Abstract

Purpose: Various risks exist in the field for security guards. Given such risk factors, the need for security guard increases while the security industry is developing. However, security guards carry only portable equipments, which are very passive from against risk factors in the workplace. This causes a lot of stress and sacrifices further to injuries for the security guards.

Method: Therefore, in this study, the portable equipment of the security guard was examined, and the baton was examined based on the issue of the security guard’s portable equipment.

Results: Security guard is making much effort to help protect the safety of those subject to personal protection and facilities subject to security from against various risk factors in the workplace. However, the equipment to protect the safety of those subject to personal protection and facilities subject to security from against dangerous weapons which are becoming more aggressive and dangerous as the number of hazardous goods is diversified fails to reflect the reality. For the safety of the security guard and those who are subject to their protection, it is necessary to re-establish the standards for the baton among the portable equipments.

Conclusion: Various efforts for the portable equipments of security guard are required. Regarding the security guard’s portable equipment, it is a device which can respond to threats from against violent crimes and aggressive harmful weapons, the redevelopment of the standards which may be used to safely respond to factors of danger and which may be used appropriately is needed.

[Keywords] Security Guard, Portable Equipment, Baton, Harmful Equipment, Safety

1. Introduction

The development and change of advanced technology has brought about changes in almost every sector of the nation and society, and this is the same aspect worldwide [1].

As the main performer in the security related activities has been carried out by a human security guard, various equipments are used for more efficient work, and accordingly, the equipments are providing assistance to better and safely protect the subject of security.

In the globalized international environment, the security work has played a crucial role in safety at the global festivals including the Olympic Games and the World Cup Soccer Games as well as largescale performances and expos.

Safety at important international events where domestic and foreign distinguished guests attend and which attract attention from across the world goes beyond the national image and is absolutely an important part of the country’s safety, tourism industry, and the national stature.

In particular, with the rapid changes in the social environment due to external factors, criminal methods and means are progressing and diversifying, and illegal acts that destroy the social
order are constantly occurring, so the police are bound to experience constant job
stress\[2\][3][4][5][6].

Since the security guard's identity is not different from that of the general public, many re-
strictions apply to the safety activities in the field, and even the basic authorities needed for
control are often lost\[7].

Security personnel in major cities are often first responders in case of security crisis or other
emergencies, and the increasing presence of commercial security providers in communities con-
sidered to have made a major contribution to tackling crime through deterrence activities\[8][9].

This is because the partial performance of police duties by private individuals is integral to
the exercise of physical force, and the use of weapons or equipments which reaches the level
of the police is inevitable\[10].

Currently, Germany, United Kingdom, and the United States, etc., are also implementing a
system to extend the authorities of the private security guard in the form of granting limited
police power to the private sector, and such phenomenon is expected to further accelerate\[11].

Accordingly, in this study, the laws related to the portable equipments of the security guard
will be examined, problems of the current standards related to the baton among the portable
equipments of the security guard will also be examined, followed by the presentation of plans
for improvement.

2. Data Analysis

2.1. Framework of the research

As for the method of data analysis for this study, the reference analysis and the laws and
regulations related to the research subject were reviewed, and the interview technique was
used as the research tool. The reference data and the laws and regulations related to the secu-
rity guards' portable equipments were analyzed, and the data were collected by using the in-
depth interviews conducted with security work experts.

In this study, the in-depth interviews were conducted with the selected experts after collect-
ing the basic data based on the reference data and related laws and regulations. The research
results were derived by gathering the collected data and interview data.

Table 1. Procession of the study.

<table>
<thead>
<tr>
<th>Extract basic data</th>
<th>Expert survey</th>
<th>Derive plans of improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extract items of evaluation to explore the issues and improvement measures for the security guards' portable equipments</td>
<td>Gather the expert opinions on the details derived from the previous studies</td>
<td>Derive the plans of improvement for the security guards' portable equipments in the process of analyzing the questionnaire data and interpreting the results</td>
</tr>
</tbody>
</table>

2.2. Research participants

In this study, 7 experts with 10 or more years of experiences in the security field were selected as
the research subjects to secure the validity of the questionnaire questions by using the purposive sam-
pling method.

Even in the situation where the rate of turnover is high for the security field, it is considered that
the research participants can make their independent judgement on the issues of the security guard’s use of portable equipments and the plans of improvement for each situation where they have been served in the security field for 10 or more years, and the purpose of this study can be faithfully achieved.

**Table 2.** Expert group.

<table>
<thead>
<tr>
<th>Name</th>
<th>Gender</th>
<th>Age</th>
<th>Education</th>
<th>Field of expertise</th>
<th>Length of service</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCJ</td>
<td>Male</td>
<td>41</td>
<td>Master’s</td>
<td>Facility security guard (at department store)</td>
<td>12 years</td>
</tr>
<tr>
<td>LSW</td>
<td>Male</td>
<td>40</td>
<td>Bachelor’s</td>
<td>Facilities / special security guard (dispatch of manpower)</td>
<td>13 years</td>
</tr>
<tr>
<td>LHM</td>
<td>Male</td>
<td>48</td>
<td>Bachelor’s</td>
<td>Personal protection</td>
<td>16 years</td>
</tr>
<tr>
<td>KS</td>
<td>Female</td>
<td>37</td>
<td>Bachelor’s</td>
<td>Personal protection / facilities guard</td>
<td>10 years</td>
</tr>
<tr>
<td>SSJ</td>
<td>Male</td>
<td>38</td>
<td>High school diploma</td>
<td>Personal protection</td>
<td>14 years</td>
</tr>
<tr>
<td>JSH</td>
<td>Male</td>
<td>33</td>
<td>Diploma from community college</td>
<td>Personal protection / facilities guard</td>
<td>10 years</td>
</tr>
<tr>
<td>CSH</td>
<td>Female</td>
<td>44</td>
<td>PhD program</td>
<td>Personal protection</td>
<td>18 years</td>
</tr>
</tbody>
</table>

3. **Analysis of the Security Guard’s Portable Equipments**

3.1. **Laws related to the security guard’s portable equipments**

The Security Services Industry Act was enacted in 1976 under the name of the Security Industry Act, and various amendments have been made in line with the changes in the industry and the demands of the times, while faithfully achieving the purposes of the enactment for the sound development of the security industry[12].

Article 20 of the Enforcement Rules of the Security Services Industry Act provides for the legal standards for the portable equipments of the Korean security guards, and the specific standards are presented in Appendix 5.

The security guard’s portable equipment related matters were presented under the Security Industry Act, Enforcement Rules of the Security Industry Act, and the Enforcement Rules of the Security Services Industry Act since 1976, when the Security Industry Act was enacted, and they have changed as illustrated in Table 3 according to the demands of the times[13].

**Table 3.** Laws related to the security guard’s portable equipments.

<table>
<thead>
<tr>
<th>Related laws</th>
<th>Date of enactment and amendment</th>
<th>Date of enforcement</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Security industry act law no. 2946</td>
<td>Enacted on 1976. 12. 31</td>
<td>1977. 4. 1</td>
<td>Article 8. Clothes and equipments The security guards shall wear the clothes and equipments specified under the ordinance of the ministry of interior in the line of their duty.</td>
</tr>
<tr>
<td>Enforcement rules of the security industry act ordinance no. 242 of the ministry of the interior</td>
<td>Enacted on 1977. 11. 22</td>
<td>1977. 11. 22</td>
<td>Article 7. Replication and equipments 6. The types of equipments shall be divided into belts, light rods and horns, yet the belts’ rules shall be identical to those of the security guards, and the security guard mark shall be emphasized on the buckle.</td>
</tr>
<tr>
<td>Enforcement rules of the security industry act Ordinance no. 525 of the ministry of the interior</td>
<td>Amended on 1991. 2. 26</td>
<td>1991. 2. 26</td>
<td>Article 7. Replication and equipments 6. The types of equipments shall be divided into belts, light rods and spray guns, yet the belts’ rules shall be identical to those of the security guards, and the security guard mark shall be emphasized on the buckle.</td>
</tr>
<tr>
<td>Enforcement rules of the security services industry act ordinance no. 50 of the ministry of security and public administration</td>
<td>Amended on 2014. 1. 8</td>
<td>2014. 1. 8</td>
<td>Article 20. Equipments, etc. The types of equipments which the security guards carry shall be horns, light sticks, and spray guns, yet they may be carried in the line of duty only.</td>
</tr>
<tr>
<td>Enforcement rules of the security services industry act ordinance no. 72 of the ministry of security and public administration</td>
<td>Amended on 2014. 6. 5</td>
<td>2014. 6. 8</td>
<td>Article 20. Portable equipments of security guards ① In accordance with article 16-2 paragraph 1 of the act, the security guards may carry a horn, baton, spray gun, safety shield, walkie talkie, and other equipments needed for the performance of security duties which are not manufactured for offensive purposes in the line of duty, and safety equipments such as helmets and stab proof vests may be worn. ② The specific standards for the security guards’ equipment according to Paragraph 1 shall be governed by Annex 5.</td>
</tr>
</tbody>
</table>

Note: Ministry of government legislation.

### 3.2. Standard of the security guard’s portable equipments

Concerning the portable equipment of the Korean security guard, the Enforcement Rules of the Security Services Industry Act provide for specific standards.

**Table 4.** Specific standards of the security guard’s portable equipments.

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Equipment’s standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Horn</td>
<td>Whistle made of metal or plastic</td>
</tr>
<tr>
<td>2. baton</td>
<td>A self defense bar made of metal (including alloy) or plastic with a total length of 700 mm or less</td>
</tr>
<tr>
<td>3. Spray gun</td>
<td>Spray gun according to the control of the firearms, swords, explosives, etc. act</td>
</tr>
<tr>
<td>4. Safety shield</td>
<td>As a shield made of plastic with a width of 500 mm or less and a length of 1,000 mm or less, its color and design must be clearly distinguished from the safety shield used by police officers</td>
</tr>
<tr>
<td>5. Walkie talkie</td>
<td>Reception must be available in real time when transmitting radio</td>
</tr>
<tr>
<td>6. Safety hat</td>
<td>As an equipment which protects the head without covering the face, its color and design must be clearly distinguished from the hard hat used by the police officers</td>
</tr>
<tr>
<td>7. Stab proof vest</td>
<td>The color and design of the stab proof vest used by the police officers must be clearly distinguished.</td>
</tr>
</tbody>
</table>

Note: Enforcement rules of the security services industry act (Annex 5).

### 4. Analysis of the Security Guard’s Portable Equipments

As illustrated in Table 3, the equipment which the security guard can carry is specified as a horn, baton, sprayer, safety shield, walkie talkie, helmet, and a stab proof vest. It can also be said that most of these equipments are applicable under the defensive type of equipment.
In Korea, where the legal authority of the security guard is identical to that of a civilian, and given no special authority, the provision of equipment as a passive means of defense for the security guards may be taken for granted.

As examined in the specific standards of security guard’s portable equipment, baton and spray gun would be the weapons which can control a weapon with a high degree of threat, such as a knife or iron pipe, or protect a person subject to personal protection during a confrontation with a violent criminal at a security scene where violent crimes occur. Among which, the use of spray gun is specified under the ‘Control of the Firearms, Swords, Explosives, Etc. Act,’ and the spray gun has the characteristics which are difficult to use in the environment.

The following is the table which summarizes the key contents of the issues and plans of improvement for the security guards' portable equipments based on the data collected after collecting relevant data and conducting in-depth interviews with the selected experts.

**Table 5. Comprehensive analysis of the expert interviews.**

<table>
<thead>
<tr>
<th>Expert</th>
<th>Issues related to the security guards' portable equipments</th>
<th>Plans of improvement for the security guards' use of portable equipments</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCJ</td>
<td>Portable equipments cannot be used in harmful situations since the customer's safety comes first</td>
<td>While providing service is extremely crucial for the department store, the defense equipments against the customers causing serious disturbance are required</td>
</tr>
<tr>
<td>LSW</td>
<td>Improvement of the laws related to the formal use of equipments</td>
<td>Enactment of the mandatory implementation of equipment training Development and possession available of countermeasure equipments for serious crime scenes</td>
</tr>
<tr>
<td>LHM</td>
<td>Development is very slow compared to other industries. Inadequate equipments of countermeasures against knives, etc., in the case of serious harms</td>
<td>Permission of the possession of low voltage tasers after training Permission of the possession of a baton which is longer than the currently short baton</td>
</tr>
<tr>
<td>K S</td>
<td>Aging of portable equipments</td>
<td>Enactment of the validity period for portable equipments</td>
</tr>
<tr>
<td>SSI</td>
<td>Equipments cannot be used realistically. Passive response is made with the body of security guard only</td>
<td>Equipments which can protect the person subject to security guard at the labor union's site and in highly harmful situations are required</td>
</tr>
<tr>
<td>JSH</td>
<td>Equipment related regulations failing to reflect the real extent of harms</td>
<td>Equipments which can secure safe distance between the person subject to security guard and the aggressor are required. Long batons are required</td>
</tr>
<tr>
<td>CSH</td>
<td>Impossible to respond to strong men and threatening weapons with current equipments alone</td>
<td>Equipments capable of delaying criminal activities are required. Equipments which can secure a safe distance between the person subject to security guard and the aggressor are required</td>
</tr>
</tbody>
</table>
Private security guards, who have to perform their duties in such an environment, have increased their distrust and dissatisfaction with the organization, and side effects such as lowered morale, decreased job satisfaction, and increased stress, etc., have manifested, while the mutual trust between colleagues and the trust in the organization have also decreased[14][15].

Since the authority and status of civilian security guards are unstable, there are limitations to actively responding to various problems which occur in the process of performing security work[16].

In terms of the private security guard, through the introduction of new equipments, they immediately subdue the aggressor during personal protection and the facility security work[17], and depending on the situation of the scene, they ought to confront the person with a weapon possessed by the aggressor and protect those subject to personal protection and the facility to be guarded safely.

It is expected that the highly advanced security equipments can contribute to the improvement of the security operation system in the security environment where the security environment changes, specialization of security work is required, and the security environment has to prepare for changes in the international situation and terrorist attacks[18].

5. Need for the Improvement of the Security Guard’s Portable Equipment

Many studies in the United States look for the foundation of the development of private security in the police’s incompetence and fear of crime[19][20][21][22].

In a situation where the Korean security guards are also exposed to violent crimes at the security scene, there is a need for preemptive countermeasures to ensure that they can work with portable equipments which are more active and effective when responding to crimes.

It is apparent by examining the case where a strong person in his 50s assaulted a security guard in his 70s for 40 minutes, and claiming that if he spoke out loud on the phone according to the work manual, he might cause damages to other residents, and he beat up the apartment’s security guard and burned his cheek with a cigarette[23].

Everyday crimes are rising in number, kidnapping of children, etc., and homicide by robbery are frequent, and the media also reported them provocatively, and hence, the high fear of crime among the residents surrounding the communal residence is still present[24][25].

While the scope of activities of the private security and security industry is expanding, the security and security industry are always exposed to dangerous cases and accidents because they have to protect their clients with their own lives as a collateral[26][27].

As in the case of the United States, the death toll of the security guard is high, and there are many violence or assaults against the security guard. Hence, even if the precedents are examined where the fatality of the security guards is very high, the protective equipments of the security guard are an important part which must be in place[28].

The security guards do not have special judicial authority to carry out their security duties, and it is difficult to operate sufficient personnel, and hence, the scope of security activities is very limited as a matter of characteristics[29][30].

As for the civilian security guards, the improvement of portable equipment is very necessary. Towards this end, it is necessary to establish a new regulation related to the baton which can respond to and against powerful weapons in a hazardous situation among the current portable equipments. The current baton standard provides that ‘a metal(including alloy) or plastic material for self-defense with a total length of 700 mm or less,’ yet with a rod of 700 mm or less, it is very difficult to respond to the dangers of strong weapons such as iron pipes or long swords.

In addition, it is proposed to make the installation of the ground positioning system(GPS) mandatory in order to respond to the trend of increasingly intelligent and speedy crimes and promptly arrest criminals[31].

However, in a situation where the reason for the existence of security guards is developing into a complementary form of the public security which carries out the safety of the people, laws and
institutions ought to change and develop according to the demands of the times to ensure that the security guards can better perform their given duties.

6. Conclusion

In the private security industry, it would also be necessary to analyze the effects of non-lethal and incapacitating weapon systems, which are the key themes of the overall flow and developmental direction for the weapon systems worldwide, and actively pay more attention to technology and equipment[15].

Meanwhile, the use of weapons by the security guards in the security industry has been very limited and for the passive situations even while they are essential equipments. While any excessive abuse or illegal use of equipments need to be severely punished, efforts are needed to improve the portable equipments which can safely and legally use the equipment of the security guard.

As per the current security guard’s portable equipment standards, the need to raise the standard for baton to one which can effectively respond to powerful and dangerous weapons is presented. This will enable the security guards to effectively deal with the risk factors for the safety of the people, which is the foremost goal of the security industry.

7. References

7.1. Journal articles


### 7.2. Thesis degree


### 7.3. Books


### 7.4. Additional references


8. Appendix

8.1. Authors contribution

<table>
<thead>
<tr>
<th>Author</th>
<th>JH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial name</td>
<td>Contribution</td>
</tr>
<tr>
<td>JH</td>
<td>☑ Set of concepts</td>
</tr>
<tr>
<td></td>
<td>☑ Design</td>
</tr>
<tr>
<td></td>
<td>☑ Getting results</td>
</tr>
<tr>
<td></td>
<td>☑ Analysis</td>
</tr>
<tr>
<td></td>
<td>☑ Make a significant contribution to collection</td>
</tr>
<tr>
<td></td>
<td>☑ Final approval of the paper</td>
</tr>
<tr>
<td></td>
<td>☑ Corresponding</td>
</tr>
<tr>
<td></td>
<td>☑ Play a decisive role in modification</td>
</tr>
<tr>
<td></td>
<td>☑ Significant contributions to concepts, designs, practices, analysis and interpretation of data</td>
</tr>
<tr>
<td></td>
<td>☑ Participants in Drafting and Revising Papers</td>
</tr>
<tr>
<td></td>
<td>☑ Someone who can explain all aspects of the paper</td>
</tr>
</tbody>
</table>