, terrorism, and cybersecurity, as well as the violation of the National Security Law and the transfer of anti-communist investigative authority from the National Intelligence Service in the future. Therefore, the current organizational structure should be reorganized into the Security Planning Division, Security Management Division, Security Investigation Division, and Cyber Security Division, and teams of middle and small groups should be set up inside each department so that the leadership of each team and positive followership of the members of the organization can generate maximum results in the security field[15].

More importantly, however, it is necessary to understand the nature of the security police as well as increase the efficiency of the organization through the leaders' positive followership. This is because the security police perform tasks that are directly related to the existence of the state, which is carried out to protect the national legal interests of the system, order, people, and property that make up the basis of a state[16]. As for the security police, therefore, longer-term and continuing policies should be established to free it from the regime change and political influence, as well as in terms of its efficiency, as analyzed in this study.

5. References

5.1. Journal articles

[1] Lee SH. U.S. Extended Deterrence Policy in the Asia-pacific and Its Implications for South Korea's Security. *Research Institute for National Security Affairs*, 56(2), 1-22 (2013).
[2] Nam JS. Human Security and Security Police's Supporting Activities for the Defectors from North Korea. *Korean Police Studies Review*, 7(4), 63-94 (2008).
[3] Lim CH. The Measures for Effective Protection and Support of North Korean Defectors by Security Police. *The Police Science Journal*, 11(4), 89-119 (2016).

[4] Lim YJ & Lee MS. Implications of Emotional Coaching and Integrated Art Therapy Teaching Method on Leadership Education in the AI Era. *Robotics & AI Ethics*, 5(2), 42-49 (2020). [Article]

[5] Jung HS. The Implications of Police Gender Inclusive Leadership. *International Journal of Human & Disaster*, 5(2), 10-20 (2020). [Article]

[6] Kim DW. From Management to Leadership in Diverse Workplaces: Theoretical Proposals.*International Journal of Protection, Security & Investigation*, 4(2), 40-46 (2019). [Article]

[7] Kwon HC & Kim KS. Effects of Followership on the Leader's Decision-making: The Mediating Role of LMX. *Journal of Human Resource Management Research,* 22(1), 1-23 (2015).

[8] Kim HB & Song YS. The Identification and Relative Importance Analysis on Followership Competencies in Large Korean Enterprises. *The Journal of Lifelong Education and HRD,* 15(3), 29-51 (2013).

[9] Kang JA. Leadership and Followership. *Journal of Creativity and Innovation,* 8(1), 137-153 (2015).

[10] Park SH & Kim BT & Choi BJ. Effect of High-school Athletic Majors' Self-leadership and Self-efficacy on Exercise Adherence Intention. *International Journal of Sport,* 1(1), 26-30 (2016). [Article]

[11] Cho CK & Shin MC. The Effects of Special Security Guards' Self-leadership on Organizational Citizenship Behavior and Organizational Effectiveness. *International Journal of Protection, Security & Investigation,* 2(1), 9-14 (2017). [Article]

[12] Jeon KD & Park SJ. Analysis of Domestic Research Trend in Self-leadership Found among Nursing Students in Republic of Korea. *International Journal of Crisis & Safety,* 3(4), 1-9 (2018). [Article]

[13] Chung DY & Kim CK & Yoon MO. The Effects of the Types of Leadership and the Followership on the Effectiveness of an Organization by Means of the Quality of LMX. *Global Business Administration Review,* 6(4), 165-191 (2009).

[14] Lee HY. A Study on the Dissolution of Intelligence and Security Police. *Democratic Legal Studies,* 71, 139-173 (2019).

[15] Chang NS & Nam JS. A New Security Paradigm for the Korean National Police and the Role of Security Police. *Korean Police Studies Review,* 8(2), 123-152 (2009).

[16] Lee SY & Shin HK. Plans to Enhance the Capability of the Security Police to Prevent Social Deviance of North Korean Defectors. *Journal of Korean Public Police and Security Studies,* 9(4), 45-66 (2013).

6. Appendix

6.1. Authors contribution

	Initial name	Contribution
Lead Author	HYY	–Set of concepts☑ –Design ☑ –Getting results ☑ –Analysis ☑
Corresponding Author*	JSN	–Make a significant contribution to collection ☑ –Final approval of the paper ☑ –Corresponding ☑ –Play a decisive role in modification ☑
Co-Author	SGJ	–Significant contributions to concepts, designs, practices, analysis and interpretation of data ☑ –Participants in Drafting and Revising Papers ☑

-Someone who can explain all aspects of the paper ☑

International Journal of Terrorism & National Security

A Study on History of CBRN Weapons and New TERRORISM

Sungtaek Cho

Sunmoon University, Asan, Republic of Korea

Abstract

Purpose: As concerns are growing about terrorists' approach to biological weapons highlighted by the current COVID-19 crisis, it is important to better understand the historical development and past use of biological weapons. Since the World War, attempts to attack CBRN by state-sponsored terrorism and non-state terrorist groups have been constantly occurring. It is important to assess past cases in order to be able to cope well with potential CBRN threats and evaluate the current capabilities of extremists.

Method: Identify the theoretical background of bioactive and chemical agents, examine the use cases of biochemical weapons that have been used during World War, and assess the threat levels of CBRN terrorism recently. In particular, identify examples being attempted in Europe and look at the international response strategies of Europe and the United Nations. Specifically, we look at the CBRN terrorism international response system of Europol and UNCCT.

Results: The rise of ISIS In Europeand white nationalists in the U.S. have been constantly trying to threaten CBRN since then. The reason why terrorist groups, including ISIS, are attracted to CBRN is that it is not easy to produce agents and weapons, but it is possible to achieve the purpose of terrorism through mass murder. Nevertheless, jihadists and white nationalists in the U.S. do not abandon their plan to take over vulnerable security facilities dealing with CBRN-related materials to achieve their goals

Conclusion: Biochemical weapons were used during the two World Wars, which inspired the post-Cold War New Territories. In addition, despite international regulatory cooperation such as the Vienna Treaty, several countries still produce CBRN secretly. Terrorist groups are diversifying their means of terrorism, including conventional weapons, vehicle thrusts, and biochemical weapons, targeting unspecified individuals. Security measures seem necessary to prevent terrorist groups and lone wolves from exploiting bio-terrorism in the current era of Corona.

[Keywords] *CBRN, Biological and Chemical Agents, Bioterrorism, Chemical Warfare, New Terrorism*

1.Introduction

Since 9/11, terrorism has been widely recognized as a significant political and social problem, with countries all over the world increasing their counterterrorism efforts[1].CBRN terrorism is unlikely to succeed in the threat, but it can cause serious damage if it occurs. No country can be perfect for CBRN terrorism. Nevertheless, it is perceived by terrorist groups as a more attractive means of attack than conventional weapons[2].Among CBRN materials, biological toxins can be obtained very easily. Simple bacterial culture system and plant toxin-specific extraction equipment are inexpensive and easy to obtain, and can be made at home[3].

Toxic diseases have sickened humans for thousands of years. They have been used in effective ways in war and terrorism. Unfortunately, the use of biological agents as a means of terrorism has become a reality[4] and separating events of naturally occurring diseases from those of bioterrorism has become an important public health goal[5].

CBRN terrorism is a serious threat that can cause economic and social problems[6].Through the knowledge and experience gained through past wars and terrorism, extremists perceive it as a useful means of terrorism, and accumulate knowledge of the acquisition and utilization of related materials.

In order to counter these threats, international norms require cooperation between countries, between countries and international organizations[7].The United Nations and other international organizations, the United States and the EU are strengthening international cooperation.

In this paper, we introduced the evaluation and historical cases of the threat level of CBRN terrorism, identified the recent attempts of CBRN terrorism around Europe, and presented its response system.

2.Theoretical Background

2.1. Biological and chemical agents

Biological Weapons kill people using bacteria, viruses, or toxins contained in bacteria. There have been cases in which toxins were sprayed on wells in villages or bodies that were seriously infected with infectious diseases were used. In the 19th century, American Indians were infected with smallpox through donated blankets. Modern biological weapons will use strains of bacteria or viruses that can kill thousands of people.

A bioterrorism attack is the deliberate release of viruses, bacteria, toxins, or other harmful substances used to cause disease or death in humans, animals or plants. These agents are typically found in nature, but are likely to mutate or deform in order to increase the ability to cause illness, to be resistant to current drugs, or to increase the ability to propagate to the environment.

Biological agents can spread to air, water, or food. Terrorists tend to use biological agents because they are very difficult to detect and do not cause disease for hours or days. Some biological agents, such as the smallpox virus, can spread from person to person.

Biological toxins are attractive weapons because they can cause widespread social fear and panic beyond physical damage. But military leaders have found that as military assets there are some important limitations to bio-terrorism. It is difficult to use biological weapons in such a way that only the enemy is affected and friendly forces are not affected. But scientists have warned of the potential power genetic engineering will have for future bio-terrorists[8].

Chemical Weapons are weapons that kill people using manufactured chemicals. The first chemical weapon in history was chlorine gas. In World War I, German troops released tons of gas to the enemy[9]. Chemical weapons developed after World War II have the ability to kill more people[10].For example, chemical weapons using ingredients similar to pesticides used in lawns were developed.

2.2. CBRN terrorism: interim threat assessment

Since the 1970s, the motivation behind the CBRN terrorist incident has changed over time. The main motivation from 1975 to 1989 was to protest government policy. But since 1990, the main motive has been for nationalist or separatist purposes and for retaliation or revenge. The apocalyptic prophecy also emerged as an important motivation in 1993 because of Aum Shinrikyo.

Since the end of the Cold War, terrorism for the traditional political purposes of national liberation or Marxist-Leninist ideology has decreased significantly, and terrorism, motivated by religious fanatics or ethnic identitarians, has increased[11][12].On the surface, it can be seen as using terrorism to achieve political purposes, but in essence, terrorism at this time was the act of maximum violence itself.

"New Terrorism" features tactics to punish and destroy enemies they perceive rather than appeal to the broad constituency. According to terrorist analyst Brian Jenkins, "terrorists wanted a lot of people watching, not a lot of people dead." This is proof that terrorists hope to show their arguments effectively. In addition, the collapse of the Soviet Union, globalization and improved communication made CBRN materials and expertise easier to acquire than ever.

The CBRN offensive movement seems to be on the rise among the "new terrorism groups." Because of CBRN's asymmetrical potential, al-Qaida and ISIS also seem to have been interested in acquiring sophisticated CBRN devices to prove their power. ISIS has repeatedly attempted conventional and chlorine-bomb attacks to draw cooperation from its residents in Syria and Iraq. It is not easy to acquire or manufacture CBRN weapons. Nevertheless, the terrorist group was aware of the ability to destroy CBRN weapons, so it tried to secure these weapons in secret.

3. Historical Case of CBRN Attack

3.1. The rise of the age of modern CBRN weapons

Chemical weapons also appear in the history of ancient Greece, India and China. Poison arrows, poisoned water, hot peppers powder and sulfur gas were used in the attack. During World War I, the German army used several poison gas first developed to counter the Allies as a strategic weapon. In 1915, German troops attacked Russia with bromide gas and used chlorine gas to attack the French Allies. In December of that year, he used a phosgene against the British. In July 1917, the German army launched a Mustard gas attack against the Allies. During World War II, Nazi Germany killed more than a million people by running gas chambers using commercial cleaners and pesticides Zyklon B.

The age of modern biological weapons was opened through the development of microbiology and its use in international warfare. In World War I, attempts were made to use anthrax to target animal populations, and Germany sent secret agents to the United States and Russia to infect horses with the glanders.

The biological and chemical attacks carried out during World War I served as an occasion to draft the 1925 Geneva Agreement. The Geneva Convention prohibits the use of substances, including suffocation and toxicity, in war. Then Germany, Japan, the Union of the Soviet Socialist Republics and the United States launched a research program to eliminate the threat of biological weapons[13].In 1969, under President Nixon, the United States began dismantling its aggressive bio-weapons program.

Accordingly, all biochemical research programs in the United States were defensive and the Geneva Convention was developed and ratified in 1972. But several countries that signed the convention continued aggressive research and production of biological agents until the mid-1990s. Also, from the mid-1980s to today, terrorist groups are increasing in the aggressive use of biological weapons.

3.2. CBRN weapons reserve and use after world war

In the Vietnam War, which began in 1965, the U.S. military used Napalm and Agent Orange. Agent Orange was sprinkled in the jungle and was a herbicide used to wither plants, but the release of dioxin killed more than 400,000 people in the long term since the war.

In 1984, in Oregon, U.S., followers of Bagwan Shree Rajneh tried to infect local residents with Salmonella typhimurium bacteria. Infected salad bars at 11 restaurants in Oregon, 751 people were seriously poisoned. In 1995, Aum Shinrikiyo members sprayed Sarin gas on the subway in Tokyo, Japan, causing 5,800 people to suffer. In the same year, there was an incident in the United States in which two people failed to use ricin against government officials and were arrested. In 2001, there was an Anthrax attack in the United States, where letters containing infectious anthrax were found in the U.S. Congress and the media in September and October of that year, killing five people and having to pay $1 billion to decontaminate the building[14].

Numerous international agreements have been signed to restrict biological and chemical weapons, but many countries are still secretly continuing to develop them. Among them, the United States, Russia, and Iran have disclosed their chemical warfare agents, but 16 countries, including China, Egypt, India, Cuba and Albania, are believed to be secretly developing biological and chemical weapons at their shelters. Signatories of the Biological Weapons Convention(BWC) are developing more lethal biochemicals due to mutual distrust.

On the other hand, nuclear and radioactive materials have been appearing on the black market since the early 1990s in former Soviet countries of the Soviet Union. Nuclear power plants and nuclear weapons facilities in the EU are a major target of jihadists and groups. Chemical facilities and corporate agents are targeted for exploitation by terrorist groups and are relatively vulnerable to security[15].

4. CBRN Attack: Focusing on Europe

4.1. CBRN attack events

According to Europol, CBRN attacks are considered unlikely. Nevertheless, in some cases in 2015, there were attempts at malicious use of CBRN agents with unknown intent.

Two incidents involving attacks on chemical facilities took place in France in 2015. Although it was not specifically classified as a CBRN terrorist incident, it was an incident that revealed vulnerability from terrorist attacks. In 2015, two large simultaneous explosions at a petrochemical plant in southern France burned two petrochemical tanks. The incident shows that the chemical plant, which until now appears to be less well-known, is now the target of terrorist groups.

Nuclear power plants and nuclear weapons facilities in the EU are also potential targets for terrorists. In December of the same year, a high-ranking official of a nuclear research institute was found during a search for a suspected Parisian terrorism suspect in Belgium. The theft of radioactive materials is due to the monetary value of protective containers or devices and does not seem to be intended for use in terrorism. In the EU, the distribution of radioactive materials, such as nuclear materials, is strictly controlled, and trafficking is not prevalent.

However, nuclear and radioactive materials have continued to appear on the black market since the early 1990s in neighboring Soviet countries. In 2015, there were attempts to sell radioactive materials by organized crime groups in Ukraine, Moldova and Turkey. There is no information about the potential connection between the groups involved in the three incidents and the terrorist organization, but criminals who have access to the material could potentially serve to acquire and sell radioactive materials to terrorists.

The procurement of biological toxins such as avrin and lysine is taking place in the underground market of Darknet. In the past, Syria and Iraq had a chemical weapons program, fully equipped with production facilities and stockpiles, despite efforts by the international community and the OPCW. Even in Europe, the production, stockpiling and use of chemical weapons are prohibited, so the threat level is almost nonexistent. Also, CBRN materials are under strict government control, keeping threats at a minimum level.

So far, no major CBRN attacks in the EU by any terrorist group have been reported[16].However, ISIS has improved its ability to manufacture improvised explosives by renovating existing military unit items that have been stolen or recovered from abandoned or conquered military facilities. There is also concern that they have accumulated knowledge to develop CBRN weapons that could later be used for attacks.

The threat of deliberately polluting food or water occurred in anarchist group in Italy in 2016. In June 2016, Italian anarchists acted in a supermarket in Lombardi mixing herbicides with groceries. In December of the same year, Greek anarchists issued a warning that claimed to have contaminated various food and beverage products from multinational corporations.

Three incidents involving the use of CBRN were reported in the EU in 2018. In May 2018, an Egyptian national was arrested in France on charges of preparing for terrorism. In his apartment in Paris, several guidelines were found explaining how to make black powder extracted from explosives and an improvised explosive device(IED) and how to use lysine to commit terrorism[17].In June 2017, a terrorist plot using lysine was uncovered in Cologne, Germany. The suspect, allegedly inspired by IS, had planned to combine Lysine with ball bearings and bladed weapons.

4.2. Propaganda: CBRN terrorism threats

Since 2014, ISIS has led terrorist attacks in Europe, which have been carried out by organized terrorist organizations and lone wolves who are sympathizers. Also, jihadists and their sympathizers have regularly claimed CBRN-related threats to their propaganda[18].Furthermore, CBRN-related topics have continued to appear in the propaganda of terrorism since 2015. Various jihadist media outlets used social media channels, especially Telegram, to express their intention to launch CBRN attacks, to share possible tactics against attacks and to propose targets. For example, in May 2016, a toxic extracted jihadist tutorial for solo actors was posted online. The subject of CBRN has reappeared in the online propaganda of terrorism. Online jihadist propaganda messages and guidelines[19] targeting sole actors, and easy-to-execute scenario suggestions for small CBRN attacks have increased compared to previous years.

In particular, in 2017, several jihadist media used social media channels to disclose their knowledge of chemical weapons and related terrorist tactics[20].Several documents from the 2017 Knights of Lone Jihad series, published in English by the Hurat Willaya Channel, presented CBRN scenarios, especially including food and water pollution, as possible terrorist tactics for sole actors. Using available means, the proposed simple method allows untrained individuals, even lonely actors, to carry out attacks with CBRN data. The terrorist organization provides easier access to CBRN attacks with the intention of increasing the number of attempts in the hope that successful attacks can be carried out regardless of initial scientific knowledge or the actor's experience by presenting a simple methodology.

5. International Response to CBRN Terrorism

5.1. Response strategies of the United Nations

The U.N. Global CBRN Terrorism Response Strategy calls for member states, international organizations and others to take the following steps:
· War on the smuggling of CBRN materials
· Confirm that biotechnology development is not used for terrorist purposes
· Prevent and detect illegal transactions of CBRN weapons and materials by improving border and customs control
· Cooperation in establishing a counterterrorism plan using CBRN weapons or materials

UNCCT's WMD/CBRN program seeks to promote member states and international organizations' understanding of WMD/CBRN terror threat levels.

· Enhancing national capabilities to prevent and respond to chemical and biological terrorist attacks in Iraq.

· Enhancing capabilities to prepare for and respond to CBRN terrorist attack in Jordan.

· Promoting universalization and effective implementation of the International Convention for the Suppression of Acts of Nuclear Terrorism(ICSANT).

· Enhancing knowledge about advances in science and technology to combat WMD terrorism.

The UNCCT's WMD/CBRN program aims to promote understanding of the level of WMD/CBRN terror threats among member states and international organizations.

UNCCT also provides support focused on areas such as border and export.

5.2. Europol's role in responding to CBRN terrorism

The process of making explosives, potential recipes for harmful use of explosive precursors, and potential new threats using CBRN materials are monitored and cross-checked daily by Europol experts at the ECTC[18]. Information is shared with EU member states and with experts and relevant departments within non-EU countries. Europol also promotes cooperation between CBRN and explosives experts through the European Explosive Ordnance Disposal Units(EEODN). The agency provides seminars and training to practice responses to possible and realistic scenarios of terrorist attacks.

Europol is a key partner in the field of explosives with CBRN and is working with state agencies in Europe. Europol serves to link the activities and training of member states and non-EU countries and the European Commission and other relevant international organizations. The European Explosive Processing Unit Network Groups, where EOD and CBRN experts work, continue to be promoted and actively supported by Europol.

The new platform for the European Explosive Surveillance Network in the European Platform of Experts(EPE) has already become a major communication channel through which more than 300 European bomb technicians and CBRN experts can quickly and efficiently share knowledge, best practices and technical information about the latest cases and incidents directly.

The European Commission announced a new action plan in October 2017 to strengthen its preparedness against the security risks of Annex 76 CBRN, strengthening the role of Europol as a key player in CBRN security.

6. Conclusion: Terrorism in the Age of Coronavirus

The European Commission announced a new action plan in October 2017 to strengthen its preparedness against the security risks of Annex 76 CBRN, strengthening the role of Europol as a key player in CBRN security.

Extremists around the world are revising their strategies to take advantage of the virus-induced upheaval in the health care industry and the global economy. The U.S. Department of Homeland Security has determined that domestic and foreign terrorists are trying to inspire supporters to use the Coronavirus. Terrorists are deliberately trying to infect the Corona virus.

On March 1, Bahgat Saber, known as a supporter of Muslim Brotherhood, posted a video on his Facebook account calling on Egyptians to deliberately infect friends and family members working for Egyptian President Abdel Fattah al-Sisi's government. And even though ISIS has warned its supporters to stay away from the infected areas, some ISIS supporters have referred to the virus itself as 'soldier of allah' and consider it God's punishment for the heathen.

In February, White Nationalists reported conversations about the encrypted message service Telegram, referring to the 'duty' to spread it in case of coronavirus infection. The discussion took place among followers of neo-Nazi James Mason, according to the Federal Protective Service of the Department of Homeland Security. The FBI warned white nationalists who instructed their followers to use spray bottles to spread virus-infected body fluids, targeting law enforcement agencies and Jews, especially in the false belief that Jews were trying to make or financially use viruses. Other terrorist threats have often occurred using the coronavirus of individuals whose membership is unclear.

Coronavirus19 has changed the way society behaves from social interaction to employment. We must consider how we will do the proper security measures to prevent this epidemic from being used for bio-terrorism while at the same time trying to prevent the spread of the virus.

7. References

7.1. Journal articles

[1]Back SC & Sung YE & LaPrade J. The Effect of Terrorism Risk Perception and Agency's Interaction on Police Homeland Security Preparedness. *International Journal of Police and Policing*, 2(1), 7-13 (2017). [Article]

[2] Clarke SC. Bacteria as Potential Tools in Bioterrorism, with an Emphasis on Bacterial Toxins. *British Journal of Biomedical Science,* 62(1), 40-46 (2005).

[3] Janik E & Michal C & Joanna SB. Michal Bijak, Biological Toxins as the Potential Tools for Bioterrorism. *International Journal of Molecular Sciences,* 20(5),1-18 (2019).

[4] Anderson PD. Bioterrorism: Toxins as Weapons. *Journal of Pharmacy Practice*, 25(2), 121-129 (2012).

[5] Blazes DL & Lawler JV & Lazarus AA. When Biotoxins are Tools of Terror. Early Recognition of Intentional Poisoning can Attenuate Effects. *Journal of Postgraduate Medicine*, 112(2), 89-92 (2002).

[6] Mahdi BM & Moshiri M & Etemad L. Medical Aspects of Bio-terrorism. *Toxicon*, 69, 131-142 (2013).

[9] Park GY. A Critical Evaluation to Just War Theory and Alternative Way. *International Journal of Military Affairs*, 5(1), 13-19 (2020). [Article]

[11] Lee MJ. A Study on the Possibility of Terrorism by AI and Its Countermeasures. *International Journal of Military Affairs*, 3(1), 14-18 (2018). [Article]

[12] Lee MJ. Recommendations for the Development of Counterterrorism Policy in Korea: Evaluation on Anti-terrorism Act. *International Journal of Military Affairs*, 1(2), 1-7 (2016). [Article]

[18] Cho ST & Kim SJ. A Study on the Characteristics of IS Related Terrorism in Western Europe. *International Journal of Military Affairs*, 1(2), 21-26 (2016). [Article]

[19] Jo SG. Terrorism Crisis on Northeast Asia. *International Journal of Crisis & Safety*, 5(1) , 35-42 (2020). [Article]

7.2. Books

[8] Nikoleli PN & Nikoleli GP. *Biosensors for Security and Bioterrorism Applications.* Springer(2016).

[13] Bothe M & Ronzitti N & Rosas A. The New Chemical Weapons Convention - Implementation and Prospects-. Martinus Nijhoff (1998).

[14] Willman D. The Mirage Man: Bruce Ivins, The Anthrax Attacks, and America's Rush to War. Bantam (2011).

[15] Europol. TESAT, 13 (2016).

[16] Europol. TESAT, 15~16 (2017).

[17] Europol. TESAT, 19 (2019).
[20] Europol. TESAT, 14 (2018).

7.3. Additional references

[7] https://www.counterextremism.com/ (2020).
[10] https://www.mnd.go.kr/ (2020).

8. Contribution

8.1. Authors contribution

	Initial name	Contribution
Author	STJ	-Set of concepts ☑ -Design ☑ -Getting results ☑ -Analysis ☑ -Make a significant contribution to collection ☑ -Final approval of the paper ☑ -Corresponding ☑ -Play a decisive role in modification ☑ -Significant contributions to concepts, designs, practices, analysis and interpretation of data ☑ -Participants in Drafting and Revising Papers ☑ -Someone who can explain all aspects of the paper ☑

International Journal of Terrorism & National Security

Human Security Task and Prospect on COVID-19 Pandemic

Hongje Cho[1]

Korea National Defense University, Nonsan, Republic of Korea

Sangjung Park[2*]

Korea National Defense University, Nonsan, Republic of Korea

Yooshin Im[3]

Kyunghee Cyber University, Seoul, Republic of Korea

Abstract

Purpose: The study is due to the recent outbreak of global corona virus and is aimed at raising the need for international solidarity and cooperation for the overall development of humanity, starting with the perception that human security threats are increasing and international cooperation and solidarity are collapsing due to each country's selfish response.

Method: In order to achieve this purpose, the cause of the current outbreak of COVID-19 and the cause of the collapse of international solidarity was investigated and seek joint reconstruction and cooperation in the international community, focusing on South Korea's K-quarantine system.

Results: South Korea played an early leading role in preventing COVID-19, centering on the K quarantine system. Based on this, the COVID-19 response strategy is being transferred to countries around the world. Developed countries such as the United States, Europe, and Japan, however, suffered numerous damage and economic damage due to the failure of early quarantine. In addition, there are differences over the responsibility battle, transparency, vaccine development and distribution of the COVID-19 crisis between the U.S. and China.

Conclusion: Today, the COVID-19 crisis is rapidly spreading due to the openness and mobility of the international community as one of human security and poses a major threat to humanity. Due to the imbalance of related substances such as vaccine development, quarantine system, medicines, and masks, there is a serious gap in response between developed and underdeveloped countries. In the wake of the COVID-19 crisis, the international community wants to strengthen cooperation and solidarity to contribute to the construction of a bright future for mankind. At the same time, the government will seek ways to overcome the COVID-19 crisis, which has emerged as the biggest threat to health and security, through active participation and support from local governments and civic groups.

[Keywords] *COVID-19, Human Security, Public Health Emergency of International Concern(PHEIC), World Health Organization(WHO), K-Quarantine Model*

1.Introduction

The COVID-19 situation around the world was reported for the first time in Wuhan, China on December 31, 2019. After the first COVID-19 death was reported on January 11, 2020, the initial spread mainly occurred in China and neighboring Asian countries.

The virus spread throughout the Asian continent. In response, the World Health Organization(WHO) officially declared on Jan. 30, 2020 that COVID-19 was a "Public Health Emergency of International Concern(PHEIC)".

With the virus spreading rapidly around the world, the World Health Organization defined COVID-19 as a global epidemic on March 11, 2020. The international communityhas been

greatly threatened by the recent outbreak of COVID-19. In particular, the international community is increasing human and material exchanges to the extent that borders are over-shadowed by openness and scientificization.

After the rise of globalization, the world became more closely connected and people could easily interact with each other without facing serious barriers. This has benefited the social, political and economic spheres as far as people's well-being is concerned. UN Secretary-General Antonio Guterres said that COVID-19 revealed the world's vulnerability[1].

The COVID-19 Pandemic raises unprecedented problems in South Korea, such as having a devastating impact on people's lives and livelihoods and seriously disrupting our society and economy[2]. As U.N. General Assembly President Tijani Muhammad-Bandi and U.N. Economic and Social Council President Mona Jule said, "International solidarity should not end with COVID-19: we must implement it for everyone[3]."

Concerns are growing that the new crisis of COVID-19 on July 2, 2020, combined with these existing concerns, could undermine international solidarity and multilateral cooperation.

Amid growing concerns that the new crisis in the COVID-19 could undermine international solidarity and multilateral cooperation in line with these existing concerns, South Korea's emphasis on "solidarity and cooperation"under the Seoul Defense Dialogue(SDD) theme this year is interpreted as reflecting its conviction that it is the strongest response to the COVID-19 that can restore international stability.

As a result, infectious diseases and other threats are frequent across borders. This is a matter of human security and health security that began in 1994 with the United Nations Human Security Development Program(MERS-CoV).

Paying attention to this, this study discusses and evaluates the challenges of human security, which is an issue in Korea peninsula. The political and military emphasis on national security has been extended to non-military areas such as economy, society, and environment, and human security has emerged that frees humans from fear and deficiency. Human safety is that every human being on earth lacks personal ability. I'm here Even so, I am a minimum human being. It is based on the recognition that I have a right to live on luck. In this regard, human rights guarantees are deeply related to respect for human dignity and human rights issues. As we entered the post-Cold War era, human rights security began to emerge around Europe and the international community[4][5].

That's from the late 1980s. Under the previous Cold War system, each country justified authoritarian rule in the name of traditional national security, and made many sacrifices and costs until democratization took place. He then held a meeting on traditional security centered on national security, and human security theory began to be discussed as an alternative security debate. In South Korea, human rights guarantee theory was introduced in the 2000s. There are many human rights and security issues in South Korea, but the most representative of them are North Korean human rights, North Korean defectors, Japanese military sexual slavery, and Middle East Respiratory Syndrome(MERS) infectious diseases. In this paper, we will discuss these tasks. A safe and effective vaccine development is essential to win COVID-19, but it will be equally important to develop global solidarity. The epidemic has no boundaries. In Africa, the Middle East, and Latin America, the COVID-19 epidemic is on the rise at a particularly vulnerable time. The humanitarian framework is already destructive around the world, and the epidemic is worsening the living conditions of families that have always been struggling to meet basic needs, from housing to food, water and health care. Based on this, the COVID-19 response strategy is being transferred to countries around the world. Developed countries such as the United States, Europe, and Japan, however, suffered numerous damage and economic damage due to the failure of early quarantine. In addition, there are differences over the responsibility battle, transparency, vaccine development and distribution of the COVID-19 crisis between the U.S. and China.

Today, the COVID-19 crisis is spreading rapidly due to the openness and mobility of the international community as one of human security and poses a major threat to humanity. Due

to the imbalance of related substances such as vaccine development, quarantine system, medicines, and masks, there is a serious gap in response between developed and underdeveloped countries. In the wake of the COVID-19 crisis, the international community wants to strengthen cooperation and solidarity to contribute to the construction of a bright future for mankind.

2. Concept and Definition of Human Security

The United Nations Security Council has discussed the Ebola outbreak in West Africa as an issue that threatens global stability. United Nations Mission for Ebola Emergency Response(UNMEER) was established in accordance with Security Council Resolution 2177(2014.9.18.) and UN General Assembly Resolution 69/1.

It has decided to jointly respond to global health and security threats such as new infectious diseases and bioterrorism. It is an international will to no longer see "health"as a sub-political issue. In response, an international cooperation system called the Global Health Security Agency(GHSA) was officially launched in February 2014.

The GHSA is a gathering of countries, international organizations, NGOs and private companies gathered to develop a safe world from infectious disease threats. Under the GHSA, countries around the world have made new and concrete commitments and decided to raise global health security as a national leadership priority[6].

WHO's definition of a biological disaster means "the outbreak of infectious diseases in humans, animals and plants, including global pandemics[7]."

This will threaten humanity in an ecosystem of endemic diseases(endemic, malaria, dengue fever, hepatitis B, etc.), an outbreak of infectious diseases(epidemic, Zika, Ebola, etc.), a global pandemic of infectious diseases(pandemic; plague, Spanish flu, HIV/AIDS, H1N1, etc.)[8][9].

In the form of natural occurrence, laboratory accident, terrorism or war. In the United States, the Bio vigilance National Strategy is prepared, and international organizations have governance based on the WHO, the BWC and the United Nations Security Council Resolution 1540. GHSA serves as a catalyst to strengthen in advance its ability to identify and jointly respond to areas that are difficult to cope with the WHO's International Health Regulations(IHR) and the BWC agreement alone in the event of a crisis such as international public health emergencies due to infectious diseases.

Human security is a concept that sees the ultimate object of security as human[10][11]. This was the first term used by the United Nations Development Program(UNDP) in the 1994 Human Development Report, and was presented as a new security concept. A total of seven areas of human security are presented in this report. As its main content, economic security is freedom from poverty, food security is freedom from hunger, health security is freedom from disease, environmental security is freedom from polluted water and air, personal security is freedom from threats such as violence and crime, community security is preservation of traditional culture, political security is freedom from political oppression[12][13][14][15][16].These human development reports value both the concept of "freedom from fear" and "freedom from hunger".

As a result, human security is emerging as a new concept that values the quality of life of individuals away from national security. In other words, protection of human security has emerged as a concept that focuses more on the welfare and safety of individual human beings than on the territory or sovereignty of the state. Human security does not completely deny military security that preserves territory and maintains national independence against direct threats from other countries. However, it emphasizes the economic pain of the individual, the quality of life of the individual, and freedom from freedom and human rights[17][18]. The guarantee of human rights is particularly interested in basic human rights

individuals should have, such as how people live in society, how freely they can choose, how easily they can access social opportunities, and how individuals enjoy true peace. After all, human rights guarantees are also used for the immediate intervention and support of the international community in countries or governments that lack the ability to actively cope with respect for individual human rights and protection of human rights[19].

For example, support following the earthquake and protection of refugees due to civil war are typical. The importance of human security in the COVID-19 era. The threat to people's survival, livelihood, and dignity due to COVID-19 is more than a health crisis. Beyond immediate and devastating losses, life, COVID-19 has had devastating unemployment and multifaceted consequences Thein the global economic crisis. It revealed a fundamental weakness in social delivery The same goes for social protection and preparedness systems as well as services. Like most crises, they are least likely to withstand further shocks when they are already unstable and vulnerable and their happiness is bearing the brunt of the epidemic. The limit recognition crisis of the dominant paradigm to effectively manage today's complexes, a resurgence of interest in human security as a valuable framework for sustainability, and improvements at all levels of people's lives have reappeared as a basis for prosperity in the stable and inclusive society.

As such, human security offers an alternative perspective: a rethink of how we prepare to deal with a pressing global challenge; how we come together as an international community to address it; what the best strategy is to protect and empower people, especially the most vulnerable. And for how we allocate resources. The context of the epidemic acknowledges that human safety depends on everyone's health: powerful disease prevention systems, availability and access to quality health care, and the wider conditions in which people live, and that requires us to consider how a health crisis can take place, dominating the economic system and destroying people's lives with knock-on effects in all ways. It promotes a combination of protection and empowerment measures: improving early warning and preparedness, building and mobilising the capabilities of the healthcare system, educating the public, and protecting the most vulnerable. And human security emphasizes that, as securing people facing complex threats accelerates multilateral cooperation to national partnerships, academia, civil society and the private sector. As COVID-19 accelerates globally, it is time to make human safety a top priority: our efforts to prevent the spread of pandemics, our efforts for recovery in a better direction, and the possibility of an inclusive and resilient future in which men and women of all ages can live as much as they want.

3. COVID-19 and Human Security

South Korea was one of the first countries hit by COVID-19. We witnessed an explosive increase in the number of outbreaks in late February, late August and early September, but we were able to flatten the curve. Guided by the experience of infectious diseases such as MERS and SARS in the past, we have firmly adhered to the principles of openness, transparency and civic participation since the beginning of the outbreak. Since then, it has quickly adapted and fine-tuned the South Korea government's response, COVID-19, responding to sporadic cluster infections and virus evolution. Health and security issues are spreading further due to security issues that threaten human safety. In particular, the recent COVID-19 crisis has been hitting the economy hard, driving the world into a frenzy of fear. As of the 5th, COVID-19 had 3.6 million confirmed cases(240,000 deaths) worldwide and 1.17 million confirmed cases(70,000 deaths) in the United States. In South Korea, the increase has stopped to more than 10,000 confirmed cases(about 250 deaths), and quarantine has been effective, but the global trend is still unpredictable. Western societies, including the U.S., are facing criticism that they underestimated the transmission of the COVID-19 outbreak in the early stages and that their passive response worsened the situation.

On the other hand, the U.S.-China responsibility battle continues. Regardless of the controversy caused by COVID-19, the lesson of COVID-19 is that disease has a fatal effect on human life. In terms of international relations, the COVID-19 impact is comparable to the Cold War in terms of level and scale. COVID-19 has brought a fundamental change to the international relationship recognition framework. In international relations dominated by realism, a liberal approach is emerging as a realistic alternative. Although it is inevitable to respond to infectious diseases in the short term, it cannot be overcome without cooperation from the international community in the long run. Military security priorities naturally come to human security In this regard, it is persuasive that national interests are not the relative interests of Competition butthe absolute interests of consensus. In terms of policy measures, soft power of persuasion and charm will increase in hard power centered on military and economic power. International political players are witnessing significant influence not only by the state but also by local governments and businesses, as well as civic groups and individuals.

4. COVID-19: The Collapse and Response of International Solidarity and Response

The infectious disease crisis has raised the issue of responsibility and trust in the international community. Human life threats are inevitable to change the COVID-19 international political paradigm, and there have already been various forms of threats for human security, but active response avoidance health threats are a direct threat to human survival and realizing the maximization of unpredictability at the global level.

Human security has shifted from a secondary position on military security to a major threat. Criticism of the integration of neo-liberalism and functionalism and realizing new security The international community recognizes a new paradigm of mutual exchanges with a sense of interconnection, but as the neoliberal trend declined, we confirmed the limits of economic liberalization based on globalization of capital, opening of markets through political means, free trade and international division of labor. The abandonment of globalism and globalization such as globalization, isolation, and British Brexit, represented by the Trump phenomenon, have spread and generalized as an epidemic, and the trend of nationalism is being strengthened by manufacturing reshoring in accordance with job policies. In addition to military security, the international community seeks to strengthen domestic economic capabilities by expanding comprehensive security awareness such as industrial security, food security and energy security trade, while industrial policy will be reorganized to a comprehensive security level, and the international community, which has been lukewarm to warnings about food security caused by diseases such as climate change, biofuel and avian influenza, is recognized as a real threat to COVID-19.

It is natural that the nation's monopolistic status as actors of international politics should collapse.As the central government faces the limits of its responsibilities and obligations, new players such as local governments, businesses, civic groups and individuals have emerged on the international stage. It emphasizes the need for a new regime of the structure of international organizations and the role of solidarity for new regim in response to criticism of "government of international organizations" and "inappropriate and inefficient responses.". Alliance structure based on ideology or economic interests revolves around the possibility of sharing values of democratic politics and security

5. K-Quarantine Model's Global Expansion

As South Korea's successful COVID-19 response has been evaluated as a best practice around the world, countries around the world are asking for our experience to be shared.

The areas of international standardization of K-defense 3T(18 types) are as follows. Joint, June 11, 2020, K-defense 3T(test-trade-treat) international standardization strategy.

1)Tests and tests are largely divided into infectious disease diagnosis techniques and screening clinic operation systems. In detail, it will consist of gene amplifier-based diagnostic technology(RT-PCR), reagent, equipment and test methods related to infectious disease diagnosis techniques, standard operation procedures for Drive Thru screening clinics, standard operation procedures for medical clinics by Walk Thru line, standard operation procedures for mobile sound pressure container screening clinics, functions and quality evaluation criteria of screening clinic two-way test booths.

2)Mechanics and Trace are self-diagnosis and isolation management and epidemiological tracking management systems. In detail, it consists of the requirements of the mobile self-diagnosis app, the requirements of the mobile self-price management app, the method of linking self-diagnosis and questionnaire results with electronic medical records, and the function of the epidemiological investigation support system and how to protect personal information.

3)Isolation and treatment shall specifically consist of guidelines for the operation of special immigration procedures for blocking the spread of infectious diseases between countries, guidelines for preventing cross-contamination of infectious diseases, guidelines for managing personal hygiene and keeping a social distance in the event of an infectious disease pandemic, essential social welfare services and medical support guidelines for the socially vulnerable in the event of an infectious disease disaster, emergency use approval and follow-up evaluation of in vitro diagnostic devices in the event of an infectious disease disaster, guidelines for patient classification and room management according to symptoms, and requirements for essential diagnostic equipment/medicine/personal protection equipment(PPE) inventory / distribution / logistics management platform.

K-quarantine model of COVID-19 is acknowledged a best solution around the world. As of June 5, 2020, 86 countries around the world shared their experiences and knowledge through web seminars and video conferences. As a result, 3T Test-Trace-Treat, such as test diagnostic techniques used in the entire process of responding to infectious diseases, is being systematized as a "K-Quarantine model" to promote international standardization. The field of international standardization is to establish 3T as an international standard(18 types), including procedures and techniques throughout the entire process of responding to infectious diseases that leads to tests, tests, epidemiology, trace, isolation and treatment.

6. Conclusion and Implication

We call for international cooperation and solidarity. The ongoing COVID-19 pandemic is a global crisis affecting politics, the environment and society around the world. This crisis has halted the movement of people and goods, disrupted global supply and distribution networks, and is fueling panic and fear around the world. Faced with these difficult challenges, countries are taking a wide range of measures ranging from maintaining control to lifting, depending on the seriousness and socioeconomic impact of COVID-19 in the region. Nevertheless, no country can end the epidemic on its own, and no country can provide a global solution in today's highly connected world. Furthermore, any country's actions can have a significant impact on other countries, regions, and the world. This means that exchanges and cooperation between countries are urgently needed until the COVID-19 fandom is overcome. It is essential to share experiences and information of each country in the spirit of international cooperation and solidarity[20].

It is natural that the state's monopoly status as an international political entity will collapse.As the central government faces the limits of its responsibilities and obligations, new

players such as local governments, businesses, civic groups and individuals have emerged on the international stage. It emphasizes the need for a new regime for the structure of international organizations and the role of solidarity for new regime in response to criticism of "government of international organizations"and "inappropriate and inefficient responses." The alliance structure based on ideological and economic interests revolves around the possibility of sharing democracy and security. South Korea's external strategy is expanding our status and role internationally in the process of overcoming COVID-19 K-quarantine system has emerged as an international standard. By effectively coping with the international community's acclaimed COVID-19 crisis, including massive requests of South Korea's support, the international community will expand social capital by improving South Korea's soft power and national brand image and improving public awareness - It matures without raising awareness of national soft power, such as openness, transparency, the government's ability to maintain democracy, citizenship and national capabilities.

It plays a central role in establishing an international cooperation system, such as securing leadership and training in medical and health-related industries in the 19th era.Securing future growth engines of high value-added industries such as diagnostic reagents, treatments and vaccines taking advantage of South Korea's manufacturing-based economic structure. Leading an international cooperation system across health, health, and human security by establishing a national image that does not seek profits by taking advantage of the crisis. It is necessary to reaffirm the need for international solidarity and cooperation to cope with infectious diseases and to share transparent information and prevent information distribution. "We should continue our diplomatic efforts to strengthen multilateral cooperation in the security sector with the participating countries of the Asia-Pacific Economic Cooperation(APEC) based on video discussions of the Asian summit in the situation of COVID-19," he said. We will have to establish a cooperative mechanism to cope with human security challenges that threaten the existing economic cooperation order in the world. It establishes a sound security and economic order in the global and contributes to the development of Asia and the global community. Among the threats to human security that threaten the order of global security and economic cooperation, international cooperation and solidarity on health and security are essential.

7. References

7.1. Journal articles

[4] King G & Murray GJL. Rethinking Human Security. *Political Science Quarterly*, 116(4), 585-610 (2001).
[5] Kerr P. Human Security. *Strategic Studies Quarterly*, 11(41), 601-626 (2008).
[8] Grennan D. What is a Pandemic? *The Journal of the American Medical Association*, 321(9), 1-1 (2019).
[9] Morens DM & Folkers GK & Fauci AS. What is a Pandemic? *The Journal of Infectious Diseases*, 200, 1018-1021 (2009).
[12] Cho HJ & Park GY. North Korea Missile: Past, Present and Future. *International Journal of Terrorism & National Security,*3(1), 1-5 (2018). [Article]
[13] Yang SD & Kim HW. Research on Potential Terrorist Threat and National Security Crimes. *International Journal of Terrorism & National Security*, 3(2), 8-14 (2018). [Article]
[14] Seo BS. A Study on the National Security Crime in Cyber Space. *International Journal of Terrorism & National Security*, 4(1), 15-19 (2019). [Article]
[15] Yu BH. Transnational Security Threat and Change of Counterterrorism Intelligence Environment. *International Journal of Terrorism & National Security*, 4(1), 9-14 (2019). [Article]

[16] Yun WS. Periodical and Spatial Differences of Terrorism Examining Global Terrorism Data-base from 1970~2018. *International Journal of Terrorism & National Security,*5(1), 1-12 (2020). [Article]

[17] Pettifor A. Global Economic Justice: Human Rights for Debtor Nations. *Journal of Human Development,* 2(1), 47-51 (2001).

[18] Osmani SR. Poverty and Human Rights: Building on the Capability Approach. *Journal of Human Development,* 6(2), 205-219 (2005).

[19] Osmani SR. Human Rights to Food, Health, and Education. *Journal of Human Development,* 1(2), 273-298 (2000).

7.2. Books

[10] Kaldor M. Human Security. Polity Press (2007).

[11] Tadjbakhsh S & Chenoy A. Human Security: Concepts and Implications. Routledge (2007).

7.3 Additional references

[1] https://infectionsinsurgery.org/ (2020).

[2] https://www.humanrights.go.kr/ (2020).

[3] https://www.korea.kr/(2020).

[6] http://ghsagenda.org/ (2020).

[7] https://www.who.int/ (2020).

[20] http://www.koreatimes.co.kr/ (2020).

8. Appendix

8.1. Authors contribution

	Initial name	Contribution
Lead Author	HJC	-Set of concepts ☑ -Design ☑ -Getting results ☑ -Analysis ☑
Corresponding Author*	SJP	-Make a significant contribution to collection ☑ -Final approval of the paper ☑ -Corresponding ☑ -Play a decisive role in modification ☑
Co-Author	YSI	-Significant contributions to concepts, designs, practices, analysis and interpretation of data ☑ -Participants in Drafting and Revising Papers ☑ -Someone who can explain all aspects of the paper ☑

International Journal of Terrorism & National Security

Legal Review of the Use of COUNTERRERRORISM Drones

Youseok Lim

Kunsan National University, Kunsan, Republic of Korea

Abstract

Purpose: This study aims to discuss the roles and responsibilities of state agencies using drones to prevent terrorism, which threatens national security, which is distinct from general criminal offenses. In this regard, first of all, we will look at the recent development status of drones and the definition of legal concepts, and then discuss the rational operation plan of drone use in the field of national security. In the use of drones for counterterrorism, in consideration of the legislative purpose of the Personal Information Protection Act, the principles of personal information protection, rights of data subjects, and responsibilities of the state must be observed, and evidence under the Criminal Procedure Act. It is necessary to review exceptional regulations because it is a national security violation that mainly infringes on national legal interests.

Method: Considering the increasing trend of drone use for crime prevention due to the recent development of advanced science and technology, the legality and requirements of drone use are discussed through literature research focusing on legal problems that can be a problem when using drones and related precedents.

Results: In the case of crimes that threaten national security, such as terrorism, laws can limit the basic rights of the people. For this purpose, if a state agency uses drones, a serious violation of the basic rights of the people's privacy is involved. The legal basis for information and investigation activities must be clearly established.

Conclusion: Therefore, It is necessary to meet the actuality of the crime, the necessity and urgency of the evidence preservation in order for Intelligence and Investigative agencies to collect evidence using drones for crimes of national security violations such as terrorism and to be recognized for their proof ability.

[Keywords] *Drone, Personal Information Protection, Terrorism, National Security, National Security Crime*

1.Introduction

Today, the drone industry is showing explosive growth in the world, and its application field is also expanding to all fields of society, such as military, commercial, and agriculture, and the technology of drone equipment is being developed faster than expect. In this situation, the state not only needs to meet the expectations of the people to respond to crimes that threaten the lives, bodies, and property of individuals, but also proactively and actively responds to crimes that become more intelligent and specialized as time goes by. They have a great responsibility to defend their enemy values.

In particular, the need to approach national security crimes that threaten our society and the national community differently from general crimes is undeniable[1]. In the case of major developed countries, various police activities such as maintenance of public order and criminal investigations. Of course, drones are actively being used in the field of national se-

curity, such as terrorist and spy tracking, and discussions on privacy invasion due to the use of drones are actively taking place.

However, despite the serious changes in the environment for the geographical, historical, military, and international political security of Korea, there is still a lack of academic discussions on the use of drones in the public sector[2]. The use of in is absolutely inadequate. Of course, even if the basic rights of the people are restricted for national security or public order, the essential contents cannot be infringed. Therefore, for the preemptive and active role of the intelligence agency against the violation of national security that threatens the existence of our society and constitutional order It is effective to use state-of-the-art equipment such as drones[3].

This study intends to legally review the authority and responsibility of Intelligence/Investigation agencies for the use of drones in counterterrorism.

2. Review of Application of Personal Information Protection Act

2.1. General principles of the personal information protection act

2.1.1. Principles of the personal information protection act

Article 3 of the Personal Information Protection Act stipulates the principles of personal information protection as follows. First, the personal information controller must clarify the purpose of processing personal information, and must legally and legitimately collect only the minimum amount of personal information necessary for that purpose. Second, the personal information controller must properly process personal information within the scope necessary for the purpose of processing personal information, and must not use it for purposes other than that purpose. Third, the personal information controller must ensure the accuracy, completeness and up-to-dateness of personal information to the extent necessary for the purpose of processing personal information. Fourth, the personal information controller must safely manage personal information in consideration of the possibility of infringement on the rights of the data subject and the degree of risk according to the processing method and type of personal information. Fifth, the personal information controller must disclose matters related to the processing of personal information such as the personal information processing policy, and must guarantee the rights of the information subject such as the right to request access. Sixth, the personal information controller must process personal information in a way that minimizes invasion of the privacy of the data subject. Seventh, if the personal information controller can achieve the purpose of collecting personal information even if the personal information is processed anonymously or under a pseudonym, if anonymization is possible, by anonymity, if the purpose cannot be achieved through anonymization, by a pseudonym make sure it can be processed. Eighth, the personal information controller must make an effort to obtain the trust of the information subject by complying with and practicing the responsibilities and duties stipulated in this Act and related laws.

2.1.2. Rights of the data subject

The subject of personal information has the right to receive information on the processing of personal information in relation to the processing of his/her personal information, the right to select and decide whether to consent to the processing of personal information, the scope of consent, etc., and to confirm the processing of personal information The right to request access to personal information(including issuance of a copy), the right to request suspension, correction, deletion, and destruction of personal information, and the right to be relieved of damage caused by the processing of personal information in accordance with prompt and fair procedures(Article 4 of the Personal Information Protection Act).

2.1.3. Responsibilities of countries, etc. within the scope of purpose

The Personal Information Protection Act does not explicitly stipulate information collected using drones. However, according to the provisions of Article 2, No. 1, the information collected through the drone is 'information about a living individual, and information that can be used to identify an individual through name, resident registration number, and video. In the case of includes easily recognizable by combining with information', it should be considered that it can be protected as personal information protected by the Personal Information Protection Act.

In addition, personal information controller refers to 'public institutions, corporations, groups, individuals, etc. that process personal information by themselves or through other people in order to operate personal information files for business purposes', so if a public institution uses a drone when collecting personal information, the Personal Information Protection Act may be applied. Information/Investigation agencies are also subject to the Personal Information Protection Act as a "public agency" specified in Article 2, No. 6 of the Personal Information Protection Act[4].

2.2. Whether the regulations on image information processing equipment apply

Looking at the definition regulations for image information processing devices under the Personal Information Protection Act(Article 2, No. 7), image information processing devices are 'continuously installed in a certain space to shoot images of people or objects, or use wired/wireless networks. It is a device that transmits through the system and is prescribed as 'device prescribed by Presidential Decree', but because drones are not continuously installed in a certain space, they cannot be included in image information processing devices for interpretation. Therefore, it would be difficult to apply the regulations on the installation and operation restrictions(Article 25) of image information processing equipment. Therefore, it can be interpreted that the personal information protection law is widely applied to drones that are suspended or patrolled in a specific airspace[4].

2.3. Admissibility of evidence for filmed images

2.3.1. Compulsory investigation vs voluntary investigation

When judging the legal nature of using drones for photographing or video shooting by state agencies(Intelligence and Investigative Agencies) targeting national security infringement offenses, discussions under the Criminal Procedure Act are developed over whether photography is a voluntary or compulsory investigation. Due to the development of science and technology, new investigative techniques such as photography and interception have appeared, and there are cases in which the subject's rights or interests are violated, although physical coercion or legal obligations are not imposed on the subject. As a result, the criteria for determining compulsory disposition, which divides discretionary and compulsory investigations, has changed. The concept of compulsory disposition, which was previously judged based on whether to impose physical coercion or legal obligations, is determined based on the infringement of important rights or interests. In the case of photography, even if the subject is not subject to physical coercion or legal obligations, and a covert and momentary method is taken to prevent the subject from being noticed, the rights or interests of the other party are violated, resulting in serious consequences in criminal proceedings. If so, it is a common belief in Korea that it should be interpreted as a forced disposition. Therefore, it is necessary to grasp the legal nature of taking pictures or videos using drones equipped with video equipment in the process of investigation as a forced investigation[5].

2.3.2. Warrantism and exceptional tolerance

In the case of permitting the use of drones by state agencies for national security crimes, the target, method, and permitted range should be specifically specified in the warrant.

On the other hand, if the suspect is concerned about destroying the evidence, it is necessary to prescribe it as an exception because it requires an emergency and there is no time to receive a warrant. In this case, it would be desirable to request a warrant without delay. The same exceptions should be applied to cases where there is a concern that there is a serious threat to national security(eg terrorism)[6].

In addition, since drones can move in the air, they can only shoot specific targets that they want, and because they can continuously track and collect information, they are more likely to invade privacy compared to CCTV. Therefore, it is necessary to allow the drone to collect data only to the target or location specified in the warrant, and to prevent unlimited information collection by setting the period of information retention.

2.4. Provision of personal image information to a third party

2.4.1. Provided to a third party within the purpose of collection

Even if image information is collected or used in accordance with Article 25 of the Personal Information Protection Act, provision of the image information to a third party is governed by Articles 17 and 18 of the same Act. In the case of public institutions, there are special provisions in the Act of Article 15, Paragraph 1, Item 2, which is a condition that permits provision to a third party in Article 17, Paragraph 1, Item 2, If it is unavoidable for the public institution under subparagraph 3 to perform the duties under the jurisdiction, it will be possible to provide it within the scope of collection[7]. This is because the collection, use, and provision of personal information in the public sector are subject to the principle of legal retention, and that public institutions are obligated to perform the duties stipulated by laws and regulations[8].

2.4.2. Provided by a third party

The reason why the Personal Information Protection Act puts normative clarity and purpose binding as a principle of protecting personal information is to allow the processing of personal information to a person who intends to collect and use personal information under an original purpose. Therefore, even if it is provided to a third party, it is limited to the purpose connected to the original purpose of collection, and more stringent conditions are placed on the provision beyond the purpose of collection. Therefore, in principle, the act of using personal information other than the purpose for which it was provided or providing it to a third party should be prohibited. Otherwise, the infringement of the rights of the information subject such as the right to self-determination of personal information or the right to correct or delete personal information due to the leakage and illegal distribution of personal information will be serious. However, as in Article 19 of the Personal Information Protection Act, if the data subject has given a separate consent or if there are special provisions in other laws, it is exceptionally permitted.

Even if you look at the case of the Personal Information Protection Committee, it can be seen that the use of the person who has been provided or the provision of it to a third party is strictly handled. In the case of the police, they are in charge of preventing, suppressing and investigating crimes in accordance with Article 2, No. 2 of the Act on the Performance of Duties by Police Officers, and receiving CCTV video information related to the missing persons from local governments for the search and investigation of the missing persons. In a case where it is question able whether video information related to a runaway person, not a missing person, can be viewed by the guardian of the runaway person, the Personal Information Protection Committee meets the purpose of the crime prevention, suppression, and investigation for which the National Police Agency was provided, that is, runaway. It was

judged that a guardian could read it only if there was a reason to believe that a person's runaway was related to a crime[9].

2.4.3. Exceptions to collection and provision restrictions

The video information collected and used by CCTV is mainly related to Article 58, Paragraph 1, Item 2, "Excluding the application of personal information processed for national security purposes"[10]. This is because, in the event of a terrorist or national security emergency, if an integrated defense posture is needed, CCTV footage installed in various places becomes a very important support factor. In this case, the manipulation of CCTV, the subject of filming, the provision of video information to a third party, etc., are excluded from many regulations under the Personal Information Protection Act. Of course, the basis and purpose related to national security must be specific and clear.

The Personal Information Protection Committee also determined that local governments could use and provide CCTV video information from the integrated control center for national security purposes. For example, the integrated defense operations under the United Defense Act are directly related to national security, and to support this, the integrated defense support headquarters of local governments can use and search the image information of the integrated control center of the local government, and can operate CCTV[11]. In addition, it is said that local authorities can also receive video information from the integrated control center from local governments when necessary, such as in the case of training related to national security[12].

3. Review of the Application of the Criminal Procedure Act

3.1. Legality of filming and limitations of application

The Criminal Procedure Act stipulates in Article 199 that "Compulsory Disposition is limited to cases where special provisions are provided in this Act, and must be taken within the minimum required range", but there are no special regulations for photographing or filming. In addition, when taking a picture using a drone, unlike general shooting, remote control and aerial photography are possible, so it will be possible to take a picture from a wider angle than that of existing national institutions. When a camera capable of shooting at night and a sensor capable of face recognition are combined, it is possible to collect a variety of information that is difficult to collect with conventional photography.

3.2. Admissibility of Evidence of images collected by drones

The Supreme Court ruled, "Everyone has the freedom not to be photographed without permission, but such freedom is not protected without limit from the exercise of state power, and considerable restrictions are imposed if necessary for the purpose of ensuring the security of the state, maintaining order, and public welfare. When the crime is being investigated by the investigative agency, if the crime is currently being committed or is immediately after the crime, there is a need and urgency to preserve evidence, and if the film is taken by a generally accepted method, the above filming will be performed without a warrant. It has been judged that it cannot be concluded that it is illegal to lose it"[13].

In addition, the Supreme Court riled, "The filming of a video of the defendants meeting with North Korean spies in Japan or China was made because it was necessary to preserve evidence of the meeting of the defendants, and filming was generally permitted. It was judged that it could not be considered illegal because it was done in a way that was out of significance or it was a forced disposition without a warrant."[14].

3.3. In case the investigation agency secures the evidence collected by the drone

In principle, the domestic majority theory is taking the position that it is reasonable to assume that the law of exclusion of illegal collection of evidence is applied to the collection of evidence of the cause of death[15]. This is because, as long as there was a violation of the evidence collection procedure, it is essentially not a matter of whether the subject of the collection is an investigative agency or a private agent. However, since the law of exclusion of illegal collection and evidence stipulated by the Korean Criminal Procedure Act has the main purpose of suppressing illegal acts by investigative agencies, it is unreasonable to apply the same principle to the collection of evidence by death. It is also true. Considering these points, even evidence collected illegally by an investigative agency is not excluded in all cases, and if the contents of the violation do not infringe the actual contents of due process, the definition of discovery of substantive truth. Theories and precedents agree that the ability to testify can be acknowledged with a request[16].

If the subject of video shooting using drones is the cause of death, it will be the act of shooting the crime scene directly. However, taking into account the actuality and directness of the evidence and the efficiency of collection, it is uniformly disallowed to adopt it as evidence for criminal proceedings. However, it should be considered that the law on the exclusion of illegal collection evidence applies when the cause of the cause of the death of the cause of the evidence-gathering 'significantly and essentially violates the moral or privacy rights of others.' Cases of serious and essential infringement of the right to privacy should be embodied in realistic legislation[4].

4. Reasonable Operation Plan of Drone

For "personal information requested to be collected or provided for the purpose of analyzing information related to national security" in Article 58 (1)2 of the Personal Information Protection Act, personal information requested for collection or provision for the purpose of information analysis related to national security even in order not to apply to the country, the minimum types or behaviors and types of information related to national security must be specified. Through this, it is expected that the public's trust in Intelligence or Investigative Agencies will be improved as well as the relief of vague fears of infringement of personal information for national security or inspections.

When conducting Intelligence/Investigation activities on national security infringement offenders, guidelines for using drones should be implemented taking into account general matters(Articles 3-5 of the Personal Information Protection Act) that do not fall under the grounds for exclusion. That is, ①clarity of the purpose of personal information processing, which falls under the principle of personal information protection(Article 3 of the Act), legitimacy and legitimacy of information collection, prohibition of use for other purposes, accuracy, completeness, up-to-dateness, safety, anonymity Infringement minimization is guaranteed, and personal information controllers must comply with legal responsibilities and obligations, and the rights of data subjects such as the right to request access must be guaranteed. ②In terms of the rights of the information subject(Article 4 of the Act), the right to receive information on the information processing of the personal information subject, the right to select and decide whether or not to consent and the scope of consent, the right to request access(including issuance of a copy), The right to request suspension, correction, deletion and destruction of personal information, and the right to remedy in accordance with the prompt and fair procedure of damages should be protected. ③In the responsibilities of the state, etc. within the scope of the purpose(Article 5 of the Act), the government and local governments take measures to prevent harm caused by prohibition of collection of personal information other than the purpose of personal information, misuse, abuse, and indiscriminate monitoring and tracking, etc. Laws and ordinances should be enacted and revised in accordance with the purpose of the law, improving the laws and regulations to pro-

tect the rights of people, improving unreasonable social practices, respecting, promoting and supporting autonomous personal information protection activities.

5. References

5.1. Journal articles

[1] Yang SD & Kim HW. Research on Potential Terrorist Threatand National Security Crimes. *International Journal of Terrorism & National Security*, 3(2), 8-14 (2018). [Article]

[2] Yu BH. Theoretical Approach to Radicalizationand Violent Extremism that Leads to Terrorism. *International Journal of Terrorism & National Security,* 2(2), 12-18 (2017). [Article]

[3] Yu BH. Transnational Security Threat and Change of Counterrorism Intelligence Environment. *International Journal of Terrorism & National Security,* 4(1), 9-14 (2019). [Article]

[4] Lee DH. Legal Issues and Prospects Regulating Drones. *Law & Technology*, 12(4), 74-90 (2016).

[5] Yun JY. Legal Issues and Legislative Improvements of Drones used by Law Enforcement Agencies. *New Trend of Criminal Law*, 51, 108-137 (2016).

[6] Kim SW. Regulations Concerning Police Drones: Focusing upon Relevant United States' State Acts and Their Implications in South Korea. *Review on Global Enterprise Law at KHU*, 8(1), 199-235 (2015).

[8] Park JH. Direction of Regulatory System for Personal Video Information in the Public Sector according to the Use of Police Cams and Drones. *Law Association*, 69(2), 114-143 (2020).

[15] Seo BH. The Doctrine of the Poisonous Tree and its Exception, the Admissibility of Evidence Illegally Obtained by the Private Person. *Korean Criminological Review,* 20(3), 31-59 (2009).

5.2. Books

[10] Ministry of the Interior and Safety, Introduction of Act and Guideline in Personal Information, Ministry of the Interior and Safety (2016).

5.3. Additional references

[7] http://www.law.go.kr/ (2020).

[9] Personal Information Protection Commission. Provide CCTV Video Information on Missing Children and Runaways by the National Police Agency. Resolution (2019).

[11] Personal Information Protection Commission. CCTV Video Information Processing to Support Integrated Defense Operations in Boryeong City. Resolution (2019).

[12] Personal Information Protection Commission. Request to Provide Video Information from the Integrated Control Center Owned by Local Governments to Respond to the United Defense Situation of Local Responsible Units. Resolution (2019).

[13] Korea Supreme Court 99Do2317 Judgement (2020).

[14] Korea Supreme Court 2013Do2511 Judgement (2020).

[16] Korea Supreme Court 2007Do3016 Judgement (2020).

6. Contribution

6.1. Authors contribution

	Initial name	Contribution
Author	YSL	-Set of concepts ☑ -Design ☑ -Getting results ☑ -Analysis ☑ -Make a significant contribution to collection ☑ -Final approval of the paper ☑ -Corresponding ☑ -Play a decisive role in modification ☑ -Significant contributions to concepts, designs, practices, analysis and interpretation of data ☑ -Participants in Drafting and Revising Papers ☑ -Someone who can explain all aspects of the paper ☑