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A Study on the Operation and Improvement of Extracurricular Curriculum based on the University's Core Competency for Public Value -Focused on O University

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Abstract

Purpose: This study was conducted with the purpose of proposing the direction necessary for the balanced operation of the university's core competency based curricula (major and liberal arts) and extracurricular

curriculum of O University, objective evaluation and quality management of extracurricular programs based on the case analysis of other universities' extracurricular operation and management systems and of providing the basic data.

Method: First, the case studies on the competency based extracurricular curriculum's operation and management systems of other universities are analyzed. Second, the competency based extracurricular curriculum's operation and management system centered on each core competency, type, and operating department for the 2021 academic year of O University are analyzed. Third, the directions for the future core competency based extracurricular curriculum's operation and management system directions for O University are presented.

Results: As for the problems for the operation of the extracurricular program through the case of extracurricular performance management of other universities include the imbalance of core competency and detailed competency programs, lack of connection with the major curriculum, and the lack of communication and collaboration for each center for the prevention of the duplication of extracurricular programs, which require the continuous improvement and quality control of the extracurricular program. Furthermore, it is difficult to provide the students with the necessary extracurricular program information, and it is also necessary to strengthen the performance system to ensure that the extracurricular program performance management system is a mileage scholarship system depending on whether the students have completed the course and can be used as a career in employment.

Conclusion: As a measure to address the imbalance for the extracurricular programs by core competency and induce the active participation of students, by developing and operating an integrated curriculum for each department linking the curriculum and extracurricular curriculum, it will play such a practical mediating role in fostering talents by department, while extending opportunities to strengthen the students' various competencies and playing a supporting role in providing an opportunity to strengthen the human body, thereby providing changes for growth as a whole person.

[Keywords] University, Core Competency, Extracurricular Curriculum, Operation, Improvement

1. Introduction

Given the recent extension of the COVID-19 and a decrease in the student population, universities must change to survive[1], which requires changes in the educational environment, diversity of student tendencies, and high quality educational services[2]. Universities present the extracurricular curriculum as a key factor in identifying the outcomes of university educa-

tion[3] when the continuous research and efforts are needed[4] to improve the quality of educational services for students and improve the quality of university education[5][6]. Initially universities recognized the extracurricular curriculum as simply among the programs linked to the liberal arts curriculum[7], but the extracurricular curriculum is effective in enhancing the students' necessary competencies in addition to the academic knowledge of the university's regular curriculum[8], and recognizing its importance, the extracurricular curriculum is being used in various ways[9].

As the extracurricular curriculum was operated at universities, related research was conducted. The university related extracurricular education research presents examples of university's program operation[10][11][12][13][14][15], or remains with the analysis of the effect of the extracurricular program or limited to studies which investigates the effectiveness analysis or consumer perception[16][17][18][19], and besides which, a study investigating the overall operational status of other universities[20], and a case study of the university's extracurricular curriculum development[21][22]][23][24] form the mainstream. While the extracurricular curriculum is positive for the students' academic achievement and is also recognized as positive in terms of job skills[25][26][27][28], research on the operation and improvement of the extracurricular curriculum is rather minimal.

Furthermore, the studies related to the operation of the extracurricular curriculum of most universities are primarily conducted with a focus on the cases of 4-year universities, and hence, there is a limit to applying such cases to community universities. Given the recent rapid changes in the university education and society, with the goal of fostering talents with various competencies through regular curriculum education[29], they are developing and operating programs which may complement the education and regular curriculum which are practically needed in society, thereby undergoing intensification.

Hence, presenting an efficient extracurricular curriculum's operational method and management system model based on the case studies of other universities' extracurricular operational methods and management systems and the analysis of the current O University's core competency based extracurricular curriculum's operation and management system appears to bring about the public's value of research, and based on which, this study seeks to explore the objective evaluation and qualitative management methods required for the operation and management of thee extracurricular curriculum at O University.

2. Research Method

First, the case studies concerning the competency based extracurricular curriculum's operation and management systems of other universities are analyzed.

Second, this study analyzes the competency based extracurricular curriculum's operation and management system centered on each core competency, type, and operating department for the 2021 academic year of O University.

Third, the future core competency based extracurricular curriculum's operation and management system directions for O University are presented.

3. Research Results

As the extracurricular curriculum which offers a variety of education without time and space constraints began to be applied to universities, the role of extracurricular is growing beyond

just a program. If the regular curriculum is a course in which subjects are taught, the extracurricular curriculum is a curriculum which does not grant credits yet is different from the major courses which grants credits[30]. However, the instructors and students participate more actively[31][32], and it is no longer a concept of support for the major through methods such as mileage or scholarships to students, but is deeply positioned as a curriculum linked to the major. The extracurricular curriculum is ideal for the students' voluntary participation and non-formal, and no credits or conditions are attached. However, in reality, all universities are improving various systems for inducing the students' voluntary participation. Notwithstanding which, there seems to be a limit to following voluntary participation of the students as with the regular curriculum.

Furthermore, it is deemed that the systematic operation and management of the extracurricular curriculum is needed in order to find a point of reference for how to operate the extracurricular at each university and operate the extracurricular curriculum linked to the regular curriculum. Hence, in this chapter, it is intended to examine the cases of extracurricular curriculum's operation and management of other universities and the extracurricular curriculum's operation and management system of O University.

3.1. Case analysis of the extracurricular curriculum's operation and management system of other universities

Recently, universities use the term of "curriculum" for the extracurricular activities, including extracurricular activities in classes, and grant credits, and various programs linking the curriculum and extracurricular curriculum have been developed and provided to the students. <Table 1> analyzed the characteristics of the extracurricular curriculum's operation and management system of representative universities in Korea by region, focusing on the linkage between the curriculum and the extracurricular curriculum, and the performance in order to analyze the cases of operation and management of the extracurricular curriculum of other universities.

Consequently, universities do not only operate the extracurricular curriculum, but also focus on managing the quality of programs and establishing a feedback system to improve the quality. Accordingly, the role and weight of each university's educational innovation and quality center is further increasing. Based on the commonalities of majors, liberal arts, and extracurriculars, core competency is no longer limited to the extracurriculars, yet based on the university's core competency, majors, liberal arts, and extracurriculars, they ought to be operated in connection with each other. This means the coexistence between majors, liberal arts, and extracurricular departments and work collaboration by and between the departments, and each department must be managed in an integrated way to achieve the same goal. However, given the involvement of the Ministry of Education, it may be possible to operate only the evaluation specific extracurriculars focused on the element of 'evaluation,' yet it is important to operate more freely based on the unique characteristics and autonomy of the university.

Furthermore, in the case of E University in addition to the cases analyzed in <Table 1>, a total of 13 extracurricular programs across 3 areas based on the 5 largest core competencies (EU programs) are operated, yet there is an imbalance in the extracurricular programs operated by each educational target area given the lack of extracurricular programs in the creativity area as it has been pointed out[33].

As in the case of K University, if the students complete the application in proportion to their lack of competency for each competency, duplicate programs for each center are prevented, and the students can participate more effectively in the extracurricular programs as they do not have to listen for the performance of each center. Requiring the students to participate in the program semi-compulsively for the performance of each center may rather provide them with a negative perception of the extracurricular program. The centers within the university should

not operate major education, liberal arts education, and extracurricular curriculum individually, and through communication or linkage between centers, overlapping programs towards the same goal need to be restructured for each center, and an organic relationship must be maintained primarily with customized programs customized to the characteristics for operation [34].

As such, extracurriculars are no longer a simple program, but are widely used at universities as a curriculum, and hence, an operation plan must exist in the extracurricular curriculum just as the concept of the regular curriculum, and in lieu of credits, mileage (scholarship) provision is required, such as a curriculum. Accordingly, it is most important for O University to achieve the integrated management from a macroscopic perspective, and the goal management should move towards a common goal while discussing and sharing from an overall point of view. In the next chapter, this study seeks to examine O University's extracurricular curriculum's operation and management system.

Table 1. Characteristics of the operation and management system of other universities' extracurricular programs.

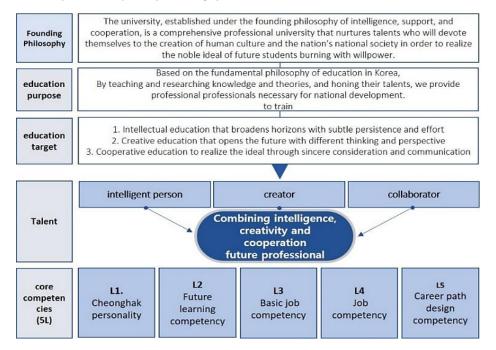
University	Characteristics of the extracurricular program's operation and management system
КО	-University Education Innovation Center: Development of WE人傳 system -Divided for operation into 5 kinds of general extracurriculars, job placement and startup, extracurriculars relative to department, and external extracurriculars -Using the self-check type competency diagnosis tool developed by K University, and after diagnosing the competency, proposed a program to strengthen the skills which each student lacks. Selected and completed the extracurricular program for each student
University of Seoul	-WE人 Community Certification, WE人 Core Competency Certification, and WE人 Comprehensive Certification executed via certification management (separate certification system and mileage system implemented) -Connecting the major curriculum with the extracurricular curriculum by supporting additional credits by executing the extracurricular program linked to the major curriculum for those placed on academic warning -Separate evaluation and feedback department operated -As a leading university of extracurriculars, a focus is placed on strengthening monitoring for each extracurricular program and the objective to improve the quality of extracurricular programs via the quality management
N O University of Chung- cheong	-Convergence Education Innovation Center: Attempted the extracurricular certification system in 2020 -The differentiated mileage compensation for each score based on the evaluation index was provided via the qualitative evaluation of the extracurricular program through the final field evaluation and same day consulting by in-school experts, external experts, and employees of the Education Innovation Center on the self evaluation results of the extracurricular program -The part of the imbalance in the extracurricular program which is focused on the field of employment has been pointed out -The areas where it is difficult to quantify evaluation indicators given the nature of the extracurricular program and seek ways were pointed out and explored -As with the operation of the major and liberal arts curricula, the need for the operational system of the extracurricular curriculum to be planned, implemented, evaluated, and feedbacked (CQI) was presented
K O University of Gangwon	-University Education Innovation Center -Divided into department centric extracurricular programs linked to majors and extracurricular programs supervised by the university headquarters -Continuing to limit the extracurricular program's operational method may be a factor hindering the development of extracurriculars, and hence, rather than credits and grades for the extracurriculars, emphasis was placed on exploring ways to motivate students, such as by providing mileage scholarships and graduation certificates -Decision to maintain, improve, and close the extracurricular programs was decide in the phases of survey on the needs of professors and students, planning, evaluation, and deliberation of the Steering Committee, survey on the operation and satisfaction of programs, Steering Committee for each center, staff, program evaluation in the unit of university, and final deliberation -Continuously resetting the programs by competency, rather than the center specific operation related extracurricular program, students selected the skills they lack, and develop and operate a core competency program which suits them as a direction of development -The final phase is aimed at building an integrated management center for extracurriculars

3.2. Analysis of the extracurricular programs based on core competency of O university

O University's core competency (5L) articulates the details in line with the educational goals, talent goals, and human resource development related directions, and also devised the development strategy area for achieving the mid-to-long-term development goal of VISION 2025 with

the objective of fostering intellectual people, creative people, and collaborators who are the university's talents. The implementation tasks for the realization of the university's vision 2025+ core competency include strengthening the operation of extracurricular linked courses, establishing a competency based extracurricular roadmap, upgrading the student history management system, and establishing a learning competency diagnosis system. By reexamining the current extracurricular curriculum's operation and management system as a whole, it is deemed that it would be possible to create a qualitatively improved successful extracurricular curriculum's operation and management related cases < Figure 1>.

Figure 1. O university's core competency matching system.



As of the 2021 academic year, the results of classifying O University's extracurricular programs by core competency, type, and operating department and analyzing the operational characteristics are as follows.

3.2.1. Extracurricular programs by core competency

Based on its founding philosophy, O University presented 5 core competencies to help revitalize the extracurricular education according to the university's talent profile, and the competencies (5L) were classified and applied with the goal of "fostering talents with learning, career, psychology, and job placement and startup capabilities through extracurricular programs based on the university's core competency."

According to the results of the extracurricular program survey, it was divided into 5 core competencies of L1 cheonghak personality, L2 future learning competency, L3 basic job competency, L4 job competency, and L5 career path design competency and others, and the distribution of programs by core competency is as illustrated in <Table 2>.

Examining the distribution of extracurricular programs by 5L core competency, out of the total 82 extracurricular programs, L1 9 (11%), L2 15 (18%), L3 12 (15%), L4 13 (16%), L5 24 (29%) and other 9 (11%), given which, the L5 core competency turned out to be the most, while L1 was confirmed to be the least with 9 (11%). Furthermore, examining the extracurricular programs according to the detailed competency of each 5L core competency, the detailed competency of the L5 career design path competency, the L5-1 career path, job placement and startup capability was the most with 22 programs, and the L5-2 self-directed competency program had

the least with 2 programs. It is necessary to expand the L1 cheonghak personality competency and L3 basic job competency programs, which are relatively lacking, and the proportion of others whose competency division is not clear is also not small at 11%. This was analyzed to be urgent, and it is deemed that the continuous improvement and quality control of extracurricular programs are needed to resolve the imbalance of programs by core competency and detailed competency.

Table 2. Distribution of extracurricular programs according to detailed competency by core competency of O university.

Core competencies (5L)	Detailed competency	Frequ	uency	Rati	o (%)	
L1 Cheonghak	L1-1 Self-comprehension ability	5	9	6	11	
personality	L1-2 Collaboration ability	4	9	5	11	
L2 Future learning	L2-1 Digital literacy skills	10	15	12	10	
competency	L2-2 Global literacy ability	5	15	6	18	
L3 Basic job	L3-1 Communication skills	5	12	6	14	
competency	L3-2 Problem-solving ability	7	12	8		
L4 Job competency	L4-1 Major job competency	13	13	16	16	
L5 Career path design	L5-1 Career path, job placement and startup capability	22	24	27	29	
competency	L5-2 Self-directed competency	2		2		
Etc		9	9	11	11	
	Sum			10	00	

3.2.2. Analysis of extracurricular programs by type

According to the type, the extracurricular program was divided into 7 types of learning support, psychological support, career path support, job placement and startup support, competency customized student support, programs with a high need to operate for all departments, and the programs operated when academic departments so desire. Among the types of extracurricular programs operated in 2021, the largest portion turned out to be job placement and startup support program (22 programs) accounting for 26% as illustrated in <Table 3>, followed by learning support program at 18% (15 programs) and the competency customized student support program at 15% (13), following which, learning support program at 18% (15), competency customized student support at 15% (13), program operated upon request by department at 15% (13), psychological support program at 11% (9), program with a large need for the operation for all departments at 8% (7), and the career path support program at 7% (6) in their respective order.

It is necessary to actively operate the career path support and psychological support programs which have turned out to be relatively less, and the lack of connection with the major curriculum may be seen as a problem if they are examined closely for each program. The purpose of the extracurricular program is to provide the students with a variety of experiences through extracurricular activities which cannot be obtained from the major subject, and it was analyzed that the programs unrelated to major curriculum occupy such a large portion, which may cause great obstacles and confusion in the students' academic performance.

Table 3. Frequency analysis of extracurricular program by type.

No.	Program type	Frequency	Ratio (%)
1	Learning support programs	15	18

2	Psychological support programs	9	11
3	Career path support programs	6	7
4	Job placement and startup support programs	22	26
5	Competency customized student support programs	13	15
6	Programs with a high need to operate for all departments	7	8
7	The programs operated when academic departments so desire	13	15
	Sum		100

3.2.3. Analysis of extracurricular programs by the managing department

<Table 4> analyzed the number of extracurricular programs by the department managing the extracurricular programs in 2021, and it turned out that there are a total of 15 operating departments and 82 programs under operation. The university's job center was the department which most managed the extracurricular programs, which managed 21 extracurricular programs, which accounted for 26% of the extracurricular programs overall all.

Following which, the departments operating the next most programs were the Teaching and Learning Support Center (17%), which operates 14 programs, and the Startup Support Corps at 8 (10%), Student Counseling Center at 6 (7%), and the Student Employment Center at 5 (6%) in their respective order, while the rest of the centers were operating 4 or less extracurricular programs. The university's job centers, teaching and learning support centers, and startup support corps account for over half of the total program operation, and the remaining operating departments also need to improve the operation of extracurricular programs by utilizing the characteristics and expertise of each department.

Currently, O University is in charge of various departments for each type of extracurricular program, and hence, the communication and collaboration by each department or center should be prioritized to help prevent the duplicate offering of extracurricular programs, and it is considered that the systematic program management and monitoring ought to be provided. Furthermore, in order to supplement the curriculum, they will need to expand and operate various extracurricular programs linked to the major curriculum with the goal of balanced operation of curriculum + extracurricular curriculum without prejudice to any competency based on the customized operation, and manage the performance of activities by competency, while building a quality management system which may manage the performance of activities by each competency.

Table 4. Frequency analysis of extracurricular programs by the managing department.

No.	Managing department	Frequency	Ratio (%)
1	Teaching and Learning Support Center	14	17
2	External Cooperation Center	4	5
3	University job center	21	26
4	Libraries	4	5
5	Industry-academia cooperation	2	2
6	Support Center for Students with Disabilities	4	5
7	Vocational Innovation Center	2	2
8	Startup Support Corps	8	10
9	Creative Character Education Center	3	4
10	Promotion Strategy Center	3	4
11	Student Counseling Center	6	7

12	Student competency certification center	4	5
13	13 Student Employment Center		6
14	Innovation Project Group	1	1
15 Field Practice Support Center		1	1
	Sum	82	100

Table 5. Frequency analysis of extracurricular program 5L competency by the managing department.

Managing department	Core competencies (5L)	Frequency
	L2 Future learning competency	4
Tooching and Loarning Support Contor	L3 Basic job competency	2
Teaching and Learning Support Center	L4 Job competency	7
	Etc	1
External Cooperation Center	L2 Future learning competency	4
	L1 Cheonghak personality	1
University inhontor	L2 Future learning competency	2
University job center	L4 Job competency	1
	L5 Career path design competency	17
	L2 Future learning competency	1
Libraries	L3 Basic job competency	2
	Etc	1
Landy salary and describe an arranting	L3 Basic job competency	1
Industry-academia cooperation	L5 Career path design competency	1
Support Center for Students	L1 Cheonghak personality	2
with Disabilities	L3 Basic job competency	2
Vocational Innovation Center	L4 Job competency	2
	L2 Future learning competency	2
Startup Support Corps	L3 Basic job competency	1
	L5 Career path design competency	5
Creative Character Education Center	L3 Basic job competency	1
Creative Character Education Center	Etc	2
	L1 Cheonghak personality	1
Promotion Strategy Center	L3 Basic job competency	1
	Etc	1
	L1 Cheonghak personality	4
Student Counseling Center	L3 Basic job competency	1
	Etc	1
	L2 Future learning competency	1
Student competency certification cen-	L3 Basic job competency	1
ter	L5 Career path design competency	1
	Etc	1
Ctudent Franksisses at Contain	L1 Cheonghak personality	1
Student Employment Center	L4 Job competency	1

	L5 Career path design competency	1
	Etc	2
Innovation Project Group	L2 Future learning competency	1
Field Practice Support Center	L4 Job competency	1
	Sum	

According to <Table 5>, the extracurricular programs operated by the university job center are L1 (1), L2 (2), L4 (1) and L5 (17), and there were 17 extracurricular programs linked to L5, which is the career path and job placement and startup competency directly related to the center's original work. There were 1 to 2 extracurricular programs related to the rest of the competencies under management. The extracurricular program operated by the Teaching and Learning Support Center turned out to include L2 (4), L3 (2), and L4 (7) competencies. Besides, L1 and L3 were mainly operated by the Support Center for Students with Disabilities, Promotion Strategy Center, and the Student Counseling Center. The extracurricular programs related to the center's work include L3 (1) at the Creative Character Education Center, L2 (4) at the External Cooperation Center, L4 (2) at the Vocational Innovation Center, L2 (1) at the Innovation Project Group, and L4 (1) at the Field Practice Support Center has a single competency for the operation of extracurricular programs. In addition, other libraries, industry-academia cooperation, startup support corps, student competency certification center, and student employment center, 2 to 4 diverse student competencies were included.

Hence, in order to evenly adjust the structure of the extracurricular programs which strengthen the university's core competency related to the university talent image of O University, and revitalize the extracurricular program education, it will be necessary to set and apply the ratio at the time of registration and approval of the extracurricular program through the extracurricular integrated management system and standardize them. Furthermore, communication and collaboration for each center should be made to help prevent the duplication of extracurricular programs with similar characteristics by department, and the systematic program management and monitoring ought to be implemented without exception.

4. Conclusions and Recommendations

This study was conducted with the purposes of providing the directions and basic data for the balanced operation of university's core competency based curriculum (major and liberal arts) and extracurricular curriculum of O University and objective evaluation and quality management of extracurricular programs via the case analysis of the other universities' extracurricular operation and management systems.

In terms of the university's core competency based extracurricular curriculum operating system of O University, problems in the operation of extracurricular programs through the case of extracurricular performance management types of other universities include the imbalance of core competency and programs by the detailed competency, lack of connection with the major curriculum, overlapping extracurricular programs, and the lack of communication and collaboration for each center to prevent offering, it would be necessary to carry out the continuous improvement of extracurricular programs and quality management. Furthermore, examining the problems of O University's extracurricular integrated management system, O-Story, O University's extracurricular program integrated system, is consisted of a system which includes the introduction to the extracurricular programs and an application menu. Yet, it was analyzed that there is no function to inquire on the competency they are learning, as to which 5L core competency the student participated in is linked, and as such, it is difficult for faculty and staff who need to manage, consult, and guide the core competency necessary for students to directly

inquire on the extracurricular program and recommend them or provide extracurricular program information.

In order to effectively manage the 5L core competency based the extracurricular programs in an integrated manner, the mileage acquired through the extracurricular program in connection with student history, student competency index, student counseling function for extracurricular recommendation and counseling guidance, student competency and extracurricular participation rate for basic student information inquiry, etc., must be included, and it will be necessary to develop and improve an integrated system capable of managing student competency linked to the extracurricular program, and it is thought that it should be possible to efficiently perform the inefficient work processing of working level officials in charge of each department by loading the document function to prepare the operation plan, operation report, attendance check report, result report, evaluation and feedback plan across all extracurricular programs.

The current O University's extracurricular program performance management system is a simple performance management system which reflects the mileage scholarship system depending on whether the students have completed the curriculum, and the performance system needs to be further strengthened to ensure that it may be used as a measure to certify the 5F competency certification while encouraging that the students manage them even more actively and voluntarily. To improve the quality of O University's extracurricular program performance management system, first, to diversify the performance management system, use the 5L competency certification index (score obtained by taking the curriculum and the results of participating in various extracurricular programs), or secondly, grant equivalent credits (virtual credits according to the nature and time of the activity for each extracurricular program), or third, a system will need to be prepared where scholarships may be awarded based on the 5L competency certification which records the students' activity related histories and achievements, while the performance of all extracurricular programs the students have taken are combined as the 5L competency certification index and managed in the form of learning portfolio.

Lastly, as a measure to address the imbalance of extracurricular programs by core competency and induce the proactive participation of the students, by developing and operating an integrated curriculum for each department which links the curriculum and extracurricular curriculum, first, the integrated curriculum reflective of the characteristics of the department will play a practical mediating role in fostering talents for each department, and second, it is thought that it will play a supporting role in providing opportunities for the students to strengthen their various competencies, thereby providing opportunities for growth as a whole individual.

In follow-up studies, it is necessary to perform an in-depth analysis of variables related to qualitative research, such as the performance of various non-examination programs.

5. References

5.1. Journal articles

- [1] Lee S & Han S. Preceding Factors for Life Satisfaction of University Students Majoring in Aviation Service in the Covid-19 Disaster: Social Environment in the Classroom, Grit. *International Journal of Human & Disaster*, 6(3), 64-74 (2021). [Article]
- [2] Kuh GD. The Other Curriculum: Out-of-class Experiences Associated with Student Learning and Personal Development. *The Journal of Higher Education*, 66(2), 123-125 (1995).
- [3] Cho C & Kim D & Park S. The Effects of Self-directed Learning Ability on Self-determination and Career Maturity among Students in the Department of Security Services. *International Journal of Criminal Study*, 1(2), 8-12 (2016). [Article]
- [4] Choi KG & Kim JH. The Effect of Educational Service Quality on Career Decision-making Self-

- efficacy and Career Attitude Maturity as Public Value of Airline Service Major. *Public Value*, 6(4) 40-51 (2021). [Article]
- [5] Han HJ. Analyzing Research Trends of the Extracurricular Activities in Korean Universities: From 2010 to 2019. *Journal of Learner-centered Curriculum and Instruction*, 20(15), 331-350 (2020).
- [6] Bae SH & Kim HJ. Validation of the National Survey of Student Engagement(NSSE) Model in the Korean Context. *The Journal of Educational Administration*, 30(1), 499-523 (2012).
- [7] Shin HJ. A Study on Undergraduate Liberal Education Curriculum for an Achievement of Significant Learning Outcomes. *Korean Journal of General Education*, 7(5), 467-493 (2013).
- [8] Lee BK & Kim EJ & Yu GS & Lee WK & Chang SC. Studies on Extra Curricula Activities in Universities for Globalization in Korea. *Korean Journal of General Education*, 6(4), 463-492 (2012).
- [9] Kim SY & Lee MK. A Study on Students' Perceptions and Needs about College Extracurricular Programs. *Journal of Learner-centered Curriculum and Instruction*, 16(9), 585-609 (2016).
- [10] Ahn MY & Lee HS & Lee YJ. An Operation Case of Extra Curriculum Programs for Strengthening the Basic Sciences of the Glocal Campus Liberal Arts College of Konkuk University. *Culture and Convergence*, 39(4), 259-284 (2017).
- [11] Lee SJ. A Case Study on an Online Extracurricular English Vocabulary Program for Improving EFL Learners' Use of Vocabulary Learning Strategies. *The Journal of Learner-centered Curriculum and Instruction*, 21(19), 569-594 (2021).
- [12] Lee SJ. A Case Study on an Online Extracurricular English Grammar Program. *Korean Journal of General Education*, 15(2), 25-41 (2021).
- [13] Kim HK. The Extra-curricular Writing Programs in University Writing Education -Focusing on the Case of Demand Survey-based Management. *The Korean Journal of Literacy Research*, 12(1), 13-40 (2021).
- [14] Yun JH & Lee YH & Park YJ & Kim YN. A Case Analysis on Development and Operation of Extracurricular Learning Community Program Model of University. *Journal of Education & Culture*, 26(4), 141-164 (2020).
- [15] Lee HS. Comparison of Basic Education for Students with Disabilities -Focusing on Writing Supplementary Class of Konkuk University Glocal Campus. *Culture and Convergence*, 40(5), 381-412 (2018).
- [16] Moon SD & Eum KS. A Study on the Satisfaction Factors in the Extracurricula Area in College. Journal of the Korea Management Engineers Society, 20(1), 147-160 (2015).
- [17] Yoon SS & Kim BK. Effects of Curriculum Linked Project based Extracurricular Education based on Industry-university Cooperation: Focusing on D University. *Journal of Educational Innovation Research*, 30(3), 149-174 (2020).
- [18] Yeo KH & Kim SY. A Case Study on RC Co-educational Programs for Collaboration and Thinking Skill Development. *The Journal of Learner-centered Curriculum and Instruction*. 18(18), 105-130 (2018).
- [19] Baek WY & Jung HN. An Analysis of the Effect of the Extra-curriculum Activities and Teaching Method on College Educational Performance. *The Journal of Economics and Finance of Education*, 21(1), 261-284 (2012).
- [20] Choi JY & Shin PS & Park YK & Kim DY & Park JW & Yoon KY & Kim WN. A Case Study on Management Systems for Non-curriculum Courses to Develop a Proper Management System for Non-curriculum Courses. *Journal of Engineering Education Research*, 14(4), 69-77 (2011).
- [21] Kim YM. The Development of Competency-based Extracurricular and Its Operating System for Developing Creative-convergent Talent. *Journal of the Korea Institute of Information & Communication Engineering*, 20(10), 1987-1993 (2016).
- [22] Yang KW. Implementation and Operation of University Extracurricular Education Management and Accreditation System: U-CAAM. *Journal of Information Systems*, 24(3), 115-131 (2015).
- [23] Lee MN & You JW. A Case Study of the Development and Implementation of Extracurricular Activity Management System in a College by Applying Gamification. *Journal of Educational Information and Media*, 22(4), 805-834 (2016).
- [24] Han AN. The Establishment and Operation of Integrated Curriculum-extra Curriculum

- Management System of Daegu Catholic University. *Culture and Convergence*, 39(6), 171-202 (2017).
- [25] Kim EJ & Seong MH. Development of a Personality Education Program Aimed at Cultivating Servant Leadership in College Students and the Perceptions of Its Effect. *Leadership Review*, 7(4), 33-59 (2016).
- [26] Son SN & Im B. Developing a Lebenstherapie as Students Healing Program and Its Application to University Character Education. *Korean Journal of General Education*, 9(2), 117-144 (2015).
- [27] Son JH & Lee GS & Lee MO. Study on the Coursework Development of Social Scientific Thinking and Expression. *Ratio et Oratio*, 7(2), 211-253 (2014).
- [28] Lee GH & Kang KL. Study on the Effects of the Learning Coaching Programs focused on the Self-regulated Learning for Academic Underachievers. *Korean Journal of Thinking Development*, 12(2), 119-154 (2016).
- [29] Shin CK & Byun HY & Eo SM & Kim SM. Analysis of Students and Faculty Member Liberal Arts Curriculum Perception and Needs-university A's Case-based. *Korean Journal of General Education*, 14(3), 217-231 (2020).
- [30] Kim JR. IPA Study on the Participation Attributes of Extracurricular Activities Program of Beauty Major Students. *Journal of the Korean Society of Cosmetology*, 26(6), 1510-1520 (2020).
- [31] Kang YD. English Teaching Method using Flipped Learning in the Artificial Intelligence Era. *Robotics & Al Ethics*, 4(2), 14-22 (2019). [Article]
- [32] Sung EY. Class Model of Child Safety Education Applied to the Flipped Learning Method. International Journal of Crisis & Safety, 2(2), 22-27 (2017). [Article]
- [33] Kim EJ & Kim KS. Operational System and Performance Management of Extra-curricular Programs to Support the Curriculum. *The Journal of the Convergence on Culture Technology*, 6(4), 95-101 (2020).
- [34] Kang Y. Design of Liberal Arts Curriculum Centered on Core Competencies. *International Journal of Human & Disaster*, 5(2), 49-57 (2020). [Article]

6. Appendix

6.1. Authors contribution

	Initial name	Contribution
		-Set of concepts ☑
		-Design ✓
Lead	SS	-Getting results ✓
Author	55	-Analysis 🗹
		-Make a significant contribution to collection $\ lacktriangledown$
		-Final approval of the paper $\ oxdot$
		-Corresponding ☑
	ing JK	-Play a decisive role in modification $\ oxdot$
Corresponding		-Significant contributions to concepts, designs,
Author*		practices, analysis and interpretation of data $\ lackimsquare$
		-Participants in Drafting and Revising Papers $\ oxdot$
		-Someone who can explain all aspects of the paper $\ lacktriangledown$

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E-Book Production and Online Communication Education Practice for Public Value

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Abstract

Purpose: At a time when talents with convergence and consilience who can create creative ideas at the center of talents with various knowledge through infusion and memorization education with experts in a specific field become the object of envy, talents who fit the trend of the times in universities, which are higher education institutions The need for nurturing is increasing, and creative convergence talents including mutual collaboration ability and self-directed learning are in the spotlight rather than individuals. Two-way interactive communication education is absolutely necessary at the center of nurturing creative fusion talents, and this is to foster creative fusion talents through mutual communication education.

Method: Creative convergence talent refers to talent with humanistic imagination and creativity in science and technology, and collaboration-oriented communication education is needed rather than individual-centered education. Tools are required In this study, through the production and use of e-books, convergence thinking skills are enhanced, teachers and learners can share with each other, and creative imagination can be enhanced through class-centered teaching methods.

Results: In this study, questionnaire evaluation and analysis of learners were conducted, and the responses of learners were evaluated by evaluating the satisfaction of teaching methods using various educational models and flip learning. Through this, an important foundational material was prepared for designing the right direction for future education.

Conclusion: This study presented the e-Book Production and Interactive Communication Education Practice, and the results of the class using a learning method based on various communication tools were very satisfactory and it was considered that a major change occurred in the class. In the future, follow-up research such as the development of new smart devices that can expand learner-centered capabilities and the development of creative content will continue.

[Keywords] Online Communication, Convergence, Creativity, E-Book, Education

1. Introduction

More than five years have passed since the 4th industrial revolution was declared[1], and many changes are taking place in society. Self-driving cars that drive themselves without a human being have become commonplace, and drones that can freely shoot high-rise buildings over mountains and seas without a human being, and even mount weapons, are in full swing. Things that were unimaginable even just a few decades ago are becoming a reality. In order to actively respond to this rapidly changing society, companies are accelerating their efforts to recruit talented people. Moreover, global companies are investing a lot of time, money, and research intensively to develop new products suitable for the times in order to gain an edge in

global competition. Before explaining the talents these companies require, it is meaningful to consider the changes in talent needs from the past. This is summarized as follows.

- [Medieval Society] Geniuses such as Leonardo da Vinci, famous as a genius artist, anatomist, engineer, and thinker, are recognized as key talents.
- [Modern Society] Like Edison, who is widely known as a great scientist and entrepreneur, he prefers talented people with all-around beauty.
- [Modern Society] Leading entrepreneurial talents like Steve Jobs with convergence and consilience capable of creative ideas became the object of envy.

In particular, in the era of the 3rd industrial revolution (1969~2015), which can be called the modern society, among the talents needed by each era, experts in a specific field and talents with knowledge in various fields through infusion and memorization education were in the spot-light[2][3].

However, the need for talent who can understand and lead the rapid technological change such as AI and the emergence of new values in the rapidly changing times is increasing [4][5][6]. This requires more competency from individuals, which means that creative convergence talents are in the spotlight in the future society.

In other words, in the era of the 4th industrial revolution, future companies prefer talents who can converge different fields and creatively derive them rather than experts in a specific field. The requirements of future talents needed by future companies have very important implications.

It means that changes in the educational system at universities, which are higher education institutions, are inevitable. In other words, in a limited classroom, the existing teaching method, classes were conducted according to the textbooks and pre-planned times set by the instructor. However, future education must provide an environment so that learners can freely learn beyond the limited walls of time and space[7][8][9]. Moreover, the shift from the existing teachercentered teaching method to the learner-centered learning method has become inevitable. Therefore, advanced foreign universities are actively conducting research for various learner-centered education. For example, various programs and contents are being developed, such as Flipped Learning[10][11][12], a reverse learning method, or Gamification[13][14][15][16], which increases interest in classes by introducing games into classes[17][18]. Some universities in Korea are also introducing and conducting programs that can spark interest in classes.

However, there is the most important factor in introducing various programs or contents into the class. That is, instead of a one-way class between the instructor and the learner, the two-way class should be oriented. Interactive class is a class method that has been conducted in advanced foreign universities for a long time, and the famous Havruta education is a typical class method of interactive communication education, and is being actively studied by education experts around the world.

Accordingly, the Ministry of Education confirmed and announced the 2015 Revision Curriculum aimed at nurturing creative convergence talents as a core task for 'enhancing the capacity of public education'[19]. In other words, the shift from 'knowledge-oriented education by memorization' to 'happy education that enjoys learning', improvement of student-centered class-room classes, and establishment of a job-oriented vocational education system based on the National Competency Standard (NCS) are significant.

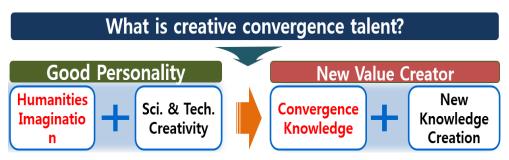
In this study, we intend to examine the design method of interactive communication education, which is the most important for nurturing creative convergence talents, and consider how to use it for e-book production and interactive communication. In addition, it is intended to

examine the direction for nurturing talents required by the future society through practical application cases of interactive online communication classes and the evaluation and analysis of learners' questionnaires. With this as an opportunity, it is meaningful in nurturing the right talents by suggesting the necessity of changing teaching and learning methods, developing contents, and developing various programs [20].

2. Interactive Education Design

What is Creative Convergence Talent? Although the definition of this has not yet been clearly agreed upon by the expert group, many experts believe that talented people with humanistic imagination and scientific and technological creativity based on upright personality are creative convergence talents. In other words, the creative convergence-type talents they say are those who have basic literacy education in the humanities, society, and science and technology fields. However, the talents of the future society emphasize new value creators who can converge various knowledge and create knowledge. In other words, the future society emphasizes talented people who can create new ideas. As shown in the following.

Figure 1. What is creative convergence talent?.



The six core competencies of creative convergence talent announced by the Ministry of Education are as follows.

- [Knowledge Information Processing] Ability to process knowledge information for rational problem solving
 - [Creative Thinking] Ability to create new things by fusion of various experiences
- [Community] Ability to actively participate in community development such as regions and countries
- [Communication] Ability to express one's thoughts well and to listen to and respect the opinions of others
 - [Aesthetic sensibility] Ability to discover the value of life based on empathy and sensitivity
 - [Self-management] Ability to live independently

In order to respond to the 4th industrial revolution, the Ministry of Education respects the autonomy of universities, and has been promoting or planning to improve the quality of education from 2020, such as inducing improvement of the curriculum and teaching and learning methods centering on the specialization of universities. Accordingly, there is a wave of efforts to prepare self-rescue measures such as educational system transformation and educational paradigm shift in line with the policies promoted by the Ministry of Education.

Universities, which are higher education institutions, must foster creative convergence tal-

ents required by the future society. It is necessary to nurture talented individuals with humanities literacy and creativity, away from the traditional curriculum centered on infusion and memorization at universities. Interaction communication education is the core of the future curriculum direction.

In other words, the ultimate reason for the need for interactive communication education is as follows. First, since the demand for creative convergence talents based on good character is increasing, it is necessary to create new values by converging and creating various knowledge. Second, it is necessary to motivate learners voluntarily by inducing active participation in class and to increase class immersion to induce high class achievement. Third, in order to realize consilience education beyond the scope of convergence education, it is necessary to aim for learner-centered education instead of instructor-centered education.

In the era of the 3rd industrial revolution, the need for experts in a specific field has increased rather than interactive communication education. Therefore, the lecture was conducted with the teacher's one-sided teaching method. In the era of the 4th industrial revolution, when creativity is absolutely necessary, there is a need for talents who can converge and create various fields rather than any specific expert. Against this background, demand-tailored products such as AI, IoT, ICT, VR/AR, Self-driving cars, and Drones, Metaverse are being launched [21][22][23], which is accelerating. If this trend continues, it is clear that in the near future, there will be a clear division into two groups: the creative convergence core talent and their followers.

For understanding and empathy, the most important thing is to make interactive communication possible by going beyond the limits of time and space through two-way interaction. In addition, collaboration-oriented communication education is needed rather than individual-centered education. Moreover, for interactive communication education, various communication tools such as VR/AR[24], Google Classroom[25], QuizN[26], Padlet[27], and DocZoom Pro[28] are required.

Above all, the core of interactive communication education should be shared and researched through mutual discussion and dialogue. Sharing is unimaginable in the existing traditional education method, but it is self-evident that education in the future will be more difficult to conduct without a culture of mutual sharing.

In other words, it will be transformed into a class method that has expanded to online/offline classes, away from the existing method in which offline classes were the main focus. Moreover, the rate of spread will be further accelerated by the COVID-19 pandemic. In fact, an environmental culture that is not limited by time and place is being revitalized beyond the limits of time and space. Various academic activities are being operated remotely online, school classes are being conducted non-face-to-face due to the spread of COVID-19, and school management meetings are being held online.

Examples of interactive communication education are as follows. A creative curriculum can be created with a system consisting of real-time feedback using smart tools in the course of a project-oriented class or mutual discussion-centered class, in which the instructor poses a problem through the interactive class tool[29]. At this time, project classes include humanities subject learning centered on imaginative and creative competency, self-directed learning centered on problem-solving competency and knowledge information competency, and collaborative activity learning centered on communication competency and coexistence and common competency[30].

The process of learners autonomously selecting a topic and expressing their thoughts based on it to create a creative work is a good example of interactive communication education in which learners can express their interest and imagination infinitely. The fundamental reason for creating creative works by demonstrating the talents and imagination of learners through class

is that it is the best education for enhancing creativity. Creating one creation by oneself is the driving force for developing several or thousands of items. Also, one of the most important factors in interactive communication education is that the class should be fun from the learner's point of view. No matter how good a subject is, if there is no fun added to the class, it is a natural result that the learner will move away from it.

In this study, in the design of interactive communication education, the subject name was reading English and American short novels, which is a humanities education, and the project class method expanded with flip learning was adopted as the class method. This meant that the instructor registered the class content suitable for the subject through the online LMS, the learners learned the basic content, and the learner was induced to freely select a topic suitable for the class and create a creative work in a fun way. And when you submit your creations, you need something. The reason for the selection of the topic, the roles of the team members, the production period, and the thoughts of the team members through the creation of the creation must be included.

Above all, it is very important to share the creations of learners with each other. By sharing data with the other party, you can clearly analyze the strengths, weaknesses, and characteristics of your own creations, and it can be very helpful for future creations. Education through sharing can be applied not only to this class, but also to all fields. In order to become an expert in a particular field, data from the field of expertise is absolutely essential. Moreover, sharing is valuable because it allows you to understand the other person's values, etc., and to obtain data that you do not have.

So, the most necessary thing in the era of Intelligence Artificial in the 4th industrial revolution is sharing[31]. It is an absolute word that can sufficiently strengthen competencies such as collaboration, self-direction, creativity, and thinking ability through sharing. The biggest weapon is that there is very little development of learning methods that can strengthen sharing. Efforts are made to apply the development of teaching and learning methods to each class in each school, but it is also true that there is a limit to increasing the effectiveness. For example, the syllabus necessarily includes the item 'discussion' as a way to improve teaching and learning methods, but it is insufficient to actually lead the discussion in the right direction.

In addition, as interactive classroom tools, Google Classroom, a classroom of communication, QuizN, which can enhance the fun of learners with quizzes on class contents, and KakaoTalk chat room for learner management such as announcements and mutual communication were used. And this class aims to develop core competencies of self-direction, communication, and community competence.

3. How to Make and Use E-Books

E-Book is an abbreviation of Electronic Book, and it refers to an electronic book manufactured with an electronic terminal such as a computer, unlike the existing paper book. In other words, e-Books, books, publications, etc., in any form stored digitally. If digital text is reproduced as analog characters, it can be an e-book terminal, so it is convenient because it is not necessary to carry a lot of books. The advantages of e-Books are that they can be reduced by 30% compared to paper books, so the price is low, and the weight of the terminal is light, so it is easy to carry. But there are not only advantages. Compared to paper books, e-books can be somewhat inconvenient to use if inexperienced, and some of the published books are not published as e-books[32].

It can be very motivating if the learner's own work is presented to other audiences. If a learner cannot present confidently in front of other learners who have participated in the class,

learner can convey his thoughts and philosophy to other learners by creating an e-book containing learner's own voice. Moreover, e-Book Creator can easily combine books, so you can break the classroom wall and work on projects with learners from different countries. <Figure 2> shows Creation and Utilization of e-Books.

In this study, the reasons for using e-books in English and American Short Story Reading classes can be summarized as follows.

- Teachers and learners can share the depth of English sentences.
- The learner becomes the center of the class and can improve convergence thinking ability.
- You can increase your creative imagination through the flipped learning method.
- It broadens individual capabilities as a creator, such as video editing and production, maximizing the use of YouTube, and developing various contents, and is helpful in finding employment.

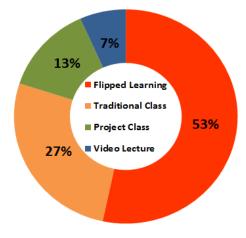
Figure 2. Creation and utilization of e-books.



4. Assessment and Analysis of Learners' Surveys

Survey evaluation and analysis of learners were conducted, and <Figure 3> Educational model that increases immersion in class and <Figure 4> Satisfaction with Flipped Learning applied class method are shown.

Figure 3. Educational model that increases immersion in class.



60% 53% 50% Verv Good 40% Generally Satisfied Usually Dissatisfaction 30% 20% Very Unsatisfied 17% 20% **7**% 10% 3% 0% Generally Satisfied Very Unsatisfied VeryGood **Dissalistaction** Usually

Figure 4. Satisfaction with flipped learning applied class method.

First of all, as shown in <Figure 3>, the classes that applied flipped learning accounted for more than half (53%) of the total, which was almost twice as high as 27% of the traditional class method. However, 13% of project classes and 7% of video lectures were rated lower than expected. Also, as shown in <Figure 4>, a whopping 73% of the respondents were generally satisfied with the teaching method applied with flipped learning, including very satisfied. However, as 10% of the respondents were dissatisfied and very dissatisfied, there seems to be room for improvement in this class.

4. Conclusion

This paper proposes e-Book Production and Online Communication Education Practice for Public Value. The needs of future companies to actively respond to the era of the 4th industrial revolution and the direction of the government's education policy were analyzed. Future companies are demanding creative ability to converge various fields with different personality-based characteristics. It can be fully guessed that the government's willpower for quality improvement is also making stronger efforts than ever before. In this regard, the urgency of a paradigm shift for university education changes and the importance of Online Communication Education Practice due to the impact of the COVID-19 pandemic were examined.

Moreover, online interactive communication education allows students to freely engage in educational activities without time and place restrictions beyond the limits of time and space. It was explained through examples that all fields are active online.

And by reducing the scope of this class, it was designed to enhance convergence and creativity by inducing learners to create creative works including the reasons for autonomous topic selection, the roles of team members, the production period, and the team members' values through creative production. Moreover, since the most necessary thing in the era of the 4th industrial revolution is share, the advantage of sharing is maximized so that you can understand the other person's thoughts and values, and develop through comparison with your own thoughts and values.

For the online interactive communication education suggested in this study, students were given the opportunity to create their own e-books through the production and use of e-books. It is evaluated that it is not only able to fully understand the thoughts and values of learners, but also the learners themselves as having fun.

Through the actual online interactive communication education proposed in this study, the

results of classes using various communication tool-based learning methods were very satisfactory, as expected, and it was considered that there was a significant change in the class. In other words, more than half of the learners (53%) were satisfied with the change in class, rather than the 27% who preferred the traditional teaching method. However, there is room for improvement through low survey evaluation such as 7% of video lectures.

Online interactive communication education will be of great help in improving the ability to derive convergence results with the creative thinking required by future companies. The reason is that the process of learners finding answers on their own is proceeding according to their own thoughts, and the created creations are not only owned by themselves, but can become a place of mutual exchange through sharing.

In addition, the creation process for e-books can be enjoyed in a fun way, increasing the interest of the class and the level of immersion and participation in learning. Moreover, it is expected to be of great help in resolving the shortcomings of online remote classes for Corona 19. In the future, follow-up research such as the development of new smart devices and creative contents that can expand learner-centered capabilities will continue.

5. References

5.1. Journal articles

- [5] Park S. Career Education in the Fourth Industrial Revolution. *The Journal of Korean Business Research*, 2(1), 1-11 (2018).
- [6] Kang Y. Implementation of a Convergence Model in Liberal Arts Education using Image Techniques. *Journal of English Teaching through Movies and Media*, 17(1), 23-38 (2016).
- [7] Kang Y. A Design on Teaching and Learning Method for Creative Talent in the Fourth Industrial Revolution. *International Journal of Human & Disaster*, 5(1), 1-9 (2020). [Article]
- [8] Lee J. Research on Smart Learning Model based on 5 Steps using Media-based Teaching and Learning Method. *Public Value*, 5(2), 1-12 (2020). [Article]
- [9] Kang Y. Case Study on Application of Content Development using Video Technology in English-American Literature Class. *The Journal of Global Cultural Contents*, 35, 1-18 (2018).
- [10] Choi J. Development of Program Model for Improving Intrapersonal Intelligence based on Flipped Learning. *International Journal of Human & Disaster*, 6(1), 16-25 (2021). [Article]
- [11] Kim J. A Case Study of the Flipped Learning based on Google Classroom: Focused on the Japanese Service Practical Conversation. *International Journal of Human & Disaster*, 5(2), 21-29 (2020). [Article]
- [13] Kang Y. A Study on Development of Instructional Model for Smart Education based on Game App. *The Journal of Humanities and Social Science*, 10(3), 1617-1628 (2019).
- [14] Lee K & Chang D. A Study on Participatory Branded Gamification for Metaverse Environment-Focusing on Global Brand Cases. *Brand Design Studies*, 19(2), 277-289 (2021).
- [17] Ryu C. & An J. A Study on Digital Storytelling in the Virtual World. *Game Industry Journal*, 16, 30-47 (2007).
- [18] Kim K. & Hong I. A Study on Effective Management of the Reading and Discussion Class in Liberal Arts Education. *The Journal of Language & Literature*, 67, 373-395 (2016).
- [20] Lee S. Developing and Running Classic Books Reading Seminar. *The Korean Society for Thinking and Communication*, 9(1), 235-262 (2016).
- [24] Lee G. & Kim Y. Deep Learning Application Plan for the Military's Smart VR Education System. *Korean Journal of Military Art and Science*, 75(1), 214-215 (2019).
- [25] Lee J. Application and Satisfaction Study of Media-based Teaching & Learning Method in Beauty Education: Focusing on Flipped Learning using Google Classroom. *Public Value*, 6(1), 92-105 (2021). [Article]

- [29] Kang Y. A Study on Teaching and Learning Method of Expanding PBL based on Flipped Learning. *The Journal of Humanities and Social Science*, 10(2), 769-778 (2019).
- [30] Kang Y. Design of Liberal Arts Curriculum Centered on Core Competencies. *International Journal of Human & Disaster*, 5(2), 49-57 (2020). [Article]

5.2. Thesis degree

- [15] Han B. Effect of Gamification-based Art Appreciation Class on Flow in Learning: Tested with High School Freshman Students. Ewha Womans University, Master's Thesis (2019).
- [16] Isabel O. Gamification Effects on Users' Motivation to Participate: A Case of a Portuguese Q&A Community. Ajou University, Master's Thesis (2020).

5.3. Books

- [1] Schwab K. The Fourth Industrial Revolution. Penguin Group (2017).
- [2] YaoK M. Applied Artificial Intelligence: A Handbook for Business Leaders. Amazon (2018).
- [12] Jin SH & Choi JB & Kim TH & Yu MA. For Engineering Majors Flip Learning Instruction Guidebook. Inha University Center (2017).
- [21] John S. & Jerry P. Metaverse Roadmap. A Cross-industry Public Foresight Project (2007).

5.4. Additional references

- [3] https://www.pfeifferreport.com/ (2018).
- [4] https://brockprize.org/ (2019).
- [19] http://www.moe.go.kr/ (2019).
- [22] Suh S. Metaverse Development Trend and Development Prospect Research. Conference in HCI Korea (2008).
- [23] https://terms.naver.com/ (2016).
- [26] http://www.quizn.show/ (2016).
- [27] https://blog.naver.com/ (2019).
- [28] http://www.wizexpert.co.kr/ (2021).
- [31] https://terms.naver.com/ (2020).
- [32] https://bit.ly/3rbnCpk/(2020).

6. Appendix

6.1. Authors contribution

	Initial name	Contribution
Author	YK	-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 ☑

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The Effect of Self-Efficacy of Those in Their 30s and 40s for Public Value on the Appearance Management Behaviors

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Abstract

Purpose: Women in their 30s and 40s are most active in terms of their professional life, and it may be said that the public value of social activities is quite large. Self-efficacy for the public value influences interpersonal relationships in professional life and is also an important factor manifested through the appearance management behaviors. The purpose of this study is to examine and understand the effect of self-efficacy on the appearance management behaviors for the women in their 30s and 40s.

Method: In this study, a total of 577 copies were used for the final statistical analysis data. For the question-naire's questions for the development of the scale of this study, a survey method was used for the women in their 30s and 40s for an empirical study. Self-efficacy was used as three factors of physical self-efficacy, social self-efficacy, and task difficulty preference, and appearance management behavior was used as five factors of cosmetic management, skin care, weight management, hair care, and clothing management.

Results: First, among the sub-factors of self-efficacy among the women in their 30s and 40s, and as for the 'physical self-efficacy' and 'social self-efficacy,' it turned out that there was a significant negative (-) correlation concerning 'skin care', 'hair care' and 'clothing care' among the appearance management behaviors. Among the sub-factors of self-efficacy, and as for the 'preference for the level of task related difficulty,' it turned out that there is a significant positive (+) correlation concerning 'plastic management' and 'weight management' among the appearance management behaviors.

Second, as for the effect of self-efficacy on weight control among the appearance management behaviors, social self-efficacy and the preference for the level of task-related difficulty turned out to have statistically significant effects. Among the appearance management behaviors, and as for clothing management, it turned out that there was a statistically significant effect for physical self-efficacy, social self-efficacy and the preference for the level of task related difficulty. The rest of the factors did not turn out to be significant.

Conclusion: As the women's social activities have increased, the public value socially speaking has increasingly grown, and it is considered that it is very important for women to take care of their appearance Therefore, it is expected that this study will examine women's self-efficacy and well understand women's interest, so that they can be well-activated in the marketing of the beauty market and the fashion market.

[Keywords] Self-Efficacy, Appearance, Management-Behaviors, Public Value, Women in Their 30s and 40s

1. Introduction

The women in their 30s and 40s in today's modern society are most active in professional life, and it may be said that the public value of social activities is quite large. Self-efficacy for public value influences interpersonal relationships in professional life and is also an important factor manifested through the appearance management behaviors.

Kim HJ & Lee MH[1] claimed that the appearance accepted in the modern society is evolving

given the general values, morals, and the liberalization of sexuality, etc.

Appearance is among the most important factors which determines image [2], and women feel a much greater social pressure for appearance [3], and appearance becomes social competitiveness as well as influences interpersonal relationships and the skills related evaluation [4]. Furthermore, it is considered that working people's efforts and investments made in appearance are naturally accepted as self-development [5].

Appearance is an individual's physical condition and is also expressed by face, body type, and skin color, and appearance decoration is an important factor in determining appearance via makeup, hairstyle, clothes, and accessories, etc.[6][7].

Humans have had a culture of decorating themselves for a long time, and the Egyptians, who have had the longest history of makeup, protected their bodies with makeup, as evidenced by the 'protection theory'. It also became a means of expressing beauty and gradually became the women's makeup[8].

Cho CM[9] claimed that in a study on the relationship between finger length and body composition related variables, the height and weight of men were significantly greater than those of women, and that women were significantly greater than men in terms of the variables related to body fat mass. It is considered that the appearance of modern people has been changing, and the study of appearance management behaviors according to appearance ought to be continued.

Song JH & Kim KH[10] claimed that appearance is among the important means of self-display for women with strong narcissistic tendencies, and that appearance management and the related appearance management behaviors are an active factor.

Yoon HJ & Kim ES[11] claimed that in a study related to the middle-aged women's desire to consume cosmetics, the desire for safety, nature-friendliness, and pleasure demonstrated significant positive effects. It is apparent that the desire of women to put on makeup and make their appearance beautiful is demonstrated as a propensity for cosmetic consumption.

In a study by Kim MJ & Kim ES[12], it was claimed that occupational resilience and career path related identity turned out to have a significant positive effect on the external satisfaction. The factors which have a positive effect on the external satisfaction may also be manifested in the occupation.

Lee CY & Lee JB & Na EY[13] claimed that the appearance satisfaction plays an important role of mediation between perception and happiness, and that the women's appearance related perception significantly influences the appearance satisfaction and positively affects their happiness. Such a human behavior is determined by the interaction of environmental factors and cognitive factors, and self-efficacy is among the mediating processes to help explain human behaviors. Self-efficacy is a personal belief in one's ability to organize and execute the actions required to produce the intended result in a specific scene[14].

Self-efficacy is a subjective evaluation of oneself, and it changes depending on how one perceives oneself given any situation regardless of the chronological age, over a long period of life, individual differences largely appear to demonstrate differences in behaviors[15][16]. Self-efficacy is a positive self-perception of one's abilities[17], and desires are realized by undertaking various activities, and self-efficacy may be increased in the psychological and social context[18][19]. It is also a variety of cognitive and psychological variables related to the human behaviors[20], it may be explained by cognitive concepts[21], and it is the source of power which enables humans to overcome their frustration and pain and offer new hopes[22][23], and it is a cause leading to efficient and desirable behaviors for individuals, families, communities, and professional life[24].

Cho HJ & Park KA[25] claimed that those with a high emotional intelligence have a greater self-efficacy by integrating their thoughts and actions.

Im CH[26] claimed that a negative emotional disposition causes a negative effect on the individuals' self-efficacy and social support, and that social support causes a positive effect on the individuals' self-efficacy and groups' self-efficacy.

Choi IS and Choi HN[27] claimed that rather than directly affecting the social anxiety, implicit narcissism indirectly affects a relatively large part via the internalized shame and social self-efficacy.

In this study, questionnaires were distributed to and collected from the women in their 30s and 40s, and the questionnaire's questions for the development of the scale of this study were consisted of self-efficacy, appearance management behaviors, and demographic variables, and the purpose of this study was to examine and understand the effect of self-efficacy on the appearance management behaviors.

Self-efficacy is predicted to have effect on the appearance management behaviors, and this study seeks to examine and understand the relationship between self-efficacy and the appearance management behaviors for the women in their 30s and 40s.

The study of self-efficacy for those in their 30s and 40s, who are most active professional life, on the appearance management behaviors, would be helpful in understanding the women's minds and pursuing public interest related values, and it is meaningful in making contribution to the utilization of basic data for beauty related marketing.

2. Research Method and Procedure

2.1. Selection of sample and the data collection

In this study, questionnaires were distributed to and collected from the women in their 30s and 40s in Seoul and Gyeonggi-do from June 15, 2021 until July 10, 2021. Of the total 600 copies distributed, 585 copies were collected, and among which, a total of 577 copies were used for the final statistical analysis, excluding the 8 incomplete and insincere responses. As for the questionnaire's questions for the development of the scale of this study, a survey method was used for the women in their 30s and 40s for an empirical study. The questionnaire was consisted of self-efficacy, appearance management behaviors, and demographic variables, and the total number of questions was 47.

Self-efficacy was three factors of physical self-efficacy, social self-efficacy, and preference for the level of task related difficulty, which were used in the study of Kim IS[28]. As a result of factor analysis, it turned out that there were 3 factors of 8 questions, and the appearance management behavior was five factors of cosmetic care, skin care, weight control, hair care, and clothing management, which were used for the study of Choi SK & Kang KJ[29], and as a result of factor analysis, 12 questions were used for the final analysis, and a 5-point Likert scale was used. For the data analysis of this study, the SPSS WIN 25.0 program was used.

Frequency, percentage, and average were calculated to examine and understand the demographic characteristics of the study subjects, and the Pearson's product moment correlation was calculated to examine and understand the relationship between self-efficacy and the appearance management behavior. The stepwise multiple regression analysis was performed to identify the causal relationship between demographic variables, self-efficacy, and appearance management behaviors. The significance level was α =.05 for all analyses.

2.2. Research questions

This study seeks to investigate the effect of self-efficacy for those in their 30s and 40s on their appearance management behaviors. Towards this end, specific research issues are as follows.

Research Question #1. Examine the general characteristics.

Research Question #2. Examine the correlation between self-efficacy and appearance management behaviors.

Research Question #3. Examine the effect of self-efficacy on the appearance management behaviors.

3. Research Subject

3.1. Demographic variables of study subjects

<Table 1> illustrates the results of the frequency analysis performed to examine the demographic characteristics of the survey subjects. First, in terms of age, it turned out that 384 people (66.6%) were in their 40s and 193 people (33.4%) were in their 30s. As for the average monthly cost of appearance management cost, 159 people (25.6%) were the largest in number for having spent KRW 100,000 to less than KRW 200,000, 148 people (25.6%) spent less than KRW 100,000, 99 people (17.2%) spend KRW 200,000 to 300,000, and 90 people (15.6%) spent over KRW 400,000, and 81 people (14.0%) spent KRW 300,000 to less than KRW 400,000, respectively. Examining their occupations, professionals accounted for the most at 137 people (23.7%), homemakers at 136 people (23.6%), students at 131 people (22.7%), office workers at 68 people (11.8%), others at 64 people (11.1%), self-employed at 21 people (3.6%), and sales and service providers at 20 people (3.5%), respectively.

As a result of surveying their educational background, 364 people (63.1%) were largest in the number of college and university graduates (including the currently enrolled students), followed by 169 people (29.3%) who graduated from graduate school (including the currently enrolled students), and 44 people (7.6%) who graduated from high school. As a result of surveying the average monthly income of the entire household, 265 people (45.9%) were the largest in number for having earned KRW 6 million or more, followed by 143 people (24.8%) who earned KRW 4-6 million, 118 people (20.5%) who earned KRW 2 million to less than KRW 4 million, and 51 people (8.8%) earned less than KRW 2 million. As a result of the survey performed on their marital status, 325 people (56.3%) responded that they were married, and 252 people (43.7%) responded that they were single.

Table 1. Demographic variables of the study subjects.

Classification		Frequency (N)	Percentage (%)
	30s	193	33.4
Age	40s	384	66.6
	Less than KRW 100,000	148	25.6
Average monthly	KRW 100,000 to less than KRW 200,000	159	27.6
cost of appearance management	KRW 200,000 to less than KRW 300,000	99	17.2
	KRW 300,000 to less than KRW 400,000	81	14.0
	KRW 400,000 or more	90	15.6

	Professional	137	23.7
	Sales and service provider	20	3.5
Occupation	Office worker	68	11.8
(including allow-	Student	131	22.7
ances)	Self employed	21	3.6
	Homemaker	136	23.6
	Others	64	11.1
	High school graduate	44	7.6
Educational background	College and university graduates (including the currently enrolled students)	364	63.1
Ü	Graduate school graduates (including the currently enrolled students)	169	29.3
Marital status	Single	252	43.7
Maritai Status	Married	325	56.3
	Less than KRW 2 million	51	8.8
Average monthly	KRW 2 million to less than KRW 4 million	118	20.5
income	KRW 4 million to less than KRW 6 million	143	24.8
	KRW 6 million or more	265	45.9
	Overall		100.0

3.2. Verification of validity and reliability of the measurement tools

The factor analysis was performed to verify the validity of the questions used for this study and to discover common factors and use them as variables. In this study, the principal component method was used as the factor extraction method, and only the factors with eigenvalues equal to or greater than 1.0 were extracted. The verimex rotation was performed in connection with the factor rotation. The factor loading, which indicates the extent of correlation between the factors of each variable, was analyzed based on 0.5 or higher.

Furthermore, in this study, the Cronbach's α was calculated to examine the extent of internal agreement between the questions to verify the reliability of the questions measured on the multi-question scale with homogeneous questions. As shown in the following <Table 2> <Table 3>.

Table 2. Factor analysis and reliability analysis of the self-efficacy.

Item	Physical self-efficacy	Social self-efficacy	Preference for the level of task related difficulty	Commonality
I am confident about playing sports very well.	.826	.059	.088	.694
I am not confident when taking tests related to physical expertise.	.778	.046	.165	.635
I cannot run very fast.	.767	.133	.123	.622
My physical movements are not sophisticated.	.615	.339	.130	.510
It is difficult to make new friends.	.124	.885	.151	.821

I do not know what to do with myself in social gatherings.	.166	.860	.230	.819	
When I have a big problem, I get anxious and cannot do anything.	.217	.131	.858	.800	
When something difficult arises, I get embarrassed and don't know what to do.	.115	.248	.840	.781	
Eigenvalue	2.359	1.738	1.584		
Dispersion (%)	29.488	21.731	19.802		
Accumulation (%)	29.488	51.219	71.021		
Reliability (Cronbach's α)	.776	.797	.723		
Overall reliability		.802			
KMO and Bartlett tests	KMO=.767, χ²=1,460.697 p<.000				

 Table 3. Factor analysis and reliability analysis of the appearance management behaviors.

	App					
ltem	Cosmetic care	Skin care	Weight control	Hair care	Clothing manage- ment	Com- monality
Plastic surgery is meaningful to become professionally successful.	.852	.015	.130	.004	.078	.750
Plastic surgery is important because it can help improve body image.	.825	.157	.017	.108	.137	.736
When I see attractive looks of celebrities, I want to have plastic surgery as well.	.779	.118	.127	.096	.095	.656
I regularly visit a skin care clinic or dermatologist for skin care.	.203	.795	.097	013	.140	.702
I frequently give myself facial skin massage (home care).	.054	.764	.232	.281	.098	.729
I use functional cosmetic products (eye cream, essence, whitening cream, etc.) every day for skin care.	.016	.729	.059	.150	.097	.567
I have never had food to lose weight.	.109	.096	.897	.034	.089	.834
I use various dietary control methods (fasting, fasting, using drugs) to build a slim body.	.142	.212	.845	.104	.105	.802
I often dry my hair.	.181	.163	.023	.878	.030	.832
I make special efforts to do my hair.	.001	.183	.133	.781	.338	.775
I usually pay a lot of attention to what other people wear.	.142	.052	.169	.126	.822	.742
I work very hard to be told that I dress well.	.144	.256	.021	.151	.801	.752
Eigenvalue	2.165	1.968	1.666	1.554	1.523	
Dispersion (%)	18.039	16.404	13.886	12.946	12.694	
Accumulation (%)	18.039	34.443	48.329	61.275	73.969	
Reliability (Cronbach's $lpha$)	.784	.718	.780	.700	.648	
Overall reliability			.809			
KMO and Bartlett tests		KMC	$\lambda = .776, \chi^2 = 2$,146.092 p	<.000	1

3.3. The correlation between self-efficacy and appearance management behaviors for the women in their 30s and 40s

In this study, the causal relationship of each variable for self-efficacy and appearance management behaviors for the women in their 30s and 40s was verified through the correlation analysis. The following <Table 4> illustrates the results of the correlation verification to examine the correlation between the variables.

As a result of the analysis, 'physical self-efficacy' and 'social self-efficacy' among the subfactors of self-efficacy for the women in their 30s and 40s turned to have a significant negative (-) correlation for 'skin care', 'hair care' and 'clothing management' among the appearance management behaviors, and among the sub-factors of self-efficacy, 'preference for the level of task related difficulty' turned out to have a significant positive (+) correlation for 'cosmetic care' and 'weight control' among the appearance management behaviors.

Table 4. Correlation analysis for the self-efficacy and appearance management behaviors.

Classifica- tion	Mean	Standard deviation	Physical self- efficacy	Social self- efficacy	Prefer- ence for the level of task related difficulty	Cosmetic care	Skin care	Weight control	Hair care	Clothing manage- ment
Physical self- efficacy	2.87	.801	1							
Social self- efficacy	2.51	.843	.351**	1						
Prefer- ence for the level of task re- lated difficulty	2.74	.814	.377**	.428**	1					
Cosmetic care	2.91	.880	.046	.000	.087*	1				
Skin care	2.87	.915	105*	096*	039	.262**	1			
Weight control	2.98	1.110	.001	056	.097*	.276**	.350**	1		
Hair care	3.01	.991	053	091*	012	.239**	.397**	.222**	1	
Clothing manage- ment	3.46	.792	146**	144**	016	.319**	.369**	.272**	.394**	1

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

3.4. The effect of self-efficacy of the women in their 30s and 40s on the appearance management behaviors

The multiple regression analysis was performed to examine the effect of self-efficacy of the women in their 30s and 40s on the appearance management behaviors. As a result of analyzing the effect of self-efficacy on the cosmetic care among the appearance management behaviors, the ANOVA results on the conformity of the regression model was F=1.921, p>.05, which was not statistically significant, further indicating that the regression formula was not conforming.

As a result of analyzing the effect of self-efficacy on skin care among the appearance management behaviors, the multiple correlation coefficient (R) turned out to be .124 and the coefficient of determination (R²) turned out to be .015. Accordingly, the explanatory power of the independent variable on the dependent variable was 1.5%. Furthermore, the ANOVA results on the conformity of the regression model was statistically significant with F=2.990, p<.05, further indicating that the regression formula is conforming.

As for the effect of self-efficacy on skin care among the appearance management behaviors,

it turned out that all variables including the physical self-efficacy (β =-.088, p>.05) variable, social self-efficacy (β =-076, p>.05) variable and the preference for the level of task related difficulty(β =.026, p>.05) variable were not statistically significant (p>.05).

As a result of analyzing the effect of self-efficacy on weight control among the appearance management behaviors, it turned out that the multiple correlation coefficient (R) was .146 and the coefficient of determination (R²) was .021. Accordingly, the explanatory power of the independent variable on the dependent variable was 2.1%. Furthermore, the ANOVA results on the conformity of the regression model was statistically significant with F=4.178, p<.01, further indicating that the regression formula is conforming.

As for the effect of self-efficacy on skin care among the appearance management behaviors, it turned out that the social self-efficacy (β =-.116, p<.05) variable has a statistically significant negative (-) effect, and the preference for The level of task related difficulty (β =.153, p<.01) variable has a statistically significant positive (+) effect. However, it turned out that the physical self-efficacy (β =-.016, p>.05) variable is not statistically significant.

As a result of analyzing the effect of self-efficacy on hair care among the appearance management behaviors, the ANOVA results on the conformity the regression model was F=1.973, p>.05, which was not statistically significant, further indicating that the regression formula was not conforming.

As a result of analyzing the effect of self-efficacy on clothing management among the appearance management behaviors, it turned out that the multiple correlation coefficient (R) was .194 and the coefficient of determination (R^2) was .038. Accordingly, the explanatory power of the independent variable on the dependent variable was 3.8%. Furthermore, the ANOVA results on the conformity the regression model was statistically significant with F=7.496, p<.001, indicating that the regression formula is conforming.

As for the effect of self-efficacy on clothing management among the appearance management behaviors, it turned out that the physical self-efficacy (β =-.134, p<.01) and social self-efficacy (β =-.137, p<.01) variables were statistically significant, and the preference for the level of task related difficulty (β =.093, p<.05) variable has a statistically significant positive (+) effect.

Kim HJ & Lee MH[30] claimed that the greater the self-regulation efficacy, the more the clothing management is performed, and even when the social efficacy was high, the management was performed much in terms of investment and effort for achieving success and maintaining amicable relationship in the professional world.

Such results are partially consistent with the findings of this study, and the women's self-efficacy appears to have influence on the appearance management behaviors. As shown in the following <Table 5>.

Dependen	t variable	Independent variable	В	SE	в	t	sig.
		(Constant)	2.668	.163		16.360	.000***
		physical self-efficacy	.029	.051	.026	.571	.568
Appear- ance man- Cosmetic	social self-efficacy	055	.049	052	-1.111	.267	
agement behaviors		preference for the level of task related difficulty	.108	.052	.100	2.093	.037*
		R=.	100 R²=01	LO <i>F=1.921</i> Du	bin-Watson 2	2.027	

	(Constant)	3.284	.169		19.424	.000***			
	Physical self-efficacy	100	.053	088	-1.908	.057			
	Social self-efficacy	083	.051	076	-1.616	.107			
Skin care	Preference for the level of task related difficulty	.030	.054	.026	.551	.582			
	R=	.124 R²=.01	5 <i>F=2.990</i> * Du	bin-Watson :	1.942				
	(Constant)	2.852	.204		13.952	.000***			
	Physical self-efficacy	022	.063	016	347	.728			
Weight	Social self-efficacy	153	.062	116	-2.477	.014*			
control	Preference for the level of task related difficulty	.208	.065	.153	3.222	.001**			
	R=.146 R ² =.021 <i>F=4.178</i> ** Dubin-Watson 2.213								
	(Constant)	3.281	.184		17.875	.000***			
	Physical self-efficacy	043	.057	034	746	.456			
	Social self-efficacy	115	.055	098	-2.068	.039*			
Hair care	Preference for the level of task related difficulty	.052	.058	.043	.893	.372			
	R=.101 R ² =.010 <i>F=1.973</i> Dubin-Watson 1.880								
Clothing manage- ment	(Constant)	3.915	.145		27.066	.000***			
	Physical self-efficacy	132	.045	134	-2.939	.003**			
	Social self-efficacy	129	.044	137	-2.939	.003**			
	Preference for the level of task related difficulty	.091	.046	.093	1.979	.048*			
	R=	.194 R²=.03	8 <i>F=7.496</i> *** Du	bin-Watson 1	L.876				

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

4. Conclusion and Recommendation

This study examined the effect of self-efficacy for public interest value on the appearance management behaviors for 577 women in their 30s and 40s, and the results are as follows.

First, the questionnaire were consisted of self-efficacy, appearance management behaviors, and demographic variables, while self-efficacy demonstrated three factors of physical self-efficacy, social self-efficacy, and preference for the level of task related difficulty, and the appearance management behaviors demonstrated cosmetic care, skin care, weight control, hair care, and clothing management.

Second, among the sub-factors of self-efficacy of the women in their 30s and 40s, it turned out that 'physical self-efficacy' and 'social self-efficacy' had a significant negative (-) correlation for 'skin care', 'hair care' and 'clothing management,' and among the sub-factors of self-efficacy, 'preference for the level of task related difficulty' turned out to have a significant positive(+)

correlation with 'cosmetic care' and 'weight control' among the appearance management behaviors.

Third, as for the effect of self-efficacy on weight control among the appearance management behaviors, social self-efficacy and the preference for the level of task related difficulty demonstrated a statistically significant effect, and among the appearance management behaviors, it turned out that there was a statistically significant effect for physical self-efficacy, social self-efficacy, and preference for the level of task related difficulty for the clothing management. The rest of the factors turned out to be not significant.

As the women's social activities have increased, the public value socially speaking has increasingly grown, and it is considered that it is very important for women to take care of their appearance. It seems that the women's social activities have also seen their increased self-efficacy. The marketing market for women is very diverse and growing even more widely. Hence, it is expected that this study will examine women's self-efficacy, understand women's interest, and be active in marketing in the beauty market and fashion market.

5. References

5.1. Journal articles

- [1] Kim HJ & Lee MH. A Study of Appearance Management Behaviors and Body Exposure Attitudes According to Sex Role Identity. *Journal of the Korea Society of Costume*, 60(3), 99-109 (2010).
- [2] Oh GS. The Mediating Effects of Self Efficacy in the Relationship between Appearance Satisfaction and Vocational Adjustment. *Journal of the Korea Society Deign Culture*, 22(3), 307-317 (2016).
- [3] Lee HO & Ku YS. Study on the Relationship of Appearance Instrumentality, Appearance Concern and Appearance Management Behavior of Women. *Journal of the Korea Society of Costume*, 68(1), 113 (2018).
- [4] Kim JY. The Effect of Interest in Appearance on Efficacy of Image Making of Undergraduates. Journal of The Korean Society of Cosmetology, 18(4), 892-900 (2012).
- [5] Yoo H. Differences in Appearance Management Behavior according to Occupational Characteristics and Demographic Characteristics of Workers. *Journal of the Korea Society of Costume*, 67(2), 17-35 (2017).
- [6] Oh YJ & Youn CS. A Study on the Appearance Management Behavior and Self-esteem of Korean Women. *Journal of Beauty Industry*, 1(2), 153-162 (2006).
- [7] Kang MJ & Kim BB. Effects of Self-awareness of Appearance on Management Behavior: Focused on Women in Their 20s. *Journal of the Korea Traditional Costume*, 23(3), 35-48 (2020).
- [8] Yeom J & Choi J & Lee J. Color Reproduction with Drag Queen and Makeup Protection. *Protection Convergence*, 6(1), 33-40 (2021). [Article]
- [9] Cho C. The Second to Fourth Finger Length Ratio(2D:4D) and Its Relationship with Body Composition Parameters in Korean Young Adults. *Protection Convergence*, 6(2), 35-45 (2021). [Article]
- [10] Song JH & Kim KH. The Effect of Narcissistic Tendency on Appearance Management Behaviors and Interpersonal. *Journal of Korean Traditional Costume*, 23(2), 65-79 (2020).
- [11] Yoon H & Kim E. Creation of Public Service Value Based on the Mediating Effect of Customized Cosmetics Salesperson Customer Empathy in the Relation between Middle-aged Women's Cosmetic Consumption Needs and Customized Cosmetic Purchase Intentions. *Public Value*, 6(2), 28-44 (2021). [Article]
- [12] Kim M & Kim E. The Effects of Internal Marketing and Career Motivation for the Protection of Dermatology Hospital Workers on Job Satisfaction and Organizational Commitment . *Protection Convergence*, 6(2), 46-60 (2021). [Article]
- [13] Lee C & Lee J & Na E. Psychological Health Relation between Perception, Appearance

- Satisfaction, and Happiness of Women Participating in Jewelry Therapy. *Protection Convergence*, 6(1), 12-21 (2021). [Article]
- [14] Lee SH & Park KS. Appearance Management Behaviors of Female University Students by Self-efficacy and Self-esteem. *The Research Journal of the Costume Culture*, 19(5), 1075-1087 (2011).
- [15] Lim KB. The Effect of Self-efficacy and Appearance Interest on Appearance Management and Clothing Purchase Behavior of New Siler Generation. *Journal of the Korea Fashion & Costume Design Association*, 16(2), 163-175 (2014).
- [16] Lee SH & Park KS. Appearance Management Behaviors of Female University Students by Self-efficacy and Self-esteem. *The Research Journal of the Costume Culture*, 19(5), 1075-1087 (2011).
- [17] Lee EG & Cho SS. Relations Among the Social Activity, Self-efficacy and Psychological Well-being of the Urban Elderly. *Journal of the Korea Contents Association*, 14(7), 196-216 (2014).
- [18] Kim JM & Jang HJ. Relationship between Participation Motivation on Leisure Sports Activity and Self-efficacy. *The Korean Society of Sports Science*, 13(2), 135-144 (2004).
- [19] Kang JH & Jung JY & Ko KS. Self-efficacy, Satisfaction, and Purchase Intention according to the Awareness of Wearing Wigs of Korean Chinese Japanese Women. *Journal of The Korean* Society of Cosmetology, 25(2), 245-254 (2019).
- [20] Kim HA & Ryu SA & Choi SK. A Study on the Relationship between Appearance Management Behavior and Career Decision Making Self-efficacy of Female College Students in Changwon Province. *The Korean Society of Design Culture*, 25(3), 87-99 (2019).
- [21] Hun KC. The Implication of Bandura's Self-efficacy Theory on the Instructional Method of Autonomy. *The Journal of Korean Education*, 18, 67-84 (1991).
- [22] Han NR & Choi AK. A Study on the Development and Validation of a Secretary Scale. *Journal of Secretarial Studies*, 20(2), 31-58 (2011).
- [23] Yoo BW & Park DH. The Effect of Leisure Activities on Self-virtue and Psychological Well-being: Focusing on Baby Boomers. *Journal of Hotel Resort*, 15(4), 295-309 (2016).
- [24] Kim KY. The Relationship between Self-efficacy and Self-actualization according to Dance Sports Participants Steady Intention of Participation. *The Korean Society of Sports Science*, 18(2), 77-83 (2009).
- [25] Cho HJ & Park KA. The Effect of Emotional Intelligence and Self-efficacy on Teachers' Burnout. *The Journal of Korean Teacher Education*, 24(1), 251-270 (2007).
- [26] Im CH. The Effects of Negative Affectivity on Collective Self-efficacy: A Focus on the Mediating Role of Personal Self-efficacy and Social Support. *Journal of Business Administration*, 23(1), 75-100 (2008).
- [27] Choi IS & Choi HN. The Influences of Covert Narcissism on Social Anxiety: The Mediating Effects of Internalized Shame and Social Self-efficacy. *Korean Journal of Counseling*, 14(5), 2799-2815 (2013).
- [28] Kim IS. Differences of Appearance Management Behaviors among Appearance Management Motives. *The Korean Fashion & Textile Research Journal*, 19(4), 468-478 (2017).
- [29] Choi SK & Kang KJ. The Makeup Behavior and Effect of Psychological Expectation after the Makeup according to Demographics and Contact with Media of Woman. *The Korean Society of Fashion Design*, 7(1), 81-95 (2007).
- [30] Kim HJ & Lee MH. The Effect of Self-efficacy on Appearance Management Behavior of Male and Female College Students. *Journal of the Korea Fashion & Costume Design Association*, 14(2), 33-47 (2012).

6. Appendix

6.1. Authors contribution

Initial	Contribution
name	Contribution

		-Set of concepts ✓
Lead Author	JC	-Design ☑
	JC	-Getting results ✓
		-Analysis ☑
Correspond-		-Make a significant contribution to collection $\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$
	JS	-Final approval of the paper $\ oldsymbol{arnothing}$
ing Author*	13	-Corresponding ✓
		-Play a decisive role in modification $\ oxdot$
		-Significant contributions to concepts, designs,
Co-Author	IJ	practices, analysis and interpretation of data $\ oldsymbol{arphi}$
	IJ	-Participants in Drafting and Revising Papers $\ lacktriangledown$
		-Someone who can explain all aspects of the paper 🔽

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An Analytical Study of Avant-Garde Characteristics and Make-Up Form of Alexander McQueen Show for Public Value

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Abstract

Purpose: In the modern society, trends have fast changed along with the development of the fields of fashion, beauty, and art. The rapid delivery of information in the 4th industry is destroying, not changing, the standards of beauty. It is proposed that, by analyzing the avant-garde characteristics and make-up of Alexander McQueen show, it is in-tended to understand modern trends and suggest creative beauty. The purpose is to achieve the development of the design of avant-garde and make up.

Method: The photos of Alexander McQueen collection 2001 F/W through 2010 S/S were classified through magazines such as Livingly and Vogue. Three experts participated in the analysis to help reduce the subjective view of the data and increase the reliability, while performing the analysis by using the SPSS WIN 25.0 program.

Results: According to the avant-garde characteristics of Alexander McQueen show, 'decadentism' is 'formless' and 'abstract pattern form', while it turned out the most that 'eclecticism' is 'formless', 'experimentalism' is 'formless' according to the avant-garde characteristics of Alexander McQueen show. Nihilism turned out to be uniformly high across various forms. Furthermore, among the five types of make-up, 'nihilism' turned out to be the highest, 'decadentism' turned out to be the second highest, and 'experimentalism' and 'eclecticism' turned out to be relatively low. The avant-garde characteristics of Alexander McQueen show were correlated in terms of eyes, lips, and face.

Conclusion: The avant-garde characteristics and make-up form expressed through the Alexander McQueen show are related to the following. The avant-garde characteristic turned out to have the highest nihilistic characteristics, followed by decadentism, experimentalism, and eclecticism. It is evident that the avant-garde characteristics of Alexander McQueen show are based on nihilism and decadentism. It is considered that studies of various collections and brands is required for the development of avant-garde and make-up design and for the creation of public values in the fields of beauty and fashion.

[Keywords] Alexander McQueen, Avant-Garde, Make Up, Collection, Form Analysis

1. Introduction

In the modern society of the 21st century, make-up has emerged as a daily routine for everyone, not just for celebrities. In the 4th industry beyond the 3rd industry, and given the rapid Internet information delivery speed[1], far more diverse forms of popular culture are apparent socially and culturally than ever before[2]. Following the development of the fields of fashion and beauty, relevant studies are also continuously carried out. It has been claimed that fashion is a direction to flex one's own individuality, and such trend is evident more rapidly in the beauty and fashion categories[3].

Standards of beauty are created by the society to which they belong, and have also changed according to the development of history. Now, the modern society destroys the standard of

beauty which has been maintained since the past[4]. The new beauty presented by the designers is a fresh and original avant-garde art unlike ever before. The avant-garde art began as a movement of art and has incrementally settled itself as a movement of art.

There have been several studies related to avant-garde in the fields of fashion and beauty, yet most of them have focused on deconstructionism. Hence, the purpose of this study is to derive the characteristics of avant-garde focused on the Alexander McQueen show collection from F/W 2001 through S/S 2010, and also analyze the make-up form which has not been relatively studied even among them. It is also sought to contribute to the development of the fashion and beauty industries [5], and develop avant-garde and creative make-up designs thereby.

2. Theoretical Background

2.1. The life and realm of works of Alexander McQueen

Born in London in 1969, Alexander McQueen's real name is "Lee," and is the youngest of six children of a taxi driver. After quitting school at the age of 16, he began fashion as an apprentice at Anderson & Sheppard, a tailor on Savile Row. Thereafter, in 1994, he received a master's degree in fashion design from Central Saint Martins College[6]. In 1994, he threw his debut show thanks to the sponsorship of the Welfare Fund, and began gaining attention with the help of Isabella Blow, editor of the British Vogue magazine[7]. However, the death Isabella Blow in 2007 combined with the death of his mother in 2010, he struggled with depression, then he finally committed suicide on February 11, 2010[8].

McQueen's world of art became even more pronounced since his graduation collection. He wanted to re-examine the role of fashion in the present time, and he saw it as an epic artistic inspiration, rather than simply to dress women[9]. He has been regarded as a fashion cult, and even said himself, "I want the audience to jump out of the show and vomit. I prefer extreme reactions (Wilson, 2015)." He demonstrated a violent, gloomy and unconventional style [10]. He expresses not only the unconventional costumes, but the fashion show itself as an art. Furthermore, he used show make-up, not general beauty make-up, to perfectly express the concept while revealing his presence and matching the outfit.

2.2. Concept and characteristics of avant-garde

Avant-garde is a French war term which originally means 'advance guard,' and which also refers to a detachment or detached force which covers the main force and provides information[11]. As a movement of art which began in the west during the early 20th century, it is a movement of art inspired by the spirit of resistance, formal denial, and criticism against the prevailing artistic values or ideology of the time[12]. For the anti-artistic and anti-humanistic metaphors, avant-garde artists destroyed traditional and familiar cognitive methods, and also used scientism created by themselves including mechanical abstraction, chance, and transformation[13].

The characteristics of avant-garde are divided into various forms according to the researcher. Charles Russell identified avant-garde characteristics to be temporal dynamism, social antagonism, historical possibilities of art and society, and aesthetic activism. Renato Poggioli, who explored avant-garde art, claimed that avant-garde was related to activism, philanthropy, futurism, and militantism, and further asserted that it exhibited characteristics including experimentalism, umoriismo, and scientism[14] No. JH[15] claimed alienation, novelty, progress, and autonomy, while Eom SH and Kim MS[16] classified it into futuristic dynamism, surrealistic experimentalism, alienated hostility, and counterculture. Hence, this paper has categorized the avant-garde characteristics into decadentism, eclecticism, nihilism, and experimentalism, respectively.

First, decadentism is a word derived from the French word of "Décadence," and which also refers to a phenomenon of extremes in the pursuit of pleasure as the society and culture of the time declined[17]. Criticism by emphasizing unhealthy problems is often employed, yet in the art, images of abnormal and bizarre shapes or human body transformations are primarily used.

Figure 1. Decadentism 2010 S/S.



Second, eclecticism first emerged in the field of theology and philosophy, and the concept discussed at this time was further expanded and defined from the fields of architecture and art during the 19th century across all fields during the 20th century[18]. As for the postmodern cultural style, it is explained as a method of reconciliation and fusion of opposing establishments, and it is also formed as a popular culture by mixing the so-called high-class art or classicism such as music, art, and film[19]. Pluralistic eclecticism is the act of creating a new style or implementing an original culture by mixing or decomposing the scope and form between the various forms of different eras[20]. Pluralistic eclecticism in art is concerned with the individuality and expression of various styles[21], and it pertains to the act of creating a new style by mixing various cultures with opposing characteristics.

Figure 2. Eclecticism 2002 F/W.



Third, nihilism developed based on Nietzsche's theory. Nilty means emptiness, loneliness, and meaninglessness, that is, nothingness, and also conveys the image which is destructive, not for construction, but for destruction[22]. Nietzsche highlighted nihilism as a positive phenomenon, such as the will of a weak human being to exist from an extreme position. Artists agonized over the tasks of the modern society and directly appealed to the anxious inner and reality of the mankind, and expressed the human's primary desires, negative emotions, and subsequent stability as themes[23]. Nihilism may be defined as an effort to overcome negative emotional situations such as feelings of deprivation and emptiness experienced when values are denied or collapsed by others or absurdity which cannot be addressed.

Figure 3. Nihilism 2008 S/S.



Fourth, experimentalism, which pursues the 'experimental method,' is uncovered in the surrealist movement, which is a result of dadaism in the early 20th century, and takes on 'mental liberation' as its ideal. The basic characteristics of avant-garde art may be guided by technical and formal meanings, yet in an indirect and uncompromising attitude, it is evident that it invades the realm of art or even reaches to the extent of such a plan[24]. The avant-garde artists sometimes experiment with surrealism for novelty, and it was claimed that they primarily use the diphase network, metaphor, deformation, trompe l'oeil technique and object painting[25].

Figure 4. Experimentalism 2009 S/S.



2.3. Make up of the show

Make up means make-up or cosmetics, and has been constantly developed by decorating the human body with various theories. It takes on a broad meaning of artificially constructing the body through methods such as drawing, design, sculpture, and modeling [26]. Make-up is classified according to the method of expression or location, and the show make-up is the make-up carried out in the fashion show collection among them. In the field of beauty, make-up is recognized as a factor which determines the completeness of fashion. It is evident that the most influential matters until the expression of an experimental attitude and such make-up becomes a trend is the show make-up which may be encountered regularly and every season [27].

The show make-up must account for the distance between the stage and the audience, the intensity and color of lighting, clothes, hair, and objects. In the past, it played a role as a device to make the clothes stand out and primarily produced natural make-ups which are possible in real life. From the 1980s and onwards, they began to try abstract and experimental expressions in accordance with the concept of clothing [28], and it is also apparent that, in the modern fashion illustrates, more avant-garde elements than before have been uncovered, and it is evident that various and free attempts are made, thereby breaking away from the existing make-up

framework. The show make-up may be said to be an artificial make-up which maximizes the costume and show concept by decorating the formative characteristics of the face with various materials[29].

Song YJ[30] analyzed the morphological expression related elements of make-up in terms of eyebrows, eyes, lips, cheeks, and face, and Park SE[31] classified the make-up form into eyebrows, eyes, 8 lips, cheeks, and face. Hence, this paper has analyzed the form of the show make-up into eyebrows, eyes, lips, cheeks, and face.

3. Results

3.1. Reliability according to avant-garde characteristics and the form analysis's analytical items

In this study, the avant-garde characteristics manifested in the Alexander McQueen show were divided into the four elements of decadentism, eclecticism, nihilism, and experimentalism by making reference to Livingly and Vogue, then the form analysis was performed for the five characteristic of eyebrows, eyes, lips, cheeks and face. 377 photos from S/S 2001 through S/S 2010 were used for the analysis. For the data analysis, the SPSS WIN 25.0 program was used [32].

In order to reduce the subjective opinions and understand reliability, 3 people with doctoral degree or higher participated in the analysis, and a total of 3 analysts performed the analysis. The extent of agreement among the analysts for each item of analysis was calculated by dividing the number of identical codes of 3 people by the total number of codes, and the results are as illustrated in <Table 1>.

Table 1. Reliability.

Item	of analysis	Overall reliability		
Avant-garde characteristics		1.000		
	Eyebrows	1.000		
	Eyes	1.000		
Form analysis	Lips	0.996		
	Cheeks	0.984		
	Face	0.986		
Median		0.994		

3.2. Avant-garde characteristics manifested in Alexander McQueen show and the results of the frequency analysis

The frequency analysis of avant-garde characteristics and he form analysis manifested in the Alexander McQueen show is as follows. <Table 2> summarizes the frequency of the avant-garde characteristics and the form analysis.

<Table 2> illustrates the frequency analysis of each element manifested in the Alexander McQueen show. When examining the frequency of avant-garde characteristics, nihilism turned out to be the most common at 92.8%, decadentism at 4.5%, experimentalism at 2.1%, and eclecticism at 0.5%, respectively.

During the form analysis performed of make-up, the none shape of the eyebrows turned out to be the most at 31.0%, followed by the normal shape at 27.9%, angular shape at 25.2%, grain

shape at 9.3%, and the line extension shape at 6.6%, respectively. According to the frequency analysis performed of the eyes, shadow extension was the most common at 55.4%, followed by formless at 27.3%, eyeliner form at 9.8%, heterochromatic form at 4.5%, and the abstract pattern form at 2.9%, respectively. As for lips, formless was the most common at 40.3%, followed by the texture form at 26.3%, normal form at 22.8%, and the deformed (line distortion) form at 10.6%. Cheeks turned out to have the most for formless (37.9%), followed by diagonal lines (35.0%), expanded form (24.4%), and oval form (2.7%). The natural shape of the face was the most at 81.7%, followed by the object type at 11.1%, texture type at 4.2%, and the abstract pattern type at 2.9%, respectively.

Table 2. Frequency analysis of the avant-garde characteristics and the items of form analysis.

	Classification		Frequency	%
		2001	40	10.6
		2002	40	10.6
		2003	40	10.6
		2004	37	9.8
Relevant	vear	2005	40	10.6
Relevant	year	2006	40	10.6
		2007	40	10.6
		2008	40	10.6
		2009	40	10.6
		2010	20	5.4
Seaso	nn	SS	197	52.3
Seasc) 	FW	180	47.7
		Decadentism	17	4.5
A		Ecleticism	2	0.5
Avant-garde ch	aracteristics	Nihilism	350	92.8
		Experimentalism	8	2.2
		Line extension	25	6.6
		Angular	95	25.2
	Eyebrows	Texture	35	9.3
		Normal	105	27.9
		None	117	31.0
		Different color	17	4.5
Form analysis		Shadow extension	209	55.4
orm anarysis	Eyes	Eye line	37	9.8
		Abstract pattern	11	3.0
		None	103	27.3
		Normal	86	22.8
	Line	Texture	99	26.3
	Lips	Deformed (line distortion)	40	10.6

		None	152	40.3
		Oval		
		Ovai	10	2.7
	Cheeks	Slanted	132	35.0
	Cileeks	Expanded	92	24.4
		None	143	37.9
	_	Object	42	11.1
		Texture	16	4.2
	Face	Nature	308	81.7
		Abstract pattern	11	3.0
	Total		377	100.0

3.3. Analysis of the make-up form according to avant-garde characteristics manifested in Alexander McQueen show

1) Cross-analysis of eyebrows among the forms of make-up according to the avant-garde characteristics

Among the avant-garde characteristics, 'decadentism' accounted for 52.9% of 'formless', 'line-extended form' accounted for 47.1%, 'angled form', 'grain form' and 'normal form' accounted for 0.0%, respectively. As for 'eclecticism', 'formless' accounts for 100.0%, and the other forms account for 0.0%, respectively. As for 'nihilism', 'normal form' accounted for 29.7%, 'formless' accounted for 28.6%, 'angled form' accounted for 27.1% 'grain form' accounts for 10.0% and 'normal form' accounted for 4.6%, respectively. As for 'experimentalism', 'formless' accounted for 75.0%, 'line-extended form' and 'normal form' accounted for 12.5%, and 'angled form' and 'grain form' accounted for 0.0%. respectively <Table 3>.

Table 3. Cross-analysis of eyebrows.

				Form a	analysis - eye	ebrows		
	Cross analysis	5	Line extension	Angular	Texture	Normal	Formless	Total
		Frequency	8	0	0	0	9	17
		Expected frequency	1.1	4.3	1.6	4.7	5.3	17.0
	Decadentism	% of avant-garde characteristics	47.1%	0.0%	0.0%	0.0%	52.9%	100.0%
		% of form analysis -eyebrows	32.0%	0.0%	0.0%	0.0%	7.7%	4.5%
		% of total	2.1%	0.0%	0.0%	0.0%	2.4%	4.5%
Avant-garde		Frequency	0	0	0	0	2	2
characteristics		Expected frequency	0.1	0.5	0.2	0.6	0.6	2.0
	Ecleticism	% of avant-garde characteristics	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
		% of form analysis – eyebrows	0.0%	0.0%	0.0%	0.0%	1.7%	0.5%
		% of total	0.0%	0.0%	0.0%	0.0%	0.5%	0.5%
		Frequency	16	95	35	104	100	350
	Nihilism	Expected frequency	23.2	88.2	32.5	97.5	108.6	350.0

		% of avant-garde characteristics	4.6%	27.1%	10.0%	29.7%	28.6%	100.0%
		% of form analysis – eyebrows	64.0%	100.0%	100.0%	99.0%	85.5%	92.8%
		% of total	4.2%	25.2%	9.3%	27.6%	26.5%	92.8%
		Frequency	1	0	0	1	6	8
		Expected frequency	0.5	2.0	0.7	2.2	2.5	8.0
	Experimentalism	% of avant-garde characteristics	12.5%	0.0%	0.0%	12.5%	75.0%	100.0%
		% of form analysis – eyebrows	4.0%	0.0%	0.0%	1.0%	5.1%	2.1%
		% of total	0.3%	0.0%	0.0%	0.3%	1.6%	2.1%
		Frequency	25	95	35	105	117	377
		Expected frequency	25.0	95.0	35.0	105.0	117.0	377.0
To	Total		6.6%	25.2%	9.3%	27.9%	31.0%	100.0%
			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of total	6.6%	25.2%	9.3%	27.9%	31.0%	100.0%

2) Cross-analysis of eyes among the make-up forms according to avant-garde characteristics

As for 'decadentism', 'abstract pattern form' accounted for 52.9%, 'formless' 41.2%, 'shadow extension form' 5.9%, 'exotic form' and 'eyeliner form' accounted for 0.0%, respectively. As for 'eclecticism', 'Abstract pattern' accounted for 100.0%, and the other forms account for 0.0%, respectively. As for 'nihilism', 'shadow extension form' accounted for 59.1%, 'formless' accounted for 26.3%, 'eyeliner form' accounted for 10.6%, 'extraordinary form' accounted for 4.0%, and 'abstract pattern form' accounted for 0.0%, respectively. As for 'experimentalism', 'formless' accounted for 50.0%, 'extra-color form' accounted for 37.5%, 'shadow extension form' accounted for 12.5%, and 'angled form' and 'grain form' accounted for 0.0%, respectively <Table 4>.

 Table 4. Cross-analysis of eyes.

				For	m analysis - E	yes		
	Cross analysis		Different color	Shadow extension	Eye line	Abstract pattern	Formless	Total
		Frequency	0	1	0	9	7	17
		Expected frequency	0.8	9.4	1.7	0.5	4.6	17.0
	Decadentism	% of avant-garde characteristics	0.0%	5.9%	0.0%	52.9%	41.2%	100.0%
Avant-garde		% of form analysis - eyes	0.0%	0.5%	0.0%	81.8%	6.8%	4.5%
characteristics		% of total	0.0%	0.3%	0.0%	2.4%	1.9%	4.5%
		Frequency	0	0	0	2	0	2
	Ecleticism	Expected frequency	0.1	1.1	0.2	0.1	0.5	2.0
		% of avant-garde characteristics	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%

	T			1		1		
		% of form analysis - eyes	0.0%	0.0%	0.0%	18.2%	0.0%	0.5%
		% of total	0.0%	0.0%	0.0%	0.5%	0.0%	0.5%
		Frequency	14	207	37	0	92	350
	Nihilism	Expected frequency	15.8	194.0	34.4	10.2	95.6	350.0
		% of avant-garde characteristics	4.0%	59.1%	10.6%	0.0%	26.3%	100.0%
		% of form analysis - eyes	82.4%	99.0%	100.0%	0.0%	89.3%	92.8%
		% of total	3.7%	54.9%	9.8%	0.0%	24.4%	92.8%
		Frequency	3	1	0	0	4	8
		Expected frequency	0.4	4.4	0.8	0.2	2.2	8.0
	Experimentalism	% of avant-garde characteristics	37.5%	12.5%	0.0%	0.0%	50.0%	100.0%
		% of form analysis - eyes	17.6%	0.5%	0.0%	0.0%	3.9%	2.1%
		% of total	0.8%	0.3%	0.0%	0.0%	1.1%	2.1%
		Frequency	17	209	37	11	103	377
	Total		17.0	209.0	37.0	11.0	103.0	377.0
To			4.5%	55.4%	9.8%	2.9%	27.3%	100.0%
			100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of total	4.5%	55.4%	9.8%	2.9%	27.3%	100.0%

3) Cross-analysis of lips among the make-up forms according to avant-garde characteristics

As for 'decadentism', 'deformed (line distortion) form' among the make-up forms – lips accounted for 52.9%, 'formless' accounted for 47.1%, 'normal form' and 'texture form' accounted for 0.0%. As for 'eclecticism', 'normal form' accounted for 100.0%, 'formless', 'deformed (line distortion) form' and 'texture form' accounted for 0.0%. As for 'nihilism', 'formless' accounted for 40.6%, 'texture form' 27.4%, 'normal form' accounted for 23.1%, and 'deformed (line distortion) form' accounted 8.9%. As for 'experimentalism', 'normal form' and 'texture form' accounted for 37.5%, respectively, while 'formless' accounted for 25.0%, and 'deformed (line distortion) form' accounted for 0.0%, respectively <Table 5>.

Table 5. Cross-analysis of lips.

	Cross analysis				-		
	Cross analysi	S	Normal	Texture	Deformed (line distortion)	Formless	Total
		Frequency	0	0	9	8	17
		Expected frequency	3.9	4.5	1.8	6.9	17.0
-	Avant-garde Decadentism Characteristics	% of avant-garde characteristics	0.0%	0.0%	52.9%	47.1%	100.0%
		% of form analysis - lips	0.0%	0.0%	22.5%	5.3%	4.5%
		% of total	0.0%	0.0%	2.4%	2.1%	4.5%

				ı		
	Frequency	2	0	0	0	2
	Expected frequency	0.5	0.5	0.2	0.8	2.0
Ecleticism	% of avant-garde characteristics	100.0%	0.0%	0.0%	0.0%	100.0%
	% of form analysis - lips	2.3%	0.0%	0.0%	0.0%	0.5%
	% of total	0.5%	0.0%	0.0%	0.0%	0.5%
	Frequency	81	96	31	142	350
	Expected frequency	79.8	91.9	37.1	141.1	350.0
Nihilism	% of avant-garde characteristics	23.1%	27.4%	8.9%	40.6%	100.0%
	% of form analysis - lips	94.2%	97.0%	77.5%	93.4%	92.8%
	% of total	21.5%	25.5%	8.2%	37.7%	92.8%
	Frequency	3	3	0	2	8
	Expected frequency	1.8	2.1	0.8	3.2	8.0
Experimental- ism	% of avant-garde characteristics	37.5%	37.5%	0.0%	25.0%	100.0%
	% of form analysis - lips	3.5%	3.0%	0.0%	1.3%	2.1%
	% of total	0.8%	0.8%	0.0%	0.5%	2.1%
	Frequency	86	99	40	152	377
Total		86.0	99.0	40.0	152.0	377.0
		22.8%	26.3%	10.6%	40.3%	100.0%
		100.0%	100.0%	100.0%	100.0%	100.0%
	% of total	22.8%	26.3%	10.6%	40.3%	100.0%
	Nihilism Experimental- ism	Ecleticism Expected frequency % of avant-garde characteristics % of form analysis - lips % of total Frequency Expected frequency % of avant-garde characteristics % of form analysis - lips % of total Frequency Expected frequency % of avant-garde characteristics % of total Frequency Expected frequency % of avant-garde characteristics % of form analysis - lips % of form analysis - lips	Expected frequency 0.5	Expected frequency 0.5 0.5	Expected frequency 0.5 0.5 0.2	Ecleticism

4) Cross-analysis of cheeks among the make-up forms according to avant-garde characteristics

As for 'decadentism', 'formless' accounted for 52.9%, 'extended form' accounted for 47.1%, and 'normal form' and 'textured form' accounted for 0.0%. As for 'eclecticism', 'formless' accounted for 100.0%, and 'oval form', 'slanted line form' and 'extended form' accounted for 0.0%. As for 'nihilism', 'slanted line shape' accounted for 37.7%, 'formless' 35.7%, 'extended form' 23.7%, and 'elliptical shape' 2.9%. For 'experimentalism', 'formless' accounted for 87.5%, 'extended form' accounted for 12.5%, and 'oval form' and 'slanted line form' accounted for 0.0%, respectively <Table 6>.

Table 6. Cross analysis of cheeks.

	Cross analysis			Form analysis - Cheeks					
	Cross analysis	Oval Slanted		Expanded	Formless	Total			
Avant-garde	5 1	Frequency	0	0	8	9	17		
characteristics	Decadentism	Expected frequency	0.5	6.0	4.1	6.4	17.0		

		% of avant-garde characteristics	0.0%	0.0%	47.1%	52.9%	100.0%
		% of form analysis - cheeks	0.0%	0.0%	8.7%	6.3%	4.5%
		% of total	0.0%	0.0%	2.1%	2.4%	4.5%
		Frequency	0	0	0	2	2
		Expected frequency	0.1	0.7	0.5	0.8	2.0
	Ecleticism	% of avant-garde characteristics	0.0%	0.0%	0.0%	100.0%	100.0%
		% of form analysis - cheeks	0.0%	0.0%	0.0%	1.4%	0.5%
		% of total	0.0%	0.0%	0.0%	0.5%	0.5%
		Frequency	10	132	83	125	350
		Expected frequency	9.3	122.5	85.4	132.8	350.0
	Nihilism	% of avant-garde characteristics	2.9%	37.7%	23.7%	35.7%	100.0%
		% of form analysis - cheeks	100.0%	100.0%	90.2%	87.4%	92.8%
		% of total	2.7%	35.0%	22.0%	33.2%	92.8%
		Frequency	0	0	1	7	8
		Expected frequency	0.2	2.8	2.0	3.0	8.0
	Experimentalism	% of avant-garde characteristics	0.0%	0.0%	12.5%	87.5%	100.0%
		% of form analysis - cheeks	0.0%	0.0%	1.1%	4.9%	2.1%
		% of total	0.0%	0.0%	0.3%	1.9%	2.1%
		Frequency	10	132	92	143	377
		Expected frequency	10.0	132.0	92.0	143.0	377.0
To	tal	% of avant-garde characteristics	2.7%	35.0%	24.4%	37.9%	100.0%
		% of form analysis - cheeks	100.0%	100.0%	100.0%	100.0%	100.0%
		% of total	2.7%	35.0%	24.4%	37.9%	100.0%

5) Cross-analysis of face among the make-up forms according to avant-garde characteristics

As for 'decadentism', 'abstract pattern form' accounted for 52.9% of make-up forms – 'texture form' accounted for 41.2%, 'natural form' accounts for 5.9%, and 'object form' accounted for 0.0%. As for 'eclecticism', 'abstract pattern form' accounted for 100.0% of the make-up form – among face, and 'texture form', 'natural form' and 'object form' accounted for 0.0%. As for 'nihilism', 'natural pattern form' accounted for 87.4% of make-up forms – 'object form' accounted for 10.0%, 'texture form' accounted for 2.6%, and 'object form' accounted for 0.0%. As for 'experimentalism,' among the make-up form – 'object form' accounted for 87.5% of the face, 'natural form' accounted for 12.5%, 'texture form' and 'abstract pattern form' accounted for 0.0%, respectively <Table 7>.

 Table 7. Cross-analysis of face.

				Form ana	lysis - face		1
	Cross analysis		Object	Texture	Nature	Abstract pattern	Total
		Frequency	0	7	1	9	17
		Expected frequency	1.9	0.7	13.9	0.5	17.0
	Decadentism	% of avant-garde characteristics	0.0%	41.2%	5.9%	52.9%	100.0%
		% of form analysis - face	0.0%	43.8%	0.3%	81.8%	4.5%
		% of total	0.0%	1.9%	0.3%	2.4%	4.5%
	Frequency	0	0	0	2	2	
		Expected frequency	0.2	0.1	1.6	0.1	2.0
	Ecleticism	% of avant-garde characteristics	0.0%	0.0%	0.0%	100.0%	100.0%
		% of form analysis - face	0.0%	0.0%	0.0%	18.2%	0.5%
Avant-garde		% of total	0.0%	0.0%	0.0%	0.5%	0.5%
characteristics		Frequency	35	9	306	0	350
		Expected fre- quency	39.0	14.9	285.9	10.2	350.0
	Nihilism	% of avant-garde characteristics	10.0%	2.6%	87.4%	0.0%	100.0%
		% of form analysis - face	83.3%	56.3%	99.4%	0.0%	92.8%
		% of total	9.3%	2.4%	81.2%	0.0%	92.8%
		Frequency	7	0	1	0	8
		Expected frequency	0.9	0.3	6.5	0.2	8.0
	Experimentalism	% of avant-garde characteristics	87.5%	0.0%	12.5%	0.0%	100.0%
		% of form analysis - face	16.7%	0.0%	0.3%	0.0%	2.1%
		% of total	1.9%	0.0%	0.3%	0.0%	2.1%
		Frequency	42	16	308	11	377
		Expected frequency	42.0	16.0	308.0	11.0	377.0
To	otal	% of avant-garde characteristics	11.1%	4.2%	81.7%	2.9%	100.0%
		% of form analysis - face	100.0%	100.0%	100.0%	100.0%	100.0%
		% of total	11.1%	4.2%	81.7%	2.9%	100.0%

3. Correlation Analysis

As a result of analyzing the correlation between the avant-garde characteristics and the items of the make-up form manifested in the Alexander McQueen show, it turned out that the avant-

garde characteristics had no significant correlation with the eyebrows and cheeks among the make-up forms, and the correlation between the eyebrows, lips, and the cheeks turned out to be not significant among the make-up forms of the eyebrows. Among the make-up forms, the correlation turned out to be not significant for the eyes among the same make-up forms, and as for the face among the make-up forms, the correlation between the lips and the cheeks turned out to be not significant among the make-up forms. The remaining properties turned out to have a significant correlation with each other <Table 8>.

 Table 8. Analysis of the correlation between the avant-garde characteristics and make-up forms.

Classification			Standard	Avant-garde	Make up form analysis			
		Median	deviation	characteristics	Eyebrows	Eyes	Lips	Cheeks
Avant-garde characteristics		2.93	0.449	1				
Form analysis	Eyebrows	3.51	1.333	.077	1			
	Eyes	2.93	1.363	204**	.083	1		
	Lips	2.68	1.218	135**	.005	069	1	
	Cheeks	2.98	0.915	088	084	.139**	.110*	1
	Face	2.76	0.680	232**	256 ^{**}	279**	020	052

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

4. Conclusion

This study has analyzed the characteristics of avant-garde and the forms of make-up at a fashion show. For the purposes of the study, photos were collected limited to the Alexander McQueen show, and the reliability of the photos was validated and analyzed with 3 experts. The analysis was introduced to examine and understand the frequency analysis, crossover, and correlation according to the characteristics of avant-garde and the forms of each make-up. The analytical results are as follows.

According to the Alexander McQueen show's analysis of the make-up forms according to the avant-garde characteristics, and among the avant-garde characteristics, 'decadentism' turned out to be the largest in terms of 'formless', and as for 'eclecticism,' 'formless' turned out to be the largest, and as for 'nihilism,' 'normal form' and as for 'experimentalism,' 'formless' turned out to be the largest, respectively.

As for the shape of the eyes, and as for 'decadentism,' 'abstract pattern form' turned out to be the largest, and as for 'eclecticism,' 'Abstract pattern,' and as for 'nihilism,' 'shadow extension form', and as for 'experimentalism,' 'formless' turned out to be the largest.

As for the shape of the lips, and as for 'decadentism,' 'deformed (line distortion) form' turned out to be the largest, and as for 'eclecticism,' 'normal form', and as for 'nihilism,' 'formless', and as for 'experimentalism,' 'normal form' and 'texture form' turned out to be the largest.

As for the shape of the cheeks, and as for 'decadentism,' 'formless' turned out to be the largest, and as for 'eclecticism,' 'formless', and as for 'nihilism,' 'slanted line', and as for 'experimentalism,' 'formless' turned out to be the largest.

As for the shape of the face, and as for 'decadentism,' 'abstract pattern form' turned out to be the largest, and as for 'eclecticism,' 'abstract pattern form', and as for 'nihilism,' 'natural

pattern form', and as for 'experimentalism,' 'object form' turned out to be the largest.

Since most of the preceding studies focused on deconstructionism the Alexander McQueen collection, this study focused four avant-garde characteristics and makeup forms in detail, and analyzed, turned out to be correlated among in eyes, lips, and face.

As it evident from the cross-analytical results, there is such a little diversity among the overall avant-garde characteristics. In each of the 5 forms of make-up, the characteristics of nihilism turned out to be remarkably large, followed by the characteristics of decadentism, while the characteristics of experimentalism and eclecticism were relatively low. It is evident that the avant-garde and beauty expressed by designer Alexander McQueen are based on the characteristics of nihilism and decadentism.

Since this study has collected and researched only the collections of designer Alexander McQueen while he was alive, it is not adequate to examine and understan the characteristics of avant-garde after Alexander McQueen's death. Hence, it is suggested that studies and progress in that respect are needed. Furthermore, in order to create public values of beauty and fashion, and further develop design, it would be necessary to study and proceed with various brands by analytical research in the form of creative make-up according to the characteristics of avant-garde.

5. References

5.1. Journal articles

- [1] Kang YD. A Design on Teaching and Learning Method for Creative Talent in the Fourth Industrial Revolution. *International Journal of Human & Disaster*, 5(1), 1-9 (2020). [Article]
- [2] Ro HK. A Study of Beauty Trend-based Make-up Color Expression in Fashion Collection. *Journal of the Korea Society of Beauty and Art*, 17(2), 7-19 (2016).
- [3] Kang Y. Design of Liberal Arts Curriculum Centered on Core Competencies. *International Journal of Human & Disaster*, 5(2), 49-57 (2020). [Article]
- [4] Seo KH. A Study on Intertextuality Expressed in Modern Fashion -Focus on 1999~2005 Paris Collections-. *Fashion & Textile Research Journal*, 7(4), 361-370 (2005).
- [5] Park S & Choi J. A Study on Military Makeup Design with Camouflage Characteristics during Crisis. *International Journal of Crisis & Safety*, 6(2), 19-27 (2021). [Article]
- [7] Kim SY. The Grotesque in the Work of Alexander McQueen. *Journal of the Korean Society Costume*, 58(8), 106-119 (2008).
- [8] Chung JS & Kin JH. A Study of Alexander McQueen's Fashion Performance. *The Journal of the Korean Society of Knit Design*, 11(3), 82-94 (2013).
- [9] Kim YK. A Study on Romantic Characteristics Seen through Alexander McQueen's Fashion Brand. *A Journal of Brand Design Association of Korea*, 10(4), 193-202 (2012).
- [10] Kim JY & Suh SH. Visual Tactility in Alexander McQueen's Design. *Journal of the Korean Society of Costume*, 65(8), 77-94 (2015).
- [11] An KS. A Study on the Characteristic of Romantic Avant-garde Expressed in Modern Fashion. *The Journal of Humanities and Social Science*, 17(5), 977-998 (2016).
- [12] Yang IB. L'identité Artistique De La Première Avant-garde Cinématographique. *Association Culturelle Franco-coreenne*, 26, 303-326 (2013).
- [13] Kim SY. Characteristics of Avant-garde in Anrealage Fashion Collections -Focusing on Collections from 2015 S/S to 2016 F/W-. *Journal Korea Society of Visual Design Forum*, 55, 49-62 (2017).
- [16] Eom SH & Kim MS. Study on The Characteristics of the Avant-garde's Style Expressed in Modern Fashion. *The Research Journal of the Costume Culture*, 8(2), 315-333 (2000).
- [17] Chang MS & Yang SH. A Study on the Neo-avantgarde Tendency Expressed in the Modern Makeup -With the Main Point of the Late 1990's Catwalk-. *The Research Journal of the Costume*

- Culture, 7(3), 72-92 (1999).
- [18] Chun HJ & Na HS. Historical Eclecticism in Fashion -A Focus on the 19th and 20th Centuries-. Journal of the Korean Society of Clothing and Textiles, 25(10), 1779-1790 (2001).
- [19] Yang HY & Yang SH. A Study on Eclectic Trend Expressed in the Late 20th Century's Fashion -With the Main Point of Andy Warhol's Look-. *Journal of the Korean Society of Clothing and Textiles*, 24(4), 538-548 (2000).
- [20] Jang HM & Jung YK. A Study of Cultural Identity's Types That are Shown by Regional Symbolic Sculpture -As a Enter of the Analysis of Adjectively Expressed Words based on the Plural and Eclecticism-. *Bulletin of Korean Society of Basic Design & Art*, 9(3), 255-265 (2008).
- [21] Jun YS & Kim JH & Kin YS. A Study On the Plural Eclecticism and the Aesthetic Characteristics in the Stage Costume -Focused on the World's Top 4 Musicals-. *Journal of the Korean Society of the Costume*, 63(6), 1-13 (2013).
- [23] Lee HW & Kim MJ. Analysis of Expressions on Nietzsche's Nihilism in Fashion Collection & Arts. Journal of the Korean Society of Costume, 65(4), 76-90 (2015).
- [24] Chae HS & Yoo YS. Research on British Fashion in the View of Avant-garde -Focusing on Theory of Renato Poggioli-. *Bulletin of Korean Society of Basic Design & Art*, 11(1), 399-410 (2010).
- [25] Koo IS. A Study on the Design Analysis of Avant-garde Fashion Since 1995. *Journal of Fashion Business*, 6(4), 62-82 (2002).
- [26] Baek S & Choi J. A Study on the Design of Art Mask based on Traditional Korean Patterns and Obang Color in Modern Society. *Public Value*, 6(2), 45-51 (2021). [Article]
- [27] Kim MH & Lee YN. Make-up Trends in 2008-2009 F/W Fashion Collections. *The Journal of the Korea Contents Association*, 8(12), 151-159 (2008).
- [28] Kang EJ. A Study on the Avant-garde Characteristics of Make-up in Fashion Illustrates -Centering on Fashion Illustrates of John Galliano Since 2003 S/S-. *Journal Korea Society of Visual Design Forum*, 18, 121-130 (2008).
- [29] Park JS. A Study on the Methods to Express Avant-garde Images in Fashion Show Make-up. *Asian Journal of Beauty and Cosmetology*, 11(1), 185-192 (2013).
- [32] Cha Y. Effects of the Integrative Play Therapeutic Counseling Program on the Depression of the Elderly. *Protection Convergence*, 5(2), 103-111 (2020). [Article]

5.2. Thesis degree

- [14] Kim WG. A Study on the Effect of Avant-garde Theory and Scientific Paradigm on the Contemporary Architectural Design. Hongik University, Doctoral Thesis (1991).
- [15] No JH. A Study on Establishment of True Definition of the Term Avant-garde. Seoul National University, Master's Thesis (1989).
- [30] Son YJ. Makeup Type Analysis of Fashion Collections and Aesthetic Characteristic in kitsch Culture. Sungshin Women's University, Master's Thesis (2017).
- [31] Park SE. Analysis of Deconstruction and Genderless Characteristics of Make up in the Haute Couture Collection. Yewon Arts University, Master's Thesis (2020).

5.3. Books

[22] Poggioli R. Theory of Avant-garde. The Belknap of Harvard University (1981).

5.4. Additional references

[6] https://terms.naver.com/ (2022).

6. Appendix

6.1. Authors contribution

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

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A Study on the Establishment of Objective Standards Value for Physiognomy and Cosmetic Plastic Surgery -For Your Eyes and Eyebrows-

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Abstract

Purpose: This study aims to reduce the failure rate due to excessive surgery (procedure) by consumers who want to satisfy their appearance through cosmetic plastic surgery. Most plastic surgery consumers want to know their face (especially their eyes and eyebrows) in advance to achieve results that look physiognomically good ahead of procedures or surgery. Until now, however, the characteristics of each part cannot be objectively converted into data. Therefore, we intend to develop a system so that the specific part of the face to be identified can be examined before surgery (procedure). The system allows you to immediately grasp the current physiognomic results and appearance status while automatically recording feature points in coordinates when you show your face on the screen of a mobile device. Again, the purpose of this study is to prevent wrong judgment and failure in performing surgery (procedure) through the development of such a system.

Method: First, the name of each part of the feature points constituting the eyes and eyebrows was designated as a point on the coordinate plane.

Second, the six types of eyes and eyebrows were first defined by equation. By substituting the input coordinates into this equation, a criterion for determining what shape the user's eyebrows fit was presented. In addition, it is possible to determine what shape the user's eyes are according to the coordinates of the eyes.

Third, by substituting the coordinates of the eyes and eyebrows, the length and position of the eyes were compared with the position of the eyebrows to determine the image state of the physiognomy and cosmetic plastic surgery, and to what extent it is allowed in surgery (procedure) was suggested.

Results: Since eyes and eyebrows are the most important parts of one's physiognomy (appearance), a method for setting standards that allow immediate judgment of each shape was suggested. The equation was defined according to the shape of the eyes and eyebrows, and when the coordinates were input, it was possible to determine which shape they were, so that good results could be derived.

Conclusion: In physiognomy, the color of the pupils and the degree of clarity of the eyes are important. Eyes can be said to be "windows to the mind," and they are important parts of judging one's personality and character because they convey thoughts. Eyebrows, along with the eyes, are in an important position to determine large parts of physiognomy and beauty. There are times when you have to decide on surgery for better physiognomy and appearance, but it takes time and effort to learn the correlation between your eyes and eyebrows professionally. Therefore, if you have a tool to analyze it when you do not have knowledge on physiognomy (appearance), you can expect much more efficient results. Based on this paper, it is believed that it will be possible to establish a system that presents the direction or limitations of physiognomy (appearance) and surgery (procedure) because the user's appearance image status can be immediately known by reflecting eyes and eyebrows on the screen of devices.

[Keywords] Objective Standards, Cosmetic Plastic Surgery, Face Recognition, Eyes, Eyebrows

1. Introduction

Everyone is interested in their beauty and physiognomy. Since customers' physiognomic needs can be consulted on the Internet, there are countless physiognomic information service sites that currently exist offline and online[1]. In addition, an automatic face avatar generation system capable of automatically generating a face avatar most suitable for a user's face on the Internet[2]. This system uses the screen of a mobile device to acquire face images in real time, detect and recognize acquired face images, and classify face features in detail to create avatars of images resembling the user's face [3][4].

However, there are many services that build databases and utilize multimedia devices, but they only compare rough facial shapes, and there is no facial analysis technology based on geometric concepts and numerical objectivity yet. Therefore, a tool that can be objectified as a numerical indicator is needed, which becomes possible as the system of this study. Using the existing avatar generation technology, feature points may be displayed as coordinates on the face input on the screen. At this time, it is important to accurately detect facial feature points such as eyes, nose, and mouth for facial recognition, physiognomy, beauty, and facial expression analysis[5]. Methods for face recognition include statistical-based methods[6], neural network-based methods[7], connection structure methods[8], hidden Markov models[9], etc.

The goal of this paper is to provide information on the user's appearance status and physiognomy by setting feature points as coordinates and creating and calculating a mathematical formula. The coordinates of the individual face are characterized by the ability to protect information.

No one says that physiognomy is entirely unscientific. Beauty comes from a good impression, and a good impression is based on a good physiognomy[10]. Therefore, physiological analysis is an essential process for makeup, plastic surgery, and tattoo procedures. The practitioners have a professional habit of analyzing the shape of the faces to satisfy customers' needs. At this time, the practitioners who have learned physiognomy will be able to provide better results to their customers, but those who have not will need related tools.

Appearance is attracting attention as one of the most important capital in modern society [11]. Appearance is a comprehensive concept that includes face and body, and appearance management includes taking good care of oneself and respecting others [12][13]. In particular, people today can play an important role in determining their appearance by cultivating their appearance, showing off their various personalities [14], and expressing visual beauty through appearance change [15]. Therefore, in modern society, the concept of appearance management is changing in a broader sense and being replaced by beauty. Therefore, in order to create an individual image of individuality [16][17], with the help of cosmetic plastic surgery, appearance is managed according to social standards and one's own standards [18].

As for the development tool of this study, when the face appears on the screen facing a mobile device, the positions of the eyes, forehead, and ears that build the face can be automatically recorded in dozens of coordinates. The length or area between coordinates is calculated by a formula and automatically analyzed according to the conditions of the equation so that the customer's personality or past can be identified and the future can be predicted based on physiognomy. This could help with procedures to create a better image of appearance.

Recently, the beauty industry is actively developing physiognomic linkage, and it is becoming an indispensable part of the standards and principles of plastic surgery. This suggests that the physiognomic point of view is still showing its utility value from an academic and practical application point of view, and that interest in the beauty industry, which combines physiognomy, is also high.

Among the many parts that make up the face, this paper deals with eyes and eyebrows. The

eyes are the first place people encounter when talking to each other. It is said that the eyes are windows to the mind. In physiognomy, eyes are also an important criterion for determining one's character and fate. Eyebrows are also called the roof of the face because they are at the highest point in the face. Eyebrows are an important part of functional eye protection. Eyebrows transmit a clear image and can make changes easier than in other areas.

As people get older, they try to slow down the aging of their faces to manage their appearance[19][20]. In particular, they are interested in resolving the natural phenomenon of drooping eyes and philtrum. As a method, surgery to reduce philtrum and widen jeontaekgung (the "property area" between the eyebrows) are used to pull the drooping philtrum and widen the area under the stuffy eyebrows. In physiognomy, it is considered to have the effect of securing financial resources as a result of this surgery (procedure). In particular, middle-aged women are considered an important customer base in the beauty industry due to hormonal changes and social status changes, and they are highly interested in eye and eyebrow surgery [21][22][23].

In Chapter 3, the names and coordinates of the characteristic points of the eyes and eyebrows are displayed, and the characteristics are classified by mathematical formulas. Criteria for determining the shape of eyebrows were prepared according to the calculation result in which coordinates were input to the equation. The figures of the criteria referred to the opinions of experts. The experts consisted of four professors in beauty-related departments, and the numbers converged into common figures.

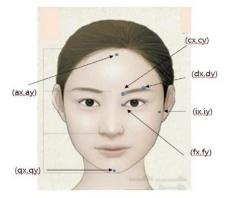
It is important to increase the satisfaction of cosmetic plastic surgery for customers. It is also important to understand how consumers of beauty-enhancing services receive the services they want. Service quality can increase customer preference and emotional bond and provide satisfaction, increasing utilization[24][25]. Korea's beauty and personal care market is growing. In order to provide high-quality beauty-enhancing services, efforts to expand and specialize from the viewpoint of emphasizing the differentiation of the beauty service industry are required[26][27][28]. Currently, the cosmetic plastic surgery industry is playing a public role in realizing changes in various consumer markets[29]. The facial image analysis technology pursued in this paper will be an important part of the cosmetic plastic surgery industry.

2. Name, Coordinate, and Term Definition of Each Point of the Eye and Eyebrow

2.1. Name and location of each point

When there is a rectangular picture of a human face, the lower center (0.0) is set as the point above the coordinate plane, and the upper center of the face is set as (0,100). Name each feature point characterizing the eyes and eyebrows and set a coordinate name.

Figure 1. Coordinate name.



Note: https://blog.naver.com.

When the face is reflected on the screen, the coordinate values of each feature point around the eyes and eyebrows are automatically input immediately. Considering that the face is symmetrical left and right, it will not interfere with the flow much without recording the half, so only the right side of each point was designated.

The coordinates of each point are input to the prepared equation, and features of physiognomy and beauty may be automatically output depending on whether the output value meets each criterion.

The name and coordinate value of each coordinate of <Figure 1> are shown in <Table 1>.

Table 1. Coordinate name and value.

Point	Location	x-coordinate	y-coordinate	
А	Top point 0		100.0	
С	Eyebrow front	6.8	69.5	
D	Eyebrow top	23.5	72.7	
F	Eye front	8.2	55.4	
ı	The end of cheekbones	36.1	46.0	
Q	Bottom point	0	0	

If the conditions meet by substituting the coordinate values of these feature points into the input formula, the results of physiognomy or cosmetics are output.

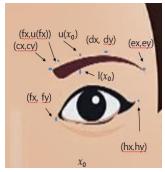
According to <Table 1>, the ratio of face size in <Figure 1> is 1:1.38. It is rather long for a Korean face, but rather short for Westerners.

2.2. Definition of terms

2.2.1. Eyebrow line function

We define the six types of eyes and eyebrows by equation [30]. Eyebrows are made of strands. If you look closely at the eyebrows, they cannot be plane because they are a collection of lines. However, from a broader perspective, it can be viewed as a face and has a boundary line by facial recognition technology. The leftmost point is called C (cx, cy) in front of the eyebrow front, and the rightmost point is called the eyebrow tail E (ex, ey). The upper line of the eyebrows can be defined as a function. u(x): [cx, ex] \rightarrow [0, 100], where $u(x_0)$ is the upper point of the eyebrow at x=x_0. The lower line of the eyebrows can be defined by the following function: u(x): [cx, ex] $u(x_0)$: [cx, ex] $u(x_0)$: It is the upper point of the eyebrows at x_0, and $u(x_0)$: the lower point of the eyebrows at x_0.

Figure 2. Eyebrow line function.



Note: Life information (2019).

Meanwhile, the front point of the eye is referred to as (fx,fy), and the endpoint of the eye is referred to as (hx,hy). Now, if the eyebrow top is the top point of the eyebrow, the eyebrow top can be indicated as follows.

Eyebrow top = (dx, dy), where $dy = max(u(x):cx \le x \le ex)$.

2.2.2. Average rate of change

Eyebrows are said to be the roof of the face, and the highest point among them is the eyebrow top. The most stable form is the position of the eyebrow top at 2/3 of the total eyebrow length. : In physiognomy, the color of the pupils and the degree of clarity of the eyes are important[31]. Eyebrows are an important point from the perspective of physiognomy and beauty, and their shape can be fixed relatively easily compared to other parts. Depending on the angle of the eyebrow, it can be divided into an upward type, a horizontal type, an arch type, and a sagging type, and a clear image can be determined according to each shape. Therefore, if you go further from vague term definitions and define them as accurate figures, you may be able to set an objective criterion when your face is reflected on the screen.

A long face will not look long if the straight eyebrows are maintained, and the inverted triangular eyebrows will look sharper if they are straight eyebrows. Therefore, it is important to set the angle of the progress of the eyebrows, so it is necessary to determine the starting point of the eyebrows.

It is not accurate to specify the slope as the slope of the straight line between the two points (cx, cy) and the eyebrow top, given that the leftmost point is (cx, cy) and the last point of the ascending process is the eyebrow top. This is because the location of the left part of the eyebrow is unclear and is often located below the angle. Therefore, in order to measure the angle of the eyebrows, it would be more accurate to start at the point (fx, u(fx)), the upper part in front of your eyes where the curve begins in earnest. Therefore, the average rate of change between the starting points (fx, u(fx)) and the peak points (dx, dy) of the eyebrow angle is as follows.

Average rate of change of eyebrows[32] =
$$\frac{dy - u(fx)}{dx - fx}$$

The length of the eyes = hx-fx

The center of the eyes =
$$gx = \frac{hx + fx}{2}$$

The length of the middle of the forehead = 2cx

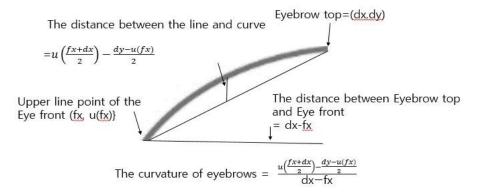
2.2.3. The curvature of eyebrows

Curved eyebrows generally have a soft image. The degree to which the curve bends is called curvature. If you think of a curve as part of a circle, the distance between the point on the curve and the center of the circle is called the curvature value. If the curve connecting the starting points (fx, u(fx)) of the eyebrow curve and the eyebrow top (dx, dy) draws a large arch, the curvature will be large.

The curvature of the eyebrows is defined as follows. The ratio of the distance between the linear point (dy-u(fx)) at (fx+dx)/2 on the x-axis of the two points and the curved point u(dx)-1(dx) to the height of the eyebrow top is referred to as eyebrow curvature.

Definition: Curvature of eyebrows =
$$\frac{u\left(\frac{fx+dx}{2}\right) - \frac{dy-u(fx)}{2}}{dx-fx}$$

Figure 3. Curvature of eyebrows.



If the eyebrows are straight, the eyebrow curvature will be zero, and the maximum value of the eyebrow curvature does not exceed 1.

3. Shape of Eyes and Eyebrows

3.1. Shape of eyebrows

3.1.1. Straight eyebrows

Straight eyebrows continue horizontally with little slope and refer to when the position of the eyebrow top exists after the middle of the eyebrows and the average rate of change is less than 0.1, and the length in front of the eyebrows should be similar to the length of the eyebrow top. In other words, the ratio of dividing the length of the eyebrow top by the length in front of the eyebrow should be 2/3 or more.

A)
$$dx \ge \frac{fx + ex}{2}$$
,

B)
$$\frac{dy - u(fx)}{dx - fx} \le 0.1$$

C)
$$\frac{u(dx)-l(dx)}{u(fx)-l(fx)} \ge \frac{2}{3} ,$$

Eyebrows are straight eyebrows when these three conditions are satisfied at the same time. A method of determining whether the conditions of straight eyebrows are satisfied by looking at the picture <Figure 4> is as follows.

Figure 4. Conditions of straight eyebrows.



Note: www.bing.com.

Table 2. Coordinates of <Figure 3>.

Feature points	Coordinates	Description	
(fx, u(fx))	(11,70)	The upper point at the eyebrow front	
(fx, l(fx))	(11, 63)	The lower point at the eyebrow front	
(dx, dy)	(29, 71)	Eyebrow top	
(dx, l(dx)	(23, 65)	The lower point of the eyebrow top	
(ex, ey)	(34, 60)	The endpoint of the eyebrows	

Substituting the coordinates of <Table 2> into the formula of the straight eyebrow, it is calculated as follows.

- A) 22 > (11+22)/2 = 16.5,
- B) 71-70 /29-11 = 1/18 =0.055 < 0.1,
- C) 71-65/70-63 = 6/7 > 2/3.

The coordinates in Figure 3 satisfy all three equations and can be called straight eyebrows.

On the other hand, there may be a straight eyebrow shape while the position of the eyebrow top is in front. In such a case, it will have to be measured with other exceptions.

3.1.2. Arch-shaped eyebrows

The curvature tends to increase as the position of the eyebrow top approaches the middle of the eyebrows in a curved and raised form.

The eyebrow curvature is defined as the ratio of the distance between the point in front of the eyebrow and the height of the eyebrow top by measuring the distance between the point on the straight line connecting the two points and the point on the eyebrow top. The larger the eyebrow curvature, the more curved the curve, and the smaller the eyebrow curvature, the straighter it will approach. If the eyebrow curvature is 0.05 or more, the eyebrows form an arch.

When the average change rate is 0.1 or more and the eyebrow curvature is 0.05 or more, it is defined as an arched eyebrow.

A)
$$\frac{dy - u(fx)}{dx - fx} \ge 0.1,$$

B)
$$\frac{u\left(\frac{fx+dx}{2}\right) - \frac{dy-u(fx)}{2}}{dx-fx} \ge 0.05$$

When both of the above conditions are satisfied, it can be called arch-shaped eyebrows.

3.1.3. Semi-arched eyebrows

The average rate of change of eyebrows is equal to that of straight eyebrows and thinner.

The criterion for the ratio in which the thickness of the eyebrow top should be thinner than the thickness of the front part of the eyebrow was set to 2/3. Therefore, the thickness of the eyebrow top should be 2/3 or less thin than the ratio of the thickness in front of the eyebrow and the average rate of change should be 0.1 or less.

A)
$$\frac{u(dx)-l(dx)}{u(fx)-l(fx)} \le \frac{2}{3} ,$$

$$B) \frac{dy - u(fx)}{dx - fx} \le 0.1,$$

When both of the above conditions are satisfied, it can be said to be semi-arched eyebrows.

3.1.4. Raised Eyebrows

These are suitable for a short face, and are suitable for a face with a height ratio of 1.3 or less or an angled face compared to the width of the face. If the average rate of change of eyebrows is low, the short face looks shorter and the angled face looks more angular. Therefore, it is considered that the raised eyebrows will be effective if the average rate of change is 0.3 or more regardless of the curvature. To meet the effect of rising, the position of the eyebrow top should be located after the middle of the eyebrow.

A)
$$dx \ge cx + \frac{cx + ex}{2}$$
,

B)
$$\frac{dy - u(fx)}{dx - fx} \ge 0.3$$

When both of the above conditions are satisfied, it can be said to be a raised eyebrow.

3.1.5. Standard eyebrows

The average rate of change of straight eyebrows should be 0.1 or less and the average rate of change of raised eyebrows should be 0.3 or more, and the eyebrows with the median value should be said to be standard. If the following conditions are satisfied, it can be said to be standard eyebrows.

$$0.1 < \frac{dy - u(fx)}{dx - fx} < 0.3$$

3.1.6. Angled eyebrows

This is a condition in which the average rate of change is 0.1 or more and the eyebrow curvature is less than 0.05, and because it does not draw an arch, it goes up straight and bends hard starting from the eyebrow top.

$$A) \frac{dy - u(fx)}{dx - fx} \ge 0.1$$

$$B) \frac{u\left(\frac{fx+dx}{2}\right) - \frac{dy - u(fx)}{2}}{dy - u(fx)} < 0.05$$

3.2. Relationship between eyes and eyebrows

3.2.1. Jeontaekgung ("property area")

The area between the eyes and eyebrows is called jeontaekgung. This area represents luck with real estate, that is, wealth. It is believed that if this area is wide, it brings a fortune. For Westerners, the eyebrow bones are developed, so the eyes look retracted, and the eyebrows come out, so the distance between the eyes and the eyebrows looks short. In physiognomy, the narrow jeontaekgung of Westerners can be considered bad in terms of Eastern physiognomy.

Recently, cosmetic surgery to expand jeontaekgung by pulling the forehead is common, and the objective criteria are to be set.

The jeontaekgung ratio is the length above the eyes and below the eyebrows divided by the length of the eyes.

Definition: Jeontaekgung ratio = $\frac{l(rx) - ry}{hx - fx}$

When jeontaekgung ratio = $\frac{l(rx) - ry}{hx - fx}$ < 0.1, it is narrow.

When jeontaekgung ratio = $\frac{l(rx) - ry}{hx - fx}$ > 0.5, it is wide.

<Figure 5> is a physiognomy with luck of wealth with more than 60% of Jeontaekgung ratio.

Figure 5. Rep. Sim Sangjung's profile.



Figure 6. Jeontaekgung, reducing forehead, and raised eyebrow.



Note: https://blog.naver.com.

In the picture on the left of <Figure 6>, Jeontaekgung is about 0.05, so Jeontaekgung is narrow, but in the picture on the right, Jeontaekgung is larger than 0.1, so Jeontaekgung is not narrow.

3.2.2. The middle of the eyebrows

The middle of the eyebrows refers to the space between eyebrows and eyebrows. It is an important part of the physiognomy, and if it is wide, the mind is relaxed, and if it is narrow, it is delicate and impatient. The length of the middle of the eyebrows is said to be normal if it is equal to the length of the eyes, and the length is 2cx, considering that the face is symmetrical. In other words, if the length of the middle of the eyebrows is less than 2cx, it is said that it is narrow, and if the length of it is longer than the length of the eye, it has the impression that the eyebrows are short.

It is considered narrow when the following conditions are met.

Narrow:
$$2cx < \frac{2}{3}(ex - fx)$$

Wide: cx < u(fx)

The criteria for figures in this paper objectively determined the facts mentioned on the Internet. In the future, these standards will be modified from a more universal perspective.

4. Conclusion

The criteria for determining the state of physiognomy or cosmetic plastic surgery have not yet had a numerical concept, and the custom of experts and the general public judging by eye guess has continued[33]. The consumer expresses the purpose of the cosmetic plastic surgery he or she wants in words, and the operator listens to it and subjectively judges and performs on the patient's condition through examination if necessary[34][35]. Subjective explanations are also important for patients or customers, but it is natural that presenting objective data will increase reliability even more. Among the characteristics of cosmetic plastic surgery medical services, there is a reality that it is difficult to standardize them because it is not known what medical services each medical customer receives. Since it is not known what cosmetic plastic surgery medical services each medical customer receives, data standardization is a necessary process.

The number of foreigners visiting Korea, so-called the powerhouse of cosmetic plastic surgery and medical technology, is expected to increase in the future, and the Korean Wave is also expected to have a significant impact on the Korean cosmetic plastic surgery market[36]. It is believed that numerical standardization of cosmetic plastic surgery is essential in order to utilize the value of an IT powerhouse and demonstrate cutting-edge technology in this field[37]. For this goal, cooperation with the field of animation development should continue[38].

In this paper, when the eyes and eyebrows are exposed to the screen using modernized devices, the positions of feature points are automatically input and the results of physiognomy and cosmetic surgery are derived. Not only the eyes and eyebrows, but also the areas that make up numerous faces such as the forehead and nose can be digitized, so it is expected that the future task will be to create mathematics and figures of the features that make up all faces.

5. References

5.1. Journal articles

- [1] Woo H & Kim E. Mediating Effect of the Involvement with Beauty Content in the Relationship between the Characteristics of Youtube Beauty Content That Uses AI and the Intention to Purchase Cosmetics: Comparison between Men and Women from 20 to 40 Years Old. *Robotics & AI Ethics*, 6(2), 30-43 (2021). [Article]
- [2] Lee EJ. Facial Phrennology Analysis and Automatic Face Drawing System based on Internet using Facial Feature Information. *Journal of Korea Multimedia Society*, 9(8), 982-999 (2006).
- [3] Kim Jh & Do KH & Lee EJ. Automatic Face Identification System using Adaptive Face Detaction and Facial Feature Vector Classification. *IEEE Traction on Circuits/Systems, Computers and Communications*, 20(2), 1252-1255 (2002).
- [4] R Brunelli & T Poggio. Face Recognition: Feature Versus Templates. *IEEE Traction on Patter Analysis and Machine Intelligence*, 15(10), 1042-1052 (1993).
- [5] Han YH. Automatic Facial Feature Detaction for Face Recognition System. *The Journal of Korean Institution Technology*, 5(2), 120-127 (2007).

- [6] Turk M & Pentland A. Face Recognition using Eigenfaces. *IEEE Trans In Computer Vision and Pattern Recognition*, 2983, 586-591 (1991).
- [7] Lu. Face Recognition using Kernel Discriminant Analysis Algorithms. *IEEE Trans, on Neural Networks*, 14(1), 117-126 (2003).
- [8] Kotropoulos CL. Frontal Face Authentication using Morphological Elastic Graph Matching. *IEEE Trance on Image Processing*, 9(4), 555-560 (2000).
- [9] Nefian AV. Maximum Likelihood Training of the Embedded HMM for Face Detection and Recognition. *IEEE Trance on Image Processing*, 6983798, 33-36 (2000).
- [10] Lee H & Lee J & Kim H. A Qualitative Study on Changes in Women's Perception of Beauty Care After Covid-19. *Protection Convergence*, 6(3), 11-20 (2021). [Article]
- [11] Kim Y & Choi E. The Effect of Body Image Recognition of Manipulative Therapy based on Kinesiology of Customers on the Appearance Management Behaviors. *Kinesiology*, 6(4), 56-65 (2021). [Article]
- [12] Won JW & Han GH & Oh MS. A Study on Strategic Direction of Beauty Care Service using Smart Mirror. *Journal of Communication Design*, 63, 60-74 (2018).
- [13] Park ME & Lee KJ & Han CJ. A Study on the Correlations between Socio-cultural Attitude to Psychological Effort. *Journal of the Korean Data and Information Science Society*, 31(4), 663-681 (2020).
- [14] Kim N & Choi J & Baek S. A Study on the Nail Art Design of Andy Warhol's Works to Protect Human Nail Disaster. *International Journal of Human & Disaster*, 6(1), 36-44 (2021). [Article]
- [15] Han J & Kim J & Cho M. Analysis of the Public Value of Celebrity Hair Color Trend in Milbon Collection. *Public Value*, 6(3), 32-40 (2021). [Article]
- [16] Lee HJ & Lee JB & Kim HW. A Qualitative Study on Changes in Women's Perception of Beauty Care after Covid-19. *Elsevier Public Health Emergency Collection*, 6(3), 11-20 (2021).
- [17] Kim I & Lee J & We H & Kim E. Effect of the Women's Beauty Care Behavior on the Psychological Happiness after Covid-19. *International Journal of Human & Disaster*, 6(3), 75-84 (2021). [Article]
- [18] Kim SJ & Lee JB & Na EG. Q-methodological Approach to the Perception of Meridian Massage for Health Management. *International Journal of Crisis & Safety*, 5(2), 47-54 (2020). [Article]
- [19] Son S & Kim E & Park H. The Mediating Effect of the Perceived Value in the Relationship between the Self-paced Motivation of Purchase of Beauty Device and the Intent to Use Continuously for Middle-aged Women Bodily. *Kinesiology*, 6(3), 1-11 (2021). [Article]
- [20] Cha Y. Effects of the Integrative Play Therapeutic Counseling Program on the Depression for the Elderly. *Protection Convergence*, 5(2), 103-111 (2020). [Article]
- [21] Yoon H & Kim E. Creation of Public Service Value based on the Mediating Effect of Customized Cosmetics Salesperson Customer Empathy in the Relation between Middle-aged Women's Cosmetic Consumption Needs and Customized Cosmetic Purchase Intentions. *Public Value*, 6(2), 28-44 (2021). [Article]
- [22] Lee J & Liang D. Suggestions for using AI in Preparation for a Super-aging Society. *Robotics & AI Ethics*, 5(2), 57-64 (2020). [Article]
- [23] Maslow AH. A Theory of Human Motivation. *Psychological Review*, 50, 370-396 (1943).
- [24] Park SJ. A Study on the Effects of Service Quality on Customer Satisfaction and Shop Loyalty in the Beauty Industry. *Asian Journal of Beauty and Cosmetology*, 8(4), 353-368 (2010).
- [25] Jeon H & Park J. The Effect of the Beauty Service Quality for Humans on the Customer Satisfaction and the Customer Loyalty. *International Journal of Human & Disaster*, 6(3) 22-34 (2020). [Article]
- [26] Park JS. Changes in Beauty Service Industry in Era of the Fourth Industrial Revolution and Aging: Focused on Expandability of the Smart Beauty Care Market. *The Journal of Humanities and Social Science*, 11(1), 205-220 (2020).
- [27] Lee HJ & Heo JR. The Effect of Beauty Service Quality on Customer Satisfaction and Re-visit. *Journal of Korea Society of Ingrielogy*, 1(2), 27-33 (2019).
- [28] We H & Lee J & Kim E. Exploring the Experience of Job Convergence Change in the Beauty and Health Industry using Grounded Theory. *Protection Convergence*, 5(2) 84-93 (2020). [Article]

- [29] Lee YS. Transmission Pattern of Folktales of Physiognomy-mediated Marriage. *Folklore Research Institute*, 38(2), 115-147 (2019).
- [31] Park JS. A Study on the Correlation between Physiognomic Features of a Face and Character Makeup. *Journal of Korean Beauty Society*, 24(1), 155-164 (2018).
- [33] Lee DH & Kim KL &Lim YH. Recognition on Cosmetic Surgery in College Women Students. *The International Society of Health and Beauty*, 2(2), 43-56 (2008).
- [34] Jang M & Jang JD. A Study on Awareness and State of Cosmetic Surgery. *Korean Society of Cosmetics and Cosmetology*, 4(2), 179-195 (2014).
- [35] Jeong SJ. A Study on the Global Brand Strategy of the Low-price Cosmetic Industry through K-Beauty. *The Korean Society of Design Culture*, 23(3), 679-693 (2017).
- [36] Lee YS & Yang EJ. The Relationship between Quality of Beauty Service and Satisfaction Perceived Customer using Social Network Service. *Journal of the Korean Society of Cosmetology*, 25(4), 900-908 (2019).
- [37] Hong SH & Kim JH. A Study on Animation Character Face Design System based on Physiognomic Judgment of Character Study in the Cosmic Dual Forces and the Five Elements Thoughts. *European Journal of Integrative Medicine*, 9(7), 872 -893 (2006).
- [38] Hong SH & Lee YS & Lee MY. A Nonvocal Communication System for Emotional Expression of Characters in 2D Games. *Journal of Digital Contents Society*, 12(3), 397-407 (2011).

5.2. Thesis degree

[30] Kim Jk & Park JS. Eyebrow Make-up Type using an Average rate Sensitivity Image for the Difference of Perceived Sexiness. Joongbu University, Master's Thesis (2015).

5.3. Books

[32] Min JS. College Mathematics. Heemang (2007).

6. Appendix

6.1. Authors contribution

	Initial name	Contribution
	JP	-Set of concepts ☑
		-Design ☑
Lead		-Getting results ✓
Author		-Analysis ☑
		-Make a significant contribution to collection $\ lacktriangledown$
		-Final approval of the paper $\ oldsymbol{arnothing}$
	3 JM	-Corresponding ☑
		-Play a decisive role in modification $\ oxdot$
Corresponding		-Significant contributions to concepts, designs,
Author*		practices, analysis and interpretation of data $\ lackimsquare$
		-Participants in Drafting and Revising Papers 🔽
		-Someone who can explain all aspects of the paper $\ lackip$

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Research on Creative Works using Hair Pieces and Public Value

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Abstract

Purpose: Aiming for beauty is a privilege given to humans and is accelerating with the changes of the times. Human being's awareness of beauty began when they came in contact with and experienced everything visually, and the standard of beauty began in nature. This researcher produced a hair creation work by expressing the beauty of aroma color using a hairpiece.

Method: In this study, the motif of aromatic plants with natural beauty and healing functions. The work was composed by using the characteristic color of each plant as the representative color. Aroma plants suitable for characteristic colors were selected, and in order to maximize the beauty of the colors and motifs, the hairpiece was dyed and then the artwork was created in consideration of formativeness. The study on the production of the work took about 50 days between September and October of 2021.

Results: The researchers conducted research on color and aromatic plants, and the aromatic plants selected as motifs for the final work were pink saffron, red rose, yellow citrus lemon, green eucalyptus, and purple lavender. Therefore, a total of 5 works reminiscent of these plants and colors were derived after considering formativeness using hairpieces. The order of producing each piece is dyeing, drying, shaping the shape, making a hat, and connecting motifs and hats.

Conclusion: It was an opportunity to create various works through color dyeing using a hair piece. However, since each material was expressed only in a stable form with a similar hair piece production method, there was a lack of expressing the shape of flowers or plants using color. Since there was a dissatisfaction with a more creative and free expression, it is thought that a research on a new original technique is needed through functional perfection and proficiency with craftsmanship in subsequent works.

[Keywords] Creative, Work, Hair-Piece, Public Value, Beauty

1. Introduction

Humans have a culture of decorating the human body by themselves for a long time[1]. Among the actions pursued by humans, beauty is an expression of personal value creation and an action that has public value[2]. Humans play an important role in expressing visual beauty through appearance changes and determining their appearance[3]. The desire for beauty accelerates with the changes of the times, and public values are being created in various ways in beauty such as economy, politics, culture, and art[4].

with the 4th industrial revolution[5] Trends such as art, fashion, and beauty are changing. With lifestyle and trend changes, hair designers can suggest ways to create creative designs and contribute to public values[6].

The term hair creative refers to creative hair work. Hair creative style is a hair style that expresses artistry by reflecting the trendy designs and colors of the time, and requires skills such as cutting, dyeing, drying, and styling. In particular, hair creative style is the determinant of overall application and creativity of hair design[7]. Hairpieces are partial wigs that have been used for a long time for specific purposes such as makeup, decoration, stage, dating, ceremonies, and judges. Generally, it refers to fake hair worn on the head for the purpose of makeup or decoration[8].

Hair creative work, which has been established as a new art field in modern society, has developed into another field of beauty that values technology and function, expanding the range of artistic expression that could not be met in practical technology, enabling new design, and its importance continues to increase. In particular, the work using hairpieces in hair creative is a field that requires more originality, artistry, and creativity in a different dimension from practical skills. In performance-oriented works such as hair shows, art exhibitions, and technical seminars using hairpieces, it is evaluated as an art work that contains the concept of an artist through the advancement of technology as well as academic achievements in beauty art [9].

As the environmental problem emerged as a serious social problem, interest in materials derived from nature with an image of nature or products based on it has increased [10]. Aromatherapy is a natural healing therapy in which the fragrance molecules of essential oils extracted from aromatic herbs that are beneficial to health act on the brain through the skin or respiratory system to affect the mind and emotions [11]. This is a compound word with the concept of therapy, Aroma, which means Spice in Greek [12]. It is a complementary and alternative therapy that maintains and promotes mental and physical balance and homeostasis with pure active ingredients of plants [13]. The energy of color and essential oil resonates with the human mind, so it is effective in balancing negative energy and stress and relieving negative emotions that can be felt in daily life [14].

The previous research on hair creative is as follows. In the study of Eun-Hee Oh, Ki-Weon Park (2019), the creative design of hair that formed the flower of Mugunghwa was studied and the work was produced[15]. In the study on creative style, creative hair works were produced according to the styles of Ecology, Feminine, Avant Garde, Punky, Cyber, etc.[16]. In the study of 'A Study of Hair art by motifs Creative and Hair by Night', hair art works were produced with the motifs of Creative Style and Hair by Night Style, which are the events of the beauty skill competition, which are receiving a lot of attention due to the growth of professional hairdressers[17]. In another study, after selecting the first prize-winning work in the technical section of the Hair World Competition and analyzing the characteristics of the work, creative and hair-by-night works in the shape of a phoenix were created[18]. Eom Seong-lye & Kim Sung-nam studied the fabrication of hairpins with the image of flowers by utiliz-ing hairpiece to make hair ornaments reminiscent of various colors and beautiful flowers[8].

Ji-hye Yu, Yun-mi Lee, Jae-jun Gang, and Gi-hyung Kwon conducted research on the transition and expression methods of creative and hair-by-night[19]. Kwan Dae-Soon and Lim In-sook used hairpieces to dye, shape, and use various methods to create artistic works that added formativeness[20].

In addition, as a result of examining previous studies on the production of creative hair works using hair pieces, the design development of hair accessories using the organic line of Art Nouveau as a motif[21], research on formative hair art that expresses images of the four seasons[22], research on formative hair art that expresses images of the four seasons[23], development of hat hair art with flower motifs[24], development of hair ornaments design using dandelion images[25], a study on short hair upstyle using a traditional Bomun hairpiece[26], and a study on Collage expression modeling of hairpieces[27].

The most important factor when composing a hair creative work is to formatively express various colors and creative design elements. Therefore, this study gave natural formativeness to the hair piece, got color and inspiration from the natural motifs of herb plants, and expanded the range of technical techniques than existing hair art works to increase the value as an art work, and create a new hair design.

2. Research Method

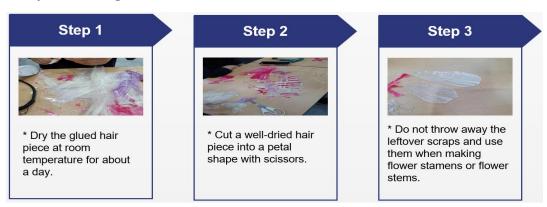
This researcher produced creative works using hair pieces for the beauty fashion show of the Department of Beauty and Health at Jeonju Vision College held every year. This study was conducted from September to October. The color, which is the motif of the work's subject, contains almost all elements that coexist with humans, and the rich colors and the beauty of various aromatic plants are combined as the motif of hair art. The researcher searched for an application method to express the characteristics of various colors in hair art works, and expanded the freedom of expression style by reconstructing and transforming the method plastically using the unique characteristics of hair pieces and hair. It is produced by adding various creative designs to colorful colors, curves, and realistic expressions. Therefore, 5 pieces of creative hair piece work were produced with the motif of plants symbolizing rich colors and aromatic plants. In this study, a hair dye exclusively for hair was used during color work to harmonize the delicateness of the hair and the natural color. For hair expression, only hair spray was used to create works based on the basic properties of hair ingredients. The three-dimensional expression of the work adds a sense of realism and rhythm to the work.

3. Creation of Work

3.1. Hair piece dye



3.2. Hair piece cutting



3.3. Create a hair piece shape

Step 1



*Use a setting machine to shape the cut hair piece into various shapes such as c-shape and s-shape.

Step 2



* At this time, the heat of the setting machine should be weakened.

Step 3



*This is because the hair piece may melt if used at high heat.

Step 4



* Make petals and collect the leftovers *Use a glue gun and setting machine to shape the flower wick.

Step 5



* You can make a wick by putting cold water next to your hand and then taking it out to make a wick without hurting your hand.

Step 6



* In order to make the petals beautiful, the flower needs to be supported by the core.

3.4. Create a floral motif

Step 1



Step 2



Step 3



Using a glue gun, attach the petals one by one to the made wick to make a flower cluster.

3.5. Hat making

Step 1



*Paint the empty cup noodle bowl with black paint and allow it to dry completely.

Step 2



*After cutting the black fabric woodlock into squares, wrap the black nonwoven fabric and fix it on the bowl.

Step 3



*Hold the frame in the shape of a bachelor's cap.

3.6. Connect motifs and hats



4. Research Results

4.1. Pink saffron

Efficacy Effect: Saffron is an iris and perennial plant that grows to about 15 cm in height. The flowers are funnel-shaped and bloom one by one at the tip of the flower stalk from April to May. The flowers have various colors such as white, purple, yellow, and light purple, and are planted as a horticultural species. The flower language is introduced as 'youth without regrets, joy, and past happiness'. It is used as a spice made by drying flower stigmas in Toronto, Canada [28].

Purple pink expresses femininity with the most delicate color. Curves were emphasized to bring out femininity, gradation dyes were used to express softness, and cubic was used to express some splendor, and sparkles were given. As shown in the following <Figure 1>.

Figure 1. Pink saffron.



4.2. Red rosa

Efficacy Effect: Rose oil (Rose Otto, Rose Athar, Rose Atar or Rose Essence) is an essential oil extracted from the petals of various types of roses. Rose Otto is extracted through steam distillation, Rose Absolute is obtained through solvent extraction, and Absolute is more commonly used in perfumery. Production technology originated in Persia. Despite high prices and the advent of organic synthesis, rose oil is still the most widely used essential oil in perfumery [29].

Rosa expressed a beautiful heart. To express the inside of a beautiful person who is fragrant with a soft red light, the flower of rose is used and sculpted. As shown in the following <Figure 2>.

Figure 2. Red rosa.



4.3. Yellow citrus

Citrus Benefits: The refreshing citrus notes of peeled oranges and lemons are always uplifting. Orange oil contains an ingredient called linalool, which calms the mind and helps to relax the mind and body. Not only orange, but also mandarin and grapefruit have a subtle scent[30].

The color of citrus delivers a feeling of being recharged with energy just by looking at it with a bright, bright color that pops out. In order to maximize the lively feeling of citrus, it is produced by giving a rich feeling by utilizing the curl. As shown in the following < Figure 3>.

Figure 3. Yellow citrus.



4.4. Green eucalyptus

Efficacy Effect: It has excellent effects on the respiratory system and has a color that makes the eyes comfortable just by looking at it. Eucalyptus, which has immunity to respiratory system viruses such as colds and flu, sore throat, etc., is recognized as a soft but strong color[30].

Eucalyptus Meaning: The freshness of eucalyptus seems to convey the power of life to people just by looking at it. In modern society, nature cannot be easily enjoyed, so I think it will be needed more and more. The work is expressed with the naturalness, flexibility, and comfort of eucalyptus. As shown in the following < Figure 4>.

Figure 4. Green eucalyptus.





4.5. Purple lavandula

Efficacy Effect: Smelling the fragrance is effective in relieving stress and getting a good night's sleep, and diluting it with carrier oil and taking a bath or massage can relieve mental and physical fatigue and have a calming effect. It relieves pain such as headache, muscle pain, and menstrual pain, and in a small amount, it can be applied directly to the skin, so it is useful for dermatitis, light burns, psoriasis, acne, and insect bites[31].

Lavender is a gorgeous purple color, but somehow it seems to be calming and calming. In order to maximize the feeling of lavender, gradation dyeing was used to create a soft and comfortable feeling rather than splendor. As shown in the following< Figure 5>.

Figure 5. Purple lavandula.





4. Conclusion

Suggestions for research on 'hair art' according to the results of this study are as follows. It was an opportunity to create various works through coloring using hairpieces. However, as each material was expressed only in a stable form with a similar hairpiece directing method, it was insufficient to express the shape of a flower shape using color, and there was a dissatisfaction with a more creative and free expression. Therefore, it is expected that the follow-up work will provide a complete work by supplementing these shortcomings. Also, through this study, it was a good opportunity to open up the possibility that high-level beauticians expected by researchers can be recognized as artists with artistic tendencies beyond the functional perfection and proficiency of craftsmanship. In the future, it is expected that high-quality hair art works will be produced by pursuing original and creative new techniques and the world of modeling.

5. References

5.1. Journal articles

- [1] Yeom J & Choi J & Lee J. Color Reproduction with Drag Queen and Makeup Protection. *Protection Convergence*, 6(1), 33-40 (2021). [Article]
- [2] Han J & Kim J & Cho M. Analysis of the Public Value of Celebrity Hair Color Trend in Milbon Collection. *Public Value*, 6(3), 32-40 (2021). [Article]
- [3] Kim N & Choi J & Baek S. A Study on the Nail Art Design of Andy Warhol's Works to Protect Human Nail Disaster. *International Journal of Human & Disaster*, 6(1), 36-44 (2021). [Article]
- [4] Heo M & Kim M & Choi E. A Study on the Utilization of Public Value of the Zentangle Pattern and the Development of Nail Design. *Public Value*, 6(3), 1-10 (2021). [Article]
- [5] Lee J. Research on Smart Learning Model Based on 5 Steps using Media-based Teaching and Learning Method. *Public Value*, 5(2), 1-12 (2020). [Article]
- [6] Lee J & Choi J & Yeom J. Analysis of Properties of Deconstruction & Hair Expression Components in Maison Margiela Collection. *Public Value*, 6(1), 38-50 (2021). [Article]
- [7] Lee SJ & Na MS. A Study on the Area and Flow of Curls Shape of Hair Creative Design Line -Based on Points by Design Area-. *Journal of the Korean Society of Cosmetology*, 25(5), 1169-1185 (2019).
- [9] Lee Y. Hair Creative Definition and Styling Process. *The Korean Beauty Management Society*, 7(2), 42-49 (2019).
- [10] Moon K. Aromatherapy And Its Application. *Journal of Society of Cosmetic Scientists of Korea*, 24(2), 100-127 (1998).
- [11] Youn NR & You EJ & Youn CS. n Exploratory Study on Effect Aromatherapy and application. *The Korean Society of Beauty Industry*, 9(2), 85-98 (2015).
- [12] Mo JH & Song MR. A Study on the Current Status of Use and Satisfaction in Aromatherapy. Korean Society for Environmental Sanitary Engineers, 22(4), 45-54 (2007).
- [14] Yoo B. An Integrated Approach to Naturopathy for Emotional-therapy: Focused on the Colortherapy and the Aromatherapy. *Journal of the Naturopathy Education Association*, 3(1), 103-125 (2019).
- [15] Oh EH & Park KW. A Study on the Hair Creative Design of Rose of Sharon. *The Korean Beauty Management Journal*, 7(2), 97-103 (2019).
- [16] Park GJ & Lee JR & Ghung JR. A Study on Creative Style -Focusing on Hair Style and Color-. Journal of the Korea Beauty Design Society, 4(2), 157-177 (2008).
- [17] Park JY & Kim SJ & Park EJ. A Study of Hair Art by Motifs Creative and Hair by Night. *Journal of Beauty Art Management*, 6(1), 175-186 (2013).
- [18] Kim SA & Kwon GH. A Study of O · M · C Hair World Ladies Creative and Hair by Night Pieces and Creating New Hair Design -Winning Pieces from 2010 to 2016-. *The Korean Society of Design Culture*, 22(2), 113-122 (2016).
- [19] Yu JH & Lee YM & Gang JJ & Kwon GH. A Study on the Historical Change of Creative & Hair by Night. *Journal of Beauty Art Management*, 8(2), 111-119 (2014).
- [20] Kwan DS & Lim IS. The Study on the Formative Expression of Hair Art -Focused on Making Works by using Hair Pieces-. *Korean Society of Beauty and Art*, 2(2), 19-29 (2001).
- [21] Kim MS & Kwon GH. A Study on Hair Ornaments with the Motif of Organic Lines in an Art Nouveau Style. *Journal of Beauty Art Management*, 15(3), 77-98 (2021).
- [22] Kang J. A Study on Hair Art Design Applying Optical Art Works -Focused on Work Creation-. *The Korean Society of Design Culture*, 19(2), 17-27 (2013).
- [23] Lim S. A Study on Formative Hair Art Expressing Images of the Four Seasons. *Journal of Beauty Art Management*, 15(4), 87-109 (2021).
- [24] Lee M. A Study on Hair Art of a Hat with Flower Motif: Focusing on Fascinator. *Journal of Beauty Art Management*, 12(3), 71-86 (2018).
- [25] Kim E. A Study on the Hair Ornaments using Dandelion Image: Focused on Up-style Decoration. Journal of Beauty Art Management, 11(2), 37-54 (2017).
- [26] Y CK & Do JY. A Study of Updos for Short Hair using Traditional Bomun(Treasure Motif)-patterned

- Hairpiece. Korean Society of Beauty and Art, 18(2), 239-253 (2017).
- [27] Ahn Y. A Study on Collage Expressive Formative of Hair Piece. *Journal of The Korean Society of Cosmetology*, 14(4), 1120-1128 (2008).
- [31] Bae M. Esthetic Bioactivity of Lavender Essential Oil for Inner Beauty. *Korean Society of Beauty and Art*, 22(1), 319-335 (2021).

5.2. Additional references

- [8] Eom SL & Kim SN. A Study on Fabrication of Hairpins with the Image of Flowers by Utilizing Hairpiece. Korean Design Forum (2013).
- [13] Sagong JG & Kim YH. Use of Aromatherapy as Complementary and Alternative Medicine. Conference of the Human Plant Environment Association (2009).
- [28] https://en.wikipedia.org/ (2004).
- [29] https://en.wikipedia.org/ (2014).
- [30] https://bit.ly/ (2021).

6. Appendix

6.1. Authors contribution

	Initial name	Contribution
	ML	-Set of concepts ✓
Lead		-Design ☑
Author		-Getting results ✓
		-Analysis ☑
	JL	-Make a significant contribution to collection $\ oldsymbol{oldsymbol{arphi}}$
Corresponding		-Final approval of the paper $\ oxdot$
Author*		-Corresponding 🗹
		-Play a decisive role in modification $\ lacktriangledown$
	JL	-Significant contributions to concepts, designs,
Co-Author		practices, analysis and interpretation of data $\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$
Co-Author		-Participants in Drafting and Revising Papers $\ lacktriangledown$
		-Someone who can explain all aspects of the paper $\overline{\!$

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The Meaning and Value of Local Festivals of Local Governments: Exploring the Current State and Improvement Methods

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Abstract

Purpose: While the classification of local festivals of Korea may be diverse, if they are classified according to the relevant subject, they may be classified into the traditional culture, local specialties, people representing the region, new regional contents, and the contents related to national policies, etc. Based on the analysis of local festivals designated by the Ministry of Culture, Sports and Tourism, it is intended that the purpose of the tourism industry of the local government be further specified, and a plan for reorganizing the policies related to local festivals of the local governments be explored.

Methods: The criteria for the festivals announced by the Ministry of Culture, Sports and Tourism are the "culture, tourism and art festivals held by local residents, local organizations, and local governments for a certain period of time (2 days or longer) and attended by a large number of unspecified people. Specifically, they are cultural tourist festivals, special product festivals, cultural arts festivals, and general festivals. The current status of local festivals of Korea is analyzed by analyzing the number of festivals held by region. Furthermore, this study has analyzed the status of local festivals by period spanning from the period of central government: President Syngman Rhee to President Roh Tae-woo and from 1993 to the Park Geun-hye administration, which was the period of local autonomy.

Results: Local festival of Korea demonstrates the economic functions of regional and national economic development, political functions of securing of the regional development and local government's finance, and the socio-cultural functions in terms of enhancing the welfare of the people in whole, while demonstrating the fact that the tourism industry has developed at a very high level. The reason as to why such an excessive number of local festivals is held is considered to be related to the political issues of increasing the showcase administration and performance achievements of the heads of local governments and the members of local council.

Conclusion: Currently, local festivals of Korea are faced with many needs of improvements including specialization, economic feasibility, and evaluation. Considering the fact that the largest purpose of local festivals is to revitalize local economy and enhance image, it would be necessary to form a consultative body by and between local governments and seek a strategy for cooperation and coexistence rather than pursuing competition through the objective evaluation of the festivals which are held indiscriminately. Similar local festivals held by and between adjacent local governments ought to be integrated via co-hosting, etc., and in the case of the festivals with distinct local characteristics, a way to create synergies ought to be explored through the consultation on the period of convening, etc. Furthermore, it will be necessary to develop and introduce a more scientific and objective method of evaluation criteria for the festivals, and based on which, explore a comprehensive plan of improvement to ensure that local festivals may be of practical assistance for the regional development by deriving accurate evaluation and improvement plans.

[Keywords] Local Festival, Tourism Industry, Local Government, Value, Improvement Methods

1. Introduction

Currently, there are various classifications of regional festivals in Korea. However, if they are categorized according to the subject matter, they may be classified into traditional culture, regional specialties, people representing the regions, new regional content, and contents related to the national policy. Among which, in the case of traditional culture, regional specialties, and people representing the regions, it is necessary to consider as to whether it is a tourism product based on a festival or a regional event based on a tourism product. From such point of view, it may be understood that a specific traditional culture and special product of the region is already a subject of national interest, and the number of tourists visiting may also be understood as a case where the number of tourists who visit has increased continuously from the past, rather than being affected by the festival. That is, regional festivals function across various aspects including the economic and cultural, yet the most essential is securing the regional identity [1].

By specifying the tourism industry's purpose of the local government, this study intends to seek ways to reorganize the local government's regional festivals policy. The subject of analysis is the regional festival designated by the Ministry of Culture, Sports and Tourism.

2. Analysis of Regional Festivals in Korea

2.1. Analysis of the number of festivals hosted by region

The total number of regional festivals announced by the Ministry of Culture, Sports and Tourism in 2017 is 733. Compared to the total of 693 events planned for 2016, 40 regional festivals have increased. The criteria for the festivals announced by the Ministry of Culture, Sports and Tourism are the "culture, tourism and art related festivals which are held by local residents, local groups, and local governments for a certain period of time (for 2 or more days) and are attended by many unspecified people. Specifically, there are cultural tourism festivals, special product festivals, cultural arts festivals, and general festivals, etc."

Table 1. Plan for hosting regional festivals in 2016 and 2017.

Classification	2016	2017	Change
Seoul	71	60	11
Incheon	22	19	-3
Gyeonggi	83	78	-5
Gangwon	61	68	7
Daejeon	9	9	0
Sejong	2	3	1
Chungnam	90	90	0
Gwangju	10	8	-2
Jeonbuk	47	53	6
Jeonnam	44	102	58
Daegu	23	24	1
Gyeongbuk	81	65	-14
Busan	30	33	3
Ulsan	10	10	0
Gyeongnam	44	46	4
Jeju	29	29	0
Total	693	733	40

Note: https://www.mcst.go.kr/(2022)[2].

If the division of regions is set by region, the metropolitan area includes Seoul, Gyeonggi and Incheon, Chungcheong region includes Daejeon, Sejong, Chungbuk and Chungnam, Yeongnam region includes Daegu, Gyeongbuk, Busan, Ulsan, Gyeongnam, and Honam region includes Gwangju, Jeonnam, Jeonbuk, and when classified into Gangwon and Jeju regions, it is apparent that the Honam region hosts the most regional festivals with 157 cases in the metropolitan area, 138 cases in the Chungcheong region, 163 cases in the Honam region, 178 cases in the Yeongnam region, and 97 cases in the Gangwon and Jeju regions, respectively.

While the table above demonstrates the fact that the number of festivals in Jeonnam in 2017 increased by 58 compared to 2016, as a matter of fact, there are 7 festivals held for the first time in 2017. Considering that the 51 festivals were held at least twice, it may be inferred that some of the festivals in Jeonnam in 2016 were not included for the count.

2.2. Regional festivals for each period held and the analysis of the government's tourism policy

The President's interest in the tourism policy has a significant impact on the tourism industry. Leaders of developing countries tend to be obsessed with the efficiency and effectiveness for the tourism industry of their tourism policies, and the cases of unsystematic policy enforcement in the process of establishing tourism policies are apparent. By setting the goal of national development at the center of economic growth, they demonstrate the attribute of promoting the economic effect of tourism policy as the hub, and consequently, the formation of the essential system of tourism policy is inadequate. This neglects the importance of the political, economic, and cultural influence of the national tourism policy, and consequently promotes an unbalanced tourism policy[3].

The person in charge of establishing and implementing the tourism policy should develop the tourism policy while thoroughly examining the environmental analysis of the national level of the tourism environment and the political, economic, social and cultural effects which may arise therefrom in achieving the national policy goal. This is because multi-cultural events, festivals, and strong ties with foreigners can increase the acceptance of multi-culturalism[4]. Furthermore, the effect of promoting not only the host city but also the companies and tourism resources located there with in might have various effects on the local community and residents, such as enhancing the competitiveness of the local industry, revitalizing the local economy, and enhancing the image[5].

Following which, this study seeks to review the festivals held for the first time by each government in Korea after liberation and analyze the meaning of the government's tourism policy. The regional festivals in Korea demonstrated a slight increase until the Taewoo Roh administration, yet increased rapidly from the Youngsam Kim administration.

Table 2. Period of hosting regional festivals for the first time by period.

Classification	Year	No. of festivals hosted
Local traditional culture	Unknown	4
Before the establishment of government	1931-1947	2
Syngman Rhee administration	1948-1959	6
Chunghee Park administration (The 3rd Republic)	1960-1972	19
Chunghee Park administration (The 4th Republic)	1973-1979	15
Doohwan Chun administration	1980-1987	23
Taewoo Roh administration	1988-1992	21
Youngsam Kim administration	1993-1997	86

Daejung Kim administration	1998-2002	125
Moohyun Roh administration	2003-2007	151
Myungbak Lee administration	2008-2012	142
Geunhye Park administration	2013-2017	139

2.2.1. Period of the central power: from president Syngman Rhee to president Taewoo Roh

The regional festivals newly held during the Syngman Rhee administration include the 5 regional festivals of Jinju Gaecheon Art Festival in 1949, Tongyeong Hansan Battle Festival in 1954, Baekje Cultural Festival in 1955, Miryang Arirang Grand Festival in 1957, and Jeonju Dano Festival in 1959, respectively.

The traditional festivals in Korea declined steeply as the traditional society collapsed under the Japanese colonial rule. After liberation and the establishment of the government in 1948, various local festivals began their restoration[6].

President Syngman Rhee, who had an awareness for the tourism industry as a means to effectively increase the foreign currency acquisition in a situation where the economic base almost collapsed under the government launched immediately after liberation, was determined to be primarily interested in the economic function of the tourism policy [7].

Table 3. Number of new regional festivals hosted during the Syngman Rhee administration: 6.

Chungnam	Jeonbuk	Gyeongnam
2	1	3

Organizing voluntary traditional culture festivals in the region even in the absence of any systematic support from the central government has had an important meaning for the origin of regional festivals in Korea.

During the Chunghee Park administration, new festivals were organized regionally and relatively evenly. Approximately 30 regional festivals were organized, including 5 in Gangwon-do, 4 in Chungbuk, 2 in Chungnam, 4 in Jeonbuk, 6 in Jeonnam, 4 in Gyeongbuk, and 5 in Gyeongnam, except 1 organized by Gyeonggi-do.

Table 4. Number of new regional festivals hosted during the Chunghee Park administration: 34.

Daegu	Ulsan	Gyeong-gi	Gangwon	Chungbuk	Chungnam	Jeon-buk	Jeonnam	Gyeongbu	Gyeongna	Jeju
1	1	1	5	4	2	4	6	4	5	1

During the office of President Chunghee Park, the tourism policy began to be structurally and systematically launched with a strong administrative support. The characteristics of the tourism policy during President Chunghee Park's era were the succession of traditional culture, preservation of cultural heritage, and the achievement of economic goals of acquiring foreign currency through the tourism related resources [8].

A total of 23 regional festivals were launched during the era of President Doohwan Chun.

In 1982, the Haeundae Dalmaji Oncheon Festival was launched in Busan, the Gosamu Nori Festival was launched in Gwangju, and the Daedeok Festival and the Daegu Apsan Laundry Festival were launched in Daegu. Furthermore, regional festivals were newly launched including 7 festivals in Gyeonggi-do, 4 in Gangwon-do, 3 in Chungbuk, 1 in Jeonbuk, 1 in Gyeongbuk, 3 in Gyeongnam, and 1 in Jeju.

Table 5. Number of new regional festivals hosted during the Doohwan Chun administration: 23.

Busan	Daegu	Gwangju	Gyeonggi	Gangwon	Chungbuk	Jeonbuk	Gyeongbuk	Gyeongnam	Jeju
1	1	1	7	4	3	1	1	3	1

The tourism policy of the Fifth Republic demonstrated an even more advanced status than that of the Presidents Syngman Rhee and Chunghee Park. In the case of President Doohwan Chun, it can be evaluated that he was more aware of the economic functions of the tourism industry as well as political functions including the environmental and regional development related issues compared to the previous Presidents [9].

Younghoon Ahn claimed that, "President Doohwan Chun's tourism policy is based on the economic function, but from the perspective of comprehensive national land development, it may be evaluated that it has a political function which emphasizes the government's function for the national development" [10].

A total of 21 regional festivals were launched under President Taewoo Roh. It is noteworthy that the regional festivals in the cities corresponding to the present metropolitan cities were launched from this period.

President Taewoo Roh defined some of the tourism industry as entertainment industries. Accordingly, various taxes and regulations imposed on the tourism industry may be viewed as policies which can confirm President Roh's negative perception of the tourism industry.

Table 6. Number of new regional festivals hosted during the Taewoo Roh administration: 21.

Seoul	Busan	Daegu	In- cheon	Dae- jeon	Gyeong gi	Gang- won	Chung- buk	Chung- nam	Jeonbu k	Gyeong buk	Gyeong nam	Jeju
3	2	1	1	1	2	2	2	2	1	1	1	2

2.2.2. Period of local government

The regional festivals of the era of President Youngsam Kim demonstrated a tendency to increase very steeply compared to the previous. During this period, a total of 86 regional festivals were newly launched. Examining by year, 10 regional festivals were launched in 1993, 10 in 1994, 9 in 1995, 24 in 1996 and 30 in 1997, respectively. The number of regional festivals launched by region is as illustrated in the table below.

Table 7. Number of new regional festivals hosted during the Youngsam Kim administration: 86.

Seoul	Busan	Daegu	In- cheon	Gwan gju	Dae- jeon	Ulsan	Sejon g	Gyeo nggi	Gang- won	Chung buk	Chung nam	Jeonb uk	Jeon- nam	Gyeon gbuk	Gyeon gnam	Jeju
5	7	1	2	1	0	1	0	10	7	4	9	9	13	4	7	6

President Youngsam Kim made a promise for the tourism policy during the presidential election for the first time ever. It may be evaluated that the tourism policy has been launched as the president's national policy. President Youngsam Kim made a promise to 'promote taking another leap forward for the tourism industry,' and various policies were implemented towards that end[11].

The organizational system intended for reflecting the perception of the tourism policy in President Youngsam Kim's remarks into the specific policies may be evaluated as practically not formulated[12].

The regional festivals of the Kim Dae-jung administration also demonstrated a large increase compared to the President Youngsam Kim's era. 23 new festivals were launched in 1998, 32 in 1999, 28 in 2000, 23 in 2001, and 19 in 2002, respectively. The rapid increase in the number of new festivals during this period was triggered by the development of the local government system which began during the Youngsam Kim administration, and the local government's autonomy related authority was strengthened.

Table 8. Number of new regional festivals hosted during the Kim Dae-jung administration: 125.

Seoul	Busan	Daegu	In- cheon	Dae- jeon	Ulsan	Gyeon ggi	Gang- won	Chung- buk	Chung- nam	Jeonb uk	Jeon- nam	Gyeon gbuk	Gyeon gnam	Jeju
7	6	2	3	1	3	16	13	7	20	4	19	13	6	5

Younghoon Ahn claimed that, "President Kim Dae-jung began his term with the important task of overcoming the currency crisis at the same time as the people's government was launched. During his term, President Kim Dae-jung implemented various basic tourism policy projects based on the culture to resolve the economic crisis and reduce the unemployment population. In this respect, President Dae-Jung Kim promoted the tourism policy with some knowledge base for his adaptationist tourism policy"[10].

During the era of President Roh Moo-hyun, the largest number of regional festivals in Korea's history were newly launched. 31 regional festivals were launched in 2003, 38 in 2004, 29 in 2005, 28 in 2006 and 25 in 2007, respectively. At which time, the increase in regional festivals may be evaluated as having the best period of revival in history as it coincided with the Roh Moo-hyun administration's balanced regional development policy. That is, the tourism policy of the Roh Moo-hyun administration could be evaluated as, "in terms of decentralization and balanced regional development, the tourism policy focusing on the local economy and local autonomy was utilized" [13].

Table 9. Number of new regional festivals hosted during the Roh Moo-hyun administration: 151.

Seoul	Busan	Daegu	In- cheon	Gwang ju	Dae- jeon	Ulsan	Sejong	Gyeon ggi	Gang- won	Chung buk	Chung nam	Jeonb uk	Jeon- nam	Gyeon gbuk	Gyeon gnam	Jeju
9	7	5	5	2	3	3	1	18	14	7	19	12	15	14	11	6

It was also analyzed that a relatively large number of regional festivals were newly launched even during the Lee Myung-bak administration. In particular, the fact that the number of new festivals in Seoul was counted as 18 demonstrates such a high interest in the regional festivals in Seoul at the time.

Examining the number of new regional festivals by year during the Lee Myung-bak administration, 38 new regional festivals were launched in 2008, 24 in 2009, 17 in 2010, 30 in 2011, and 33 in 2012, respectively.

Table 10. Number of new regional festivals hosted during the Lee Myung-bak administration: 142.

Seoul	Busan	Daegu	In- cheon	Gwang ju	Dae- jeon	Ulsan	Gyeon ggi	Gang- won	Chung- buk	Chung- nam	Jeonbu k	Jeon- nam	Gyeon gbuk	Gyeon gnam	Jeju
18	7	4	4	1	3	1	14	11	6	15	9	19	19	4	7

The tourism policy of President Lee Myung-bak may be verified based on the contents of the 'Tourism Policy Competitiveness Reinforcement Conference' [12]. President Lee Myung-bak promoted the policies to strengthen the competitiveness of the tourism industry based on deregu-

lation and active support for the tourism industry for the development of tourism policy. President Lee Myung-bak's tourism policy may be evaluated to be related to the economic policy at the national level.

A total of 139 new regional festivals were launched during the Park Geun-hye administration. Compared to the number of regional festivals newly launched by the previous administration, it was a result of a slight decrease, yet this is also a significant number. Examining the new regional festivals by year, there were 29in 2013, 20 in 2014, 41 in 2015, 30 in 2016, and 19 in 2017, respectively.

Table 11. Number of new regional festivals hosted during the Park Geun-hye administration: 139.

Seoul	Busan	Daegu	In- cheon	Gwang ju	Dae- jeon	Ulsan	Sejong	Gyeon ggi	Gang- won	Chung buk	Chung nam	Jeonb uk	Jeon- nam	Gyeon gbuk	Gyeon gnam	Jeju
18	3	9	4	3	1	1	2	10	11	3	20	11	28	9	6	0

The Park Geun-hye administration's policy interest in the tourism industry expanded with the expectation that the tourism industry could function as a driver for the national growth as the market expands due to the increase in the number of Chinese tourists. The tourism policy of President Park Geun-hye led to a paradigm shift for the previous tourism industry, and it may be evaluated that it brought about the convergence of the tourism industry as a high value-added industry and highly advanced science and technology.

2.2.3. Evaluation of regional festivals in Korea

Thus far, since the establishment of the government in 1948, the number of regional festivals newly launched from the Syngman Rhee administration to the Park Geun-hye administration and the tourism policies for each presidency were analyzed. As a result of the analysis performed, the regional festivals in Korea have demonstrated a gradual increase since the liberation, yet as the local government system was fully implemented, and as local governments newly launched the regional festivals, the number of regional festivals grew at a tremendous rate. The main purpose of regional festivals is to revitalize the local economy and enhance the image of the region, etc[14].

In terms of revitalizing the local economy, the tourism industry of the local government has the purpose of making contribution to the revitalization of the local economy by commercializing various contents of the region and allowing domestic and foreign tourists to visit and consume them accordingly. Furthermore, in terms of enhancing the local image, the launch of regional festivals in Korea have begun as regional cultural festivals for the preservation and inheritance of traditional culture, and have been used as a way to enhance the brand image of the local governments' special products.

Furthermore, the protection and fostering of traditional markets as tourism products are promoted from the integrated aspect of regional development by clearly setting policy goals for strengthening competitiveness[15]. The meaning of festival is "'a public, the matized ceremony,' and 'the event and social phenomenon which all societies have in common.' In addition, the modern festival concepts include religious or secular ceremonies with special observances, commemoration of major figures or events, annual ceremonies celebrating the harvest of main products, cultural events of the nature of arts festivals, fairs, etc."[16].

As the festivals have increased, the tourism safety related issues also need to be systematically managed by the local government. Tourism safety is the most important step toward protecting the body, life and the property of individual tourists, and is also a very important issue which might affect the image of a region or country and the future demand for tourism. Hence, in order for Korea to further grow into a country of advanced tourism, various institutional improvements and policy measures are needed to harmonize efforts at the government level for

the tourism safety and the expansion of the role of the private sector [17][18][19][20].

3. Conclusions and Suggestions

Regional festivals in Korea have demonstrated both the economic function of regional economic development and national economic development, political function of balanced regional development and local government finance, and the socio-cultural function in terms of improving the welfare of the people, while demonstrating the fact that the tourism industry has developed towards a high level. However, hosting 733 regional festivals per year may expect to bring about significant issues as well.

Administrative districts in Korea are consisted of 17 metropolitan governments and approximately 230 lower level local governments. Examining arithmetically, a single local government hosts approximately 3 festivals per year on average. According to the Ministry of Culture, Sports and Tourism's data, as of 2017, Jeollanam-do hosted 102, the largest number of regional festivals, followed by 90 of Chungcheongnam-do.

As such, as for the reason as to why the number of regional festivals is excessive is considered to be related to the political problem of increasing the showcase administration and achievements of the heads of local governments and members of the local councils. Excessive hosting of the regional festivals can have a negative and exhaustive effect on the local economy, culture, and environment[21][22][23].

The problem with regional festivals is that they fail to achieve specialization. The most recently launched regional festivals demonstrate varying themes and names, yet there are many similarities in terms of their contents. Furthermore, it has been pointed out that the problem of competitively hosting the festivals during the same period is not only a waste of budget, but also harms the economic feasibility, which is evaluated to be the largest achievement of the festivals, given the dispersion of tourists. Since the number of cases similar to the regional festivals of the local government with different themes of festivals has increased, there are many festivals which are difficult to differentiate from the other regions.

Furthermore, the themes of regional festivals may be evaluated to have an important problem in that it emphasizes regional specialties and regional characteristics. Another problem with the regional festivals is that the goals of the festivals are uncertain. Furthermore, the systematic and objective evaluation of regional festivals and feedbacks on the improvement measures have not been made. As such is related to the statistical problem of visitors to the regional festivals, it is not possible to examine and understand the scientific and accurate size of tourists, and in some cases, some statistical figures are exaggerated. This is because the number of visitors is the criterion for the success of the regional festivals. However, in evaluating the regional festivals, not only the number of visitors but also the economic performance of the region increased during the festival needs to be measured at the same time [24].

Arithmetically, it may not be such a problem given the fact that approximately 240 local governments are hosting an average of 3 regional festivals per year. However, as examined in the above, the current regional festivals in Korea are faced with many issues for improvements including specialization, economic feasibility, and evaluation. Considering that the main purpose of regional festivals is to revitalize the local economy and enhance the image, it is necessary to form a consultative body by and between local governments and seek cooperation and win-win strategies rather than fueling competition through the objective evaluation of the festivals hosted indiscriminately. The similar regional festivals between the adjacent local governments will need to be integrated via joint hosting, etc., and also seek way to create synergies with each other. Furthermore, it is necessary to develop and introduce a more scientific and objective

method of evaluation criteria for festivals, and based on which, find a comprehensive improvement plan to ensure that the regional festivals can be of practical assistance for the regional development by deriving accurate evaluation and plans of improvement.

4. References

4.1. Journal articles

- [1] Lee SC. The Role of the Festival to Overcome the Regional Identity Crisis in Republic of Korea: Centering on Andong International Mask Dance Festival. *International Journal of Crisis & Safety*, 1(2), 8-14 (2016). [Article]
- [4] Park C & Sa Y. A Study to Enhance Multi-cultural Acceptance of Local Governments through Analysis of Factors Influencing Multi-cultural Acceptance. *International Journal of Crisis & Safety*, 6(4), 14-24 (2021). [Article]
- [5] Shin HB. Developing Sport Legacy through Post-use of Mega-sport Event Facilities: The Case of Winter Sport. *Public Value*, 5(1), 17-28 (2020). [Article]
- [13] Kim NC. Successive Presidents' Views of Tourism Policy Reported on Newspapers: Focused on Chosunilbo and Dongailbo. *Journal of Tourism Sciences*, 135(6), 159-181 (2011).
- [14] Shin EK. A Study on Factors Contributing to Local Governments' Successful Branding of Local Festivals. *Music and Critic*, 5, 61-83 (2012).
- [15] Oh J & Lee J. Policy Tasks to Protect and Foster Korean Traditional Markets. *Protection Convergence*, 6(1), 22-32 (2021). [Article]
- [17] Nam J. Plan for Secure Tourism Safety in the Post-covid-19 Era. *International Journal of Terrorism & National Security*, 6(4), 10-18 (2021). [Article]
- [18] Yeom MH. Tourism Safety Image Difference of the Disaster Situation Before and After Focusing on the Sewol-ho Ferry Accident-. *International Journal of Tourism Management and Sciences*, 29(5), 275-296 (2014).
- [19] A Study on the Safety Threatening Factors in South Korea Tourism. *Journal of Tourism Management Research*, 21(4), 1-26 (2017).
- [20] Seo H. A Study on Tourism Security: Focused on Changes of Outbound Travel after Covid-19 in Korea. *Journal of Tourism and Leisure Research*, 33(1), 103-115 (2021).
- [21] Lee DS. A Comparative Study on the Priority Determinants of Success in Local Festivals. *The Korean Journal of Local Government Studies*, 11(3), 91-109 (2007).
- [22] Choi H. Structural Relationship Analysis between Service Quality, Service Satisfaction of Local Festival, Local Image and Festival Loyalty: Focused on Hwacheon Sancheoneo Ice Festival. *Korean Policy Sciences Review*, 16(3), 61-86 (2012).
- [23] Kim DJ & Lee SK. A Study on the Effects of Local Resident's Social-cultural Influence and Environmental Impact on Festival Satisfaction and Local Pride: In Case of the 3rd Suseong Lake Festival. *International Journal of Tourism Management and Sciences*, 33(1), 253-273 (2018).
- [24] Park IY. A Study on the Actual Condition and Improvement of Gangwon-do Local Festivals. *The Journal of Korean Policy Studies*, 8(1), 33-54 (2010).

4.2. Thesis degree

[10] An YH. Political Significance and Function of Tourism Policy as a National Policy. Kyonggi University, Doctoral Thesis (2015).

4.3. Books

- [3] Lee C. Studies of Tourism Policy. Dawangsa (2001).
- [7] Kim NJ. Korea Modern Tourism. Baeksan (2012).
- [11] Kim NJ. Tourism and Tourism Spaces. Baeksan (2013).

[16] Getz D. Special Event and Tourism. BNR (1991).

4.4. Additional references

- [2] https://www.mcst.go.kr/ (2016).
- [6] http://www.baekje.org/ (2010).
- [8] hppt://www.chosun.com/ (1972).
- [9] hppt://www.donga.com/ (1980).
- [12] hppt://www.chosun.com/ (1997).

5. Contribution

5.1. Authors contribution

	Initial name	Contribution
Author	YK	-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 ☑

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A Study on the Adaptation to the South Korean Society for the Survival of the North Korean Defectors: With a Focus on Job Satisfaction according to the Period of Service of the South Korean Security Police

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Abstract

Purpose: The Korean Peninsula of the Northeast Asia is the only divided country in the world, and unlike South Korea, North Korea is isolated from against the rest of the international community due to the socialist ideology and oppression of its dictatorship, and the human rights of the North Koreans are very serious given the economic sanctions. The number of the North Korean defectors is increasing each day. Hence, through the job satisfaction according to the period of service of the security police, who can directly or indirectly support the North Korean defectors in South Korea, which is the most frequently selected by North Korean defectors, a plan for the North Korean defectors for settling in the South Korean society has been presented.

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

Results: First, there is a difference in the job satisfaction according to the total period of service in the police organization. As a result of the analysis performed, Q-3 and Q-4 were high at the 5% level. As for Q-5, 20 years or longer turned out to be higher at 1% level than 6 or longer and 10 years and less and 11 or more years and 15 years or less. Q-3 is a response for "I have considerable discretion in performing my job." Q-4 is a response for "I think that the division of duties and the relationship of authority and responsibility among the organizational employees are clarified and efficient work assignment is made."

Second, there is a difference in the police's job satisfaction according to security and service period among police organizations. As a result of the analysis performed, at the level of 5%, as for Q-1, 10 years or longer turned out to be more satisfied with their current job and position as a police officer than 2 years or less. Q-1 is a response for "I don't think the salary level is low compared to my job."

Conclusion: Given the unfortunate political and historical experiences of the South Korean society, there is a critical perception of the security police, and it is necessary to strengthen the capabilities of the security police to support the North Korean defectors. Naturally, there may be criticisms as such, but it is worth considering scholarly from the point of view of the modern liberal state philosophy such that the state exists to protect the lives and bodies of the people and human security, which has gradually expanded its scope entering the 21st century.

[Keywords] Survival, Society Adaptation, North Korean Defectors, Period of Service, Job Satisfaction

1. Introduction

According to a report by SBS (January 3, 2022), a South Korean media, on January 1, 2022, when we need to discuss hopes and resolve, the South Korean society experienced the incident of a North Korean defector returning to North Korea. On January 1st it was known later that a

man had defected to North Korea over a fence in a division of the Eastern Front of Gangwon-do, and it was later revealed that the man was a North Korean defector who defected over the fence of the same unit about a year ago. Furthermore, according to the South Korean SEGYE Ilbo (January 12, 2022), this case is causing controversy over the settlement support system for the North Korean defectors.

In a situation where the number of the North Korean defectors entering into South Korea has recently declined, it is clear that they are not able to settle in the South Korean society and return to North Korea, a fact which is a sign of retrogress for the South Korean society's efforts to prepare for the unification[1]. Hence, there is a need to improve the system for the North Korean defectors to settle in South Korea[2].

There are many reasons as to why the North Korean defectors cannot adapt to the South Korean society but there are various social and cultural contexts, as well as the issues of choice and responsibility, which are the core values of liberal democracy, and the economic inequality caused by their failure to adapt to the capitalist system[3]. The gravity of the problem exists in that the momentum towards the unified country may also be blocked if such problems are not overcome. Hence, after reviewing the current system for the North Korean defectors to settle in the South Korean society, the perception of the security police who encounters North Korean defectors for the first time on the front line may be a clue for the improvement needed. In particular, as for the security police, since they perform the usual security work as well as the settlement management of the North Korean defectors at the front line, there may be differences in their practical perception as well as the proficiency of support work depending on the length of their service period[4].

Accordingly, in this study, based on the need to improve systematic settlement management for the North Korean defectors, in particular, based on the perception of the security police who face the North Korean defectors in the field, the possibility of a settlement support system for the North Korean defectors is intended to be examined.

2. Research Method

2.1. Research subjects and sampling method

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

Table 1. The general characteristic of the research subjects.

	Description	N (%)	Total	
Candan	Male	61 (67.0%)		
Gender	Female	30 (33.0%)	91	
	20s	7 (7.7%)		
A	30s	28 (30.8%)	91	
Age	40s	30 (33.0%)		
	50s or older	26 (28.6%)		
	High school	14 (15.4%)		
Education	Junior college	30 (33.0%)		
Education	College	43 (47.3%)	91	
	Graduate school	4 (4.4%)		

	Policemen/women	1 (1.1%)		
	Senior policemen/women	19 (20.9%)		
	Assistant inspector	18 (19.8%)		
Rank	Inspector	29 (31.9%)	91	
	Senior inspector	14 (15.4%)		
	Superintendent	10 (11.0%)		
	General recruitment	75 (82.4%)		
	Special recruitment	5 (5.5%)		
Employment path	Police Academy	2 (2.2%)	91	
	Police cadet	9 (9.9%)		
	Other	0 (0.0%)		
	5 years and less	13 (14.3%)		
	6-10 years	32 (35.2%)	91	
The total period of service as a police officer	11-15 years	13 (14.3%)		
police officer	16-20 years	13 (14.3%)		
	Longer than 20 years	20 (22.0%)		
	2 years and less	16 (17.6%)		
The period of service at the	3-5 years	56 (61.5%)		
security department	6-10 years	17 (18.7%)	91	
	Longer than 10 years	2 (2.2%)	1	
	10 or less	18 (19.8%)		
The number of police officers	11-15	42 (46.2%)		
in the organization	16-20	24 (26.4%)	91	
	More than 21	7 (7.7%)		
	Tier 1 areas (big cities)	80 (87.9%)		
Service location	Tier 2 areas	11 (12.1%)	91	
	Tier 3 areas (rural areas)	0 (0.0%)		

2.2. Measuring instrument

The appropriate method for each verification method was chosen to increase the content validity and verify the construct validity of the questionnaire. Content validity was validated through consultation with relevant experts to adopt survey questions suitable for the purpose of the study, and the reliability of the survey questions was shown to be Cronbach's α coefficient .852.

Table 2. The questions.

	Questions
Q-1	I'm satisfied with my current job and position as a police officer.
Q-2	I don't think what I do is something anyone can do with ease
Q-3	I have considerable discretion in performing my job.
Q-4	I think that the division of duties and the relationship of authority and responsibility among the organizational employees are clarified and efficient work assignment is made.
Q-5	I don't think the salary level is low compared to my job.
Q-6	I think I'm treated better than others of similar skills.
Q-7	The space where I work has a pleasant atmosphere and I get along well with my colleagues like family.
Q-8	My boss helps me out a lot with my job.
Q-9	I want to further grow, and if an opportunity, I would like to be promoted.
Q-10	I've never heard my commander or superior nagging much.
Q-11	My commander or superior lead the staff by setting example rather than by direct control.

Q-12	Given the same salary, I would like to get an easier job than the difficult like that of police.
Q-13	If I usually pull all nighter or work even on holidays, I would want to get a different job no matter how much I get paid.
Q-14	I think I'm being well compensated for what I'm doing.

2.3. Data processing and the analytical method

The data processing for this study was conducted with the SPSS 23.0 Program, a statistical package program, and the statistical validation was performed according to the purpose of data analysis as follows.

First, the frequency analysis was performed to examine and understand the general characteristics using the SPSS/PC+23.0 program.

Second, to validate the reliability of the questionnaire, the Cronbach's α coefficient was calculated.

Third, the one-way ANOVA was performed to examine and understand the differences in the perception of the North Korean defectors according to the number of police officers.

Fourth, the t-test was conducted to examine and understand the differences in the perception of the North Korean defectors by the security police according to the area of service.

3. Research Results

3.1. Differences in the police's job satisfaction according to the total police service period

Table 3. Differences in the police's job satisfaction according to the total police service period.

		N	М	SD	F	sig	post hot
	5 years and less	13	3.4615	.66023			
	6 years or longer- 10 years and less	32	3.7500	.50800			
Q-1	11 years or longer- 15 years and less	13	3.6923	.48038	1.889	.120	
	16 years or longer- 20 years and less	13	3.6923	.48038			
	20 years or longer	20	4.0500	.88704			
	5 years and less	13	3.6154	.65044			
	6 years or longer- 10 years and less	32	3.7500	.62217			
Q-2	11 years or longer- 15 years and less	13	3.5385	.51887	2.434	.053	
	16 years or longer- 20 years and less	13	4.0769	.27735			
	20 years or longer	20	4.0500	.75915			
	5 years and less	13	3.2308	.92681			
	6 years or longer- 10 years and less	32	3.2813	.85135			
Q-3	11 years or longer- 15 years and less	13	3.3077	.63043	2.773	.052	
	16 years or longer- 20 years and less	13	3.8462	.37553			
	20 years or longer	20	3.8500	.87509			
	5 years and less	13	3.0000	.91287			
	6 years or longer- 10 years and less	32	3.0313	.93272			
Q-4	11 years or longer- 15 years and less	13	3.0000	.91287	3.297	.055	
	16 years or longer- 20 years and less	13	3.7692	.72501			
	20 years or longer	20	3.7000	.92338			

	5 years and less	13	3.1538	.55470			
	6 years or longer- 10 years and less	32	3.1250	.49187			
Q-5	11 years or longer- 15 years and less	13	3.0000	.40825	3.611	.009	E>B,C
	16 years or longer- 20 years and less	13	3.5385	.51887			
	20 years or longer	20	3.6000	.82078			
	5 years and less	13	3.1538	.80064			
	6 years or longer- 10 years and less	32	3.1875	.53506			
Q-6	11 years or longer- 15 years and less	13	3.0769	.75955	1.083	.370	
	16 years or longer- 20 years and less	13	3.4615	.51887			
	20 years or longer	20	3.4500	.82558			
	5 years and less	13	3.0000	.81650			
	6 years or longer- 10 years and less	32	3.2813	.68318			
Q-7	11 years or longer- 15 years and less	13	3.1538	.80064	1.519	.204	
	16 years or longer- 20 years and less	13	3.5385	.51887			
	20 years or longer	20	3.5500	.88704			
	5 years and less	13	3.2308	.59914			
	6 years or longer- 10 years and less	32	3.2500	.56796			
Q-8	11 years or longer- 15 years and less	13	3.2308	.83205	1.624	.175	
	16 years or longer- 20 years and less	13	3.5385	.51887			
	20 years or longer	20	3.6500	.81273			
	5 years and less	13	3.8462	1.06819			
	6 years or longer- 10 years and less	32	3.8125	.82060			
Q-9	11 years or longer- 15 years and less	13	3.6923	.63043	.204	.936	
	16 years or longer- 20 years and less	13	4.0000	.91287			
	20 years or longer	20	3.8000	1.00525			
	5 years and less	13	3.0769	.95407			
	6 years or longer- 10 years and less	32	3.0313	.73985			
Q-10	11 years or longer- 15 years and less	13	3.2308	.72501	.497	.738	
	16 years or longer- 20 years and less	13	3.0769	.49355			
	20 years or longer	20	3.3000	.73270			
	5 years and less	13	3.3846	.65044			
	6 years or longer- 10 years and less	32	3.1875	.69270			
Q-11	11 years or longer- 15 years and less	13	3.3077	.75107	.694	.598	
	16 years or longer- 20 years and less	13	3.2308	.43853			
	20 years or longer	20	3.5000	.82717			
	5 years and less	13	3.5385	.87706			
	6 years or longer- 10 years and less	32	3.4375	.66901	.673	.613	
Q-12							

16 years or longer- 20 years and less	13	3.2308	.83205			
20 years or longer	20	3.5500	.75915			
5 years and less	13	3.3077	.75107			
6 years or longer- 10 years and less	32	3.4063	.61484			
11 years or longer- 15 years and less	13	3.5385	.66023	.617	.652	
16 years or longer- 20 years and less	13	3.1538	.68874			
20 years or longer	20	3.3000	.73270			
5 years and less	13	3.0000	.70711			
6 years or longer- 10 years and less	32	3.1563	.57414			
11 years or longer- 15 years and less	13	2.9231	.75955	2.106	.087	
16 years or longer- 20 years and less	13	3.2308	.43853			
20 years or longer	20	3.5000	.68825			
	20 years and less 20 years or longer 5 years and less 6 years or longer- 10 years and less 11 years or longer- 15 years and less 16 years or longer- 20 years and less 20 years or longer- 5 years and less 6 years or longer- 10 years and less 11 years or longer- 15 years and less 11 years or longer- 15 years and less 12 years or longer- 15 years and less 16 years or longer- 20 years and less	20 years and less 20 years or longer 20 5 years and less 13 6 years or longer- 10 years and less 11 years or longer- 15 years and less 13 16 years or longer- 20 years and less 20 years or longer- 20 years and less 13 20 years or longer 20 5 years and less 13 6 years or longer- 10 years and less 11 years or longer- 15 years and less 13 16 years or longer- 15 years and less 13 16 years or longer- 15 years and less 13 16 years or longer- 17 years and less 11 18 19 19 10 10 10 11 11 11 11 11 11 11 11 11 11	20 years and less 20 years or longer 20 3.5500 5 years and less 13 3.3077 6 years or longer- 10 years and less 11 years or longer- 15 years and less 12 3.4063 13 3.5385 16 years or longer- 20 years and less 13 3.1538 20 years or longer- 20 years and less 13 3.0000 5 years and less 13 3.0000 6 years or longer- 10 years and less 11 years or longer- 10 years and less 12 3.1563 13 2.9231 14 years or longer- 15 years and less 15 years and less 16 years or longer- 17 years and less 17 years and less 18 3.2308	20 years and less 13 3.2308 .83205 20 years or longer 20 3.5500 .75915 5 years and less 13 3.3077 .75107 6 years or longer- 10 years and less 32 3.4063 .61484 11 years or longer- 15 years and less 13 3.5385 .66023 16 years or longer- 20 years and less 13 3.1538 .68874 20 years or longer- 20 years and less 13 3.0000 .73270 5 years and less 13 3.0000 .70711 6 years or longer- 10 years and less 32 3.1563 .57414 11 years or longer- 15 years and less 13 2.9231 .75955 16 years or longer- 20 years and less 13 3.2308 .43853	20 years and less 20 years or longer 20 3.5500 .75915 5 years and less 13 3.3077 .75107 6 years or longer- 10 years and less 13 3.4063 .61484 11 years or longer- 15 years and less 13 3.5385 .66023 .617 16 years or longer- 20 years and less 13 3.1538 .68874 20 years or longer 20 3.3000 .73270 5 years and less 13 3.0000 .70711 6 years or longer- 10 years and less 13 3.1563 .57414 11 years or longer- 10 years and less 13 2.9231 .75955 2.106 16 years or longer- 20 years and less 13 3.2308 .43853	20 years and less 20 years or longer 20 3.5500 .75915 5 years and less 13 3.3077 .75107 6 years or longer- 10 years and less 13 3.4063 .61484 11 years or longer- 15 years and less 13 3.5385 .66023 .617 .652 16 years or longer- 20 years and less 13 3.1538 .68874 20 years or longer- 20 years and less 13 3.0000 .73270 5 years and less 13 3.0000 .70711 6 years or longer- 10 years and less 13 3.1563 .57414 11 years or longer- 10 years and less 13 2.9231 .75955 2.106 .087 16 years or longer- 20 years and less 13 3.2308 .43853

 $Note: A: 5 \ years \ or \ less \ B: 6 \ years \ or \ less \ B: 6 \ years \ or \ less \ E: 20 \ years \ or \ less \ D: 16 \ years \ or \ less \ less$

<Table 3> illustrates the differences in the job satisfaction according to the total police service period of the affiliated organization. As a result of the analysis performed, Q-3 and Q-4 turned out to be high at the 5% level. As for Q-5, 20 years or longer turned out to be higher at the level of 1% than 6 years or longer and 10 years and less and 11 years or longer and 15 years and less.

3.2. Differences in the police's job satisfaction according to the security and service period

Table 4. Differences in the police's job satisfaction according to the security and service period.

		N	M	SD	F	sig	post hot
	2 years and less	16	3.5000	.63246			
Q-1	3 years or longer- 5 years and less	56	3.7857	.56292	3.744	011	D>A
Q-1	6 years or longer- 10 years and less	17	3.7647	.75245	3.744	.014	DZA
	10 years or longer	2	5.0000	0.00000			
	2 years and less	16	3.6250	.61914			
Q-2	3 years or longer- 5 years and less	56	3.8214	.63553	.763	.518	
Q-2	6 years or longer- 10 years and less	17	3.9412	.65865	.703	.518	
	10 years or longer	2	4.0000	0.00000			
	2 years and less	16	3.0625	.77190			
Q-3	3 years or longer- 5 years and less	56	3.5357	.83043	2.032	.115	
Q-3	6 years or longer- 10 years and less	17	3.6471	.78591	2.032		
	10 years or longer	2	4.0000	0.00000			
	2 years and less	16	2.9375	.68007			
Q-4	3 years or longer- 5 years and less	56	3.3571	1.01674	1.237		
Q-4	6 years or longer- 10 years and less	17	3.2353	.90342	1.237	.301	
	10 years or longer	2	4.0000	0.00000			
	2 years and less	16	3.0000	.36515			
Q-5	3 years or longer- 5 years and less	56	3.3036	.65836	2.203	.093	
	6 years or longer- 10 years and less	17	3.3529	.60634			

	10 years or longer	2	4.0000	0.00000			
	2 years and less	16	3.0625	.68007			
Q-6	3 years or longer- 5 years and less	56	3.2857	.70619	1 200	.283	
Q-0	6 years or longer- 10 years and less	17	3.2941	.58787	1.290	.205	
	10 years or longer	2	4.0000	0.00000			
	2 years and less	16	3.0625	.77190			
Q-7	3 years or longer- 5 years and less	56	3.3571	.74903	1.215	.309	
Q-7	6 years or longer- 10 years and less	17	3.3529	.78591	1.213	.309	
	10 years or longer	2	4.0000	0.00000			
	2 years and less	16	3.3125	.60208			
Q-8	3 years or longer- 5 years and less	56	3.3929	.70527	.700	.555	
4.5	6 years or longer- 10 years and less	17	3.2941	.68599	.765	.555	
	10 years or longer	2	4.0000	0.00000			
	2 years and less	16	3.6875	.94648			
Q-9	3 years or longer- 5 years and less	56	3.8571	.79609	1.482	.225	
Ψ,	6 years or longer- 10 years and less	17	3.7059	1.04670	1.102	.223	
	10 years or longer	2	5.0000	0.00000			
	2 years and less	16	3.0625	.85391			
Q-10	3 years or longer- 5 years and less	56	3.1429	.72434	.216	.885	
Q 10	6 years or longer- 10 years and less	17	3.1176	.69663	.210		
	10 years or longer	2	3.5000	.70711			
	2 years and less	16	3.3125	.60208			
Q-11	3 years or longer- 5 years and less	56	3.2679	.67396	.742	.530	
Q 11	6 years or longer- 10 years and less	17	3.3529	.86177	./42	.550	
-	10 years or longer	2	4.0000	0.00000			
	2 years and less	16	3.3125	.70415			
Q-12	3 years or longer- 5 years and less	56	3.4464	.71146	598	.618	
Q	6 years or longer- 10 years and less	17	3.3529	.86177	.550	.010	
	10 years or longer	2	4.0000	0.00000			
	2 years and less	16	3.4375	.62915			
Q-13	3 years or longer- 5 years and less	56	3.4286	.62834	1.619	.191	
Q 13	6 years or longer- 10 years and less	17	3.0588	.74755	1.015	.131	
	10 years or longer	2	3.0000	1.41421			
	2 years and less	16	3.0000	.63246			
Q-14	3 years or longer- 5 years and less	56	3.2321	.66033	.684	.564	
Q-14	6 years or longer- 10 years and less	17	3.1765	.63593	.004	.504	
	10 years or longer	2	3.5000	.70711			

 $Note: \ A: 2 \ years \ or less \ B: 3 \ years \ or longer-5 \ years \ or less \ C: 6 \ years \ or longer-10 \ years \ or less \ D: 10 \ years \ or longer.$

<Table 4> illustrates the difference in the police's job satisfaction according to the security and service period. As a result of the analysis performed, at the level of 5%, as for Q-1, 10 years

or longer turned out to be more satisfied with their current job and position as a police officer than for 2 years or less.

4. Discussion

4.1. Current status of the North Korean defectors

Over the past decade, the number of the North Korean defectors entering into South Korea has significantly decreased. The following <Table 5> illustrates the status of entry made by the North Korean defectors over the past 10 years.

Table 5. Status of entry into South Korea byu the North Korean defectors in 2011-2020.

(Unit : people)

Classification	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Men	798	404	369	305	251	302	188	168	202	72
Women	1,911	1,098	1,145	1,092	1,024	1,116	939	969	845	157
Total	2,706	1,502	1,514	1,397	1,275	1,418	1,127	1,137	1,047	229

Note: https://www.index.go.kr(2022).

<Table 5> illustrates the fact that the number of the North Korean defectors decreased by approximately 91% compared to 2011, which was 10 years ago. The North Korean defectors began to increase steadily during the mid-1990s due to the deteriorating food situation in North Korea, and after exceeding 1,000 people in 2002, their number reached 2,706 in 2011, with the same number exceeding 10,000 in February 2007, 20,000 in November 2010, and 30,000 in November 2016.

The number of the North Korean defectors entering into South Korea has continuously decreased for the past 10 years, and the number of the North Korean defectors has decreased significantly in 2020.

The reason for the gradual decrease in the number of the North Korean defectors is that the internal control of the Kim Jong-un system has consistently strengthened, border control by North Korea and China has also strengthened, while the economic conditions have improved due to the implicit introduction of a market economy system. In particular, the nearly closed border between North Korea and China due to the COVID-19 outbreak which swept around the world seems to have acted as the reason for the record decrease in the number of North Korean defectors in 2020[5].

4.2. Grounds for providing support for the North Korean defectors

Since the settlement of the North Korean defectors can be a measurement system where North and South Koreas can coexist under the unification of the Korean Peninsula, the North Korean defectors are often referred to as 'the future that came first' or 'the unification that came first'[6]. For the settlement of such North Korean defectors, the South Korean government enacted and supported individual laws before 1960, and such trend has continued to date.

The first special law enacted to provide support for the North Korean defectors was the "Special Assistance Act for People of National Merit and North Korean Defectors" enacted in 1962. However, the Act has a drawback in that it was enacted not to protect and settle the North Korean defectors, but to gain an edge in the systemic competition during the Cold War [7]. Thereafter, in 1979, the "Special Compensation Act for the North Korean Defectors" was enacted and regarded them as the defecting soldiers who chose liberal democracy beyond the line of death. However, following the end of the Cold War, the "Defected North Korean Compatriots Protection Act" was enacted in 1993, at which point they began to take a different perspective towards the

North Korean defectors as the subjects of livelihood protection rather than the existing ideological approach. This carries not only the declarative meaning such that South Korea has won the systemic competition, but also the fact that the South Korean government's position changed when the number of the North Korean defectors rapidly increased due to the collapse of the communist bloc[8].

The North Korean defectors support system as it is now was enacted in 1997 by the "North Korean Refugees Protection and Settlement Support Act"[9]. The Act was enacted assuming a large scaled influx of the North Korean defectors which could occur in the political situation of the North Korean food crisis and the death of Kim II-sung. Article 1 of the same Act declares that the purpose of providing the North Korean defectors with the 'protection and support necessary for rapid adaptation and settlement across all aspects of life, including politics, economy, society, and culture' is to offer humanitarian protection as a matter of evaluation.

4.3. Support system for the North Korean defectors

According to the 2021 Unification White Paper of the Ministry of Unification (unikorea.go.kr), the current settlement of the North Korean defectors is consisted of the 3 phases of the protection request and domestic transfer, domestic settlement, and settlement in the place of residence[10].

In the first phase of protection request and domestic transfer, when the person requests for a protection, the situation is reported and disseminated to the relevant ministries, and the person is accommodated in a temporary protection facility in a foreign mission or host country. After confirming the personal identity, immigration negotiations with the host country and domestic entry procedures are followed through.

In the second phase of the domestic settlement phase, it is further divided into 3 phases in greater detail as follows. i) After entering into South Korea, an investigation is conducted by intelligence agencies to determine whether to protect the relevant individual, and after the investigation is completed, the individual is transferred to Hanawon, a social adaptation education facility. ii) After deliberation by the government's 'North Korean Defectors Countermeasures Council' to decide whether to protect and the unit of household, iii) there is a preparation period for the settlement of Hanawon. During this preparation period, psychological stability, improvement of understanding of South Korean society, career guidance, and basic vocational training are provided, as well as the initial settlement support such as family relations related establishment, housing arrangement, and settlement funds.

In the third phase of the settlement in the place of residence, the social safety net integration (living and medical benefits payment), employment support such as vocational training, education support, and individual protection officers are designated, and various support for the North Korean defectors to settle in the local community begins.

While the South Korean central government, local governments, and private organizations are implementing such a variety of settlement support systems for the North Korean defectors in an integrated manner[11], the Ministry of Unification is the main pillar for this process[12], and hence, the fact that the Ministry of Unification's settlement support system for the North Korean defectors was discussed, was the mainstream attitude of the previous studies[13][14]. However, the basic problem related awareness of this study is that it is necessary to strengthen the role of the police as the lead organization for the North Korean defectors. Currently, the security police are in charge of their role as personal protection officers, and hence, there are clear limitations as to their duties. However, the passive role assignment of security police is obsessed with the passive function of settlement of the North Korean defectors, and hence, there are limits to the active role of protection from against crimes given the lack of choices. That is, the North Korean defectors fail to adapt to the South Korean society and commit crimes as a matter

of their antipathy towards the South Korean society, or rather become victims of crimes themselves and hinder their settlement in the South Korean society[15]. Hence, there is a voice that the security police need to play an active role in North Korean defectors[16]. Furthermore, there are previous studies which claimed that the North Korean defectors perceive that the South Korean laws and systems guarantee the safety and rights of the people relative to North Korea [17], and hence, there is a need to maximize the net functional effect of the security police in charge of the law, system, and the criminal justice functions.

4.4. Security police's settlement support system

Currently, the personal protection system through which the security police can help the North Korean defectors is the most notable one. In order to protect the North Korean defectors safely from against various harms after they complete their program at Hanawon and are transferred to their place of residence, the security police designated as the personal protection officer regularly, directly or indirectly remove the elements of personal hazards. personal protection refers to the activities which help the North Korean defectors settle in the South Korean society early[18][19]. This is in accordance with Article 2 "Scope of Duties" of the Enforcement Decree of the Act on the Performance of Duties by Police Officers, Article 22-2 "Personal Protection at the Place of Residence" of the North Korean Refugees Protection and Settlement Support Act, Article 42 "Personal Protection at the Place of Residence" of the Enforcement Decree of the Act, Article 4 "Duties" of the National Intelligence Service Korea Act, and Article 3 of the Guidelines on Personal Protection at the Place of Residence for the North Korean Defectors.

Furthermore, the Enforcement Decree of the Act on the Performance of Duties by Police Officers grants the police organizations the authority to restrict the people's natural freedom by commanding and coercing the public to secure safety and maintain order when there is or is likely to cause harm to public safety and order, as a matter of general legal grounds [20][21]. The issue is, how effectively the support system for the North Korean defectors, including the security police's personal protection system, is operating.

According to Hankook Ilbo (January 4, 2022), a South Korean media, given the current system, protection offered such facilities as the National Intelligence Service, a joint investigation agency for the North Korean defectors, and Hanawon, a social adaptation education institution, is limited to a year or less. The 5 year period for the personal protection at the place of residence after the facility protection period includes 2 years of personal protection for the North Korean defectors within the 5 year period for residential protection (Article 5 Paragraph 3 of the North Korean Refugees Protection and Settlement Support Act). The South Korean government is operating the Residential Protection Officer, Employment Protection Officer, and Residential Personal Protection Officer Systems to provide support to ensure the successful settlement of the North Korean defectors in the South Korean society. As a police officer is in charge of 29 North Korean defectors, physical limitations are apparent.

However, according to Article 5 Paragraph 3 of the North Korean Refugees Protection and Settlement Support Act, the North Korean defectors who have settled for over 5 years must be excluded from the subject of residence protection. In particular, there is a problem that the personal protection service is not provided for a significant number for among 25,556 people who are currently subject to protection by the National Police Agency, since the protection is good for 2 years only. Naturally, under Article 5 Paragraph 3 of the North Korean Refugees Protection and Settlement Support Act, there is an exception that 'if there is a special reason, the period may be shortened or extended through the deliberation of the North Korean Defectors Countermeasures Council in accordance with Article 6,' yet the effectiveness of this exception has already been critically validated [22].

Hence, as one of the improvement measures for the North Korean defectors to adapt to the

local community, the urgent need to review is the strengthening of the personal protection system which is in charge by the security police. However, it is necessary to consider not only the theoretical need, but also the perception of the security police in charge of the North Korean defectors in the field.

5. Conclusion

Thus far, this study has briefly examined the need to utilize the security police, particularly, the personal protection system, as a methodology for the North Korean defectors to settle in the South Korean society. Naturally, since the memories of dark days in the South Korean society, the security police are not without critical perception [23], and there will certainly be views that may offer repulsiveness towards the security police taking the lead in North Korea-related tasks. However, from the point of view of the modern liberal state philosophy where the state exists to protect the lives and bodies of the people and the human security which has gradually expanded its scope in the 21st century, the security police's undertaking of support activities directly and indirectly for the North Korean defectors would not be so unusual [24].

Given this perception, this study has statistically examined as to how the job satisfaction according to the service period of security police might have an effect on the undertaking of their direct or indirect support activities for the North Korean defectors.

Consequently, first, there is a difference in the job satisfaction according to the total service period of the police organization. As a result of the analysis performed, Q-3 and Q-4 turned out to be high at the 5% level. As for Q-5, 20 years or longer turned out to be higher at the level of 1% than 6 years or longer and 10 years and less and 11 years or longer and 15 years and less. Q-3 is a response for "I have considerable discretion in performing my job." Q-4 is a response for "I think that the division of duties and the relationship of authority and responsibility among the organizational employees are clarified and efficient work assignment is made."

Second, there is a difference in the police's job satisfaction according to security and service period among police organizations. As a result of the analysis performed, at the level of 5%, as for Q-1, 10 years or longer turned out to be more satisfied with their current job and position as a police officer than 2 years or less. Q-1 is a response for "I don't think the salary level is low compared to my job."

Expectation is made towards the lives of the North Koreans whose freedom and human rights are guaranteed due to the collapse of the North Korean dictatorship.

6. References

6.1. Journal articles

- [1] An SA. A Study of Happiness Index for the North Korean Defectors: Focusing on Settlement Support Institutions and Governance. *The Journal of Peace Studies*, 14(5), 117-141 (2013).
- [2] Choi SM & Yoo HY. The Relations between Settlement Period of North Korean Refugees and National Image: With a focus on Mediating Effects of Education in South Korea. *North Korean Studies Review*, 19(1), 223-248 (2015).
- [3] Kim KW & Lee BG. Positive Research on the Social-exclusion of the North Korean Defectors. *North Korean Studies Review*, 15(1), 1-38 (2011).
- [4] Lee S & Baek S & Jo S. A Study on Role Conflict of Korean Security Police -Focusing on Service Period-. *Regulations*, 6(1), 43-54 (2021). [Article]
- [5] Oh SJ & Ha SH. North Korea's Response to Covid-19: Focus on the Rodong Sinmun. North

- Korean Studies Review, 24(2), 1-37 (2020).
- [6] Cho DW. A Study on the Plan of Early Settlement North Korean Defectors. *Korean Police Studies Review*, 14(2), 427-450 (2015).
- [7] Na GH. A Study on Directions of Support Policies for North Korean Refugees in Preparation for Reunification. *Unification Strategy*, 19(2), 119-147 (2019).
- [8] Park HS. A Study of the Problem Concerning the Support on the Settlement of North refugees to South Korea Society. *The Journal of International Relations*, 7(2), 1-24 (2004).
- [9] Son YS. A Consideration of Act on the Protection and Settlement Support of Residents Escaping from North Korea -Based upon Discussion of Domestic Law. *Kyugpook National University Law Journal*, 55, 95-122 (2016).
- [10] Kwon SD. Suggestion of Improvement Plan of Settlement Support System for the North Korean Defectors for Social Integration. *Korean Unification Studies*, 22(1), 71-108 (2018).
- [11] An SY. A Study of Happiness Index for the North Korean Defectors: Focusing on Settlement Support Institutions and Governance. *The Journal of Peace Studies*, 14(5), 117-145 (2013).
- [12] Han MJ. A Study on the Legal Policy for the Social Integration of North Korean Refugees Focusing on the Contents of the North Korean Refugees Protection and Settlement Support Act. *Public Law Journal*, 21(1), 3-31 (2020).
- [13] Jang IB. A Study on the North Korean Refugees Promote Adaption in the South Korea Society. *The Journal of Korean Policy Studies*, 10(3), 367-391 (2010).
- [14] Jang MS & Kim SU. Issues and Tasks in legislation of Supporting North Korean Refugees for Settlement: Focused on the Point of Gender Issues. *Kookmin Law Review*, 29(3), 379-422 (2017).
- [16] Choi. JH. North Korean Defector Protection by Police and Role of Peace Preservation Police. *Korean Journal of Criminology*, 31(1), 95-128 (2019).
- [17] Kim DE. A Study on Factors Influencing Confidence in the Police among North Korean Refugees. Journal of Korean Public Police and Security Studies, 17(2), 1-16 (2020).
- [18] Yim CH. The Measures for Effective Protection and Support of the North Korean Defectors by Security Police. *The Police Science Journal*, 11(4), 89-119 (2016).
- [19] Shin HJ. Study of Major Issues of Introduction of Korean Clare's Law and of Improvement Measures for the Public Security Policies. *International Journal of Police and Policing*, 2(1), 42-47 (2017). [Article]
- [20] Park YH. General Enabling Clauses on the Performance Duties of Police Officers. *Chosun Law Journal*, 19(1), 225-251 (2012).
- [21] Park YS & Yeom KR. The Study on Initializing Korean Local Police System for Effective Criminal Responding. *International Journal of Police and Policing*, 4(1), 15-22 (2019). [Article]
- [22] Lee BR & Choi H. A Study on the Appropriateness of North Korean Defector Protection by Police. Legal Theory & Practice Review, 6(1), 283-303 (2018).
- [23] Lee HY. A Study on the Dissolution of Intelligence and Security Police. *Democratic Legal Studies*, 71, 139-173 (2019).
- [24] Nam JS. Human Security and Security Police's Supporting Activities for the Defectors from North Korea. *Korean Police Studies Review*, 7(4), 63-94 (2008).

6.2. Thesis degree

[15] Kim KS. The Research on the Improvement Way of Peace Preservation Police for the North Korean Defector's Successful Settlement in South Korea. Hansei University, Doctoral Thesis (2017).

7. Appendix

7.1. Authors contribution

Initial	Contribution
name	Contribution

	•	-Set of concepts ☑
Lead	WP	-Design ☑
Author	VVF	-Getting results ✓
		-Analysis ☑
		-Make a significant contribution to collection $\ lackip$
Corresponding	SJ	-Final approval of the paper $\ oldsymbol{arnothing}$
Author*	33	-Corresponding ☑
		-Play a decisive role in modification $\ oldsymbol{ odd}$
		-Significant contributions to concepts, designs,
Co-Author	JK	practices, analysis and interpretation of data $\ oxdot$
CO-Adilloi	JK	-Participants in Drafting and Revising Papers $\ oxdot$
		-Someone who can explain all aspects of the paper 🔽

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In-Depth Exploration of the First Tattoo Process and Re-Tattoo Experience of Generation MZ

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Abstract

Purpose: Korea's MZ generation is a coined term that refers to both millennials (M) and generation Z. They have distinct personal values, are proficient in using digital media, and show characteristics of value consumption and conspicuous consumption. Therefore, in this study, among the qualitative research methods, the phenomenological research method was used to explore in depth in order to find out the perception and attitude toward the MZ generation's first tattoo participation process and re-tattoo experience.

Method: Five active MZ generation participants who can reflect the most realistic information and experience according to the research topic and have tattoo experience were selected as a nomadic sampling method. The data analysis of the in-depth interview contents was analyzed according to the four-step method suggested by Giorgi.

Results: As a result of the study, 93 semantic units, 24 sub-components, and 6 components were finally derived. The contents of the components were identified as tattoo participation motivation, SNS use, tattoo recognition change, tattoo addiction experience, negative factors, and positive factors.

Conclusion: In the process of participating in the first tattoo in the life of the MZ generation, it was confirmed that tattoos exposed through SNS or mass media arouse curiosity, and the characteristics of value consumption and conspicuous consumption are reflected in tattoo participation. In addition, it was found that the tattoo participation decision time was gradually shortened as the tattoo was recognized as an accessory of the body. Through these research results, it is expected that tattoos can have realistic scalability in the cosmetic field.

[Keywords] Tattoo, Process, Re-Tattoo, Experience, Generation MZ

1. Introduction

A tattoo is a technique in which a needle is dipped in dye, and letters, pictures, patterns, or marks are injected into the skin to be engraved into the dermal layer of the skin. In Korea's traditional Confucian values, tattoos were regarded as negative and taboo. Tattooing on the body was illegal, and it was rude. It can be seen from the records that this was used as a mark to distinguish between identity and criminals[1]. Even after a long time, these negative perceptions of tattoos were regarded as a subculture of thugs and vagrants by the Korean military regime, and were regarded as a symbol of hatred and deviance.

In Korea, the prevailing view is that this change in perception of tattoos started around 2002.. According to the 'Basic Study for the Safety Management of Calligraphy and Painting Culture' published by the Korea Institute of Health and Welfare in 2016, tattoos of soccer players were exposed through the mass media at the 2002 FIFA Korea/Japan World Cup, which offset a lot of negative perceptions. After that, tattoos began to spread mainly among international students and foreigners, and many tattoo shops began to appear in Hongdae and Itaewon[2].

Meridian Tattoos represent each individuality, and there is also the opinion that it is a popularized fashion and not a degenerate art. In addition, there is an argument that it is the individual self-expression of the modern young generation and the product of various expressions of physical satisfaction according to individual preferences and overcoming the appearance complex. Furthermore, it is said that social coding can proceed depending on the tattoo experience, and the more the tattoo progresses, the more users want bold and meaningful expression [3][4][5].

In modern society, different ideas and values coexist. It is a trend that more and more people have a strong desire to express their own thoughts and individuality while revealing their identity[1]. Reflecting the background of this modern society, tattoos are becoming more popular among young people, and the exposure of ordinary people with tattoos has become common. Therefore, tattoos are no longer a negative perception in Korean society, but are developing into the culture of fashion leaders[6][7].

It has Although the beauty market is taking a hit from low growth due to the COVID-19 that recently hit the world, in Korea, where online commerce is strong, the skin beauty industry is rather established as a well-being industry[8][9][10]. In Korea, as the beauty industry is specialized and subdivided, it is being divided into general beauty and skin care. Accordingly, semi-permanent cosmetics are growing and franchise skin salons have also appeared, leading to changes in the occupational group[11][12][13]. But, tattoos are still in the shadow of a profession, nd the perception of tattoos has not changed much[14].

In this study, we are paying attention to the growing number of MZ generation who are experiencing tattoos in Korea where the market scalability of tattoos is uncertain. Generation MZ is a term used to refer to young Koreans born between 1980 and early 2000. Unlike the older generation, the MZ generation focuses on beauty care and is judged to have uniqueness and differentiation regarding beauty items[15][16][17]. Therefore, in this study, an in-depth study was conducted on the process of the first tattoo of the MZ generation and the experience of the re-tattoo.

2. Research Methods

As for This study aims to conduct an in-depth analysis on the participation process and reuse experience of tattoos, a qualitative research method was adopted. The participation process is a concept that includes interest in and information on tattoos, and even experiences, and refers to the time of first encountering a tattoo and personal thoughts and experiences about tattoos after that. The selection of study participants was conducted by active experienced participants who visited a tattoo shop to select suitable participants for the purpose of the study, and additional participants were sampled using the snow sampling method. The general characteristics of the study participants are shown in <Table 1> below.

Table 1. Genera	l characteristics of	f study	participants.
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No	Name	Gender	Age	Job	Number of experiences	Total amount required
1	Participant1	Female	39	Movie director	4	800,000 KRW
2	Participant2	Female	26	Salesman 5		1,500,000 KRW
3	Participant3	Female	41	Clothing wholesale	5	700,000 KRW
4	Participant4	Male	21	Production job 6		1,000,000 KRW
5	Participant5	Male	30	Marketing	15 or more	5,000,000 KRW

First, a pre-interview was held to compose the question content, and secondly, a meeting between a professor and a tattooist with rich experience in qualitative research was conducted to confirm the understanding of the content to be asked and to supplement the content. The question structure started with asking about the general characteristics of the participants, and interviews were conducted on perceptions prior to the tattoo experience. In addition, openended questions were constructed regarding the perception and experience changed in the process of reuse

3. Research Results

3.1. Components of participants' experience of changing perception of tattoo participation

As a result In order to confirm the process of the MZ generation's tattoo participation and retattoo experience, the overall meaning was first identified, and the units of meaning were distinguished and converted into academic terms. After that, the results were derived through the Giorgi 4-step analysis method through the process of writing in the language of the researcher. As a result of the study, 6 components, 24 sub-components, and 93 unit of meaning were finally derived. The components of the MZ generation's first tattoo participation motivation and retattoo experience are shown in <Table 2> below.

Table 2. Integrative Components of the participant's cognitive change experience.

Component	subcomponent	Unit of meaning
	Individual expression	 Create a strong-looking image My characteristics shown to others Expression in style Shared symbol Personal accessories
Motivation for tattoo participation	Beauty items	 Accessories for a lifetime Body lines that look different depending on the tattoo A subtle beauty that seems to be invisible
participation	Aesthetic features	Tattoo design is prettyCuriosity about tattoosLonging for tattoos
	Meaning to life	 Expression of longing for a deceased father Engraving what i want to say to me Engrave the meaning of life Things I want to remember
	Acquisition of tattoo knowledge through SNS	 Search for pain in the Internet community Watch stories of real tattoos on YouTube Search for tattoo side effects Precautions before tattooing Post-tattoo care
Use of SNS	Selection of tattoo shop through SNS	 Check the design and select the shop Search SNS reviews Comparison of various works on social media The feeling of the tattooist's writing
	Tattoo design search and exchange through SNS	 Celebrity tattoo search through blog Search for meaningful phrases through the Internet Exchange the meaning of tattoos through SNS
Change in tattoo perception	Change of perception towards accessories	 Tattoos on multiple body parts after the first tattoo After the first tattoo, showing off and thinking Thinking of new tattoo designs according to style changes

	Change in perception of design	Where it is exposed, not where it can be covered Gradually prefer larger sizes from smaller sizes Choose a pretty tattoo over a meaningful one Choose a large, colorful tattoo from a simple design. Choose a colorful tattoo from black tattoos Choose a design with a distinct tattoo feel
	Changes in the per- ception of others	 Parents say they are pretty Positive attitude change of around people Husband says it's okay after seeing it My son saw the tattoo and said it was cool
	Change in self-perception	Tattoos look great Friends' tattoos look pretty Crush on a celebrity's tattoo Tattoos are not a bad thing
	Free from oppression	 Worried that people would look at me badly. Worried about of parental opposition Worrying about regrets over time Feeling worried about getting sick Liberation from cases where the lover's objection was not possible
	Pleasure after tattoo	Be courageous Feeling good during tattooing Stress Relief Freedom from me and a sense of accomplishment
Tattoo addiction experience	Increased desire for tattoos	 The first worries are gone. Imagine having a different tattoo while having a tattoo. Try a bigger and more colorful tattoo.
	Emptiness of blank space	 More fill the tattoo, the more empty feel. Want to have a balanced tattoo Appears empty when wearing revealing clothes
	Tattoo addiction	 Wanting to get a tattoo when feeling down Frequent tattoo design searches Remember how it felt when I got the tattoo Like piercing addiction, tattoos feel addictive
	Negative gaze	 Negative views of parents Negative views of others Negative views of co-workers Thinking of worrying about getting older
Negative factors	Dissatisfied with the work	 Disappointed with the result right after the tattoo Tattoos that deteriorate over time Skin trouble
-	Impulsive tattoo	 A tattoo impulsively with a friend Tattoos made out of rebellion Break up after getting tattooed symbolically
	Tattooist attitude	The attitude of a silent tattooist Unhygienic tattoo shop environment No maintenance after tattoo treatment
	Positive gaze	 Positive view of parents Hearing that the tattoos are pretty Seeing my tattoos, my friends want them too
Positive factor	Work satisfaction	 I heard that the tattoo went well My tattoo is superior to my friend's tattoo Tattoo works as desired Get a tattoo that is prettier than the picture
	Prudent judgment	Hesitating for a long time to get a tattoo Relief from oppression Bucket list and sense of accomplishment
	Tattooist attitude	The tattooist's conversational attitude The tattooist's friendly attitude Post-operative care explained by the tattooist Hygienic tattoo shop Bright tattoo shop

3.2. Situational structure statements about participants' tattoo experiences

Figure 1. The pattern and design of the first and re-tattoos of the participants.

Participant 1	Participant 2	Participant 3	Participant 4	Participant 5
- And		First film count no m		
First tattoo received 1 laser treatment for removal due to dissatisfaction with the work	The date of birth of the family is engraved on a mini-tattoo about 4cm in size on the wrist.	The tattoo engraved on the inside of the elbow is engraved with the hope that the child will do well.	A lettering tattoo with the words you need to engrave in your heart	Hourglass tattoo engraved with the intention not to waste time
		10 de	1 2 3 4 5 6 7	
Inspired by the butterfly tattoo of the male lead in the drama	Engraved as a tattoo thinking of the longing for father	A cross tattoo that copied after seeing a celebrity's tattoo	Number tattoo representing 7 things to keep in life	Belly tattoo engraved on the opposite calf
AND THE REAL PROPERTY OF THE PARTY OF THE PA	Ser Services			
Participant 1's tattoos are getting bigger and more colorful	Participant 2's arm tattoo with a gorgeous design	Participant 3's leg tattoos with colorful designs	Participant 4's arm tattoo with a gorgeous design	Participant 5's tattoo gradually increasing in size and filling the entire leg

In Giorgi's phenomenological research method, the situational structure statement represents the process through which perception is being transformed for each participant's situation. This process integrates the central meaning through in-depth interview with the participants and realistically systematizes the meaning of the experience grasped from the perspective of each participant. <Figure 1> above is a summary of the participant's situational structure statement.

3.3. A general structural statement about the participant's tattoo experience

A general structural statement is an inductive structuring of the contents and statements commonly experienced by the study participants. In the contextual structuring process, the individual's situation, uniqueness, and context are structured. In addition, in the general structuring process, the common experiences of the study participants should be integrated into the overall contextual perspective to reveal the structure of the common experiences. <Figure 2> below is a table of contents related to the participants' general structural statements.

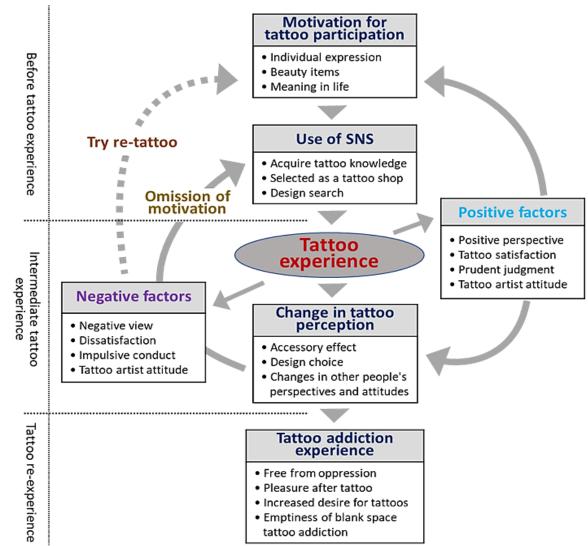


Figure 2. A general structural statement about the participant's tattoo participation process and experience.

4. Conclusion and Recommendations

People In modern society, different ideas and values coexist. A strong desire to express one's own thoughts and individuality and to reveal one's values and identity appears. Reflecting the background of this modern society, tattoos are becoming more popular among young people in Korea, and the exposure of ordinary people with tattoos has become a common occurrence. Celebrities and athletes with tattoos are commonly exposed through internet platforms and mass media, and there are parts where tattoos are no longer a negative sign, but are recognized as a culture of fashion leaders [18][19][20].

Recently, high interest in Korea's MZ generation is being actively analyzed not only in academia, but also in various industries such as fashion and beauty. The MZ generation is attracting attention as a major consumer group in Korea, and as a generation in which various consumption propensities coexist, they enjoy consumption according to their values, explore new experiences, and take on challenges[21][22][23].

The content of the components of the results of this study were identified as 6 factors: tattoo participation motivation, SNS use, tattoo recognition change, tattoo addiction experience, negative factors, and positive factors. Focusing on the results of the study, it was confirmed that the first tattoo participation process of the MZ generation became curious after seeing the tattoos exposed through SNS or mass media, and it was confirmed that the characteristics of the MZ generation were reflected and they participated in tattoos [24][25].

Tattoos are the individual self-expression of the modern young generation, and can be said to be the product of various expressions for physical satisfaction according to individual preferences and for overcoming appearance complexes. There are cases where the MZ generation wants a more bold and meaningful expression after starting a tattoo, which can be seen from the recent research report that tattoos have marketability and popularity as a new culture [26] [27].

After the first tattoo participation, it was confirmed that the participants felt the tattoo as an accessory on their body, and experienced a change in their perception of other people's gaze, thus developing an active attitude toward the tattoo. Therefore, it took time for the first tattoo participation process, but it was found that the decision time gradually became shorter. In addition, the MZ generation sometimes had an indirect experience by considering the design and size of the tattoo to be applied to their body and matching with the existing tattoo on their body through internet applications and simulations. This shows that the MZ generation is making good use of the digital environment and is accustomed to using their individuality through content [28][29][30].

In Korea, there is no legal regulation that prohibits tattoos, but it is considered illegal because the dyes and disinfectants used in tattoos are related to medical equipment. However, the number of tattoo industry-related workers is approaching 220,000, and it is estimated that more than 2 million consumers have received tattoo treatment. In such a situation, it is impossible to systematically educate tattoos, and the number of cases of damage to those who have been operated by tattooists who do not have professional training is increasing [31].

Based on this reality, in this study, the components and meanings of tattoo participants of the MZ generation were identified in realistic language. It is expected that the results of this study will be used as basic data for tattoo consumption in Korea and establishment of education and systems.

5. References

5.1. Journal articles

- [1] Kang EJ. A Study on Changes in Cultural Meaning of Tattoos in Korean Society. *Journal Korea Society of Visual Design Forum*, 19, 403-412 (2008).
- [2] Jeon HK & Kim SH. A Survey on Awareness of Tattoo on Women's University Students. *The Journal of the Korean Society of Make-up Design*, 14(1), 11-20 (2018).
- [3] Jeong ES & Kim HS. A Study on the Tattoo Fashion. *Journal of the Korean Society of Costume*, 53(2), 153-169 (2003).
- [4] Lee HY & Lee SR & Kim HJ & Kim GR. In-depth Analysis of the Motivation of Tattooing Participants. *Journal of the Korean Society of Cosmetology*, 26(6), 1270-1277 (2020).
- [5] Lee YH. The Study on the Tattoo Image and Appearance Satisfaction according to the Selfesteem. *Journal of Fashion Business*, 17(1), 114-130 (2013).
- [6] Kim WS & Kang HS. A Study on the Formation of Symbolic Meanings of Athletes' Tattoos. *The Korean Journal of Sport*, 13(1), 41-52 (2015).
- [7] Ko SY. The Desire to Tattoo and Psychological Function of Tattoos. Journal of the Korean Society

- of Costume, 67(6), 79-95 (2017).
- [8] Lee JS & Eu HS. Health Behavior Intention of Beauty Service Workers to Prevent Corona 19 Infection: Focusing on the Extended Health Belief Model. *Journal of Investigative Cosmetology*, 17(1), 93-101 (2021).
- [9] Lee J & Kim T. Exploring the Effectiveness and Utilization of Terahertz Waves for the Protection of Human Body. *Protection Convergence*, 6(1), 41-49 (2021). [Article]
- [10] Kim T & Lee J. Analysis of Perception of Naturopathy Convergence and Utilization Satisfaction Perceived by Skin Beauty Industry Workers. *Protection Convergence*, 5(2), 94-102 (2020). [Article]
- [11] Ko D & Lee J & Lee E & Oh H. A Study on the Risk Recognition and Protection of Semi-permanent Makeup in Female Students. *Protection Convergence*, 6(4), 58-68 (2021). [Article]
- [12] We H & Lee J & Kim E. Exploring the Experience of Job Convergence Change in the Beauty and Health Industry using Grounded Theory. *Protection Convergence*, 5(2), 84-93 (2020). [Article]
- [13] Kim I & Lee J & We H & Kim E. Effect of the Women's Beauty Care Behavior on the Psychological Happiness after Covid-19. *International Journal of Human & Disaster*, 6(3), 75-84 (2021). [Article]
- [14] Nam MW. Tattoo Owner's Value and Tattoo's Symbolism. *The Korean Society of Science & Art*, 33, 69-87 (2018).
- [15] Hong SH & Kim M. A Study on Communication Methods according to the Characteristics of MZ Generation. *The Treatise on the Plastic Media*, 24(1), 113-120 (2021).
- [16] Bae SH & Han HR. Analysis of Lifestyle Shop Space Representation Characteristics for Generation MZ. *Korean Institute of Interior Design Journal*, 30(2), 85-93 (2021).
- [17] Song SM & Jang SH. An I Dentification of Determinants to Ambivalent Purchase Intention of Fashion Luxury Brand Expanded Cosmetic for MZ Generation. *The Journal of the Korea Contents Association*, 21(3), 47-67 (2021).
- [18] Kim S & Lee J & Na E. Q-methodological Approach to the Perception of Meridian Massage for Health Management. *International Journal of Crisis & Safety*, 5(2), 47-54 (2020). [Article]
- [19] Nam MW. The Korea Contents Society Tattoo Owner's Value and Tattoo's Symbolism. *The Korean Society of Science & Art*, 33, 69-87 (2018).
- [20] Kim SH. The Effects of Celebrity Tattoos on their Perception and Imitative Behavior in Women's University. *Journal of the Korean Society of Cosmetology*, 24(5), 904-914 (2018).
- [21] Jun DG. Effects of MZ Generation Conspicuous Consumption on Clothing Evaluative Criteria Between Self-use and Gift Giving. *Journal of Korean Traditional Costume*, 23(4), 107-119 (2020).
- [22] Sin JH & Hwang IS. Effectiveness of Golf Wear Brand Authenticity Preferred by Consumers of MZ Generation. *The Korean Journal of Sport*, 19(3), 405-41 (2021).
- [23] Shin HK. A Case Study on Value Creation of Fashion Brands using Content Collaboration Targeting MZ Generation. *The Research Journal of the Costume Culture*, 28(6), 830-844 (2020).
- [24] Shin JK & Jung KS. A Study on Expressive Characteristics of Patterns in Emotional Tattoos. *Journal of Fashion Design*, 19(4), 139-152 (2019).
- [25] Seo RS. A Study on the Emotional Image and Preference towards Tattoo Patterns based on the Interest in Outward Appearance among Female University Students. *Journal of the Korean Society of Cosmetology*, 19(6), 1233-1241 (2013).
- [26] Hwang YG. A Narrative Study about a Father's Tattoos that Swapped Home Happiness. *Journal of Korean Home Management Association*, 38(1), 41-60 (2020).
- [27] Nam HM & Kim ES. Analysis of the Preference of Tattoo Patterns of Women in their 20s. *Journal of Society Beauty Art*, 22(3), 287-304 (2021).
- [28] Shin HK. A Study on Design of Easy Casual Wear Utilizing the Convergence Characteristics of 3D Virtual Technology for the MZ Generation. *The Korean Society of Science & Art*, 38(5), 287-296 (2020).
- [29] Lee JS. The Factors Affecting MZ Generation's Acceptance of Youtube based Beauty Health Information: Focusing on the Application of the Technology Readiness and Acceptance Model. *Journal of the Korean Society of Cosmetology*, 16(4), 367-375 (2020).
- [30] Lee HS & Kim JH. Analysis of Food Consumption Behavior due to Covid-19: Focusing on MZ Generation. *Journal of Digital Convergence*, 19(3), 47-54 (2021).

[31] Sim JY. A Study on Tattooist Apprenticeship Curriculum for the Improvement for Tattoo Regulations in Korea. *Korean Journal of Culture and Arts Education Studies*, 16(1), 175-195 (2021).

6. Appendix

6.1. Authors contribution

	Initial name	Contribution		
Lead Author	JK	-Set of concepts -Design -Getting results -Applysis -Applysis -Applysis		
Corresponding Author*	JL	-Analysis -Make a significant contribution to collection -Final approval of the paper -Corresponding -Play a decisive role in modification - Analysis - Analysis - Analysis - Analysis - A		
Co-Author	CL	-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 ✓		

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The Impact of Professional Sports' SNS Related Marketing Activities on the Confidence in Club and the Intention to Watch

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Abstract

Purpose: The purpose of this study is to examine and understand the effect of the SNS related marketing activities, which have recently emerged as an essential element for each club, including professional sports federations or associations, on the confidence in club and the intention to watch, and the direction of marketing activities related to professional sports. and assist with strategy formulation.

Method: In this study, as of 2022, 260 fans of the four major domestic professional sports (professional baseball, professional soccer, professional volleyball, and professional basketball) were surveyed and the convenience sampling method was used as the sampling method, while the survey was conducted by the self-administration method. Among the collected questionnaires, 253 questionnaires were used as the valid samples, excluding the data with insincere responses or omission of some of the contents of the survey. The measurement tool was a questionnaire, and the data processing is the SPSS 23.0 Program, a statistical package program, and the frequency analysis, reliability verification, factor analysis, correlation analysis, and the multiple regression were performed.

Results: In this study, as a result of factor analysis and reliability verification, the SNS related marketing activities turned out to be event factor (α =.884), information factor (α =.871), and advertisement factor (α =.814), and confidence in club was classified as a confidence in club factor (α =.887), and intention to watch was classified as an intention to watch factor (α =.912). Furthermore, the SNS related marketing activities (event factor, information factor, and advertisement factor) affect the confidence in club, and the SNS related marketing activities (event factor, information factor, advertisement factor) affect the intention to watch, while the confidence in club was found to have an effect on the intention to watch.

Conclusion: In this study, the SNS related marketing activities of professional sports clubs affect the confidence in club and the intention to watch, and related organizations including professional sports clubs that are developing the SNS related marketing activities or planning the SNS related marketing activities in the future rather than providing information at the strategic level of ticket sales and publicity, from the consumer's point of view, will need to identify information related to their needs and desires, truly understand consumers, and provide the desired information appropriately through strengthening a reciprocal relationship to ensure that they can feel satisfaction. Furthermore, in the social media environment, it is necessary to develop diverse contents through various methods to accurately understand the interests of advertisement audiences and satisfy their needs, and it is determined to have a positive effect on in club and intention to watch, and professional sports clubs should use SNS related marketing activities more actively, and professional sports clubs will need to use the SNS related marketing activities far more actively.

[Keywords] Professional Sports, SNS, Marketing Activities, Confidence in Club, Intention to Watch

1. Introduction

Given the recent development of technology, as the spread of computers, smartphones, and tablet PCs has increased, the expansion of the use of social network services (SNS) has not only caused a change in social communication, but also emphasized communication with a large number of people across various fields. while the importance of SNS has emerged [1][2]. SNS is consistently expanding its service area by supporting not only PC, but also various multimedia sharing such as images and videos between users, allowing access to services using mobile electronic devices such as smartphones and tablet PCs[3][4][5].

Recently, not only general companies but also professional sports clubs are actively conducting various activities using the SNS. All clubs in the US MLB, NBA, NFL, NHL, professional sports clubs in Europe, and most professional sports clubs in Korea also use the SNS in continuously communicating with fans both online and offline by using [6][7]. Recently, in addition to common social media such as Facebook, Twitter, and Blog, social media centered on images and videos such as Snapchat, Instagram, and YouTube are growing rapidly. Hence, they are attracting attention as a marketing tool for companies, and induce positive responses by providing information on brand and product promotions, news, and company activities to consumers in real time by using major social media extensively [8].

The SNS related marketing activities of professional sports clubs not only provide information, but are an important tool for forming emotional bonds with fans, enabling sports fans to form a favorable attitude toward the club. In this respect, the SNS marketing strategy, which is low cost and easy to access, is an essential communication method for professional clubs [9]. The reason as to why professional clubs are more actively implementing the SNS related marketing activities is that the SNS has the purpose of forming relationships with others, sharing and exchanging opinions and interests, as well as being easy to access and cost effective. Given its low cost, it maximizes communication with the consumers, and its ripple effect is also very large, making it an attractive marketing channel, and since domestic professional sports clubs communicate with existing and potential fans through SNS marketing, such as delivering information [10].

In particular, many professional sports clubs use the SNS to communicate with consumers immediately and respond quickly and provide a wide range of events and accurate and prompt information to strengthen relationships with sports fans, and widely use it as a facilitation tool for sports activation[11][12].

Hence, the purpose of this study is to help establish the direction and strategy for marketing activities related to professional sports by examining the effect of the SNS related marketing activities, which are recently highlighted as an essential element for each club, including professional sports associations, on the confidence in club and the intention to watch.

2. Research Methods

2.1. Subjects and sampling technique

In this study, as of 2022, 260 fans of the four major domestic professional sports (professional baseball, professional soccer, professional volleyball, and professional basketball) were surveyed. The convenience sampling was used for the sampling method, and the survey was conducted by using the Self-Administration Method. Among the collected questionnaires, 253 questionnaires were used as valid samples, excluding data with insincere responses or omission of some of the contents of the survey.

2.2. Measuring instrument

The measuring tool used for this study was a questionnaire,

First, for the SNS related marketing activities factors, the questionnaire used in the study of Kyeonghoe Jung, Minah Ryu, Gwanggil Yoo (2019), Saebom Park, Gwangmin Jo, and Hyeon Byeon (2019) was used[13][14], and in particular, in the study of Saebom Park, Gwangmin Jo, and Hyeon Byeon (2019), the Cronbach's α coefficient, which is the reliability of each factor of the SNS related marketing activities, turned out to be event factor α =.852, information factor α =.771. and advertisement factor α =.717, respectively[14].

Second, as the confidence in club factor, the questionnaire used for the study of Yongman Kim, Yerang Kim, Kihong Kim (2012), Yongman Kim (2020), and Kyunghyeon Kim (2021) was used[15][16][17], and in particular, in the study of Kyeonghyeon Kim (2021), the Cronbach's α coefficient turned out to be the confidence in club factor α =.871[17].

Third, as for the intention to watch factor, the questionnaire used in the study of Sangbaek Nam and Jeongseop Bae (2019), Jeonghee Oh and Gwangmin Jo (2017) was used [18][19], and in particular, in the study of Jeonghee Oh and Gwangmin Jo (2017), the Cronbach's α coefficient turned out to be the intention to watch factor α =.943[19].

2.3. Analysis of data

The data processing of this study was conducted by the SPSS 23.0 Program, a statistical package program, and the statistical verification was performed according to the purpose of data analysis as follows.

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

Second, to verify the reliability of the questionnaire, the Cronbach's α coefficient was calculated.

Third, factor analysis was conducted to classify the SNS related marketing activities, confidence in club, and intention to watch factors.

Fourth, correlation analysis was performed to examine and understand the conventions between each variable.

Fifth, multiple regression was used to examine and understand the effect of the SNS related marketing activities on the confidence in club and the intention to watch.

3. Results

3.1. Validity and reliability of the questionnaire

In this study, factor analysis was conducted to increase the content validity and verify the construct validity. Among the factor analysis techniques, principal component analysis (PCA) was used to highlight the mutual independence between factors. For the factor rotation, the Varimax method, which is an orthogonal rotation, was used. For the factor extraction, only the factors with an eigenvalue of 1.0 or higher were selected, and the factor loading indicating the degree of correlation between each variable and factor was limited to only the items of 0.5 or higher. Reliability was calculated by item analysis for each variable and the Cronbach's α coefficient, which provides reliability of all variables for one concept.

In <Table 1>, as a result of factor analysis on the SNS related marketing activities, they were classified into event factors, information factors, and advertisement factors. The eigenvalues of event factor were 4.587, information factor 4.011, and advertisement factor 3.542, while the overall explanation rate was 62.430%. The reliability of the event factor was α =.884, the information factor α =.871, and the advertisement factor α =.813.

In <Table 2>, as a result of factor analysis on the confidence in club, it was classified as a factor of confidence in club, and the eigenvalue was 5.462, and the ratio explaining all variables was 53.637%. The reliability of the confidence in club factor turned out to be the confidence in club factor α =.887.

 Table 1. Factor analysis and reliability of the SNS related marketing activities.

Question	Event	Information	Advertisement
Q. Events of professional clubs on SNS often stand out.	.889	.243	.113
Q. There are various plans and events for professional teams on SNS.	.814	.230	.157
Q. Professional clubs' SNS events provide product information.	.782	.172	.284
Q. It is easy to use discount tickets and special preferential tickets for professional club events provided through the SNS.	.688	.165	.069
Q. The information on professional teams provided by the SNS is easy to understand.	.007	.789	.214
Q. Information on professional teams provided by the SNS is quick.	.198	.711	.154
Q. Information on professional teams provided on the SNS is helpful when watching games.	.292	.684	.300
Q. The advertisements provided by professional teams on the SNS are persuasive.	.145	.215	.892
Q. Advertisements provided by professional teams on the SNS make people interested in watching games.	.254	.182	.791
Q. The advertisements of professional clubs provided on the SNS convey the characteristics of the club or team well.	.361	.246	.714
Eigen value	4.587	4.011	3.542
Pct of var	24.571	20.513	17.346
Cum pct	24.571	45.084	62.430
Cronbach's α	.884	.871	.813

Table 2. Factor analysis and reliability of the confidence in club.

Question	Confidence in club
Q. Satisfies customer needs	.899
Q. Places a lot of effort into customer management.	.824
Q. Does the best even from the customer's point of view.	.781
Q. Quickly handles customer complaints.	.746
Eigen value	5.462
Pct of var	53.637
Cum pct	53.637
Cronbach's α	.887

Table 3. Factor analysis and reliability of the intention to watch.

Question	Intention to watch
Q. The possibility of direct viewing has increased via the experience of the professional club's SNS related marketing activities.	.899
Q. Through experience of the SNS related marketing activities of professional clubs, I now have a desire to watch the sports.	.832
Q. The experience of the SNS related marketing activities of a professional club gives me a sense of accomplishment.	.791

Eigen value	3.876
Pct of var	56.138
Cum pct	56.138
Cronbach's α	.912

In <Table 3>, as a result of factor analysis on the intention to watch, the factor was classified as the intention to watch, and the eigenvalue was 3.876, and the ratio explaining all variables was 56.138%. The reliability of the intention to watch factor turned out to be α =.912.

Table 4. Correlation analysis.

	Event	Information	Advertisement	Confidence in club	Intention to watch
Event	-				
Information	.357**	-			
Advertisement	.314**	.247**	-		
Confidence in club	.442***	.501**	.346**	-	
Intention to watch	.498***	.398**	.302**	.467**	-

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

<Table 4> is the result of correlation analysis using SPSS, and considering the fact that the relationship between all the constituent concepts was positive (+), it was found that the direction of the relationship between the variables suggested in the research hypothesis was consistent.

3.2. The effect of the SNS related marketing activities on the confidence in club

Table 5. The effect of the SNS related marketing activities on the confidence in club.

Independent variable	Dependent variable	Non-standardized coefficient		Standardized coefficient	t	R²	F
		b	Std.E	в	-	<u> </u>	
Event	Confidence in club	.365	.088	.312	3.274***	.564	103.247***
Information		.242	.084	.191	2.896**		
Advertisement		.239	.072	.188	2.637**		

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

<Table 5> shows that event factor, information factor, and advertisement factor of the SNS related marketing activities have a significant effect on the confidence in club, and has the coefficient of determination R^2 =.564, which has an explanatory power of 56.4%.

3.3. The effect of the SNS related marketing activities on the intention to watch

Table 6. The effect of the SNS related marketing activities on the intention to watch.

Independent variable	Dependent variable	Non-standardized coefficient		Standardized coefficient	t	R²	F
		b	Std.E	в			
Event	Confidence in club	.319	.069	.329	3.1226***	.483	88.134***
Information		.332	.075	.336	3.004***		
Advertisement		.308	.058	.310	2.967***		

Note: ***p<.001.

<Table 6> shows that event factor, information factor, and advertisement factor of the SNS related marketing activities have a significant effect on the intention to watch, and has the coefficient of determination R²=.483, which has an explanatory power of 48.3%.

3.4. The effect of the confidence in club on the intention to watch

Table 7. The effect of the confidence in club on the intention to watch.

Independent variable	Dependent variable	Non-standardized coefficient		Standardized coefficient	t	R²	F
		b	Std.E	в			
Confidence in club	Intention to watch	.176	.065	.249	3.715***	.514	97.1238***

Note: ***p<.001.

<Table 7> shows that the confidence in club factor of confidence in club has a significant effect on the intention to watch, and has an explanatory power of 51.4% with a coefficient of determination R^2 =.514.

4. Discussion

In this study, the SNS related marketing activities turned out to have an effect on the confidence in club and the intention to watch. Regarding the results of this study, the public confidence of information through the SNS activities of professional baseball teams affects the social image and brand assets of the parent company, and the SNS relationship centric activities of professional sports clubs have a significant effect on the relationship value, relationship commitment, and relationship satisfaction of customers[20][21]. Professional baseball team's SNS relationship oriented activities affect relationship commitment, user satisfaction, and continuous use intention, and SNS related marketing activities affect customer satisfaction and behavioral intention[22][23]. Furthermore, the SNS related marketing activities are important to activate professional sports, and it was found that there is a relationship between the audience's desire to watch dance performances, immersion experience, and behavioral continuity using SNS prosumer marketing[24][25]. Sports goods marketing activities using the SNS affect brand image and purchase intention, and the most important matter in such SNS related marketing activities is the provision of correct information[26].

The provision of such information allows consumers or fans to receive useful and various information through SNS marketing, induce smooth communication and participation among users, and use it, and marketing related to pleasure or fun (playability) differentiated from the existing mass media needs to be continuously used to attack. Hence, it is necessary to communicate, share, and empathize with customers through the SNS, as well as identify customer needs and wants, and aggressive marketing techniques that take their characteristics into account stimulate customer's emotions and create loyal customers for the professional sports clubs[27]. That is, the SNS activities which can maintain a lasting relationship and move the mind by using the psychology of desire for customer relationships should be carried out.

In particular, professional baseball teams provide information and storytelling based contents, including the original information that only each club can have, may be produced on site, and are difficult for the general public to experience and are highly interested in, thereby attracting more attractive and interest to users and fans, and it is necessary to use the methods that may be done and to try new methods. Furthermore, in order to win trust and interest from SNS users, it should not be a temporary SNS activity, but continuous management through steady updates and club-related news, including players, needs to be provided to build trust

through active activities through smooth the communication with users. Recognizing that this may be achieved, and recognizing that these activities are important factors that can increase trust and intention to watch, as well as professional sports or the club's own brand assets, the continuous management and supervision of SNS are required.

This means that the SNS can help one communicate and discuss with a large number of people, and can satisfy various parts that customers want through video. Communication techniques must be developed[28], and the content development considering the characteristics of the target audience is also an urgent task. A more convenient and more reliable SNS will become a means for users to interact and recognize the club or team's recognition and service performance. Such changes in use lead to the idea that the SNS currently used will give a greater benefit to the individual than using the SNS of a competing club or team, and if they are satisfied with the service and relationship, they will continue to use it. maintenance will be made[29][30].

Lastly, the SNS activities affect the establishment and maintenance of relationships between clubs and teams with society and the general public, and since there are individual differences in social media usage behavior, it is the most important to identify the major public and establish a strategy tailored to their needs, and hence, should be introduced first, and positive effects may be expected for effective management and image enhancement by maintaining public-relationships as well as policy promotion through the halo effect of social media communication, whereby a positive effect can be expected for effective management and image enhancement.

5. Conclusion

The purpose of this study is to examine and understand the effect of the SNS related marketing activities, which have recently emerged as an essential element for each club, including professional sports federations or associations, on confidence in club and intention to watch, thereby helping to establish the direction and strategy of marketing activities related to professional sports.

The subjects of this study were 260 fans of the four major domestic professional sports (professional baseball, professional soccer, professional volleyball, and professional basketball) as of 2022. The convenience sampling was used for the sampling method. The survey was conducted by the self-administration method. Among the collected questionnaires, 253 questionnaires were used as valid samples, excluding data with insincere responses or omission of some of the contents of the survey.

The measurement tool is a questionnaire, and the data processing is a statistical package program, SPSS 23.0 Program, and frequency analysis was performed to identify general characteristics, and the Cronbach's α coefficient was calculated to verify the reliability of the questionnaire. Factor analysis was carried out to classify the factors of SNS related marketing activities, confidence in club, and intention to watch. Correlation analysis was performed to find out the conventions between each variable. The SNS related marketing activities showed confidence in club and intention to watch. Multiple regression was used to examine and understand the effect on

The conclusions secured through this research process are as follows.

First, the SNS related marketing activities (event factor, information factor, and advertisement factor) affect the confidence in club.

Second, the SNS related marketing activities (event factor, information factor, and advertisement factor) affect the intention to watch.

Third, confidence in club affects the intention to watch.

Hence, it is apparent that the SNS related marketing activities of professional sports clubs affect the confidence in club and the intention to watch, and the related organizations including professional sports clubs that are developing the SNS related marketing activities or planning the SNS related marketing activities in the future will need to carry out continuous marketing such as various discounts, tickets, and freebies through social media events and truly understand people and to feel satisfied by providing the desired information appropriately through strengthening a reciprocal relationship. Furthermore, in the SNS environment, it will be necessary to develop diverse contents through various methods to accurately understand the interests of advertisement audiences and satisfy their needs, and it is determined to have a positive effect on in club and intention to watch, and professional sports clubs should use the SNS related marketing activities far more actively.

6. References

6.1. Journal articles

- [1] Ryu M & Jung K. Effects of SNS Activities by Operators of Commercial Sports Facilities on Relationship-oriented Activities, Immersion and Satisfaction with Customers. *The Korean Journal of Sport*, 18(2), 33-44 (2020).
- [2] Bsng M & Seo W. The Effects of SNS Marketing on Team Trust, Team Identification, Spectatorship Intention, and Merchandising Purchases of Professional Sports Team. *The Korean Journal of Sport*, 19(2), 467-476 (2008).
- [3] Boyd D & Ellison N. Social Network Sites: Definition, History and Scholarship. *Journal of Computer-mediated Communication*, 13(1), 210-230 (2007).
- [4] Kim W. The Effect of Public Relationship according to the SNS Activity of Sports Stars on Image Restoration in Crisis Situations. *The Korean Journal of Sport*, 14(4), 459-470 (2016).
- [5] Yoon H. Protecting Victims by Infringing Personal Information on SNS. *International Journal of Justice & Law*, 3(2), 13-20 (2018). [Article]
- [6] Ryu M & Jung K. The Effects of SNS Marketing on Team Trust, Team Identification, Spectatorship Intention, and Merchandising Purchases of Professional Sports Team. *The Korean Journal of Sport*, 19(2), 467-476 (2021).
- [7] Yoon T & Bae S & Park D & Jung S. The Relationships between Levels of Sports Fan's Involvement for Social Network Service(SNS) of Professional SportsTeam and their Purchasing Intention. *Journal of Sport and Leisure Studies*, 53(1), 341-357 (2013).
- [8] Park J & Song P. A Study of Tourism Industry's SNS Marketing Activity Effect on Brand Awareness, Brand Image, Corporate Image and Purchase Intention. *International Journal of Tourism and Hospitality Research*, 29(7), 225-239 (2015).
- [9] Jung S & Cho K & Chung Y. The Relationships among the Involvements of Social Network Service(SNS) of the Sports Team's Activity, Team Image, Team Attitude, Team Loyalty and Words of Mouth Intention. *Korean Society for Sport Management*, 16(4), 61-75 (2011).
- [10] Gim G & Kim Y & Zhuo Y. The Structural Relationship among SNS Characteristics of Professional Baseball Team, Attitude toward a Team, Team Image, Parent Company Image, Positive Emotion of Parent Company, and Parent Company Loyalty. *Korean Society for Sport Management*, 22(3), 35-54 (2017).
- [11] Matsuoka H & Chelladurai P & Harada M. Direct and Interaction Effects of Team Identification and Satisfaction on Intention to Attend Games. *Sports Marketing Quarterly*, 12(4), 244-253 (2003).
- [12] Parganas P & Anagnostopoulos C. Social Media Strategy in Professional Football: The Case of Liverpool FC. *Choregia*, 11(2), 61-75 (2015).
- [13] Jung K & Ryu M & Yu K. Structural Model Analysis on the SNS Marketing of Professional Basketball Teams, Ease of Use, Perceived Usefulness and Visit Intention of Spectators with Experience in using SNS. *The Korea Journal of Sports Science*, 28(3), 427-441 (2019).

- [14] Park S & Cho K & Byun H. The Effect of SNS Marketing Activity on Emotional Reaction, Dance Company Image, Consumer Behavior. *Journal of Korean Association of Physical Education and Sport for Girls and Women*, 33(1), 15-39 (2019).
- [15] Kim Y & Kim A & Kim K. Relationship among Pro-football Spectators' Attitude toward Spectating, Spectating Satisfaction, Team Trust, Team Identification, Sponsor Identification, Sponsor Image, Purchase Intention and Word-of-mouth. Korean Society for Sport Management, 12(4), 13-30 (2012).
- [16] Kim Y. The Structural Relationship among Women's Professional Basketball Operation System, Team Trust, Team Attachment, Familiarity of Foreign Players and Revisit Intention. *Journal of Sport and Leisure Studies*, 79(1), 45-59 (2020).
- [17] Kim K. The Structural Relationships among Design Constituent of Professional Baseball New Stadium, Club Image, Club Trust and Club Loyalty. *Korean Society for the Sociology of Sport*, 34(4), 81-93 (2021).
- [18] Nam S & Bae J. The Structural Relationship among Viewing Motivation of Official Youtube Channel of Professional Sports Club, Team Identification, Viewing Attitude, Viewing Satisfaction and Spectatorship. *Korean Journal of Sports Science*, 28(6), 671-685 (2019).
- [19] Oh J & Cho K. The Relationship among Perception of Convergence in Sports Industry, Service Differentiation Strategies using Augmented Reality and Viewing Intention: Focused on Professional Baseball. *The Korean Journal of Physical Education*, 56(5), 355-370 (2017).
- [20] Lee J & Jeong S & Kim S & Park S. The Effect of Credibility of the Information through Professional Baseball Team SNS Activity on the Corporate Social Image and Brand Equity. *The Korean Journal of Physical Education*, 51(5), 399-411 (2012).
- [21] Cho T. Impact of Professional Sports Team SNS Relation-oriented Activities on Relationship Value, Relationship Commitment, and Relationship Satisfaction. *Korean Society for Sport Management*, 19(2), 71-87 (2014).
- [22] Kim W. A Study on the Effects of Professional Baseball Club's Community Relationship-oriented Activity of Social Network System on Relation Commitment, Use Satisfaction and Continuous Use Intention. *Korean Journal of Sports Science*, 23(2), 705-717 (2014).
- [23] Kim M & Lee S & Yu H & Hwang I. Causal Relationship between Social Media Marketing Activities, Customer Satisfaction, and Behavioral Intention of Water Leisure Sports Facilities. *Korean Journal of Sports Science*, 30(3), 515-529 (2021).
- [24] Ryu M. Importance-performance Analysis of SNS Marketing for Promoting Professional Sports in Post-covid Era. *The Korean Journal of Sport*, 18(4), 625-635 (2020).
- [25] Kwon RA & Cha SJ. Applying SNS Prosumer Marketing to Construct the Relevancy in Dance Performer of Audience Satisfaction, Relationship Quality, and Long-term Relationship Orientation. *The Journal of Korean Dance*, 36(1), 1-30 (2018).
- [26] Lee J & Choi J. Effect of Marketing for Sports Equipment using SNS on Consumer's Brand Image & Purchase Intention. *Journal of Sport and Leisure Studies*, 70(1), 155-165 (2017).
- [27] Choi H & Lee C. A Study on the Measure of Promotion for the Sales of Sports Licensed Products to Overcome the Disaster of Professional Sports During the Covid-19 Period: With a focus on the Relationship between the Professional Sports' Quality of Service, Identification of Team, and the Brand Loyalty. *International Journal of Human & Disaster*, 6(3), 12-21 (2021). [Article]
- [28] Choi H & Im J. The Effect of Professional Awareness of Sports Leaders on Role Expectations and Service Satisfaction among Sports Participants to Protect the Sports Market. *Protection Convergence*, 6(2), 14-22 (2021). [Article]
- [29] Shin H & Choi H. Risk Management Plan for Safety of Sport Facilities in Republic of Korea. *International Journal of Crisis & Safety*, 2(2), 9-16 (2017). [Article]
- [30] Kim B & Lee Y & Noh H. A Study on the Effect of Crisis Perception to the Re-participation Intention of Korean Participants Water Leisure. *International Journal of Crisis & Safety*, 1(1), 20-25 (2016). [Article]

7. Appendix

7.1. Authors contribution

	Initial name	Contribution		
	НС	-Set of concepts ☑		
Lead		-Design ☑		
Author		-Getting results ✓		
		-Analysis 🗸		
	ВК	-Make a significant contribution to collection $\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$		
Corresponding		-Final approval of the paper $\ oldsymbol{arnothing}$		
Author*		-Corresponding ☑		
		-Play a decisive role in modification $\ oxdot$		
	SJ	-Significant contributions to concepts, designs,		
Co-Author		practices, analysis and interpretation of data $\ oldsymbol{arphi}$		
Co-Author	31	-Participants in Drafting and Revising Papers $\ oxdot$		
		-Someone who can explain all aspects of the paper 🔽		

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