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Abstract

**Purpose:** This paper intends to find alternatives to strengthen global governance in vaccine distribution amid the rise of vaccine nationalism in the international community. To this end, Chapter 2 briefly outlines the risks of vaccine nationalism and the concept of global governance. Chapter 3 examines the status of vaccine development in major countries and Chapter 4 suggests ways to establish global vaccine governance. Chapter 5 summarizes the previous discussions and suggests a policy alternative for securing vaccines for the ROK.

**Method:** The spread of COVID-19 has led to the fall of neoliberalism, but to end the COVID-19 pandemic, only infectious disease control through strengthening transformative neo-liberal way of strengthening international governance can overcome the vaccine nationalism. Global Governance refers to the performance of various interested parties through horizontal cooperation to achieve a common purpose, especially the public purpose.

**Results:** The policy alternatives to overcome vaccination nationalism and end the global COVID-19 pandemic are as follows. First, it is possible to effectively respond to various infectious diseases in the future by strengthening the disease management function of the UN and rearranging of WHO for the fair distribution of vaccines. Second, AI technology-based platforms can be used to optimize the use of early warning and mobilize necessary resources for preventive measures. Third, patent rights for vaccine manufacturing technologies should be revoked and vaccines should be produced and administered simultaneously regardless of country or patent to prevent the spread. Fourth, measures to limit national sovereignty at the global governance level should be clearly defined. Fifth, cooperation with WHO and transnational pharmaceutical companies, and NGO, IGO(Intergovernmental Organization) are key to combating vaccination nationalism’s politics.

**Conclusion:** The implications of major countries’ vaccine development and vaccine diplomacy for the ROK are as follows. First, the ROK also needs to continue to develop vaccines and treatments, foster human resources in related fields, and establish active international cooperation. Second, it is necessary to strengthen the international system to develop vaccines and treatments. Third, it is necessary to actively secure vaccines through the production of a licensing method that introduces technology, not just consignment production in Korea, or equity investment in overseas vaccine companies, which requires the government’s full support for the industry.

**Keywords** COVID-19, Neo-Liberalism, Pandemic, Vaccine Nationalism, Global Governance

1. Introduction

With the efficacy of the vaccine proven and as the vaccination expanding, the supply of vaccines is heading toward nationalist trends. The COVID-19 Pandemic refers to an end to neoliberalism[1]. The epidemic has cut off super connectivity between countries due to vaccine nationalism, and the role of quarantine and vaccine control for the state’s survival is more important than private corporate efficiency and free trade. Individual countries seem to overlook the fact that global society is connected
as one. They are engrossed in competing with each other to form their collective immunity. The emergence of a mutant virus can demolish the collective immunity established by the existing vaccine in a moment. The best alternative to solving these global problems is to strengthen the UN which embraces the concept of global governance by realizing equal distribution of vaccines.

The global imbalance in the distribution of vaccines may affect the end of COVID-19 completely. As of the end of February 2021, Canada and Britain have secured about three times as many vaccines as their population, while the United States, EU, Japan, and South Korea have also secured supplies that can be vaccinated at least once. This competition to secure vaccines proves ongoing vaccination nationalism which prioritizes only the national interests of each state.

Nationalism is aimed at the common benefit and victory of their people, assuming homogeneity that they share one ethnicity based on the identity of the people that make up a particular nation. Vaccine nationalism refers to an action based on national selfishness that bans pharmaceutical advanced countries from exporting vaccines to other countries by prioritizing the protection of their own people’s lives. A typical example of vaccination nationalism emerged with the tensions between the United States and China[2]. These two countries are leading the development of vaccines, but they were opposed to the participation of the COVAX facility. COVAX is an international consultative body created by WHO, the World Vaccine Association(GAVI), and the Coalition for the Prevention of Infectious Diseases(CEPI) to supply COVID-19 vaccines. It is operated through joint purchases and distributes them evenly by member states. According to the WHO, more than 170 countries have expressed their intention to participate in COVAX, including South Korea, Japan, and the European Union(EU). COVAX is one of three pillars of the Access to COVID-19 Tools(ACT) Accelerator, which was established by the World Health Organization(WHO), the European Commission, and France in response to this pandemic by bringing together governments, global health organizations, manufacturers, scientists, the private sector, civil society, and philanthropy, to provide innovative and equitable access to COVID-19 diagnostics, treatments, and vaccines. To end COVID-19, the supply of global vaccines must be balanced, and without a global control mechanism for this, adverse effects on mankind will be running after[3].

The COVAX has been established out of fear that if some advanced countries monopolize vaccines based on nationalism, impoverished developing countries may suffer in access to the COVID-19 vaccine[4]. The challenge now is achieving an equitable global deployment of viable vaccines to prevent future outbreaks beyond vaccine nationalism’s politics. In this context, nationalism is based on a realism paradigm based on the power and interests of the state. Since the COVID-19 pandemic is a transnational security issue, there is a need to embrace the paradigm of neoliberalism’s way of response. This paper intends to find alternatives to strengthen global governance in vaccine distribution amid the rise of vaccine nationalism in the international community. To this end, Chapter 2 briefly outlines the risks of vaccine nationalism and the concept of global governance. Chapter 3 examines the status of vaccine development in major countries and Chapter 4 suggests ways to establish global vaccine governance. Chapter 5 summarizes the previous discussions and suggests a policy alternative for securing vaccines for the ROK.

2. A Short-Sighted Vaccine Nationalism

Most African countries in sub-Saharan Africa, Southeast Asia, and Central Asia, which are the impoverished states in the world, have no direct contracts with pharmaceutical companies to secure vaccines. Only a small amount of vaccines are supplied through the COVAX Efficiency Program, a vaccine supply organization of the World Health Organization(WHO), and those states are under direct hit by vaccination nationalism. To reach the “collective immunity” stage where the majority of global communities can gain immunity and return to their daily lives, more than half of the world’s population must be vaccinated[5]. However, the current vaccination rate varies greatly from country to country. According to an estimate by the New York Times, more than half of Britain’s population is expected to be vaccinated within the first half, while Portugal and Ireland will take 11 months and France will take
13 months. In most countries in Africa and Southeast Asia, it is estimated that collective immunity through vaccination will not be possible until 2023 <Figure 1>.

**Figure 1.** Distribution of vaccination areas by period[6].

Rich countries will get access to coronavirus vaccines earlier than others

Due to a lack of vaccine production, the EU is inspecting vaccine plants in member states and imposing restrictions on export volume[7]. In addition to India, the EU also announced restrictions on the export of vaccines produced in EU member countries such as Germany and Belgium. The global impact of “Vaccination nationalism” may bring in a country’s achieving collective immunity. Even so, if vaccination in other countries is delayed, the virus can be easily mutated and the wall of established immunity may easily collapse. This is why the Council of Europe warned, "Vaccine's unfair distribution is another threat to pandemic control," and warned, "Vaccine-nationalism can make vaccines obsolete." A delay in vaccination in low-income countries is also likely to cause problems in the labor market in advanced countries, which are heavily dependent on foreign workers. Due to the imbalance in the supply of vaccines, if products and service trade do not recover quickly, it is estimated to cause up to $2.1 trillion in losses to high-income countries that have been vaccinated. If vaccination nationalism continues, not only low-income countries that have difficulty securing vaccines but also advanced countries are expected to suffer from vaccine imbalances. Therefore, it is necessary to accept the concept of global governance to solve these problems[8]. The differentiation of this paper emphasizes that strengthening neo-liberalism through global governance can be alternatives to end the global Code-Pandemic, unlike previous research that declared the end of neo-liberalism due to the COVID-19.

The concept of global governance highlights the role-sharing between the main institutes and their management in the coordination of conflicting interests. Global governance is closely related to the environmental change of globalization. The global governance debate is in line with neoliberal institutionalism. So far, countries have implemented global governance by managing common problems through multilateral international organizations. Mayor players of global governance organizations like the UN and WHO of transnational neoliberal union need reform and renewal of their goals to prevent the spread of infectious diseases[9]. Government is achieved through the existence of hierarchical order of authority and the exercise of authority granted by the government. In government, laws, and systems, including compulsory enforcement, play an important role, while governance refers to the...
performance of various interested parties through horizontal cooperation to achieve the common purpose, especially the public purpose. Without government, governance cannot exist, but governance can exist without the existence of centralized power. Because of this nature, the nature of global governance mechanism is traditionally attended by various stakeholders as well as actors with power[10]. The OECD report defines “global governance as a process of collectively managing and governing resources, issues, conflicts, and values in a world that is gradually becoming a "global neighborhood." The acceptance of the concept of global governance refers to the application of non-traditional security, such as the spread of infectious diseases, by establishing a global management system to effectively control pandemic diseases <Figure 2>.

![Figure 2. Analysis framework.](image)

3. Current Status of Vaccine Development in Major Countries

The United States and China are also competing against each other in vaccine development and vaccination. If vaccination is delayed, the economic recovery will slow down, weakening its competitiveness in the hegemonic structure. Xi Jinping supports Chinese vaccines to developing countries, using them as an opportunity to secure allies and expand global leadership. India is showing the example of vaccination nationalism by stopping the overseas shipments of its products of AstraZeneca for the national interest of protecting its citizens. Thanks to Israel’s quick leadership, the nation’s vaccination has already been completed, and Israeli troops have begun to take masks off[11]. Rich countries have already signed vaccine contracts with major vaccine companies and have the stockpiled COVID-19 vaccine to vaccinate about 2.9 billion people <Table 1>.

**Table 1.** The amount of vaccines left after vaccination in major countries[12].

<table>
<thead>
<tr>
<th>State</th>
<th>Population (million people)</th>
<th>Secured vaccine(%)</th>
<th>The remaining vaccine (million people)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>37</td>
<td>609</td>
<td>188</td>
</tr>
<tr>
<td>America</td>
<td>329</td>
<td>553</td>
<td>1490</td>
</tr>
<tr>
<td>Italy</td>
<td>60</td>
<td>422</td>
<td>213</td>
</tr>
<tr>
<td>UK</td>
<td>68</td>
<td>421</td>
<td>218</td>
</tr>
<tr>
<td>Germany</td>
<td>84</td>
<td>394</td>
<td>247</td>
</tr>
<tr>
<td>Poland</td>
<td>28</td>
<td>364</td>
<td>100</td>
</tr>
<tr>
<td>Spain</td>
<td>47</td>
<td>364</td>
<td>124</td>
</tr>
<tr>
<td>France</td>
<td>65</td>
<td>364</td>
<td>172</td>
</tr>
<tr>
<td>Australia</td>
<td>25</td>
<td>345</td>
<td>61</td>
</tr>
<tr>
<td>Mexico</td>
<td>128</td>
<td>158</td>
<td>74</td>
</tr>
<tr>
<td>Japan</td>
<td>127</td>
<td>124</td>
<td>31</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>2898</td>
</tr>
</tbody>
</table>

Vaccination seems to be an effective way to control the COVID-19 Pandemic. To this end, it requires mass production of viable vaccines[13][14][15][16]. In this chapter, I would like to describe the status
of vaccine development in the United States, the United Kingdom, China, and Russia.

3.1. The US

The US also produces about 27% of the world’s COVID-19 vaccines, including Pfizer, Moderna, and Johnson & Johnson, including AstraZeneca, but uses most of them for domestic use as of 24th March 2021. Pfizer received 95% of the immunity effect from the final analysis of Phase III clinical trials and was approved for emergency use by FDA. Interim analysis of phase III clinical trials showed a 95% prevention rate. While the average flu vaccine effect is 40-60%, more than 90% of the COVID-19 vaccine effect is considered to have a very high prevention rate. The Pfizer vaccine can be stored at -70°C for up to six months and in a general refrigerator for five days, making it impossible to transport it through a general freezer. Modena confirmed a 94.5% high vaccine efficacy in phase III clinical trial as the second success story for the COVID-19 vaccine after Pfizer. The storage temperature of the Modena vaccine can be stored at -20°C for up to 5 months and 2~8°C for up to 30 days. Compared to Pfizer, Modena can also be stored in regular refrigerators, making it easier to distribute <Table 2>.

Table 2. Comparison of COVID-19 vaccine effect[17].

<table>
<thead>
<tr>
<th>Company</th>
<th>Type</th>
<th>Dose</th>
<th>How effective</th>
<th>Storage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oxford university</td>
<td>Viral vector (genetically modified virus)</td>
<td>2</td>
<td>62-90%</td>
<td>Regular fridge temperature</td>
</tr>
<tr>
<td>AstraZeneca</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderna</td>
<td>RNA (part of virus genetic code)</td>
<td>2</td>
<td>95%</td>
<td>-20°C up to 6 months</td>
</tr>
<tr>
<td>Pfizer-BioNTech</td>
<td>RNA</td>
<td>2</td>
<td>95%</td>
<td>-70°C</td>
</tr>
<tr>
<td>Gamaleya(Sputnik V)</td>
<td>Viral vector</td>
<td>2</td>
<td>92%</td>
<td>Regular fridge temperature</td>
</tr>
<tr>
<td>Johnson &amp; Johnson/Janssen</td>
<td>Adenovirus vector vaccine</td>
<td>1</td>
<td>85%</td>
<td>Stable for 2 years at -4ºF(-20ºC)</td>
</tr>
</tbody>
</table>

Johnson & Johnson is being developed later than Pfizer or Modern, but it can prevent the COVID-19 virus with a single vaccination and has a competitive edge in terms of convenience in storage and logistics based on protein-based traditional vaccine development methods. Also, Novavacs(NVX-Cov2373) has under development. The COVID-19 vaccine made by Janssen, a subsidiary of Johnson & Johnson(J&J) in the U.S., has also been embroiled in controversy over the side effects of blood clots just as AstraZeneca. Already developed vaccines are useful in reducing infection and death rates by the formation of neutral antibodies rather than side effects and are being used selectively. As the spread of the variant viruses speeds up vaccine development, progressive lawmakers in the U.S. Democratic Party and WHO have pressed the Biden administration to give up its vaccine patent rights to overcome the global COVID-19 pandemic. President Biden made it clear on May 5 that he would support the exemption of intellectual property rights for the COVID-19 vaccine. However, it may take a considerable amount of time to exempt intellectual property rights under the WHO regulations.

3.2. The UK

In the UK, AstraZeneca(AZD1222), developed by the University of Oxford, verified the COVID-19 prevention rate of 70.4%. It has lower efficacy than previously developed Modena and Pfizer vaccines but has a competitive edge in terms of price, storage, and distribution. The storage temperature of the AstraZeneca vaccine is 2 to 8 degrees and the price is set at around $4, which is expected to be advantageous for the supply of low-income and developing countries that cannot afford to buy vaccines. AstraZeneca is planning to supply vaccines through Kovacs, a multinational vaccine supplier, and is emerging as alternative vaccine governance to overcome vaccination nationalism. However, the AstraZeneca vaccine’s preventive effect is positive, but the side effects are severe, so alternatives are being
considered. This vaccine is used in people over 30 because of blood clots.

### 3.3. The China

China is developing 14 kinds of COVID-19 vaccines at the national project level, of which three-phase trials of Sinopalm, Sinovac, and CanSino vaccines have been completed, and they are providing free aid and exports to many foreign countries after obtaining conditional approval from China's National Food and Drug Administration[18]. China approved the emergency use of vaccines from July 22, 2020, began vaccinating high-risk personnel, including medical workers and is expected to begin free vaccinations for all citizens from Dec. 15, 2020, with 40 percent of the population expected to be vaccinated by the first half of 2021. China is expanding China’s external influence through cooperation with developing countries from the vaccine development stage and plans to expand the scope of vaccine diplomacy through vaccine aid to 53 countries and the export of vaccines to 22 countries. China’s vaccine can be distributed in an environment of 2 to 8 degrees Celsius, which is an advantage for developing countries that are unable to obtain vaccines due to lack of funds.

Sinopharm and Sinobac, vaccines developed by China, are optimistic about the results of emergency use and phase III clinical trials in their countries, but objective data remains undisclosed. Since the vaccination of Sinopharm, there have been several cases of COVID-19 infections, and no official data has been verified on the preventive effect. China has vaccinated about 1 million people with the Sinopharm vaccine and announced that there are no serious side effects. The Sinobac vaccine is expected to release its data after sufficient experiments and has already supplied the first batch under a supply contract with the Sao Paulo State Government in Brazil.

### 3.4. The Russia

The Russian vaccine Sputnik-V, which has been approved by the country since the second phase of clinical trials, has proven to be effective in the variant virus, and about 45,000 to 50,000 high-risk groups, including medical workers, have already been vaccinated. The Russian Ministry of Health reported that it has more than 90% of the effect in prevention.

Russia announced that the Phase 3 clinical analysis of the COVID-19 vaccine Sputnik V showed a vaccine prevention efficiency of 91.4%. Russia will carry out production contracts to vaccinate more than 500 million people a year. The Sputnik-V vaccine is free for Russian citizens, and the international market price is expected to be set at less than $10 per vaccination. It is produced by freezing(dried) the vaccine so that it can be stored at 2 to 8°C. Insisting that the specialty of the Russian vaccine is in two adenoviral vectors that have enabled long-term immune responses, which are considered highly immune to the mutant virus from the UK.

### 4. Comparison of COVID-19 Vaccine Effect

To overcome vaccine nationalism and realize global distribution justice, there is a need to embrace the concept of global governance that strengthens the neo-liberalistic state coalition system. In a TED lecture in 2015, Bill Gates noted, "If there is anything that kills more than 10,000,000 in the next few years, it is most likely to be a contagious virus, not a war." As Bill Gates said, the biggest threat to mankind now is an infectious disease. COVID-19 is also highly likely to remain an endemic, and plague mankind even if the pandemic is over. Given that global infectious diseases occur more frequently over the years, more deadly virus than the COVID-19 virus is likely to put mankind in pain.

In a current way, there is a clear limit to virus response in the form for each country to sign independent contracts with pharmaceutical companies that develop vaccines and treatments without global governance and to secure supplies competitively. The development of vaccines and treatments is up to science, but comprehensive solutions beyond science are needed to end pandemics. The key is how the world will establish global vaccine governance in response to infectious diseases that come
every few years. To establish vaccine governance, the international community should first cooperate in dramatically increasing vaccine accessibility in low-income countries by increasing the size of the WHO-led COVAX facility. Even though WHO has many limits, it is still a viable organization for global governance.

It is necessary to establish a system that allows the world to produce simultaneously when Pandemic strikes by temporarily suspending the application of intellectual property rights for vaccine development. The establishment of health infrastructures such as support for vaccine storage and distribution facilities, vaccine-applied syringes, containers, and related personnel are also urgent tasks[19]. The spread of COVID-19 has led to the fall of neoliberalism, but to end the COVID-19 pandemic, only infectious disease control through strengthening transformative neo-liberal way of strengthening international governance can overcome the vaccine nationalism.

5. Conclusion

To cope with non-traditional security such as the spread of infectious diseases, it is necessary to establish a global management system to effectively control infectious diseases, along with the strengthening of a transnational neoliberal coalition, so-called global governance. Vaccine nationalism may cause geopolitical tensions by damaging global cooperation[20]. International cooperation using vaccine production and distribution can be an important diplomatic asset in the post-Covid era. It will require leadership of a majority of vaccine-manufacturing countries including the US, UK, Russia, and China[21].

In particular, providing vaccinations to the new southern part of the country, which has frequent exchanges with South Korea, will help prevent the spread of infection through overseas inflows in addition to its diplomatic outcome. Currently, ROK’s amount of donations to COVAX(the COVID-19 Vaccines Global Access) is up to 10 million dollars, far less than other countries, including $2 billion in the U.S., $700 million in Britain, and $100 million in France and Germany, respectively. It may be considered to further increase donations in this field by utilizing the ODA(public development assistance) budget, etc. COVAX lacks game-changing support with no serious participation of the G2[22].

The implications of major countries’ vaccine development and vaccine diplomacy for the ROK are as follows. First, the ROK also needs to continue to develop vaccines and treatments, foster human resources in related fields, and establish active international cooperation. Second, it is necessary to strengthen the international system to develop vaccines and treatments. Also, a multinational health cooperation system such as the Quarantine and Health Cooperation in Northeast Asia should be established to respond to non-traditional security threats such as infectious diseases. Third, it is necessary to actively secure vaccines through a licensing method that introduces technology, not just consignment way in South Korea, or equity investment in overseas vaccine companies, which requires the government’s full support for the industry.

The only global solution to counter viruses that do not discriminate against time and humans is to establish global publicity in the medical sector, including vaccines, and to establish equity at the level of global governance. Still, the UN occupies its position as a key pillar of global governance that manages and solves global problems. Thus, the policy alternatives to overcome vaccination nationalism and end the global COVID-19 pandemic are as follows. First, it is possible to effectively respond to various infectious diseases in the future by strengthening the disease management function of the UN and rearranging of WHO for the fair distribution of vaccines. Second, AI technology-based platforms can be used to optimize the use of early warning and mobilize necessary resources for preventive measures. Third, patent rights for vaccine manufacturing technologies should be revoked and vaccines should be produced and administered simultaneously regardless of country or patent to prevent the spread. Fourth, measures to limit national sovereignty at the global governance level should be clearly defined. Fifth, cooperation with WHO and transnational pharmaceutical companies, and NGO, IGO(Intergovernmental Organization) are key to combating vaccination nationalism’s politics.
6. References

6.1. Journal articles


6.2. Books


6.3. Additional references


### 7. Appendix

#### 7.1. Authors contribution

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<thead>
<tr>
<th>Initial name</th>
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<td>SL</td>
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</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>
Abstract

**Purpose:** College life is perhaps the largest task of college students during the late period of their youth in their developmental phase, which is also a crucial task directly leading to their future satisfaction of life. However, college students in Korea are admitted without a proper preparation due to their academic centric education and blind focus on grades and scores, thereby undergoing much confusion in the process. This paper presents data of importance to help a successful adaptation to college life by clarifying the effect of the learned helplessness formed through the repeated failures on the adaptation to college life in detail. While previous studies have been limited on the effect of the learned helplessness on the learning process, this study seeks to specifically verify the effect on the adaptation to college life.

**Method:** By undertaking reference research, the factors impeding the successful adaptation to college life are identified, while the concept, characteristics, and the basic aspects of the factors are summarized, and how the factors cause a negative effect on the adaptation to college life is clarified in detail.

**Result:** Learned helplessness brings about negative predictions even under new circumstances even while repeated failures are experienced. The negative expectations formed as such cause the loss of new attempts or practical behaviors, thereby gravely impeding the behavioral practice required for the adaptation to college life. This further causes a serious negative impact on the formation of self identity and career path development. To form the self identity and develop an appropriate career path, one needs to have a positive attitude and find and practice various activities, yet being trapped in the learned helplessness causes passive attitude, negatively impacting the achievement of any developmental task. Moreover, learned helplessness causes negative emotions including depression and anxiety, while impeding the emotional adaptation to college life.

**Conclusion:** As examined throughout this study, it was discovered that the learned helplessness causes a negative impact on the adaptation to college life across various areas. Therefore, colleges and universities ought to actively make efforts for the successful adaptation to college life by rolling out various programs which can help their students address the learned helplessness.

**[Keywords]** Learned Helplessness, Adaptation to College Life, Negative Expectation, Depression, Anxiety

1. **Introduction**

College years are an important period to understand oneself and prepare for adulthood by gaining and undertaking various experiences and activities. Examining the developmental phase, college students are associated with the late period of adolescence, which is the period for making transition from a heteronomous lifestyle extending until high school to an autonomous lifestyle, while the important task of achieving psychological independence from parents must be completed[1]. Such extreme changes which the students face after entering college cause significant emotional and social stress for the students, and may be even more challenging tasks for the Korean students who have
developmental pause in an academically oriented social atmosphere[2]. Furthermore, this is a factor by which many students struggle with making a successful adaptation to college life.

Making a successful adaptation to college life has been confirmed to have a crucial impact on making adaptation to both personal and social lives after reaching adulthood, beyond making adaptation to college life. A failure to make adaptation to college life causes the college students to possess negative emotions including depression, frustration, and anxiety, etc., while leading to the declining learning skills in addition to discontinuing studies such as taking a leave of absence from college, lack of enrollment, and dropout, thereby causing significant personal and national losses. That is, failing to make adaptation to college life does not only bring a negative effect upon the college years, but also brings a considerable impact on the future life and an incredible negative impact on one’s realization of his or her own potential.

In a survey performed by the Korean Council for University Education in 2018 on the college students nationwide, approximately 7 out of 10 students struggled with anxiety, and 4 reported to have symptoms of depression. Furthermore, an appalling result was reported that 14.3% of the college students surveyed were among the group facing the risk of suicide[3]. This is a result reflective of the fact that many students have difficulty with making adaptation to college life, clearly demonstrating the gravity of its side effect. Therefore, it is apparent that there is an absolute need to make endeavors to identify that variables which affect the students’ adaptation to college life and help them make successful adaptation.

“Learned helplessness” is a term used to express a helpless reaction of passively receiving an electric shock without making efforts to avoid it on one’s own, when the electric shock is applied again after repeatedly receiving an electric shock beyond control or unavoidable, yet a similar pattern was discovered among the humans. Korea is a society where it is very difficult to experience success in school or academics due to the excessive expectations of the parents and a grade-oriented social atmosphere. Given such a situation, students undergo considerable distress and make efforts to achieve better grades. However, it is highly likely that successful outcomes would not be achieved, and instead, negative experiences of failure will be repeated. The repetition of such negative experiences naturally make the students feel helpless no matter how much effort is put in, which may be manifested in the form of learned helplessness.

The students of learned helplessness tend to have no awareness of goal across their school or family life. They are also dispirited, have inactive relationship with classmates, and even quit their work with ease. This demonstrates that the negative effect of academic failure is not limited to a single area, and rather causes a much broader effect on their daily lives[4]. Since college years carry a far more important meaning than any other period of the students’ lives, overcoming important yet negative factors will have a significant impact on the realization of their own potential for the college students, and hence, the meaning will be much more important. Furthermore, considering the studies claiming that a positive psychological state induces positive behaviors, overcoming a negative psychological states can only have an effect on improving an individual’s potential[5]. In this respect, I would like to define with clarity the concept of learned helplessness, which brings a significant negative impact on the process of successfully making adaptation to college life and realizing personal potential, and also discuss the manner in which it can be overcome.

College years are an especially important period among the many periods in life for many. They are also a period to make self-discovery, which is an accurate information on who you are, and grow as a human independently from your parents. Furthermore, it is also a period to prepare professionally to play your role as a member of the society. As the successful adaptation during this period has a significant impact on the success or failure of life in the future, it may also be said that it is more important than any other period. However, examining the situation in Korea, there are many students who fail to make successful adaptation to college life and struggle emotionally as much dispirited, thinking as far as to commit suicide, even when this is a period where they ought to understand themselves by undertaking various experiences and attempts, and realize their potential. This is a tremendous loss for personal life, but nationally speaking, it brings negative consequences where the individuals’ various resources of growth
are not fully deployed, and hence, they are unproductive. While there may be multiple factors causing this result, but the cause which I have noticed is learned helplessness. “Learned helplessness” refers to a phenomenon in which one quits making new attempts and efforts because of the negative prediction one makes, thinking that any new attempt will be failed, given repeated failures[6]. Considering the fact that the successful performance of a task has a significant impact on the individual’s motivation, this carries a significant importance[7]. If an individual loses hope and becomes unable to even try trivial things one is capable of, that will have a terminal negative impact on the individual’s exercise of skills. Hence, gaining an accurate understanding of the negative effect of learned helplessness will provide a most important foundation for various efforts to help the students make their successful adaptation to college life.

2. Theoretical Background

2.1. Concept of learned helplessness

“Learned helplessness” is a concept used to express a helpless reaction of passively receiving an electric shock without making efforts to avoid it on their own, when the electric shock is applied again after animals repeatedly receive an electric shock beyond control or unavoidable[6], which was discovered while the conditional formation of fear in animals was studied. The dogs subject to the experiment were the first in repeatedly receiving electric shocks, which could not be avoided regardless of what means is deployed. Following which, as an experimental procedure, they receive electric shocks again, at which time there exists a difference from the previous situation. The difference is conducting experiment in an environment where simple efforts can help them avoid electric shocks. Consequently, a surprising fact was discovered. That is, even in a situation where the dogs, which had repeatedly experienced frustrations from the previously unavoidable electric shocks, could have adequately avoided the situation, they demonstrated their form of passively receiving the pains of electric shocks helplessly. This is a very unusual reaction, considering the fact that electric shocks cause significant pains.

2.2. Theories related to learned helplessness

A lot of study has been conducted on learned helplessness ever since it was first observed. Examining the most representative theories explicative of the psychological mechanisms causing learned helplessness, the first is the theory of formation of irrelevancy for the reaction and outcome, focused on the fact that one’s own reaction intended to overcome a negative situation cannot affect the future result[8]. When one has such a thought, one would think that efforts would not be worth anything, the same which would bring about a loss of behavioral effort. The second is the claim that, while one believes simultaneously that the cause of failure is one’s own inadequacy, attribution is such a stable, comprehensive, and internal cause for learned helplessness, given the belief that no change will be brought about[9]. This is a claim which emerged in subsequent experiments related to learned helplessness, with different experimental findings made from previous studies. An experimental group who were treated to experience learned helplessness demonstrated an unexpected result of making improvement at the level of performance, without demonstrating any decline in skills at the level of subsequent performance. Such outcomes suggested that, in addition to the formation of expectation for independence of the reaction and outcome, there exists another cause of learned helplessness, and this is the second theory presented by the outcome of carrying out further studies from that perspective.

According to this theory, self-evaluation is at the base such that the cause of learned helplessness fueled by thinking that one could not achieve anything because of the lack of skills. Further studies have shown that many people who suffer from learned helplessness in this man-
ner have decreased self-esteem and have shown symptoms of depression. Since such phenomenon demonstrates that people blame themselves again for the situations in which they quit, thinking that control is impossible, rather than thinking that the reaction and outcome are irrelevant, they interpret by attributing the outcome to their lack of skills. The last and the third is the theory which explains the helplessness of infants and children. This is the theory of tacit intelligence which signifies the conditional self-value evaluating one's own value relying upon the reactions of others and the belief in the changes of intelligence, mainly used to explain the helplessness of infants and children rather than that of adults.

3. Learned Helplessness and the Adaptation to College Life

3.1. Negative effect

Learned helplessness leads to making negative predictions about one's own work, which brings about the side effect of not making any effort to make turn around, the same which naturally falls into a negative vicious cycle further leading to another failure. As a matter of fact, learned helplessness is a phenomenon which causes one to repeatedly experience failures even after efforts are made to overcome negative situations, and causes one to avoid making any attempts to address issues whatsoever thereafter, thereby causing considerably negative effect on one's behaviors overall. Therefore, there have been various efforts to specifically study the characteristics of learned helplessness. Examining their details, learned helplessness reduces the behaviors of seeking passion or joy in everyday life, while making desensitizing us towards everyday emotions and reducing one's voluntary will, thereby affecting the motivation and increasing passivity. Furthermore, those struggling from learned helplessness think of themselves to be mentally unstable, and also report headaches and sleep disorder, etc., at such a high rate. Examining other studies, the students struggling with learned helplessness feel difficulties in carrying out interpersonal relationships, quit their work helplessly, are dependent and passive, lack a sense of responsibility, do not show a willingness to do something on their own, avoid thinking, and demonstrate helplessness whether in academics or situations they face in daily life. The psychological environment of one's family has a greater relationship with the learned helplessness of children than the socio-economic position, while the parents' expectations or pressures which adolescents cannot meet or handle also grow learned helplessness.

3.2. Learned helplessness and the adaptation to college life

College years are a period of achieving adaptation and growth by making various efforts and attempts. Where one is in a state of helplessness following repeated failures, problem solving, which is among important negative characteristics of learned helplessness, and the efforts for growth and development are not even made, thereby causing an extremely negative impact on the adaptation to college life and the realization of potential. Furthermore, it cannot but negatively affect other important tasks of college years including career pathfinding and job placement preparation. Finding an appropriate career path for oneself and taking preparatory actions required towards that career path all require appropriate planning and implementation, yet such active efforts will be prevented and, consequently, will negatively affect the adaptation to college life as a whole. Another negative effect of low self-esteem and depression brings about a terminal effect on the emotional adaptation of college students, and in severe cases, even causes fatal situations including suicide. Moreover, as examined in the above, learned helplessness also affects the individuals' behaviors of seeking passion or joy. This can negatively affect the formation of and immersion in new interests, as well as active practice of them, thereby negatively affecting the behaviors of finding one's own individuality, discovering and developing...
one's potential, and creating new areas through them. In addition, even if it is not a new area, it negatively affects the continuous development of the area in which the individuals are interested in. Hence, learned helplessness is such a strong and far reaching factor negatively affecting the adaptation to college life, individual’s exercise of skills, and the realization of potential.

4. Conclusion

As examined in the above, it was confirmed that learned helplessness has such a significantly negative impact on the adaptation to college life. In particular, Korea has a far more serious situation than other countries given the grades-oriented social atmosphere and the excessive expectations of parents[12]. Hence, many students are highly likely to repeatedly experience academic failures, and the helplessness that comes along has a significantly negative impact on the adaptation to college life. Academic failure is not just a pain which is suffered by low performing students only. While students make a lot of effort to reach the college or university they desire, or the level of desired department of major, if such goal is not achieved, academic frustration can certainly be experienced by high performing students as well. In that respect, learned helplessness may be said to be among the most important factors which determine the Korean college students’ success and failure in making adaptation to college life.

Along with the effort to find the cause of the problem, how to solve problem would be what we need pay attention to. Considering that the cause of learned helplessness is repeated failures, helping students to have appropriate experiences of success may be one of the best ways for overcoming this problem. Successfully completing the tasks in a given situation for an individual is the best way to have a sense of self efficacy, which is a crucial element of the positive psychology[18]. Planning, practicing, and succeeding even tiny matters may be a starting point for the college students to overcome learned helplessness, make adaptation to college life, and realize their own potential. It is such an important task to understand the psychological state of the members of the group and manage them so that they can maintain a positive psychological state, and colleges and universities can be no exception in this respect[19]. Colleges and universities ought to make efforts to actively develop and apply such programs. If and when such efforts are actively made, the negative impact of learned helplessness will likely decline, and the individuals’ potential will be adequately exercised. Confidence, hope, and optimism, among others, demonstrate a positive impact on the reduction of the individual's stress and exercise of his or her ability and skills[20]. Hence, systematic studies for the specific methods for overcoming learned helplessness are required moving forward.

5. References

5.1. Journal articles

5.2. Books


5.3. Additional references


6. Appendix

6.1. Authors contribution

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Legal Countermeasures against HATE Speech

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Abstract

Purpose: The purpose of this study is to prepare a criminal law response system through criminal sanctions in order to prevent the seriousness of hate expressions and hate crimes that have recently been a social problem. This study aims to examine the problems of hate expression, examine the necessity of state intervention, that is, criminal punishment, and examine legislation related to regulation in detail.

Method: First of all, this study tries to define the meaning of hate expression. This is because there is no unified definition of hate expression. Second, I would like to examine the response to hate expressions in Britain, Germany, the United States, and Japan through comparative legal considerations. Third, it examines whether freedom of expression can be restricted under the constitution in relation to freedom of expression, which is a fundamental right under the constitution. Fourth, the nature of hate expression and the necessity of criminal punishment are reviewed in relation to the criminal punishment regulations for hate expression. To do this, it reviews the decision of the Constitutional Court. Finally, I would like to make a prudent proposal for the anti-discrimination law that regulates hate speech.

Previous studies on hate expression mainly focus on the definition of hate expression, foreign legislative examples of hate expression, and research on the harmfulness of hate expression.

Results: Expression of hate is “public remarks that express disgust or incite violence toward individuals or groups based on race, religion, gender, region, or gender identity”. Or, it can be defined as “expressing hostility as communication that can cause violence against a certain group, and dismantling the community by stigmatizing and persecuting social minorities.” Since hate expression is an act of killing the soul, state intervention is justified. Hate speech must be regulated through criminal punishment, cannot be protected indefinitely by freedom of expression, and must be reviewed comprehensively with democratic values.

Conclusion: Hatred is not simply an emotion of dislike. Hatred has no expiration date if it spreads through ideology and collectively created, educated, and learned. Cruel hatred has also led politicians and powerful people to scapegoat irresistible people by using the anger directed at them.

Hate expression infringes on the dignity of each individual member of the target group. In particular, if the expression of hatred against a specific group or social minority who has been discriminated against for a long period of time violates human dignity and values.

[Keywords] Hate Speech, Anti-Discrimination Act, Harassment, Minority, Political Equality

1. Introduction

Hate crimes occur frequently in our society, there is no specific legal basis to deal with them, and thus, they are not properly regulated in reality in Korea. In addition, criminal penalties for hate speech should be compared and sentenced to make both of them in that they can limit freedom of expression, which is the basic right of the people.
However, expression of hate leads to hate crimes, and induces and agitates the logic of prejudice and discrimination against a specific minority group, and besiege, causing serious damage to group members. In addition, the perpetrator of hate expression can be a victim of hate expression at any time and dismantle the community.

Therefore, Hate crime refers to a criminal act in which the perpetrator has hatred toward a specific group, such as race, gender, nationality, religion, sexual orientation, etc., and terrorizes a person belonging to that group. Called hate crime in English.

Although hate crimes occur frequently in our society, there is no specific legal basis to deal with them, and thus, they are not properly regulated in reality in Korea.

In addition, criminal penalties for hate speech should be compared and sentenced to make both of them in that they can limit freedom of expression, which is the basic right of the people. This is because restrictions on freedom of expression, regardless of media such as broadcasting, the press, news, blogs, SNS, books, conversations, miscellaneous meetings, and demonstrations, are allowed only in exceptional cases[1].

Therefore, the Constitutional Court made unconstitutional decisions in the Internet real-name system and the election real-name system to protect freedom of expression[2][3].

When a crime is caused by extremely subjective feelings toward an individual or group, if the subjective feelings of an agent are understood as prejudice or hostility toward a specific person or group, the crime is a hate crime[4].

Among the hate groups, the largest scale is the KKK group, and there is an analysis that the abuse of the death penalty prevalent in American society in the 18th century has been passed down. Article 20(2) of the 1996 Code of Liberal Rights stipulates the expression of hate as “all forms of expression that incite, spread, or justify hostility, hatred, or violence against ethnicity, race, or religion”. The 1948 Universal Declaration of Human Rights stated that ‘everyone deserves the same protection against discrimination and against acts of incitement to discrimination’. According to a survey by the National Human Rights Commission of Korea, 77% are in favor of legal restrictions on hate speech. In particular, the expression of cyber hate continuously exerts an effect online for a long time, spreads rapidly, and exists as a variety of platforms, allowing a variety of user access. The characteristics of cyber hate expression are online anonymity, so there is less fear of guilt and punishment, and it is possible to expand to the public domain and offline through collective community activities. The method to solve the cyber hate expression problem is as follows.

First, it is necessary to make an effort to acknowledge and understand the differences. Second, a monitoring system for hate expression should be established, and laws, institutions and policies related to the regulation of hate expression should be supplemented. Third, efforts are needed to cultivate the ability to overcome gender equality and differences in values. Fourth, the use of hate speech. To create a difficult social environment, the civil society’s autonomous capacity must be strengthened.

In the case of criminal punishment for hate speech, the intended effect may actually be small, and adverse effects may occur. Criminal punishment for hate expression should be enacted even when considering the general preventive function or educational function of the hate expression regulation, at least if it is socially harmful, even if the supplementary principle of the criminal law and the last resort of punishment are considered.

2. Responses to Hate Expressions in Each Country

The concept of hate speech has not yet been established. Even if we look at foreign comparative legal considerations, they stipulate differently according to the political, economic, social, cultural, and background of each country[5]. While defining the concept of hate speech, minorities are specified, groups that have historically been discriminated against are specified, neutral expressions are used, or they are classified differently, such as broadly, narrowly, or narrowly.
However, if common elements for hate expression are extracted and defined, it is as follows. The Encyclopaedia Britannica defines hate speech as "disparaging people for being a member of a social group identified by attributes such as race, ethnicity, gender, sexual orientation, religion, age, or physical or mental disability." The Oxford English Dictionary is "words or speeches that inspire hatred or intolerance of a particular social group, particularly based on race, religious belief, gender, etc.", while Black's Law Dictionary says "race, ethnicity, gender, religion, age, disability, or other similar reason. It is defined as a statement in which insulting a person is based on a single purpose, especially in situations in which communication is likely to induce violence."

Hate expression can be defined as "an act of expressing not only an inner disgust toward a specific object to the outside, but also expressing a discriminatory feeling toward a specific group to which the person belongs. Critical values shared by Koreans and noted by the Constitution can be found in a wide variety of sources, which include the writings and speeches of prominent political leaders, campaign platforms, scholarly interpretations of Korean history, and literary works of all kinds. In the recent society, indiscriminate and brutal crimes – violent crimes including murder and robbery – frequently occur. Sexual violence, in particular, has a higher risk of recidivism than other general crimes thus, efficient monitoring and surveillance are necessarily required for the victims. Recently, a growing number of cases of school violence at school sites have become contentious and become legal problems, and the phenomenon is deepening beyond what teachers can solve. It is possible to establish a more effective crime prevention strategy by including the chief of the National Police Agency and commissioner of a district police agency in the establisher of strategic plan.

As a distinct concept, hate crime refers to a type of crime caused by prejudice and hatred according to race, religion, country, sexual orientation, class, age, etc. In other words, hate crime can be said to be a crime that occurred in a state in which prejudice or hatred was added in terms of motivation.

Hate expressions are very relevant because they often develop into hate crimes. However, the expression of hate itself is subject to constitutional protection, but the expression of hate can be legally subject to criminal sanctions such as defamation, insult or intimidation. For example, there is a possibility that the criminal liability of information and communication service providers who neglected to post hate expressions may be an accessory.

The UK defined hate crimes criminally and specified various signs (race, religion, disability, sexual orientation, gender change) to recognize hate crimes to clarify the grounds for punishment, while continuing to develop a hate crime response system. Going out.

In the case of Germany, hate expression is broadly punished by strong criminal penalties for discriminatory hate expressions in the Criminal Code Article 130 (Hate agitation), Article 185 Insult and General Equal Treatment Act(Article 3(4), Network Enforcement Act(Netz DG)). It is forbidden.

Even after the abolition of slavery in 1865, the United States had a policy of segregation and legal discrimination, and crimes against African Americans were also rampant. The civil rights movement for black people in the 1950s and 1960s led to the birth of the Voting Rights Act, which banned discrimination regarding voting in 1964. In the case of the United States, there is no separate law regulating hate speech, but the US Supreme Court has expressed its position through cases in which hate speech has been directly or indirectly at issue.

In Japan, there is no criminal punishment regulation for hate speech, and there is a "Ideology Law" that contains only admonition and declarative regulations, “Act on the Promotion of Actions for Resolving Unfair Discriminatory Language and Consent against Persons from Outside Japan” [13]. This Act publicly informs or remarkably insults people of a specific ethnicity or nationality other than Japan, with the aim of promoting discrimination against persons legally residing as descendants of the same or publicly inflicting harm to life, body, honor, or property. Any remarks made or unreasonable words that incite them to be excluded from the community are prohibited.
The concept of hatred differs according to the historical and social background of each country, the purpose and content of limiting it, and may be modified or changed over time. There are various analyzes on the development process in which hatred spreads, but first of all, in a state where the structure of inequality due to economic causes has deteriorated and teaching has become unstable, there are cases in which people in power are targeted rather than resisted by social powers to transfer responsibility and fall victim to victims. When populism, which is used politically, that deceives the people, such as a certain agitator or mass media voicing false facts, becomes even more extreme. When such prejudice and hate are expressed as hate expressions, it leads to discrimination again, and furthermore, it develops into violence or genocide such as hate crimes. Therefore, it is necessary to regulate hate expression[14].

There is a serious problem in that hate expression not only despises and taunts the other person, but also creates a feeling of disgust that did not exist and promotes community division. Examples include first, persecution of Christianity in the Roman Empire, second, persecution of Islam and Jews in the Crusades, third, persecution of Jews during the plague, fourth, misogyny through the witch trial, fifth, and the Holocaust of the German Nazis.

The UN’s’ Convention on the Prevention and Punishment of the Crimes of Genocide’ entered into force in 1948, the UN’s’ International Convention on the Elimination of All Forms of Racial Discrimination’ in 1965, and the UN’s’ Civil and Political Rights' in 1966. 'International Covenants on Dislike' gave the international community's awareness of hate expressions.

Second, the UK, Germany, the United States, and Japan have recognized serious problems with hate crimes and are responding through legislation.

Third, the Korean Constitution stipulates freedom of press and publication and freedom of assembly, which is called freedom of expression in Article 21.

The National Human Rights Commission of Korea recommended the Korean government to legislate an anti-discrimination law in 2006, and urged the National Assembly to enact an anti-discrimination law in 2020.

Conflicts over the Comprehensive Anti-Discrimination Act(hereinafter referred to as the Debt Act) remain. In 2006, 14 years ago, the National Human Rights Commission(HRC) expressed its position to recommend the then-premier of the Roh Moo-hyun administration to promote legislation against discrimination. The following year, the government’s initiative knocked on the door of the National Assembly for the first time, but he was finally frustrated with the 'attempts' to deal with the bill seven times until the 19th National Assembly. Voices for and against the legislation still coexist. In a situation where discrimination against minorities is large, there is an affirmative position that this should be resolved with the law, and individual anti-discrimination laws exist, and some point out that the anti-discrimination laws encompassing them are excessive. The core of the anti-discrimination law is that everyone should not be discriminated against on the basis of gender, disability, national origin, race, or sexual orientation[15].

Recently, the 21st National Assembly proposed the 8th anti-discrimination bill. The content is that the use of employment, goods, services, education, and administrative services should not be discriminated against on the basis of 23 items such as gender, disability, and medical history. The key is that if discrimination occurs, they can receive petitions, corrective orders, and litigation support from the Human Rights Commission, and if they do not follow the corrective orders, they have to pay less than 30 million won in compulsory performance.

However, they are still pessimistic about passing the bill. Recently, the obituary of the former sergeant Byun Hee-soo, a transgender, was delivered. He cried out that he wanted to live in a world without discrimination. If there was an anti-discrimination law, the Human Rights Commission recommended correction to the Ministry of National Defense, which forcibly disposes of former Sergeant Byun Hee-soo, and if not, compulsory money is imposed and punitive damages are compensated. It could have been possible to claim.

The necessity of the anti-discrimination law is first, to establish a legal basis for the realization of the ideology of equality under the Constitution and international human rights law, and second, to seek to guarantee the human rights of both minorities and members of society through
effective discrimination relief. Raising clarity and unity Fourth, promoting the effect of preventing discrimination by raising society's awareness of discrimination. Accordingly, a law proposal was proposed by the National Assembly, and the range of discrimination subject to prohibition includes 20 categories such as gender, disability, medical history, religion, thoughts, sexual orientation, physical condition such as appearance, genetic information, and employment type. By including advertisements that promote harassment and discrimination in the concept of discrimination, we aim to secure the possibility of dislike expression by stipulating prohibition of discrimination in the provision and use of services such as goods and services, while making it work as the basis for the rules of hate expression. The arguments for and against the enactment of the anti-discrimination law are as follows.

The basis for the enactment of the Anti-Discrimination Act is that the supporters of the Anti-Discrimination Act are voicing a call for legislation to realize equal rights, one of the basic rights of the people. According to the results of the National Human Rights Commission's public survey, 88.5% of the people felt the need to enact an anti-discrimination law. 9 out of 10 people are in favor of the anti-discrimination law. In particular, interest in LGBT rights and equality laws is high. In addition, there are voices of supporters that there is a need for a law that can comprehensively deal with various reasons for discrimination, such as unmarried women and refugees, Asians but disabled people, and so on.

The grounds for opposition to the enactment of the anti-discrimination law are still voices from some religious circles and organizations that oppose the anti-discrimination law. In particular, the reason the Protestant community strongly opposes the anti-discrimination law is because sexual minorities are included in the protection of the anti-discrimination law. Whenever anti-discrimination legislation is proposed, the issue of “homosexuality” is raised together. This is because some Christianity defines homosexuality as a sin and opposes it. As the passage of the bill is soon accepted as legalization of homosexuality, the voices of those who understand it as a law that can be punished just by saying discriminating against homosexuality are increasing.

Nevertheless, even if the anti-discrimination law is passed, all the discrimination prevalent in society cannot disappear. Everyone has the right to be happy. Those who are not discriminated against will not understand the circumstances of those who have been discriminated against. With so many people still complaining about discrimination, there are growing arguments that the law must be passed in order for everyone to be conscious of discrimination. Discrimination is by no means a matter to go over simply. For this reason, an anti-discrimination law must be enacted. The above is summarized as follows.

3.1. Regulatory advocacy

As for whether or not hate speech falls within the scope of protection of freedom of expression, our Constitutional Court has determined that obscene expression is also included in the protected area of freedom of expression[16]. By broadly interpreting the protected area of freedom of expression, it was judged that hate expression also belonged to the protected area of freedom of expression[17].

However, the expression of hatred is also the provision of Article 37(2) of the Constitution, "All freedoms and rights of the people may be restricted by law only when necessary for national security, maintenance of order, or public welfare" and Article 21 of the Constitution. Paragraph 4 "Press publication shall not infringe on the honor or rights of others, or public morals or social ethics. When media publication infringes on the honor or rights of others, the victim can claim compensation for damages. Fourth, the need for criminal sanctions for hate speech[18].

Hate expression induces hostility based on negative prejudice against a specific group, and the harm of the emotional and psychological state after exposure is as follows. First, a negative psychological reaction occurs. In other words, fear, sadness, constant tension, impaired self-esteem, alienation, helplessness, anxiety, anxiety, sadness, shame, frustration, despair, despair, frustration, resentment, anger, disappointment, confusion, feeling of being oppressed, and the
like. Second, somatized symptoms include fatigue, numbness, and alopecia areata. Third, stress-related psychological responses include suicidal thoughts, panic disorder, and post-traumatic stress disorder[19]. Suicide is related to self-control over the attempt to commit suicide[20][21][22][23][24].

There is a substantial deterrent effect if legal regulation is imposed on the harm of hate speech and hate expression. In addition, legal regulations are needed to protect human dignity and ensure practical equality. As an autonomous person, every human being has the individual right to guarantee his or her own values or to be respected socially as a person. In addition, the expression of hatred tends to take discrimination for granted as an act that presupposes or incites discrimination against the target group, and it is necessary to regulate this so that all human beings can live equally without discrimination. New disasters that are unfamiliar to us are fearful. In particular, the recent infectious diseases such as the swine flu, MERS, Zika virus, and Ebola, no one knows when, where, and in what form will come to us. But what is clear is that they will surely happen again in the future[25]. An Approach Restraint refers to a request by a victim to the court, especially, when consistent violence is experienced by the victim from the assailant and if such a circumstance is likely to be repeated, so that the assailant can no longer approach the victim[26].

3.2. Anti-regulation theory

The anti-regulation theory argues that the regulation of hate expression causes adverse effects such as violation of freedom of expression and repulsion, and thus increases social costs. In other words, there is a risk that the regulation of hate expression can further increase hate expression and distort the critical discourse of the people. It is also argued that the opportunity cost, which could have occurred if hate expression was not regulated, should be considered[27].

3.3. Freedom to express hate

Hate expressions can be divided into discriminatory harassment, discrimination expression, threat of insult in public contempt, and incitement to hate, depending on their risk and intensity, and can be divided into expression of hate, incitement to hate, and incitement to hate behavior.

Hate expression is more of an opinion than a fact, so it is a problem in terms of freedom of expression. However, if it goes beyond just expressing opinions, it should be actively regulated if it arouses fear in at least a specific person or a specific group, and in extreme cases, induces hate crimes, causing anxiety in the whole society.

The Constitutional Court ruled that in Article 5, Paragraph 3 of the Seoul Metropolitan Student Rights Ordinance, “discriminatory remarks, actions, and hateful expressions” cannot be regarded as being excluded from the protection of freedom of expression in the first place. In addition, discriminatory words, actions, and hateful expressions were considered to fall within the protected area of freedom of expression stipulated in Article 21 of the Constitution. This is because, in a democratic state, freedom of expression should be guaranteed as an important constitutional right as much as possible, as it is necessary to create and maintain a democratic political order by gathering majority opinions by free formation and transmission of public opinion. Expressive behavior in a democratic society is one of the important acts of self-realization of expressive actors, protection of diversity in democratic society, promotion of tolerance, criticism and monitoring of representative democratic society. However, it may be restricted pursuant to Article 37(2) of the Constitution.

Also, the expression of discrimination and hate prohibited in Article 5, Paragraph 3 of the Ordinance of this case is somewhat exaggerated and partially misrepresented that occurs within the scope of free exchange of opinions, but is not an expression of intention allowed for free discussion and mature democracy. And it is an expression that has recognized or at least has the potential to recognize that it will ‘violate the human rights of others’ beyond that boundary, and as a result, the consequences of such human rights violations occur. In particular, discrimination and hate expressions targeting students who are physically and mentally growing up will
undermine or even destroy the mental and physical abilities of students that can be enhanced through educational opportunities by infringing upon the dignity of the subject as a human being. I can.

Therefore, since the hate speech of this ordinance exceeds the limits allowed in the field of democracy, it is inevitable that it is also restricted for the protection of democratic decision-making, especially if it is a problem in the space where students who are physically and mentally immature are members. Even when comparing the value obtained by freedom and the value achieved by the protection of personal rights, it is difficult to apply the standard prevailing in the free market of thought as it is.

4. Legislative Proposal

4.1. Legislative form

Hate speech can distort public discussions in the community, deprive practical opportunities to participate in public spheres, eventually hinder the development of a healthy democracy, and create an unequal society. In addition, hate expression has a great impact and causes realistic threats through fixed and distorted perceptions and stereotypes of a specific group. Mood and modality are often used to express the interpersonal function. Mood shows what role the speaker selects in the speech situation and what role he/she assigns to the addressee. Under the current law, the expression of hate against a specific individual can be regulated to some extent under the criminal law, insults, defamation, intimidation, defamation and illegal information distribution under the Information and Communication Network Act, and the latter slander under the Public Official Election Act. The problem is that, in principle, it is difficult to establish a crime of defamation and insult against a collective name when expressing hate toward a specific group. In Germany, under Article 130 of the German Criminal Code, it is possible to commit defamation against a group. Therefore, legislation on hate expression is required.

Hate expression should be limited in that it dismantles the social community, and the criteria for restriction should be comprehensively considered, such as time, place, object, and form through content-neutral screening rather than formal screening. This is because reinforcing the regulation of hate expression causes a decline in freedom of expression, so a harmonious interpretation is required through content-neutral screening.

Hate expression can be broadly classified into three types according to the form in which hate is expressed. The first is an expression that promotes negative stereotypes or prejudices, such as male hate and misogyny. In Korea, there are gender hatreds such as Hannam-chung and Doenjang-nyeo. Second, it is an expression of contempt, insult, or threat to a specific person or group. Extreme feminism is an example. Third, it is an expression that incites discrimination or violence and triggers action. When legislating hate speech, it is necessary to stipulate individual constituent requirements according to this categorization.

Here is discussion on whether to include the criminal punishment provisions of hate speech in the criminal law or enact a special law. It is proposed to stipulate this in the Criminal Code. The reason for this is that the enactment of the Special Criminal Act is bloated, and the current criminal law system provides confusion in its application by redundantly stipulating the same criminal acts in the Criminal Code and the Special Criminal Act. In addition, by enacting and revising the Special Criminal Law whenever necessary without considering the harmony with the entire legal system, the effectiveness of the norms is deteriorating not only in terms of unbalanced penalties but also in terms of systematic justification.

In recent years, the Special Criminal Law has been applied preferentially over the Criminal Law, which is widespread enough to neutralize the normative power of the criminal law. The reason why the Special Criminal Law is bloated and preferred is first, it is difficult to include it in the basic criminal code because it is an ad hoc law that copes with temporary situations. The general preventive effect can be maximized. Third, it is difficult to incorporate into the criminal
law because regulations such as substantive law, procedural law, and organization law are mixed. Therefore, it is reasonable to stipulate in the criminal law as a general law on punishment.

4.2. Protection legal interest and degree of protection

There is a discussion on whether to grasp the protection legal interest of hate expression as a personal legal interest or to define it as a social legal interest. There is a claim that hate expression is regarded as a social legal interest in that it causes conflict between the peoples and hinders social integration, but I think it is systematically appropriate to identify it as personal legal interest and define it in the section of defamation. And with regard to the degree of protection, it is reasonable to define it as an infringer in consideration of the conflict with freedom of expression.

4.3. Statutory punishment

In the past bills of the National Assembly, the statutory sentence was stipulated as ‘a sentence of imprisonment for not more than one year or a fine of not more than 10 million won’ or ‘a imprisonment for not more than three years or a fine of not more than 30 million won’.

The crime of defamation under the current criminal law stipulates that ‘a person who defames a person by publicly specifying the facts shall be punished by imprisonment for not more than two years, imprisonment, or a fine of not more than 5 million won’. Anyone who damages the law shall be punished by imprisonment for not more than 5 years, suspension of qualifications for not more than 10 years, or a fine of not more than 10 million won.’ Therefore, it is reasonable to stipulate it as ‘a sentence of not more than three years or a fine of not more than 30 million won’ compared to the crime of defamation under the criminal law.

5. Conclusion

There is a need for regulation in that prejudice and discrimination against the socially underprivileged, and remarks of hate and exclusion, not only infringe on the moral rights and equality rights of the person subject to hate, but also negatively affect society as a whole. Hate speech violates human rights and undermines someone’s dignity.

Hate speech violates human rights and undermines someone's dignity. If hate expressions that discriminate or exclude someone continue to be used, the vicious cycle continues, in which those words become seeds and again lead to social discrimination. Hatred begins with prejudice against the socially underprivileged and minorities, and when these prejudices are expressed in words and actions, it becomes an expression of hate, and the expression of hatred leads to discrimination, and in severe cases, leads to violent crime and genocide. Hate crimes are complexly intertwined with various factors such as politics, economy, society, and culture, and have a great impact on the entire society including the victims or victim groups, so it is necessary to seek effective solutions according to the severity of the crime.

Criminal punishment alone may not be sufficient to regulate hate speech. Therefore, the liability for tort in civil law as a civil regulation, and concession regulations and punitive damages liability as administrative law regulation in labor relations should be considered comprehensively.

Issues such as hate expression, discrimination, and hate crimes, rooted in prejudice and hate, are closely linked to each other, and a comprehensive and systematic response is also required when taking countermeasures. Legal response should also be comprehensive and systematic.
6. References

6.1. Journal articles


6.2. Thesis degree


6.3. Additional references


7. Appendix

7.1. Authors contribution

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Abstract

**Purpose:** The purpose of this article is to discuss characteristics of China’s legal warfare and its strategic implications to ongoing regional disputes in Asia Pacific. The study aims to present the origin, major characteristics, cases of legal warfare by China. Additionally, the study will argue that China’s legal warfare will highly likely to be implemented in future politico-military conflicts at the Korean Peninsula, too.

**Method:** This article presents the origin, major characteristics, cases of legal warfare of China, and its possible implications to the security of Korea. In order to proceed the study, various academic references are quoted in this article; including other journal articles, books, and governmental publications.

**Results:** Based on the study, the following findings can be deduced. First, legal warfare of China is originated from the idea of unrestricted warfare in the late 1990s; as an asymmetrical approach to evade military superiority of the U.S and gain strategic initiative at politico-military conflicts in East Asia. Second, the originality of China’s legal warfare is that it uses legal systems as a political and diplomatic weapon: 1) to undermine adversary’s activities; and 2) to justify its own measures at international disputes. Consequently, legal warfare by China can be conducted in both offensive and defensive manners. And third, China’s legal warfare is already applied in practice at a number of regional disputes; such as ongoing conflicts at the East China Sea, the South China Sea, and the Taiwan Strait.

**Conclusion:** As strategic competition between the U.S. and China is getting fierce, geopolitical vulnerability of the Korean Peninsula can be heightened in the present and future. It will make legal warfare by China more substantial challenge to the national security of Korea. Therefore, Korea needs to develop capabilities and systems to effectively deal with threats from China’s legal warfare.

**Keywords** Legal Warfare, Unrestricted Warfare, Asymmetric Strategy, Regional Disputes in East Asia, China’s Foreign Policy

1. Introduction

As the world has entered the 2020s, three decades after the end of the Cold War era, we are once again witnessing an international order based on competitions and disputes among states; rather than cooperation and mutual trust among state, which were promised during the era of liberal international order since the Cold War ended. One of the most prominent characteristics in current international order is the so-called “return of great power rivalry,” represented by the United States of America (U.S.) as a hegemonic power and revisionist powers like China and Russia. Especially, China is now regarded as a “near-peer competitor” of the U.S., which may directly challenge and replace hegemonic status of the U.S [1].

National power of China as a challenger to the U.S. on the world’s hegemony is revealed in various aspects; including economy, military, and so on. Today China is not only the world’s 2nd
largest economic power, but also one of the most formidable military powers in the world. China’s military might is represented by a number of major statistics and trends. People’s Liberation Army(PLA) of China is the largest regular armed forces in the world with 2 million troops. In 2020, China is assessed to have spent 193.3 billion dollars of military budget; the largest in Asia and the 2nd largest throughout the entire world[2]. Furthermore China has consistently expanding its conventional and nuclear arsenal since 1990s, capable of gaining superiority to its neighboring countries and denying strategic influence of the U.S. in Asia Pacific region. Such a power presents China better chances to take more assertive stance for the recent several years on regional disputes, which have been witnessed at the East China Sea, the South China Sea, and the Taiwan Strait.

It is noteworthy that China actively uses non-military and indirect means to support its diplomatic and military activities at major regional disputes with neighboring countries and the U.S. Such tools include economic leverage, media propaganda, mobilization of its own people by appealing to nationalistic emotion, and so on. It allows China to maximize the effect of coercive influence against countries in dispute, minimizing the risk of direct military conflicts at the same time. These moves are generally referred as “gray-zone conflict” or “Sharp Power,” considered to be a part of political warfare by China.

Now China has added one more non-military and indirect tool for gaining political advantage at regional disputes. It is a legal system; in terms of both domestic and international. In other words, China seeks to use legal systems to justify its more assertive actions and claims at major disputes with neighboring countries and the U.S. It is called “legal warfare” or “lawfare.” Legal warfare by China has already been in effect at disputes in the East China Sea, the South China Sea, and the Taiwan Strait.

During the past several years, indirect and asymmetric approaches by China to challenge existing regional security order in Asia Pacific, led by the U.S., have been getting attention; in terms of both policy and academic aspects. China’s legal warfare is also one of them. However, it is hard to deny that legal warfare by China and its strategic implications to the security of Korea have been overlooked. Considering that the Korean Peninsula is one of major geopolitical flashpoints between the U.S. and China in Asia Pacific, Korea should not underestimate growing security challenges posed by China’s legal warfare.

The purpose of this article is to discuss characteristics of China’s legal warfare and its strategic implications to ongoing regional disputes in East Asia. Chapter 2 describes how legal warfare by China was originated and what kinds of characteristics it has. Chapter 3 presents specific examples of legal warfare by China by cases in major regional disputes at East China Sea, South China Sea, and Taiwan Strait. And finally, Chapter 4 suggests how China’s legal warfare can pose challenge to the national security of Korea and what kinds of measures Korea needs to respond those challenges.

2. Legal Warfare of China: Origin and Characteristics

2.1. The origin of legal warfare

Legal warfare of China was originated from the idea of so-called “unrestricted warfare”(超限戰). The concept was suggested by a Chinese book with the same title in 1999, written by two colonels in Chinese Air Force named Qiao Liang(喬良) and Wang Xiangsui(王湘穗). The idea of unrestricted warfare was developed in the era of the U.S.’s military supremacy during 1990s shortly after the end of the Cold War era, which was clearly proven in a number of major military conflicts like the Persian Gulf War in 1991, Taiwan Strait Crisis in 1996, and Kossovo War in 1999; thanks to technological superiority of the U.S. military power.

Surrounded by allies and partners of the U.S. in terms of geography, China has its own reason to regard America’s superior military power as a direct security threat[3]. However, in 1990s,
China was still an emerging power at military arena. While PLA boasted large numbers of troops and weapon inventories, most of those weaponry were technically obsolete; far inferior to that of the U.S. On March 1996, when China took a series of military exercises at Taiwan Strait as a show of force to threaten Taiwanese people not to vote for pro-independence President Lee Teng-hui(李登輝) at first-ever presidential election, the U.S successfully blocked China’s military coercion by sending two aircraft carrier battle groups nearby Taiwan[4]. This incident highlighted the imbalance of military power between China and the U.S. As a result, China became keenly aware of need for asymmetric measures to respond superior military power of the U.S. in future conflicts. Unrestricted warfare was one of the outcomes from that.

Qiao and Wang, two architects of unrestricted warfare concept, stressed that China should seek to fight in domains other than traditional military battlefield. The idea is based on the assumption that fighting at traditional military battlefield will be disadvantageous to China, considering technological superiority in military power of the U.S. and other Western countries. Instead, Qiao and Wang present a list of “non-military” and “trans-military” domains that China can take initiatives in fighting against the U.S. at possible conflicts. They include economic aid, trade, finance, resource, sanction, ideology, psychology, media, and even international law[5]. In other words, the idea of unrestricted warfare emphasized indirect ways to gain the upper hand of strategic competition to militarily superior adversary like the U.S., while bypassing risks from direct military showdown.

In 2003, four year later the concept of unrestricted warfare was presented, the Central Military Commission of the Chinese Communist Party(CCP), the supreme military policy-making body in China for command and control authority of PLA, ratified a revision of Political Work Regulations for PLA which included the concept of “three warfares”(三戦). So-called three warfares consist of public opinion warfare, psychological warfare, and legal warfare [6]. This shows that China’s legal warfare was originated and materialized from the idea of unrestricted warfare; as a part of three warfares from early 2000s.

2.2. Major characteristics of legal warfare

According to the Annual Report to Congress on Military and Security Developments Involving the People’s Republic of China in 2011, published by the U.S. Department of Defense, China’s three warfare reflects desire of Chinese military to effectively utilize non-military force enablers in the run up to and during hostilities[7]. These activities intend to undermine the will of politico-military adversaries for advancing or catalyzing military objectives of China during both peacetime and conflicts. By exercising strategic influence against enemy’s leadership, armed forces, and general public, supported by non-military means like psychological propaganda, various mass media, and legal systems, China’s three warfares seek to seize the political initiative and military victory[8].

Among these activities in three warfare of China, legal warfare can be defined as “a struggle to gain legal superiority to politico-military adversaries at international disputes.” Comparing to psychological warfare and public opinion warfare, legal warfare is a relatively new concept. Rather than an independent activity, legal warfare can be regarded as an extension of psychological warfare. Because it presents a legal basis, in terms of both domestic and international law, to support the conduct of psychological warfare; by maximizing the credibility of claims by China at the entire procedure during politico-military conflicts. However, the originality of China’s legal warfare comes from the fact that it uses legal systems as a political and diplomatic weapon to gain strategic initiative at international disputes.

The instruments of China’s legal warfare include domestic and international laws as well as the full range of legal instruments. They are legislation, judicial law, legal pronouncements, law enforcement, and legal education[9]. As a political and diplomatic tool at international conflicts, legal systems can be used to offer the justification to one’s claims, decisions, and behaviors on certain politico-military disputes. Meanwhile legal systems can also be mobilized to control and
undermine adversary’s freedom of action by denying the legitimacy of their claims, decisions, and behaviors during peacetime and wartime.

Ways of conducting legal warfare by China can be divided into six actions. They include: 1) deterrence by law; 2) offense by law; 3) counterattack by law; 4) control by law; 5) sanctions by law; and 6) defense by law [9]. In other words, China’s legal warfare is carried out in both defensive and offensive manners.

Of course, in order to realize the effects of legal warfare, it should be supported by kinetic policy tools like regular military or paramilitary powers. Because mere legal activities like legislation, legal interpretation, and legal pronouncements cannot make any substantial effects at international conflicts; as long as it is not based on a certain level of armed forces and other kinetic policy tools to enforce one’s legal claims in reality. At the same time, legal warfare should be conducted along with both psychological warfare and public opinion warfare, as they are designed to interrelated and mutually reinforcing at international disputes.

3. China’s Legal Warfare in Practice

3.1. East China Sea conflict

China and Japan have been in territorial dispute over the Senkaku Islands (尖閣諸島; also known as the “Diaoyu Dao Islands” (釣魚島) in China) in the East China Sea. The islands were occupied by Japan in 1895 during 1st Sino-Japanese War. With the surrender of Japan at World War 2 in 1945, the U.S. took administrative control of the Senkaku Islands. In 1972, the Senkaku Islands returned to the Japanese government control along with Okinawa and other islands from the U.S. Since then, both China and Japan claim sovereign authority on the islands for the past decades. Moreover, the potential development of underwater energy resources like natural gas and petroleum at the Senkaku Islands has made the dispute between China and Japan a greater concern for security order in East Asia [10].

On September 2012, when the Japanese government announced the purchase of a part of the Senkaku Islands from private owners, China denounced it as the violation of their sovereignty on the islands. Because China considered the act Japan’s attempt to bolster territorial claim and control over the Senkaku Islands, which was believed to be unfairly robbed by Japan more than a century ago. The decision of Japan triggered responses from China with the context of legal warfare to undermine Japanese control over the Senkaku Islands.

On September 10, 2012, shortly after the announcement of Japan’s nationalization on Senkaku Islands, the Chinese government formally declared the base points and baselines of the territorial waters of the islands and their affiliated islets [11]. It was intended: 1) to deny and undermine the legitimacy of purchasing a part of the Senkaku Islands by the Japanese government; and 2) to legally justify future measures from China to erode effective control of Japan over the Senkaku Islands by more frequent and intensified activities of the Chinese governments’ public assets like vessels, aircrafts, and even PLA Navy and Air Force to maritime areas at the islands. The measure was followed by a dramatic increase of incursion cases by China into both maritime and aerial domains at the Senkaku Islands [11].

On November 23, 2013, a year after controversy over the nationalization of the Senkaku Islands by the Japanese government, China declared its own aerial defense identification zone (ADIZ) covering a part of the East China Sea; including the Senkaku Islands. Along with the establishment of base points and baselines of the territorial waters according to the Senkaku Islands just a year ago, China once again appealed to legal systems as an instrument for strengthening its territorial claims to the islands. Since then, military aircrafts of PLA Air Force have been flying more frequently over the East China Sea and the Senkaku Islands for the recent several years; practically as a routine [12].

3.2. South China Sea conflict
In terms of international maritime transport, the South China Sea is a very important maritime chokepoint. Not only the transportation of conventional freights, but also energy supply by vessels highly depend on routes via the South China Sea; especially through the Strait of Malacca. Almost every country in Asia Pacific region, including Korea, Japan, and China, uses maritime routes which pass through the South China Sea to import natural gas and petroleum from Middle East[13]. Besides, the South China Sea is also gaining international attention for its potential of enormous amount of underwater energy resources development; especially at the Spratly Islands[10].

There are four archipelagos in the South China Sea; the Spratly, Paracel, Pratas, and Zhongsha Islands. Currently six countries claim sovereign authority at the South China Sea. They are Vietnam, Philippines, Malaysia, Brunei, Taiwan, and China. Among them, China asserts that almost the entire maritime area in the South China Sea belongs to its territorial water. The claim is represented by so-called “nine-dash line”, a U-shaped line demarcated by the Chinese government as a basis to insist its sovereign claims at the South China Sea[14]. Since 2010s, China is even prescribing the South China Sea as its “core interests”; meaning nonnegotiable interests which are directly related to the sovereignty and national security[15].

Then how China is conducting legal warfare on South China Sea dispute? China uses the following three regulations as a legal basis for its territorial claims at the South China Sea: 1)Declaration on the Territorial Sea in 1958; 2)Law on Territorial Waters and the Contiguous Zone in 1992; and 3)Law on the Exclusive Economic Zone and the Continental Shelf in 1998, which was approved two year after China ratified the United Nations Convention on the Law of the Sea(UNCLOS)[14]. These three regulations commonly assert that most of the entire maritime area in the South China Sea belongs to territorial waters of China; including the Spratly, Paracel, and two other archipelagos.

Since early 2010s, China has been continuing a series of land reclamation at a number of coral reefs in the South China Sea to build artificial islands[16]. These structures are large enough to host various facilities like airfields, ports, and military bases. Such activities reflect China’s intention to make its territorial claims at the South China Sea practically permanent; generally called “fait accompli.” Additionally, it will present a legal basis China to demand expanded territorial waters and the exclusive economic zone(EEZ), according to the UNCLOS, in the South China Sea. And it will also legally justify more frequent and assertive actions by PLA and China’s other paramilitary forces, like the Chinese Coast Guard and Maritime Militias, in the South China Sea.

### 3.3. Taiwan strait conflict

Communist regime of CCP in China has been ruling mainland since the end of the Chinese Civil War in 1949; by kicking out the Republic of China government to Taiwan. As a result, China and Taiwan still remain hostile to each other in terms of politics, military, and ideology. Based on so-called “One China” principle, China is keen on preventing Taiwan from rejecting reunification with mainland and seeking a formal independence[17]. China even openly vows that the use of military force will not be excluded as an option to block Taiwan’s possible attempt for independence.

On March 2005, the 10th National People’s Congress, the legislative body in China led by CCP, officially passed the Anti-Secession Law; designed to block Taiwan’s formal independence. Article 8 of the law states: “In the event that the ‘Taiwan independence’ secessionist forces should act under any name or by any means to cause the fact of Taiwan’s secession from China, or that major incidents entailing Taiwan’s secession from China should occur, or that possibilities for a peaceful reunification should be completely exhausted, the state shall employ non-peaceful means and other necessary measures to protect China’s sovereignty and territorial integrity[18].” In short, the enactment of the Anti-Secession Law is a part of China’s legal warfare to force Taiwan not to seek formal independence from China; by legally justifying China’s mobilization of military power to block Taiwan’s independence attempt.
4. Challenge to Security of Korea

Since the Korean War in 1950, Korea’s major concern for its national security has been politico-military threat from North Korea. In order to deal with the threat, Korea has sought to strengthen its own national power, including defense capabilities, and alliance with the U.S. However, Korea is now paying attention to growing potential challenges from stronger neighboring powers; including China. Especially, as the Korean Peninsula has become one of the frontlines for geopolitical competition in East Asia between the U.S. and China, along with the Taiwan Strait and the South China Sea, Korea is no longer safe from coercive influence from China. It was already been witnessed in the dispute between Korea and China in 2017, triggered by the deployment of the U.S. Terminal High Altitude Area Defense (THAAD) interceptor at Korean soil [19]. As a result, legal warfare by China toward Korea is also getting more substantial security threat in the present and future conflicts at the Korean Peninsula.

Situations for the implementation of China’s legal warfare toward Korea can be divided into the following two possible occasions. One is jurisdictional disputes between Korea and China on maritime domains around the Korean Peninsula. Currently, both countries have continued arguments on the delimitation of maritime boundaries, including the EEZ and continental shelf, in the West Sea (internationally known as the “Yellow Sea”) and the East China Sea [20]. In these circumstances, possibilities that China may appeal to carrying out legal warfare toward Korea to seize initiative in the struggle over maritime jurisdictional disputes; by legally justifying the mobilization of its superior military and paramilitary forces to contested maritime areas around the Korean Peninsula.

This is already in practice. When China declared its own ADIZ over the East China Sea in 2013, it also covered the EEZ claimed by Korea. As a result, military aircrafts of PLA Air Force have been flying into the ADIZ of Korea more frequently and with broader geographical range for the recent several years [12]. Such moves of China pose a serious challenge to Korea’s effort to maintain effective control over maritime and aerial domains around the Korean Peninsula. The increase of illegal fishing activities by Chinese vessels at maritime areas around the Korean Peninsula is also a concerning factor [21].

And the other is major politico-military conflicts at the Korean Peninsula, especially involved with North Korea. In terms of geopolitical interests, China supports the survival of the North Korean regime; to keep its strategic influence over the Korean Peninsula. Therefore, if any kinds of critical contingencies, such as a war or the collapse of the North Korean regime, come to reality, priorities for China will be: 1) deny and disrupt effective military intervention by the U.S. to the Korean Peninsula; and 2) guarantee chances for exercising its leverage at crisis in the Korean Peninsula. In the process, China will actively mobilize legal instruments to fulfill the goals [22].

Then how Korea should respond challenges by China’s legal warfare? First, Korea needs to understand the way legal warfare of China is conducted; by gathering and analyzing related cases in major regional disputes. Second, Korea should keenly study both domestic and international legal basis that China mainly uses for carrying out legal warfare. It is necessary for defeating the logics and legitimacy of China’s claim in legal warfare. Third, Korea should strengthen the education and promotion of specialized personnel on legal warfare affairs; both in military and academic arena. And fourth, Korea will have to develop a comprehensive politico-military crisis management system, applied with the characters of legal warfare.

5. Conclusion

This article presents the origin, major characteristics, cases of legal warfare of China, and its possible implications to the security of Korea. In order to proceed the study, various academic
references are quoted in this article; including other journal articles, books, and governmental publications. Based on the study, the following findings can be deduced.

First, legal warfare of China is originated from the idea of unrestricted warfare in the late 1990s; as an asymmetrical approach to evade military superiority of the U.S and gain strategic initiative at politico-military conflicts in East Asia.

Second, the originality of China’s legal warfare is that it uses legal systems as a political and diplomatic weapon: 1) to undermine adversary’s activities; and 2) to justify its own measures at international disputes. Consequently, legal warfare by China can be conducted in both offensive and defensive manners.

And third, China’s legal warfare is already applied in practice at a number of regional disputes; such as ongoing conflicts at the East China Sea, the South China Sea, and the Taiwan Strait.

As strategic competition between the U.S. and China is getting fierce, geopolitical vulnerability of the Korean Peninsula can be heightened in the present and future. It will make legal warfare by China more substantial challenge to the national security of Korea. Therefore, Korea needs to develop capabilities and systems to effectively deal with threats from China’s legal warfare.

6. References

6.1. Journal articles


6.2. Books
7. Appendix

7.1. Authors contribution

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Abstract

Purpose: In this study, it look in to the direction of smart healthcare in Korea and would like to make sure possibility of healthcare service in non-medical area. In this contents, when non healthcare provider provide medical healthcare service in Korean, it can be judged what to be against the medical treatment action, furthermore, through the utilization of smart healthcare, it would be helpful to identify in the broaden professional behavior and business scope.

Method: This study was conducted to look over the concept of smart healthcare, the scope of utilization in the non-healthcare service area and then to recognize what the counter strategy can be moved to which way. To achieve the goal of this study, it is confirmed to be referred the bio health report which is issued from Korea Health Industry Development Institute and the non-medical care service guideline and casebook.

Results: As a result of the study, first, the introduction and step-by-step factors for establishing a smart health environment that are being implemented in Korea were confirmed. Second, the concept of non-medical healthcare services and detailed classification according to provision were examined. Third, smart healthcare technology trends and usage plans in non-medical healthcare services were confirmed.

Conclusion: In order Smart healthcare is grafted with social networks, and unlike the conventional passive and one-sided healthcare services, acceptance and accuracy are expanding based on big data. In addition, the active participation of users is expected to induce cooperation, creating high-quality services and providing multidimensional services. Therefore, in the future, it is expected that the composition of an appropriate execution program in the non-medical healthcare service area will create various values in the local community.

[Keywords] Smart Health, Non-Medical Healthcare Service, Medical Practice, Smart Element, Technology Trend

1. Introduction

According to increase the aging population and chronic diseases in Korea, it is increasing medical expenses and interest and demand of health rapidly. It is recognized that the medical expense has been increase significantly among the OECD countries for the last ten years. Moreover, due to the aging population, and the medical examination and treatment fee for the elderly and chronic disease patient is increased from 26.8% in 2003 to 41% in 2017 that it is disproving[1][2]. These burden of social and economic can predict to advanced prevention of health life and increasing of health management business rapidly.

In particular, due to the COVID-19, non-face to face life style of the digital system is routinized recently[3][4][5]. So, the awareness of health management is strengthened to direction which is for the Smart Healthcare by utilizing non-face to face. In the post COVID-19 era, Korean government has been defined that non-face to face healthcare service by utilizing IoT, which is for
chat bot, AI Speaker etc. in the pharmaceuticals and bio industry define invest intensively as for the National Confrontation Strategy[6].

Even in the area of healthcare service, it exist the concept to apply for the digital technology in the past. However, after the fourth industrial revolution, the rapid development of digital technology can become possibility the combine of intellectualization and extensive area by utilizing the AI than in the past[7][8]. Generally, the concept of Digital Healthcare, Mobile Healthcare, e-Health were combined to use, but, recently Smart Healthcare is the trend to be used that to be unified in Korea[9].

Regarding to the definition of smart healthcare, personal health condition is monitoring in real time and managing that can enable to possible customized treatment to combine the digital technology of IoT, Cloud, Big Data, Mobile what is the main keyword in the fourth industrial revolution. So it can signify intellectualized service to become possibility to enable the customized treatment. Due to the global aging population and development of IT technology, smart healthcare has become as mandatory not a choice. smart healthcare in each country can pursue the quality of life of the people throughout the medical expenses curtailment and successful medical service and for preoccupy global competition, contents construct which is based on network and discover the service model, it is being made to interest and invest[10].

Korea society is being made to great change to provide system in hospital setting and medical service after COVID-19, and throughout the health management service system, it is notified to reversal the standard of new normal. Treatment in the past was being made to be hospital centered, at the moment, advanced prevention and customized healthcare is conversed the paradigm. In other word, because of increasing healthcare expenditure, as alternativeness to increased burden of social and economic, it is reflected to market demand to make progress.

The latest released smart care area after the post COVID-19 era, Korea is uncertain in the medical care area and the concept of medical treatment under the medical service act in the non-healthcare service area, so there is difficulty in improvement and provide of the medical healthcare service. Accordingly, In the Ministry of Health and Welfare announce ‘Non-medical healthcare service guideline and casebook’ in May 2019 and clarified criteria for classification what could provide under the medical act and others that can be provided from non-medical Institution[11].

Therefore, in this discussion, it look in to the direction of smart healthcare in Korea and would like to make sure possibility of healthcare service in non-medical area. In this contents, when non healthcare provider provide medical healthcare service in Korean, it can be judged what to be against the medical treatment action, furthermore, through the utilization of smart healthcare, it would be helpful to identify in the broaden professional behavior and business scope.

2. Research Methods

This study was conducted to look over the concept of Smart healthcare, the scope of utilization in the non-healthcare service area and then to recognize what the counter strategy can be moved to which way. To achieve the goal of this study, it is confirmed to be referred the bio health report which is issued from Korea Health Industry Development Institute and the Non-healthcare service guideline and casebook. In addition, it is identified to academic research which is related about the Smart Healthcare by providing from Korea Education & Research Information Service(KERIS) and non-healthcare service action, it is considered and analyzed the contents which is corresponded to study contents.

3. Acceleration and Adoption to Construct a Smart Health Environment
As far as the epidemic of infectious disease become periodic and interval become shorten, medical profession reduce the face to face contact and the new medical environment is being constructed to minimize the unnecessary waiting line from patient and guardian. There is the report for about what not only overcrowding emergency room that the many and unspecified person crowd move and clinical room are very weak in the spread of disease, but also, patient and guardian feel negatively [12]. Because of it, it has been ongoing to the poor quality evaluation about medical healthcare.

Figure 1. Step-by-step smart factors according to patient journey [13].

One of the practical example of smart healthcare is the case by utilizing developed Personal Health Research application in connected hospital, In case of mild patients who entered COVID-19 residential treatment center in the Daegu, Gyeongbuk province of Korea. When the patients
inputs a physical condition such as pulse and blood in person, it would be sent to an external monitoring center, and conducted actively communication of both way to get the feedback from medical team. So, expansive medical care system of Network–based is currently utilizing and advanced to future healthcare. <Figure 1> above is showing us the phased element of smartification according to the patient journey[13].

When we check for the <Figure 1>, we could significantly sort two way into the phased element of smartification by following the patient movement. First, high risk group and severe disease group of patient could leave the hospital when the medical treatment is completed through the emergency room, operational room, intensive care room and general ward room. And they return back to local community and home, dietary control, exercise, rehabilitation, taking medicine can be progressing process based on the self-measurement record.

After leave the hospital, this information can be sent regularly to local date integration center and through the process of feedback, it can be gotten management. Second, middle risk group is discovered the symptom of health disorder but, it means that the people who do not have occurred to have specialized disease yet, and this group is needed intervention to support for keeping the health life. Therefore, it is necessary to support and participate in information and program which is related to maintain the healthy continuously in the local community and home, and it would be the object synthetically data for healthy information by being managed.

Especially, It is also important to keep the maintenance life for a long time about the increased old age in Korea, but on the super aging society, the standard of happiness has begun to change the different form unlikely before. For the successful aging, Living healthy and happiness can be main task[14][15][16]. These issue can be the arising task to handle government level above the personal issue, and currently it can be regard point of view to be accelerated as concept of smart healthcare.

Healthcare service of local community and home can be regard the included concept all medical healthcare service and non-medical healthcare service in Korea. This is because in the diversified and complicated of modern society, it can be monitoring in person by themselves through the diverse platform and device, and thanks to the professional manpower of healthcare, there is many ways to take medical care service. Furthermore, due to medical enforcement regulation reversion in Aug 2018, it is enable to request copy of medical record chart through online and send to third party such as an insurance company. So including non-face to face service, it can be born in the concept of various on healthcare service.

3. Detailed Classification for Provision and Concept of Non-medical Healthcare

The concept of non-medical care service can be defined the act to provide the service which is related to counselling, education, training and practical program composition what to be involved the judgement for purpose of maintain and promoting health and preventing worsen disease[9]. This is to improve the lifestyle and induce the accurate healthcare and medical judgement is excluded. Also. Depending on the provision method, it is included the every self-management service to be utilized automatically application face to face service and non-face to face service based on online between user and providers.

Providing to come up with the concept in medical healthcare service and non-medical healthcare service in Korea, primarily, it is not clarified the criteria for classification of acts that can be provided by non-medical institution because the concept of medical act is not clear under the medical act. Secondly, it is judged to consider the direction of automatically service above the non-face to face service to predict the expansion of non-medical healthcare service based on the online at the present what live in the era of the 4th industrial revolution[1].

According to the Medical law in Korea, if a non-healthcare provider engage in medical practice, it can be regard unlicensed medical practice, and even if healthcare provider engage in non-medical institution, it can be punishable under the medical law act(Article 87 of the medical
service act). Also, if a non-healthcare provider engage in medical practice, he or she can be punished to go jail for up to 5 years or be fined up to 20 million won (Article 90 of the medical service act). Or if he or she engage medical practice in non-medical institution, there is specified in the law to be fined up to 5 million won. <Table 1> below is the contents about the legal basis which is related to medical professionalism qualification and license, hygiene and health and qualification of supply manpower and license status.

**Table 1.** Components of the participant’s career transition experience[11].

<table>
<thead>
<tr>
<th>Regal basis</th>
<th>Licenses and qualifications of providers</th>
</tr>
</thead>
<tbody>
<tr>
<td>National health promotion act</td>
<td>• Health educator(article 12-2)</td>
</tr>
<tr>
<td>National nutrition control act</td>
<td>• Nutritionist(article 15), clinical nutritionist(article 23)</td>
</tr>
<tr>
<td>National sports promotion act</td>
<td>• Sports instructor(article 2, No. 6) sports instructor, health exercise manager, disabled sports instructor, youth sports instructor, senior sports instructor</td>
</tr>
<tr>
<td>Pharmacists act</td>
<td>• Pharmacist(article 3), Oriental pharmacist(article 4)</td>
</tr>
<tr>
<td>Act on medical technicians, etc.</td>
<td>• Clinical pathologist, radiologist, physical therapist, occupational therapist, dental hygienist(article 2)</td>
</tr>
<tr>
<td>Medical service act</td>
<td>• Doctors, dentists and oriental doctors(article 5) • Nurse(article 7) • Nursing assistant(article 80)</td>
</tr>
</tbody>
</table>

Even though, Korean government has regulation on professional qualification and license which is related to health and medical care, according to non-medical healthcare service, there is no special restriction to access, and it is the level to suggest to provide announce of information related to disease, counselling and education on the medical health manpower. Therefore, it enable to confirm and check, provide information and objective analysis, set the goal and management, counsel and advice of health information in the event of complying with the scope and procedure of information what is provided from user under ‘personal information protection act’ on the non-medical healthcare service area.

However, medical counselling and advice, examination and diagnosis, prescription, treatment and surgery are defined as for the territory of medical provider, it is excluded from non-medical healthcare service. <Table 2> is a classified table of the Ministry of Health and welfare of Korea which is about provided manpower on the healthcare service, detailed example for provider and providing organization.

**Table 2.** Detailed examples of each activity according to healthcare service providers and classification of providers[11].

<table>
<thead>
<tr>
<th>Classification of actions</th>
<th>Behavior example</th>
<th>provider</th>
<th>organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confirmation of health information check</td>
<td>• Simple confirmation of health checkup results and data collection based on individual consent(not possible to interpret numerical results, etc.)</td>
<td>No limit</td>
<td>No limit</td>
</tr>
<tr>
<td></td>
<td>• Record and monitor steps, heart rate, etc.</td>
<td>No limit</td>
<td>No limit</td>
</tr>
<tr>
<td>Consultation and advice</td>
<td>Objective Analysis</td>
<td>Goal Setting and Management</td>
<td></td>
</tr>
<tr>
<td>------------------------</td>
<td>--------------------</td>
<td>----------------------------</td>
<td></td>
</tr>
<tr>
<td>• Records of food intake and nutrient analysis and guidance</td>
<td>Health manpower recommendation</td>
<td>No limit</td>
<td></td>
</tr>
<tr>
<td>• Measurement of health information and indicators using wellness devices (body composition, sleep pattern, etc.)</td>
<td>No limit</td>
<td>No limit</td>
<td></td>
</tr>
<tr>
<td>• Measurement of health information, indicators, and values using personal medical devices (electrocardiogram, blood pressure, blood sugar, etc.)</td>
<td>Myself</td>
<td>No limit</td>
<td></td>
</tr>
<tr>
<td>Information provision and objective analysis</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Check whether the blood pressure, blood sugar, etc. according to the individual’s self-measurement falls within the normal or dangerous range of a credible standard</td>
<td>Health manpower recommendation</td>
<td>No limit</td>
<td></td>
</tr>
<tr>
<td>• Presentation of objective statistical results such as disease incidence rate among age and gender groups according to health indicators and status</td>
<td>No limit</td>
<td>No limit</td>
<td></td>
</tr>
<tr>
<td>(※ Statistical results are scientifically or medically verified, or data presented by publicly trusted institutions are used.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• The act of analyzing personal health information and calculating the health age according to the statistical result value</td>
<td>No limit</td>
<td>No limit</td>
<td></td>
</tr>
<tr>
<td>• Acts of providing information on recently prevalent diseases and vaccinations</td>
<td>Health manpower recommendation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goal setting and management</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Alarm and guidance on check-up cycle/hospital visit date</td>
<td>No limit</td>
<td>No limit</td>
<td></td>
</tr>
<tr>
<td>• Make sure taking medicines on time as prescribed by doctor and notify</td>
<td>No limit</td>
<td>No limit</td>
<td></td>
</tr>
<tr>
<td>• Set health management goals (walking, daily calorie intake, regular check-up) and pay incentives according to achievement</td>
<td>No limit</td>
<td>No limit</td>
<td></td>
</tr>
<tr>
<td>Consultation and advice</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• General healthcare precautions for disease prevention (washing hands, eating a low-sodium diet, etc.)</td>
<td>Health manpower recommendation</td>
<td>No limit</td>
<td></td>
</tr>
<tr>
<td>• Counseling and advice for improving lifestyle habits such as smoking cessation and alcohol consumption</td>
<td>Health manpower recommendation</td>
<td>No limit</td>
<td></td>
</tr>
<tr>
<td>• Food composition and provision according to individual health goals</td>
<td>Health manpower recommendation</td>
<td>No limit</td>
<td></td>
</tr>
<tr>
<td>(※ If diet can affect the disease, such as diabetes, conditional permission is given on the condition that the prescription from the medical institution is confirmed)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Training on how to exercise and providing exercise programs</td>
<td>Health manpower recommendation</td>
<td>No limit</td>
<td></td>
</tr>
<tr>
<td>• Counseling for sleep and stress management and advice on lifestyle improvement (excluding examinations, procedures, surgeries, etc.)</td>
<td>Health manpower recommendation</td>
<td>No limit</td>
<td></td>
</tr>
<tr>
<td>(※ Statistical results are scientifically or medically verified, or data presented by publicly trusted institutions are used)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4. Trend of Smart Health Technology and Non-Medical Health Management

Like this, under the standard of Medical Act in Korea, concept and area of non-medical healthcare service are divided, other available service to provide can be significantly presented area including the service of chronically patient. In other words, it enable to possibility confirming the personal health information and collect and the producing calculation act of health indicator and, even more to set the goal for activity of health and incentive payment, also can enable to counsel and advice of the lifestyle modification therapy such as nutrition and exercise guidance and announce for education and disease issue and general way of prevention etc. Therefore, through technology convergence in the external hospital, it can be prepared platform by following the characteristic of the smart healthcare area in the various industrial field, so, it become the era for utilizing device to collect data.

Definition of smart healthcare technology enable to be divided into components and uses of related products, and also, it can be sort out data, platform and equipment[17]. First, the data is constructed into big data to collect and store the data which is represented the personal characteristic such as genetic information, lifestyle, health information and medical treatment information. The platform is conducted usefulness result which is based on the collected data by utilizing artificial intelligence. The platform of medical information management and personalized healthcare management is provided information to consumer through the application of personalized healthcare management. As for the equipment part, it is divided into personal health management equipment that can be measured health bio-signal for health management and wearable equipment for health improvement by measuring and monitoring bio-signal worn on the body[18][19].

At the moment, technology development is in progress for the purpose of discover new business models and expand new market through chronic disease management and telemedicine by centering on the existing smart healthcare in Korea. The common data model research is being conducted for medical AI software development and medical data standardization by centering on medical institution on the part of data, and it is actively in progress the large hospital and platform companies in Korea to get into the healthcare market.

The IoT ecosystem research is being conducted to improve personal health management equipment and cloud-based standard Electronic Medical Record(EMR) and to prepare a certificated system for the spread of smart healthcare service in the part of platform. As for releasing the wearable device which is centered in large enterprise in the part of equipment, it is provided
the various kind of service in connection with the smartphone application. The diagnostic equipment for external body is in progress to develop for the purpose of personal healthcare management and exercise management such as blood pressure, blood sugar, body fat, electrocardiogram, portable ultrasound diagnostic device and patient monitoring device [20][21].

The Ministry of Trade, Industry and Energy, which is related ministry in Korea, is also supported the development of smart health equipment through the public connection with hospital. So, the remarkable notice is that data access control technology and history management etc. is produce in progress by utilizing de-identification technology and block chain technology to secure and security of personal information. Also, convergence equipment which is related to unique oriental medicine is being developed based on diagnosis in the field of Korean traditional medicine, oriental medicine and commercialized to promote business[13][17][22].

Like this, smart healthcare is in the spot light for the representative field of non-face to face industry and digital economy in post corona era. At moment, Korea is in a paradoxical situation where can be verified for the safety, effectiveness and satisfaction of smart health by allowing temporarily the restriction of non-face to face healthcare and smart care due to the pandemic of COVID-19 in Korea. Therefore, it is judged that it enable to provide specific and practical programs by utilizing smart health in the non-medical healthcare service area as I mentioned above.

Most of the chronic disease are non-infectious disease and it is often mediated or alleviated by lifestyle modification therapy, exercise therapy, and diet rather than treatment for the causes[23][24]. Therefore in the non-medical healthcare service area, consumers can be consulted and managed through a customized healthcare application by utilizing smart healthcare equipment and wearable equipment with a goal of health intervention rather than healthcare promotion.

So this is because that it enable to collect health related figures, disease status, disease related information, and health check-up results from users within the scope that comply with the ‘Personal Information Protection Act’ it is possible to gather information within the suggested range by trusted institution based on the contents of the checkup, caution, risk of judgement and target setting of health intervention within the scope.

Actionable contents in the non-medical healthcare service area is included to set of management level through periodic monitoring, counseling on prevention and management of chronic diseases, and counseling on dietary management and control. In addition, since it is provided the health promotion program such as exercise according to the target level, and the effect and method of the program can be explained and implemented, and the contents of the health intervention can be presented through the objective indicators. Therefore, if the smart healthcare method is utilized in the non-medical healthcare service area which is related to health promotion, health intervention and habitation in the local community and home, the area is provided and to be performed and expanded well.

5. Conclusion and Suggestions

The global aging of the population and the development of IT technology are increasing interest and demand for smart healthcare. In Korean society, smart healthcare is not an option but a necessity, and is sparing no interest and investment in network-based content construction and models in which many people participate. Recently, even in the Korean government, concerns have begun to arise that the existing regulations could lead to falling behind the competition in the use of smart healthcare services and equipment. Accordingly, healthcare equipment used in sports and leisure activities is classified as a ‘wellness product’ and guidelines are established to exclude them from regulation.

In Korea’s future medical ecosystem, it is predicted that various entities such as medical care service providers, healthcare providers, social service providers, and insurance companies will
provide comprehensive services based on digital technology. This study investigated the use and scope of smart healthcare in the field of non-medical healthcare services in Korea. In modern society, where health-related quality of life has become as important as life expectancy, the efforts of local communities and individuals using smart healthcare can enable more sophisticated health management. However, it should be carefully reviewed and implemented within the scope that does not violate the Medical Law.

Smart healthcare is grafted with social networks, and unlike the conventional passive and one-sided healthcare services, acceptance and accuracy are expanding based on big data. In addition, the active participation of users is expected to induce cooperation, creating high-quality services and providing multi-dimensional services. Therefore, in the future, it is expected that the composition of an appropriate execution program in the non-medical healthcare service area will create various values in the local community.

6. References

6.1. Journal articles


6.2. Books


6.3. Additional references


7. Appendix

7.1. Authors contribution

<table>
<thead>
<tr>
<th>Initial name</th>
<th>Contribution</th>
</tr>
</thead>
</table>
| **Lead Author** JK | - 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 ✔
| **Corresponding Author** JL | |
Abstract

**Purpose:** The purpose of this study is to check the status and the actual condition of sports private certificates registration of sports members of the Korea Sports Association after the implementation of the Framework Act on Qualifications and to provide data on how to improve the registration system by deriving non-compliance factors.

**Method:** This study was conducted using qualitative case study methodology based on the literature research methodology, and to derive the results of the study, related literature data on sports private certificates was collected to understand the activity content and status. It collected materials through academic papers, reports, books, cases, media articles, and Internet searches, and conducted in-depth interviews with analysis of literature materials to find current status of issuance, operational status, and how to improve. Research participants were selected and data were collected to explore specific research methods for the study.

**Results:** First, it was found that after the special announcement of the Korea Sports Association, the qualification registration of from 6 Korea Sports Association affiliated organizations in 2018 to 19 in 2019 were surveyed, and it has been steadily increasing so far, affecting the awareness of the registration system, but detailed management measures are needed. Second, non-affiliated organizations have as many as 40 sports registration courses in the order of gymnastics, golf, and swimming, and gymnastics are issued by 114 organizations with the popularisation of health gymnastics and job prospects expected, suggesting an increase in the number of issuers, and it aims at promoting it to a private official recognition qualification by securing public confidence and managing transparency. Third, the priorities for improving the sports private qualification system were false, exaggerated, and false advertising on the issue of private sports licences, considered the biggest problem. It was found that improvements were needed in the order of a certificate of qualifications and qualification system of unregistered publishing organizations, lack of linked education after obtaining qualifications, and poor operation of educational training institutions. As a way to raise awareness of sports private certificates, legal action by unregistered institutions is most urgent, followed by various strategic measures for publicity boost, inducement of registration through intervention of relevant ministries (Ministry of Culture, Sports and Tourism), and establishment of a system for nurturing professional qualification personnel. Fourth, establishment of an exclusive management department of the Ministry of Culture, Sports and Tourism and the Korea Sports Council are the most urgent tasks to create a sports private qualification system, and measures need to be taken in the order of improvement of law for qualification system and the system, continuous research, and government intervention.

**Conclusion:** According to this study, a sports private qualification system can be improved, first, through detailed management measures, secondly, through public confidence and transparency management, thirdly, by improving poor operation of private certificates and creating strategic measures through relevant ministries’ intervention, fourthly, by establishing a dedicated management department to create a sports private qualification system and by improving the qualification system law and system and regulation of the qualification market through government intervention.

**Keywords** Improvement, Private, Qualification, Certificate, Sports
1. Introduction

Since the enactment of the Framework Act on Qualifications in 1997, the "private qualification registration system", mainly for the implementation of the national authorization system of private qualification, the introduction of a registration system, and the establishment of standard contract terms and conditions in prohibited areas, was enacted pursuant to a presidential decree to prevent consumer damage and provided regulations for private qualification managers to manage and operate private qualifications[1][2]. Eligibility applications for Sports private certificates are increasing for self-development and to land a job, and as sports become more popular, new concept of sports events have emerged that reflect the diversity of jobs and changes in demand. It is also reported that the expansion of the issuing agency and market has had a positive effect[3].

Sports Certificates of Personal Qualification are issued by individuals, organizations, and corporations due to employment on the rise in the sports industry, an increasing number of sport-related start ups, increased demand for workers in the sports sector, and the implementation of private qualification systems. Typically, it is divided into classes 1 to 3 of guidance, referees, and judges. It was pointed out that establishment of Sports Certificates of Personal Qualification and the increase in the acquisition rate is due to the social awareness of health, the increase in the selection of local government instructors, and the payment method for the curriculum that are easy to monetize[4].

Most of the payments for training for private certificates and qualification course are made in cash, and popular sports courses are being opened more as the criteria for evaluating expertise in Korea are based on whether certificates are obtained rather than whether to be awarded or coaching experience. The number of certification course targeting college students who are seeking jobs is increasing, and the number of schools that are publishing certificates directly through industry-academic cooperation is also increasing.

The Korea Sports Association established its own certificates for leader, referee, judges, etc. of relevant sports. Among them, there were six private certificate registration organizations in 2018 that were officially authorized by the Korea Research Institute for Vocational Education & Training: Gateball, kukhak Kikong, Baduk, Park Golf, Paragliding, Jump Rope Association. For the private certificate issued by the Korea Sports Association, because there is no object that can clearly be verified in terms of type of qualification, the grade system, and the status of acquisition in real time than the official registration certificate, and no relevant ministries department has been designated to improve on consumer damage, the status of improvements to the situation of action is unknown.

Recommended compliance with the specially announced Framework Act on Qualification, and 57 qualification courses for 19 sports of 67 affiliated organizations(28.3%) were registered[5]. Among them, 25 aquatic sports run by the Korea Aquatics and Korea Underwater Association have been most active by opening 25 qualification courses, including pin swimming leaders[6]. No qualification course has been registered for twenty-five of the affiliated sports(modern pentathlon, rugby, roller sports, luge, biathlon, bodybuilding, bobsleigh, Sepak Takraw, water-skiing, squash tennis, ssireum, ice hockey, baseball softball, weightlifting, wushu, track and field, boat race, foot volleyball, triathlon, canoeing, fencing, handball, karate, kabaddi, dodge ball, etc.). As the number of club members are fewer and it is difficult to secure facilities for qualification courses for less popular sports, affiliated organizations and private sports-related organizations do not issue private certificates, and there are training programs to nurture leaders in the national qualification system. The most popular sports officially registered in the private registration system was gymnastics(issued by 144 organizations, 133 programs, including ones to nurture leaders), as it is easier to obtain private certificates of those sports with an increased number of classrooms and leaders[7]. In commercial advertisements, the pointed out problems with false, exaggerated, false advertisements and consumer damage caused by reckless issuance(insufficient tax processing) due to calculation criteria for cost for acquisition, and ease of distribution of costs for certificates[8].
In addition, it is urgent to improve the registration process for private certificates and to introduce a registration renewal system, and in order to minimize consumer damage from issuance of private certificates, various verification methods were sought, such as how to verify performance of personnel, equipment, facilities, etc. that can check the size of the issuing place (individual, organization, corporation) and are able to proceed with the qualification process. Legal and institutional measures are being further strengthened with measures to prevent consumer damage and prevent the establishment and reckless issuance of certificates.

According to prior studies related to the sports qualification system, said that although it has successfully activated it in terms of securing a trustworthy public private certificate that can immediately respond to social and environmental needs, private certificates are not transparent and compatible due to excessive indiscriminate issuance and the commercial use of private certificates[9].

Pointed out that as any corporation, organization, or individual became allowed to create new private certificates, a excessive number of licensing organizations have been established and unproven certificates are being mass-produced, and said that systematic and rigorous testing institutions or qualification processes for registration of private certificates is necessary[10][11].

As such, although prior research is actively being conducted on how to improve private certificates, the cause has been identified and various solutions have been proposed, there is a lack of theoretical research due to the lack of proper research on sports private certificates.

Therefore, the purpose of this study is to check the registration status and status of sports private certificates of sports members of the Korea Sports Association after the implementation of the Basic Qualification Act and provide materials on how to improve the registration system by deriving non-compliance factors.

2. Research Method

This study was reviewed using qualitative case study methodology based on the literature research methodology, and to produce the results of the study, related literature data on sports private certificates was collected to understand the activities and their present state. It collected materials through academic papers, reports, books, cases, articles, and the internet searches, and conducted an analysis of literature materials and in-depth interviews to find the current state of publication, operation, and improvement measures. Research participants were selected and data were collected to explore specific research methods for the study[12][13][14][15].

2.1. Selection of research participants

As a research participant, experts who are judged to contribute to presenting problems with the issuance of domestic sports private certificates and improvement plans were selected, and 14 participants were divided into advisors, operating practitioners, and academia.

In order to secure the expertise of research participants and to produce diverse opinions, we have identified expertise and experience as shown in <Table 1>, and we believe that we will be able to present reliability, expertise and clear findings of the research.

Table 1. Research participants.

<table>
<thead>
<tr>
<th>Classification</th>
<th>Name</th>
<th>Organization</th>
<th>Position</th>
<th>Career</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advisors</td>
<td>A</td>
<td>The government-funded institute</td>
<td>Supervisor</td>
<td>5</td>
</tr>
</tbody>
</table>
2.2. Role of research participants

First, two government-funded organizations and two media officials were selected as advisors to discuss the concept, scope, operation of private certificates after the implementation of the Framework Act on Qualification, and an improvement plan, and identified the need for state intervention. Also, they also consulted legal, institutional functions and roles and investigated consumer damage cases. Second, the operations management practitioners collected data on the status of certificate issuance and registration process for the system from four persons in charge of issuing certificates for each sport and two members of Yeha sports associations, investigated the use of private certificates by local governments, and collected data on the status of the public announcement system. Third, the academia shared data on a policy for the qualification process and provided information on the overall data collection and stance of the academic society and government's stance. Semi-structured questions are summarized into interviews and expert meetings as shown in <Table 2>.

Table 2. The contents of interview.

<table>
<thead>
<tr>
<th>Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Question 1</strong></td>
</tr>
<tr>
<td>□ What is the legal and institutional environment of a sports private certificate?</td>
</tr>
<tr>
<td>• What is the current status of sports laws and institutions?</td>
</tr>
<tr>
<td>• What is the change in the private qualification registration system?</td>
</tr>
<tr>
<td><strong>Question 2</strong></td>
</tr>
<tr>
<td>□ What is the status of issuance and registration of a sports private certificate?</td>
</tr>
<tr>
<td>• What is the status of the issue of affiliated organizations of the Korea Sports Council?</td>
</tr>
<tr>
<td>• What is the status of registration of sports-related private qualifications?</td>
</tr>
<tr>
<td><strong>Question 3</strong></td>
</tr>
<tr>
<td>□ What are the improvements to the private certificates for sport?</td>
</tr>
<tr>
<td>• What are the pending issues of a private sports certificates?</td>
</tr>
<tr>
<td>• How can private sports certificates be improved?</td>
</tr>
</tbody>
</table>
2.3. Collection of data

In this study, data were collected from literature and interviews from January 1 to December 31, 2018, and in-depth interviews were conducted twice from January 1 to May 31, 2019. In order to understand the status of sports private certificates registered with the Korea Vocational Competency Development Institute, the status of the domestic qualification market and the status of unregistered organizations, data on the status were collected through related internet searches, and reviewing data on policy, academic papers, media, and papers. The interview with study participants was conducted in the form of semi-structured interviews combined via telephone or e-mail while the purpose, method and main points of the study were explained, and time and places were arranged separately depending on the situation of the study participants. If other restrictions were found, transcription were converted after using recorders, recording telephone conversation, and storing SNS, and used as analysis data.

2.4. Assessment of appropriateness of the study

In its own seminar with researchers in the master’s or doctor’s course majoring in sports policy, arrangement of semi-structured questions and concepts of private certificate systems were discussed frequently, and the appropriateness of the study was evaluated and its reliability checked.

2.5. Limits of the study

This study was conducted on 67 affiliated or quasi-affiliated organizations among the affiliated organizations of the, excluding approved organizations and other sports.

3. Findings of the Study and Discussion

3.1. Current status of institutional research on sports private certificates

3.1.1. Acts and subordinate statutes and enforcement rules of private certificates

The Enforcement Decree of the Framework Act on Qualifications was enacted to prescribe matters delegated to the Framework Act on Qualifications and matters necessary for the enforcement thereof. Article 23 The establishment and registration of private qualifications requires newly enacted prohibition related to private certificates to be publicly notified on the private qualification information system, and an application for private qualification registration shall be completed and submitted to the competent minister of each sport. The relevant ministries shall be designated through consultation with the relevant central administrative agencies under the Education Decree, and the registration status shall be reported to the Minister of Education by operating a private qualification register. In addition, Article 31(5) Indications for consumer protection shall include detailed items such as expenses (all expenses incurred by the potential acquisitors regardless of due date for payment, the name, item, etc., such as application costs, certificate issuance costs, special tuition fees, education and training expenses, practice fees, cost of textbook, all kinds of service charge etc.) and returns, such as operation, acquisition of qualification, an examination for a certificate, etc. under the standard contract, and contact information and registration qualifications of the qualification manager shall be stated that they are not authorized. The types and standards of false or exaggerated false advertisements shall be specified to prevent consumer damage, and it shall be mandatory for qualification managers to participate in trainings to acquire the modified statutes and systems. It is specified that regulations of the competent ministries on establishment of a private qualification system, establishment of an
action plan shall be put in place to manage them thoroughly, and the Ministry of Education (Life-long Learning Policy) and the Ministry of Employment and Labor (Vocational Skills Assessment Division) are operating enforcement. The purpose is to prescribe matters delegated by the Enforcement Decree of the Framework Act on Qualifications and matters necessary for the enforcement thereof. The registration of private qualifications regarding sports, rating, job content shall be announced through registration in the private qualification information service, and the evaluation criteria, subjects to be evaluated, evaluation methods, qualification criteria shall be described, and the curriculum of training courses, education period, completion criteria, evaluation criteria, and evaluation methods shall be presented.

It enacts regulations on the management and operation of private qualifications, includes documents that prove property lists and property rights relationships including evaluation facilities and devices. For Certificates from Education and Training Courses, documents as a proof are needed according to the law, or through accreditation, registration, and reporting on the establishment, operation, and tutoring of Lifelong Education Act and institutes. Registration of private qualifications may be applied for or issued regardless of the size of the individual, organization, or corporation, and a certificate of relationships may be submitted accordingly. In addition, the barista certificate requires proof of relationship between the establishment and operation of the academy and devices, and it was emphasized that the Lifeguard certificate cannot be registered without evidence of facility accreditation under the Water Leisure Safety Act. If the qualification manager completes the application for new private certificates after designating appropriate departments, the appropriate department can determine whether it is appropriate or not through reviews, and if it is determined to be inappropriate, the appropriate qualification group will be asked for preparation of additional documents. It takes an average of three months, but the request for preparation of additional documents following the rejection and the deliberation period of the private qualification management advisory committee do not conform to that period. As the enforcement rule of the Framework Act on Qualification is based on the pre-registration system, advertising is also applied as a legal violation before the selection of registration numbers, so we are doing our best to prevent consumer damage.

3.1.2. Current status of sports statutes and ordinances

There are seven sports-related statutes identified through the National Statute Information Center, including the National Sports Promotion Act, and sports-related matters include only matters related to national qualifiers[21].

In addition, as of the relevant ordinances, private instructor operation plans are enacted in disaster safety of Gyeonggi-do, protecting the treatment of private instructors, but lack the legal basis as shown in <Table 3>. It is important to establish a long-term support system for sports private certificates that have the same effect as a national certificate, establish a fundamental research direction for implementation of government policy, and to be proactive by securing the credibility of the issuing agency organization and implementing a monitoring system as an inspection through diversified efforts to maintain identity and by securing public consensus. An institution that issues private certificates shall continuously endeavor to promote to private accreditation based on the Framework Act on Qualification and shall prepare for the prevention of conflicts of similar certificates by evaluating the expertise of the operating institution, the public nature of purpose of its operation, qualification duties, and operability. Close investigation and analysis of government ministries and funded entities, such as comparing their duties with state qualifications, should be preceded, and a coordination committee should be formed to prevent conflicts and clashes, and it shall be thoroughly operated and legal safeguards shall be straightened.

Policies should be strengthened by fostering professional human resources in private qualification management, opening research departments related to certificates of affiliated organizations, and diversified promotion and budget allocation of the registration system. It is necessary to make up for the weak points in the registration process of the Korea Vocational Skills
Development Institute by proceeding with "registration after completing training of the person in charge" rather than training for the place of issuance after the current pre-registration, and establish an online and offline mandatory training courses.

Also, meetings (forums) to expand submission of the operation plan of the instructor in charge of the certificate and strengthen capabilities should be institutionalized. It is also necessary to legislate the evaluation system by establishing the allocation of time for first aid and CPR considering the actual conditions out of requirements for the current domestic instructor recruitment and indicating the performance and evaluation of the issuer.

Table 3. Status related to statutes and ordinance leaders (instructors) of the national statute and information center.

<table>
<thead>
<tr>
<th>Classification</th>
<th>Key contents</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td>National sports promotion act</td>
<td>Chapter 3 national sports promotion fund</td>
<td>National qualification</td>
</tr>
<tr>
<td></td>
<td>article 11 (fostering sports leaders)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>article 19 (installation of funds, etc.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>paragraph 5 nurturing training personnel specializing in sports and culture and arts</td>
<td></td>
</tr>
<tr>
<td>Enforcement decree of the national sports promotion act</td>
<td>Chapter 4 protection and fostering of athletes and sports leaders; article 8 (fostering and improving qualities of sports leaders)</td>
<td>National qualification</td>
</tr>
<tr>
<td></td>
<td>article 9 sports instructor</td>
<td></td>
</tr>
<tr>
<td></td>
<td>article 12 (protecting and fostering athletes and sports leaders)</td>
<td></td>
</tr>
<tr>
<td>Sport-for-all promotion act</td>
<td>Statutes</td>
<td>N/A</td>
</tr>
<tr>
<td>Enforcement decree of the sports for all act</td>
<td>Article 4 (support for sports clubs) support for the placement of sports-for-all leaders</td>
<td>National qualification</td>
</tr>
<tr>
<td>School sports promotion act</td>
<td>Statutes</td>
<td>Article 12 (school sports unit leader)</td>
</tr>
<tr>
<td></td>
<td>article 13 (placement of sports instructors)</td>
<td>National qualification</td>
</tr>
<tr>
<td>Enforcement decree of school sports promotion act</td>
<td>Article 3 (criteria for qualification of school athletic team leaders, etc.)</td>
<td>National qualification</td>
</tr>
<tr>
<td></td>
<td>article 4 (standards for qualification of sports instructors, etc.)</td>
<td></td>
</tr>
<tr>
<td>Enforcement rules of the school sports promotion act</td>
<td>Article 5 (installation and operation of health fitness classes)</td>
<td>National qualification</td>
</tr>
<tr>
<td>Disaster safety in Gyeonggi-do</td>
<td>Ordinances</td>
<td>Article 3 (established operation plan) operation plan for private instructors for disaster safety education</td>
</tr>
</tbody>
</table>

3.1.3. Changes in the private certificate registration system

Legislative notice of some amendments to the Enforcement Decree of the Framework Act on Qualification was announced to improve the private qualification system to prevent consumer damage[22]. In the private qualification registration, it became mandatory to register before conducting the qualification test was implemented by revising the existing qualification registration obligations, by revising the fact that there is no regulation on existing qualification registration, the timing of registration, and punishment against non-registration was prepared as follows. With the past complaints and damage cases in reports of consumer damage, in addition to issuing of warnings and fines to relevant issuers (Consumer Resources and Fair Trade Commission), measures for cancellation of the qualification and suspension of the qualification were
created. In addition, a new regulation for course completion was established to provide a basis for introduction of national authorization private qualifications. Among private qualifications, certificates recognized for public trust, reliability, and publicity were deliberated to be promoted to a certified private certificate from a corporate-level or higher issuer upon application. A private qualification manager was ordered a fine of up to 30 million won and imprisonment of up to 3 years if he/she operated an unregistered qualification without registering in the state with a false, exaggerated, false advertisement., but there are insufficient cases of punishment, and in the case of damage relief through complaints reported, refunding the qualification costs of qualified applicants were only measures. Strong institutional execution is needed.

3.2. Status of issuance and registration of sports private certificates

3.2.1. Current status of issuance of central sports organizations of the Korea sports council

In 2018, the registration status of private certificates in the sports sector of the Korea Sports Association was 6 out of 65(9.2%), but after the special announcement on compliance with the Korean Sports Association, 19 out of 67(28.3%) and 57 qualification courses were completed[19]. Among them, registration increased with 37 sports in 13 sports of leaders(instructors), and 20 sports in 15 referees(commissioners) registered, and the implementation of special announcements is believed to have affected. The purpose of the registration is to promote the private accreditation with special announcements about compliance with the qualification, to secure public confidence, to transparently manage operations, and to promote it to private authorization through the standardized qualification system, and the qualification process is held one to two times a year with written, practical, and oral skills, so the application fee is free or at up to 300,000 won, operating at the expense of the beneficiary.

In 2019, among the affiliated organizations of the Korea Sports Council, new private qualification organizations were registered as a single referee, leader, A-C, 1-4 in billiards, volleyball, badminton, bodybuilding, boxing, aquatic sports, wushu, ironman, hockey, playground golf, archery, and squash. It was found that 25 underwater sports run by the Korea Aquatics and Fin Swimming Association were most active by establishing 25 qualifications, including pin swimming leaders. Of the 67 organizations, 48(71.6%) were unregistered and were reported to be being registered or plan to be registered, but the pre-planned certification process did not immediately stop and it was found that the implementation of the emphasized requirements was insufficient[19]. With the implementation of the pre-registration system, there are strong concerns about the establishment of a large-scale renewal system for pre-registration acquirers, and the intention to change the certificate to a license or a certificate of the completion was reported. It is believed that measures in the form of certification regarding duties are necessary.

A total of six sports organizations are semi-affiliated organizations of Korean Olympic Committee that do not issue private certificates, and when forming leaders and referees, they provide training with national qualifications and leadership experience. Only those who have completed this course are commissioned. Golf(Korea Professional Golf Association), Ski(Korea Ski Leaders' Federation), and Taekwondo(National Flag Institute, World Taekwondo Training Institute), for which collaborative organizations(designed by the Institute of Training) are conducting qualification training and issuance with affiliated sports organizations, need to investigate in terms of the scope of private qualification issuance. In the case of golf, baduk, and bowling, the competition committee and the host committee are running the competition supporting referee-free sports, and there is no referee qualification system as gentle sports. Of the 67 sports members of the Korea Sports Association, 40 were registered as private certificates, converted from non-affiliated organizations, and most of them were reported to be leaders and referees. The popular sport, the first one, is Gymnastics(Health and Gymnastics), with 114 places, including the Korea Sports and Health Welfare Council, registering 133 types related to leaders. Second, 81 leaders-related courses were registered and operated in 63 places, including Myongji University, as "Golf." The third most popular sport, is 'jumping rope' and 86 places
including the Korea Rope Jumping Association were counted related to leaders and referees, up from 57 places. The qualification market has also become active as the number of private certificates for the most popular sports private certificates has increased due to the ease of obtaining private certificates related to sports and as the number of leaders increases through the selection of leaders in life gymnastics(square gymnastics, elderly health gymnastics) classes and local lecturers. The main factors are the National Health Insurance Management Corporation’s healthy 100-year-old classroom, which only recognizes registered private certificates, and conditions for application for the qualification set by the Yeha City Sports Council.

3.2.2. Registration status of private qualifications of non-affiliated organizations

Of the 67 sports members of the Korea Sports Association, 40 were registered as private certificates in non-affiliated organizations, and most of them were reported to be leaders and referees[19]. The first popular sport is Gymnastics(Health and Gymnastics), with 114 places including the Korea Sports and Health Welfare Council, registering 133 types related to leaders. Second, 81 leaders-related courses were registered and operated in 63 places, including Myongji University, as "Golf." Third, the most popular sport is 'jumping rope' and 86 courses related to leaders and referees were counted in 57 places including the Korea Rope Jumping Association. The qualification market has also become active as the number of private certificates for the most popular sports private certificates has increased due to the ease of obtaining private certificates related to sports and the increase in the selection of leaders in life gymnastics(square gymnastics, elderly health gymnastics) classes and local lecturers. The main factors are the National Health Insurance Management Corporation’s health 100-year-old classroom, which only recognizes registered private certificates, and the conditions for application for qualification set by the Yeha City Sports Council.

It is necessary to verify its expertise as Myongji University, Hanyang University, Dankook University, and Cyber University operate 778 private certificates through direct registration, and business entities such as Seongwon Sports(table tennis), Korea Security Research Institute(shooting), MCRIT(wrestling), and Korea Qualification Evaluation Institute(Golf) that conduct projects related to equipment, research, and competitions are registered and operated as issuers. No qualification training courses have been registered for 25 out of 67 affiliated sports(modern pentathlon, rugby, roller sports, luge, biathlon, bodybuilding, bobsled, Sepak-takraw, waterskiing, squash, ssireum, ice hockey, baseball softball, weightlifting, wushu, track and field, boat race, foot volleyball, iron triathlon, canoe, fencing, handball, karate, karate, Kabaddi, dodge ball). The reasons were found to be due to the lack of popularity, a low number of club members, and difficulty in securing qualification facilities, which led to confidence in unregistered certificates of affiliated organizations and little awareness of national certificates.

3.3. Problems with private certificates of sports and how to improve them

3.3.1. Issues on private sports certificates

Surveyed 4,800 managers who applied or will apply for registration, and registered private qualification managers on the current status and tasks of the private qualification system[20]. The results of recognition, appropriateness of the registration system, direction for proper system, reason for registration, revocation and withdrawal of qualifications, wishes and inconvenience in the registration process were produced, and it was found that the understanding and recognition were high due to the Ministry of Education’s and the Korea Vocational Ability Development Institute and the Ministry of Education’s efforts to conduct training on inspection institutions Although there is some dissatisfaction with the delay in registration(approximately three months), pre-registration(prohibition of public relations and operation of qualification courses prior to registration) implemented in 2014 and complex documents, the private qualification registration system was found to be means for promotion and an opportunity to secure publicity or public confidence rather than regulation of business. In the past, the market for
strict categories of qualification markets is being transformed into a market for educational certification linked to education, and its continuous expansion is expected. However, in the case of sports private certificates, the issuer’s qualification officer remains passive in investigating the awareness of the pre-registration system, and the relevant departments are not active in changing Framework Act on Qualifications.

As a result of the analysis of expert’s opinions, the first, there are lack of specific measures dealing with the lack of awareness of regulations on punishment due to the unregistration of private qualification information services and their reckless issuance. Secondly, planning based on strict regulations on the commercialised qualification market is needed. Third, they agreed that it was urgent to raise awareness of the seriousness of issuing certificates for the refusal to application of the enforcement ordinance.

As a result of close investigation, it was found that, first, the issue of sports private certificates is recognized as national certificates in terms of the recognition of them and their value, and there is a problem with the social and environmental system in that whether certificates are obtained is prioritized over honors and coaching experience in the domestic sports-related instructor selection system. Second, it was found that only the certificates of the affiliated organization of the Korean Sports Council are recognized, not the certificate of the registered private certificate under the non-registered qualification issuing organization and the local government-related instructor selection system, which do not comply with the relevant regulations of the Framework Act on Qualification and Enforcement Rules. and it has been confirmed that there is a lack of awareness of the private qualification information system qualification registration system of the Korea Vocational Ability Development Institute, a government-funded research institute. Third, as of social factors, the criteria for problems with false, exaggerated, false advertisements and calculating acquisition prices are unequivocal, the number of issuing organizations continues to increase due to ease of distribution of license costs. As of a management factor, it is impossible to check the operating regulations of the qualification group, and the number of consumer damages caused by reckless issuance has increased rapidly, and it is urgent to improve the registration process and introduce a registration renewal system. Fourth, it was found that the benefits after obtaining the certificate and later education were insufficient due to reflux factors, and it was confirmed that the plan for the expiration date system suitable for the diversified educational environment should also be considered.

3.3.2. Raising awareness of private sports certificates

Analysis of the current status of ways to raise awareness of the sports private qualification registration system, induction strategy, and legislation were conducted. To analyze the current status, the management was checked through the certificate monitoring system and a fact-finding survey was conducted to gather opinions on the construction of panel data. The induction strategy aims to secure public confidence through registration in the private qualification registration system, authorities and issuers were induced to comply with government policies and it was found urgent to manage transparent qualification operations and management, and reduce consumer damage for the trustworthy qualification process.

In order to establish a legal and institutional foundation, it was found necessary to improve the standardized qualification system and there is need for a system to foster the person in charge of issuing private certificates, and to train professional managers to complete a systematic registration system. Priorities for improvement were identified in the order of diversified publicity boost(media), legal action against unregistered certificate issuing authorities, inducing registration through intervention of the relevant ministries(Ministry of Culture, Sports and Tourism), and establishment of a system for nurturing professional qualification personnel, and acquirers of the qualification market.

3.3.3. How to Improve the sports private certificate
In order to realize the government’s policy of intervention in the private license market and intensity, it is urgent to present a vision and investigate the publicity and marketability of the sports private certificate market[3][25][26].

In addition, the establishment of long-term strategies should be preceded by strengthening market autonomy through regulation of market functions.

As a strategy for a systematic development plan, first, it is expected to be difficult to form an organic consultative body in creating interests among government departments, but Framework Act on Qualifications should require the formation of a legal and institutional basis for the sports license system based on the close relationship between the Ministry of Education, the Ministry of Culture, Sports and Tourism, and the Korea Sports Council in that it is enforcement ordinances and enforcement rules under the Presidential Decree. Second, easy-to-understand training materials for registration managers should be developed and disseminated, a simple manual system for registration and operation, management shall be developed and disseminated, and practice-oriented education methods should be reorganized. Third, securing a public consensus to secure the identity of enforcement ordinances and enforcement rules should be prioritized, and detailed research is needed to induce the direction of the qualification system.

To prevent consumer damage, a certificate linked to sports-related university classes should be opened through an open bid, not through a consignment contract by the dean, professor in charge, and administrative assistant, and details of procedures and certification costs should be unveiled under the standard contract. In the sports private qualification system activation priority area, it was divided into policy strengthening, legal regulation, and deduction of research tasks and expanding strategies, and need for close investigation of registration managers and organizations was confirmed.

First, it has been confirmed that policy promotion to strengthen the qualification system and induce registration is important through a practical survey of unregistered certification organizations and qualification status. Second, in the area of legal regulation, unregistered authorities, organizations’ legal actions and regulation in qualification markets through government intervention were identified. Third, continuous related research was found to be necessary in the area of expansion of research, and in the area of operation and management, the government organization, the Ministry of Culture, Sports and Tourism, and the Korea Sports Council, agreed that a clear verification system is needed.

4. Conclusions and Suggestions

4.1. Conclusions

The purpose of this study was to conduct various research, along with literature research, to study the operation status of sports private certificates and how to improve them, and to utilize in-depth research methods with experts. First, it was found that after the special announcement of the Korea Sports Association, the qualification registration of from 6 Korea Sports Association affiliated organizations in 2018 to 19 in 2019 were surveyed, and it has been steadily increasing so far, affecting the awareness of the registration system, but detailed management measures are needed. Second, non-affiliated organizations have as many as 40 sports registration courses in the order of gymnastics, golf, and swimming, and gymnastics are issued by 114 organizations with the popularisation of health gymnastics and job prospects expected, suggesting an increase in the number of issuers, and it aims at promoting it to a private official recognition qualification by securing public confidence and managing transparency. Third, the priorities for improving the sports private qualification system were false, exaggerated, and false advertising on the issue of private sports licences, considered the biggest problem. It was found that improvements were needed in the order of a certificate of qualifications and qualification system of unregistered publishing organizations, lack of linked education after obtaining qualifications, and poor operation of educational training institutions. As a way to raise awareness of sports
private certificates, legal action by unregistered institutions is most urgent, followed by various strategic measures for publicity boost, inducement of registration through intervention of relevant ministries (Ministry of Culture, Sports and Tourism), and establishment of a system for nurturing professional qualification personnel. Fourth, establishment of an exclusive management department of the Ministry of Culture, Sports and Tourism and the Korea Sports Council are the most urgent tasks to create a sports private qualification system, and measures need to be taken in the order of improvement of law for qualification system and the system, continuous research, and government intervention. As a development plan to revitalize the sports private qualification system, it is most necessary to establish a bureau that deals with this issue exclusively and train professional personnel, and we gathered opinions for the development plan, in the order of seeking solutions to conflicts with similar certificates, seeking policies to support certificate issuers to manage transparently and securing public confidence, studying the current status of sports private certificates, and setting up data for debaters.

4.2. Suggestions

This study derived tasks for research on the operation status of sports private certificates and how to improve them, and made conclusions from research results and conducted discussions through surveys of groups of experts on priorities and importance. Suggestions for follow-up research are as follows. First, it was fortunate to find a match between priority and importance during the in-depth interview, but the average value of importance was found to be inconsistent with the priority, and it was reviewed again. Second, there is little domestic research on sports private certificates, and related contents were processed through the media (including media) rather than by acquiring knowledge from existing papers, and subjective opinions were excluded. Given that it takes about three months to register a sports private certificate, it was difficult to check the issuing place in real time through the private qualification information service and consult with the (67) issuing organization qualification managers. Third, among the opinions of experts surveyed through the presentation of the association during the collection of data on this study, a new clause can exclude sports private certificates from Framework Act on Qualifications. In the case of enacting private certificates under the Sports Act, opinions on the expected problems and improvement of the constitution between national and private certificates were not mentioned in this paper.

5. References

5.1. Journal articles


5.2. Books

5.2. Additional references

6. Appendix
6.1. Authors contribution
<table>
<thead>
<tr>
<th>Initial name</th>
<th>Contribution</th>
</tr>
</thead>
</table>
| Lead Author    | - Set of concepts☑  
|                | - Design ☑  
|                | - Getting results ☑  
|                | - Analysis ☑  
|                | - Make a significant contribution to collection ☑  
|                | - Final approval of the paper ☑  
|                | - Corresponding ☑  
| Corresponding Author* | - 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 ☑  |
| HY             |                                                                |
| BH             |                                                                |
Abstract

**Purpose:** This study is a descriptive research study attempted to provide basic data with a view to improve the quality of life by identifying the impact on the quality of life for the subjects of local religious community. Prior to the start of the study, a review of the research was requested, and the G-W University Research Ethics Review Committee approved of it.

**Method:** As for the data collection, the final 253 copies were used for the analysis of the adults who attended the retreat. The collected data were analyzed by the descriptive statistics, Chi-Square test, t-test, ANOVA, Pearson correlation analysis, and the multiple regression analysis using the SPSS 25.0 statistical program.

**Results:** As a result of the study, the health promoting lifestyle(r=.431, p<.001), depression(r=-.381, p<.001), religious activities(r=.275, p.<.001) and the quality of life were all significant in correlation. The factors influencing the quality of life of the research subjects were the health promoting lifestyle(β=.335, p<.001), depression(β=-.275, p.<.001), and the religious activities(β=.144, p=.011), while the explanatory power was 33.0%.

**Conclusion:** Through this study, it is necessary to develop a program which can improve the quality of life along with the continuous religious activities.

[Keywords] Health Promoting, Lifestyle, Depression, Religious Activities, Quality of Life

1. Introduction

The Ministry of Health and Welfare has placed the chronic disease management as a key project goal setting in the “2020 Comprehensive National Health Promotion Plan”[1] and presents setting approach as one of its strategies. Yet, the Ministry has not presented the direction of an approach for the utilization of place of living, which is the center of religious activities. While the existing health promotion projects are mostly carried out by public organizations in terms of practice and research, in the case of Korea, church is one of the key places of living for the local community, and is also a place where the community based health promotion programs can be operated. In particular, it has been known as a place where people of diverse age groups can access and use effectively as the place of effective communication, and where it is possible to successfully execute health promotion programs[2]. In the United States and elsewhere, health education, health fairs, and health seminars, among others, are actively conducted by the Korean communities through the church communities[3].

In order to develop a health promotion program with a focus on the church community, research on various perspectives on the factors influencing the health promotion actions of the constituents of the religious groups gathering at the church must be undertaken in advance.
It is true that the studies on the relationship between the religious life and health have formally been treated as just one variable forming the general characteristics of the research subjects. In Korea, the ratio of the Christian population among the religious groups is the largest of all the religious groups[4] and it cannot be denied that religion is a crucial part of life. Notwithstanding which, the relationship between the religion and health has been neglected to this day in terms of medicine and public health.

It has been mentioned that a religion related life influences not only the physical health, but also the mental health[5]. It has also been reported that approximately 70% of the studies related to faith and health are focused on the mental health, most of which have been centered upon the United States, and also in the case Korea, most of the studies related to the mental health including depression and the quality of life are dominant[6][7][8]. The studies related to religious life and the practice of the health promoting lifestyle could not be found other than those conducted by Park and Joo[9] and the tools used theretofore could not be compared and studied with ease as they are the tools developed through standardization by the researchers.

In this study, in the case of the church organizations, regular weekly meetings are held, and the population groups of varying age groups gather by life cycle, while there is a homogeneity among themselves. Therefore, the goal is to provide the basic data to elevate the quality of life by identifying and understanding the effects of the health promoting lifestyle, depression, and the religious activities on the quality of life.

2. Purpose of Research

This study seek to provide the basic data to elevate the quality of life by identifying and understanding the effects of the health promoting lifestyle, depression, and the religious activities on the quality of life, whose specific purposes are as follows.

1) Identify and understand the demographic characteristics of the subjects, health promoting lifestyle, depression, religious activities, and the quality of life.

2) Identify and understand the differences across the health promoting lifestyle, depression, religious activities, and the quality of life according to the demographic characteristics of the subjects.

3) Identify and understand the correlation between the health promoting lifestyle, depression, religious activities, and the quality of life of the subjects.

4) Identify and understand the factors influencing the quality of life of the subjects.

3. Method of Research

3.1. Research design

This study is a basic study intended for the development of the health promotion program by utilizing the church community, and is a descriptive research study seeking to investigate the factors which influence the demographic characteristics of the people who carry out religious activities, health promoting lifestyle, depression, and the religious activities on the quality of life.

3.2. Research subject and the data collection method

As for the number of the subjects for this study, it was set to the population of 550 expected people who applied for participation in the local church G’ retreat by using the Raosoft program[10] for calculating the number of the subjects sampled for the quantitative study, and it was also calculated that 227 people were needed if and where the power is 0.95, the level of significance is 0.05, and the size of effect is 0.25. The subjects who ultimately participated in this study were 253 people.
As for the survey period, in the case of those who desire to participate in the survey as adults who participated in the believer retreat on the 28th through the 30th in 2014, they were explained the background, purpose, and method of this program, among others, and those who agreed to participate in writing were the final subjects. The Christians aged 18 or older and capable of reading and writing Korean on a daily basis by preparing details in the form of their own records were able to participate. Those who did not agree to the purpose of this study, and those who could not read or write were excluded.

Prior to the start of the study, a request was made to the G-W University Research Ethics Review Committee, and an approval was acquired(GWNUIRB-2013-12). For ethical consideration, the research subjects were informed that they can cease participating in the study at any time during the participation, and that the research data will be conducted anonymously and will not be used for any purpose other than those of the research. Thereafter, those who gave written consent were allocated the questionnaires, which were responded to on their own, and collected.

3.3. Research tool
3.3.1. Health promoting lifestyle

The tool of 52 questions translated by Lee et al.[11]. was used for the “Health Promoting Life-styles Profile” developed by Walker and Hill-Polerecky(1996). It is consisted of 52 questions on a 4-point scale across the 6 areas of health responsibility, physical activities, nutrition, spiritual growth, interpersonal relationships, and stress. The higher the score, the higher the extent of practice, and the reliability was Cronbach’s alpha=.947 in the study of middle aged women[11] and turned out to be Cronbach’s alpha=.933 in this study. The right to use this tool has already been used by other studies[11] including the current researcher.

3.3.2. Depression

The Center for Epidemiologic Studies - Depressed Mood Scale(CESD) developed by Radloff(1977) is an abridged form of 3-point scale, and is also consisted of a total of 10 questions[12]. The higher the score, the higher the extent of depression, and the reliability was Cronbach’s alpha=.876 for the senior citizens[13] and turned out to be Cronbach’s alpha=.779 in this study. The right to use this tool is a generalized tool used frequently at the public health centers, which are public institutions, and hence, a separate permission to use was not acquired from the original author.

3.3.3. Religious activities

Religious activities are the basic religious activities, which refer to the extent of religious activities required by the affiliated denomination. Most of the reference search results for the religious activity tools are consisted of a mixture of the questions regarding the practice of religious life and the level of satisfaction, and hence, the research team developed 8 questions related to the participation in worship(Sunday worships and affiliation meetings), prayer, reading the Bible(religious books, etc.), religious meetings and the participation in volunteer activities, which are basically required for the religious activities. If it were consisted of a 5-point scale, the higher the score, it means that one is actively carrying out the religious activities. The tool turned out to have Cronbach's alpha=.690.

3.3.4. Quality of life

The research team retranslated it by making reference to the 1998 English version of the Simple Measure of the Quality of Life of the World Health Organization(WHOQOL-BREF), and the final translated tool was used by securing the advising of a native speaker professor who can use both Korean and English simultaneously. This tool is of a 5-point scale with 26 questions across 4 areas, and it means that the higher the score, the higher the quality of life. The
reliability of this tool was Cronbach's alpha=.64-.84 in the study of Choi et al[14], and the reliability of the lower area was .73 for the area of physical health, .81 for the area of psychology, .64 for the area of social relationship, and .84 for the area of environment, and in this study, it turned to be Cronbach's alpha=.91. The right to use this tool has already been used in the other studies[14] by those including the current researcher.

4. Data Analysis

The data collected were analyzed by using the SPSS 25.0 statistical program. Descriptive statistics were used to identify and understand the characteristics of the demographic and social variables of the subjects, and Chi-Square test, t-test, and ANOVA were used to validate the difference across the levels of the health promoting lifestyle, depression, religious activities, and the quality of life among the demographic variables. Furthermore, the Pearson's correlation analysis was used to identify and understand the correlation between the variables, and the multiple regression analysis, among others, was used to verify the quality of life's explanatory power.

5. Research Result

5.1. General characteristics of the subjects

The surveyed subjects were 104 men(41.1%) and 149 women(58.9%), and in terms of their age, it turned out that 159 people(62.8%) were aged 65 or younger, and 94 people(37.2%) were aged 65 years or older. As for their level of education, 89 people(35.2%) had 13 or more years of education, 85 people(33.6%) had 10 to 12 years of education, and 79 people(31.2%) had 9 or less years of education. As for the number of years of religion, 103 people(40.7%) had 30 or less years, 92 people(33.6%) had 31 to 50 years, and 58 people(22.9%) had 51 or more years. It turned out that 220 people(87.3%) had a spouse, and as for the level of income, 152 people(61.3%) had average, which turned out to be the largest in number.

It turned out that 225 people(89.3%) had regular medical exams. As for their health status, 114 people(45.6%) were the most in responding that their health conditions were good, and 186 people(73.8%) responded that they are satisfied with their religious life according to the survey <Table 1>.

Table 1. Analysis of differences in variables according to the general characteristics and general characteristics of study subjects.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Category</th>
<th>n(%)</th>
<th>Religios activities</th>
<th>Health promoting lifestyles</th>
<th>Depression</th>
<th>Quality of life</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>M±SD</td>
<td>t/F (p)</td>
<td>M±SD</td>
<td>t/F (p)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Schefe</td>
<td>Schefe</td>
<td>Schefe</td>
</tr>
<tr>
<td>Gender</td>
<td>Male</td>
<td>104(41.1)</td>
<td>2.75 ±.27</td>
<td>2.05 (.041)</td>
<td>2.51 ±.47</td>
<td>1.14 (.255)</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>149(58.9)</td>
<td>2.67 ±.35</td>
<td>2.44 ±.42</td>
<td>2.51 ±.42</td>
<td>1.12 (.262)</td>
</tr>
<tr>
<td>Age(yr)</td>
<td>23y&lt;65</td>
<td>159(62.8)</td>
<td>2.69 ±.31</td>
<td>-0.69 (.485)</td>
<td>2.45 ±.43</td>
<td>-1.12 (.262)</td>
</tr>
<tr>
<td></td>
<td>85y≥65</td>
<td>94(37.2)</td>
<td>2.72 ±.33</td>
<td>2.51 ±.47</td>
<td>1.12 (.262)</td>
<td>.61 ±.64</td>
</tr>
<tr>
<td>Educational status(yr)</td>
<td>≤9</td>
<td>79(31.2)</td>
<td>2.65 ±.32</td>
<td>1.13 (.323)</td>
<td>2.35 ±.44</td>
<td>4.95 (.008)</td>
</tr>
<tr>
<td></td>
<td>≥10</td>
<td>133(48.8)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

61
Table 2. Correlation between the subject's religious activities, health promoting lifestyles, depression, and quality of life.

<table>
<thead>
<tr>
<th>Quality of life</th>
<th>Depression</th>
<th>Health promoting lifestyles</th>
<th>Religious activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality of life</td>
<td>1</td>
<td>-.381 (&lt;.001)</td>
<td>.431 (&lt;.001)</td>
</tr>
<tr>
<td>Depression</td>
<td>1</td>
<td>-1.36 (.031)</td>
<td>-.178 (.005)</td>
</tr>
<tr>
<td>Health promoting lifestyles</td>
<td>1</td>
<td>.191 (.002)</td>
<td></td>
</tr>
</tbody>
</table>
5.3. The factors influencing the quality of life of the subjects

To identify and understand the factors influencing the quality of life of the subjects, the multiple regression analysis was performed for the variables which demonstrate significant correlation. As for the independent variables, a total of 7 variables of the level of educational, income, one’s own health conditions, satisfaction of religious life, results of correlation analysis, religious activities, health promoting lifestyle, and depression, demonstrating significant differences across general characteristics, were input. Before being input for the regression analysis, the nominal variables of the level of education, income, one’s own health conditions, and the satisfaction of religious life were converted into dummy variables and analyzed. First, multicollinearity, residuals, and outliers were diagnosed to validate the assumptions of the regression analysis for the independent variables. To verify as to whether there is an issue of multicollinearity between the independent variables, the correlation between the variables, tolerance limits, and the variance inflation factors (VIFs) were verified, and as a result, the correlation turned out to be \( r = -0.381 \sim -0.431 \), ensuring that the variables were independent. Furthermore, the Durbin-Watson value was 1.977, demonstrating that there was no issue of auto-correlation. The tolerance was \( 0.79 \sim 0.93 \), which was 0.1 or more, and the variance inflation factors (VIFs) were 1.07-1.25, which was less than 10, and hence, there was no multicollinearity. To examine the specificity values (described including Cook’s distance), it was appropriate for the regression model \( F = 18.501, p < .001 \).

It turned out that the quality of life of the subjects was influenced by the health promoting lifestyle \( (\beta = 0.328, p < .001) \), religious activities \( (\beta = 0.144, p = 0.012) \), income \( (\beta = 0.129, p = 0.018) \), one’s own health conditions \( (\beta = 0.123, p = 0.032) \), and depression \( (\beta = -0.272, p < .001) \), and the explanatory power was 33.3%. As for the quality of life of the subjects, it turned out that the higher the health promoting lifestyle, the more the religious activities are carried out, the higher the income, the better their own health conditions, and the less the depression, the higher the quality of life <Table 3>.

Table 3. Factors influencing the subjects’ quality of life.

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>SE</th>
<th>β</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>0.348</td>
<td>0.070</td>
<td>0.272</td>
<td>4.977</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Health promoting lifestyles</td>
<td>0.521</td>
<td>0.086</td>
<td>0.328</td>
<td>6.052</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Satisfaction of spiritual life</td>
<td>-0.054</td>
<td>0.095</td>
<td>-0.033</td>
<td>-0.574</td>
<td>.567</td>
</tr>
<tr>
<td>Health status of one’s self</td>
<td>0.176</td>
<td>0.082</td>
<td>0.123</td>
<td>2.158</td>
<td>.032</td>
</tr>
<tr>
<td>Economic status</td>
<td>0.269</td>
<td>0.113</td>
<td>0.129</td>
<td>2.383</td>
<td>.018</td>
</tr>
<tr>
<td>Religious activities</td>
<td>0.318</td>
<td>0.125</td>
<td>0.144</td>
<td>2.532</td>
<td>.012</td>
</tr>
<tr>
<td>Educational status(yr)</td>
<td>0.074</td>
<td>0.080</td>
<td>0.049</td>
<td>0.920</td>
<td>.359</td>
</tr>
</tbody>
</table>

\( \text{Adj.} R^2 = .330, F = 18.50, P < .001 \)


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Religious activities

Note: **Significant at the level of 0.01 of the correlation coefficient (for both sides). *Significant at the level of 0.05 of the correlation coefficient (for both sides).**
6. Discussion

This study was attempted to investigate the factors which influence the quality of life of the subjects carrying out religious activities, such as demographic characteristics, religious activities, health promoting lifestyle, and depression.

Following the results of this study, it was verified that 73.8% of the subjects were satisfied with their religious life, demonstrating that they perceived their religious life positively. Son, Hong, and Lee [15] claimed that the religious activities act as a crucial factor in forming the basic values of an individual's life. Moon TE & Byun SH [16] claimed that, in general, those who participate in the religious activities have had the effect of respecting themselves while having a more healthy, regular and stable emotions than those who do not carry out religious activities. In Korea, religion has been settled as a part of our lives to such an extent that the religious population accounts for more than half of the people, and since religious activities are among the key activities of life [4]. it is evident that presenting a positive way for the perception of religious life is instrumental for them to lead a happy life through the religious activities.

In the results of this study, it turned out that the quality of life of the subjects is correlated with religious activities, health promoting lifestyle, and depression. That is, the higher the scores of the religious activities and the health promoting lifestyle, and the lower the extent of depression, the higher the quality of life. In the research results of Kim [17], the religious activities, self-esteem, anxiety of death, and the quality of life all turned to have statistically significant results, and An & Lim [18] demonstrated in the research result that the religious life influences the quality of life. confirmed that. While it is not a variable consistent with the results of this study, it is evident seen that this study is partially supported by the results of studies through the similar variables. Based on the results of this study, there is a need for the continuous studies including the variables made in the previous studies. Kim [17] and An & Lim [18] claimed that religion is a key factor in elevating the quality of life for an individual's life, and as it may be said that it is in charge of helping them comfort or console for the pains and desairs of life when depression is felt, support for the discouragement of life, and reconcile inappropriate relationships with the surroundings, the program development and education capable of providing support for the establishment of religious values for the subjects leading a religious life in the future should be continued with consistency.

As a result of identifying and understanding the factors influencing the quality of life of the subjects, it turned out that the quality of life of the subjects was influenced by the depression, health promoting lifestyle, one's health conditions, income, and the religious activities, and the quality of life turned out to be higher, the less the depression, the better the health promoting lifestyle, the better the health, income, and religious activities. While direct comparison is impracticable since there are no previous studies conducted with the following variables, it would be necessary to clarify through continued and repeated studied. Furthermore, through the results of this study, a way to enhance the quality of life of the Christian believes may be devised. Therefore, religious institutions would need to develop various programs for the subjects to actively carry out the religious activities, and the development and application of the programs for the various subjects are required rather than being one-off, temporary or restrictive for the subjects for the operation of the program.

It is also necessary to find ways to treat depression, which is a key factor influencing the quality of life, and also continuously manage the health conditions of the subjects. Lastly, it would be necessary to consider the contents or perceptions of the experiences of the participants in this research during the church activities. To promote the practice of church activities, the effect would turned out to be higher by applying the strategy of changing the factors influencing the practice of church activities in consideration of the individual characteristics of the subjects as well as the extent of the community support.

This study has the following limitations in the interpretation of the results. There is a limitation in generalizing the results of this study since the subjects carrying out church activities in
some areas were targeted. In the future, repeated studies are needed by securing a much greater number of the subjects for the research.

7. Conclusion and Recommendation

This study was attempted to elevate the quality of life by identifying and understanding the effects of the health promoting lifestyle, depression, and the religious activities on the quality of life. The subjects' quality of life turned out to be influenced by the level of education, income, one's own health conditions, satisfaction of religious life, religious activities, health promoting lifestyle, and depression, while the subjects' quality of life turned out to be higher, the less the depression, the better the health promoting lifestyle and own's own health conditions, the higher the income, and the more the religious activities are carried out. The results of this research may be utilized as the basic data for developing the programs to elevate the quality of life of the subjects carrying out religious activities. Repeated studies to identify and understand that subjects' perception of religious activities, and verify the quality of life, including the depression, health promoting lifestyle, health conditions, and income influencing the quality of life along with the subjects’ religious activities are needed [19][20]. Towards this end, it is necessary to elevate the quality of life of the subjects via the development of customized educational programs reflecting the various demands for the subjects’ religious activities.

8. References

8.1. Journal articles


8.2. Thesis degree


8.3. Additional references


9. Appendix

9.1. Authors contribution

<table>
<thead>
<tr>
<th>Initial name</th>
<th>Contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead Author</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>Co-Author</td>
<td>-Someone who can explain all aspects of the paper ✔</td>
</tr>
<tr>
<td>Corresponding Author*</td>
<td>- ✔</td>
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</table>

EC ✔

AS ✔