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Article

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Article

Customer Happiness and Open Innovation in the Esthetics Education for the Elderly Generation

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Abstract: In Korean society, where aging is rapidly progressing, the happiness of the elderly is no longer an economic issue. An esthetics program has the effect of improving depression or low self-esteem to increase psychological and physical satisfaction, which is a good way to raise the happiness index of the elderly. However, there is a lack of esthetics education or esthetics programs in Korea to train estheticians to serve elderly people. This study confirmed the possibility of open innovation through esthetics education to increase the happiness index of the elderly. As a research method, a self-administered questionnaire was used to survey 572 estheticians and analyzed statistically. In this study, Korean estheticians were very positive about the need for the development of professional care programs for the elderly, and it was found that they are willing to care for the elderly. Developing a variety of esthetic programs through the training of professional manpower for the elderly in the future will contribute to enhancing the happiness index of elderly Korean people.

Keywords: elderly generation; esthetics service; education; happiness index; aging

1. Introduction

South Korea became an aged society in 2018, just 18 years after becoming an aging society, with 14 percent of its population classed as aged. This makes it the fastest-aging Organization for Economic Cooperation and Development (OECD) economy (Figure 1); it is faster than Japan, which took 24 years to transition from an aging society to an aged society [1,2].

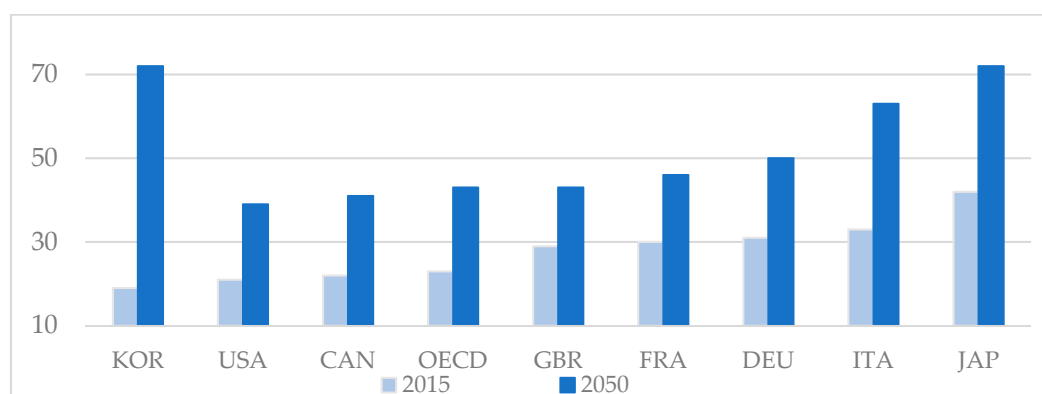


Figure 1. Aging rates of the Organization for Economic Cooperation and Development (OECD) countries [2].

According to the Korea Statistical Office, the aged population index was 104.8 in 2017, and the elderly population aged 65 or older already exceeded the youth population aged 10–14 [3].

However, it is doubtful whether Korea is prepared to face aging rapidly. According to the OECD statistics, the suicide rate [1] and poverty rate [2] of the elderly in Korea are the highest among the OECD countries, and one out of five elderly people suffer from depression [4].

After retirement, many people live between 20 and 40 years, a fact that creates the need for better quality of life and independence [5]. Happiness effects positive emotions that determine quality of life [6]. In this regard, many studies have been conducted on factors related to the happiness of the elderly.

While GDP remains widely used as an indicator of a nation's economic activity, it has been consistently found that happiness does not necessarily increase with income, and many international organizations and experts agree that it is necessary to have a happiness index that incorporates not only economic value (e.g., GDP) but also life satisfaction, future expectations, unemployment rate, self-esteem, hope, and love [7,8]. In other words, in order to raise the happiness index of the elderly, a program that can cover not only economic aspects but also psychological aspects is needed. In particular, high self-esteem has been reported to be one of the strongest predictors of well-being [9], and it has a strong relation to happiness. One study found that people with high self-esteem are significantly, substantially happier than other people. They are also less likely to be depressed, either in general or specifically in response to stressful, traumatic events [10].

Social welfare programs, such as art therapy, music therapy, and laughter therapy, are emerging to address the psychological difficulties Korean elderly face, but most Korean welfare is still focused on solving economic difficulties. In order to solve these problems, various programs that can solve the psychological and physical difficulties of the elderly must be presented. In this study, an esthetics service program is proposed as an alternative.

"Esthetics" is a specialized field for skin care in the beauty industry [11], and the people who work in the esthetics industry are called an "estheticians". Esthetic massage uses touch and manual techniques, such as stroking and gentle pressure, in order to relax the body and help to restore health [12].

Esthetics service programs are highly appropriate as an alternative program for improving elderly happiness in Korean society, which is rapidly aging, in terms of improving both appearance and psychological satisfaction.

On the other hand, in order for the esthetics service program to have an effect on improving the happiness of the elderly, it is essential to educate the practitioners (estheticians) who provide the service. In order to form a program for educating estheticians, the needs of the elderly, who are the service consumers; estheticians, who are the service providers; and industry need to be reflected. One of the important factors is the willingness of and demand from estheticians, who are the service providers and the customers of this training. Estheticians who are currently working in the esthetics industry will be in charge of senior care in the future, and the success or failure of the program will depend on their educational needs and wills. This is because their attitudes and wills are very important in their occupational group in terms of their emotional impact on the elderly. Therefore, we tried to study esthetics service program education from the perspective of open innovation with the opinions of estheticians as an element to improve the happiness index of the elderly. The details of each element will be mentioned through the analysis of previous studies in the next section.

This study is presented in the following order: Section 2 analyzes the current literature on beauty education in Korea. Through this process, open innovation frameworks were prepared to enhance the happiness index of the elderly generation. Section 3 presents the research methods, Section 4 explains the research methods and results, the results of the study are discussed in Section 5, and conclusions are drawn in Section 6.

2. Literature Review and Research Framework

2.1. Customer Education: Esthetics Education for the Elderly Generation in Korea

According to the Korea Public Health Control Act [11], “beauty art business” means the business of making the appearance of customers beautiful by taking good care of their faces, hair, skin, etc. The beauty business in Korea is divided into four areas: hair, esthetics, makeup, and nails. Since we are concentrating on esthetics, the other three areas will not be discussed in this article.

As society becomes more sophisticated, new consumption trends lead to well-being, emotions, etc. Therefore, consumers are interested in physical and mental health, while at the same time the demand for beauty is diversifying [13]. In line with this trend, the Korean government established a policy to foster the beauty industry, and in 2009, studies were conducted in accordance with the government’s beauty industry development policy, including the “Beauty Reinforcement of Beauty Industry Competitiveness” [14].

Korea has been industrialized within merely half a century and has maintained economic growth by developing Information Technology (IT) and digital-based knowledge and information with manufacturing industries [15]. Korea is, in particular, an advanced country in terms of beauty education. Korea has 400 colleges, universities, and graduate schools with beauty courses [16]. In Korea, in order to work in the beauty industry, a license in the field of beauty certified by the government must be issued, and a license for beauty majors is issued without a separate procedure [11].

However, there is not enough study about professional education aimed at elderly people in beauty education in Korea. According to research data on beauty education in Korea over the last 20 years [17], most research topics have been about satisfaction and the need for curriculum education and curriculum analysis. In addition, the subjects were not professional estheticians but students in beauty courses. From the service provider and the perspective of the consumer, many leading studies have studied the satisfaction and needs of the elderly who have demand for esthetics services, but study of the estheticians, who are the service providers, has been very rare.

Therefore, in this study, we wanted to hear the opinions of estheticians, a human resource for senior beauty services.

2.2. Customer Happiness Index: Senior Beauty Services

Previous studies have reported that physical attractiveness is a concept that positively affects factors such as happiness, self-esteem, and social performance [18]. In the case of the elderly, appearance management behavior relieves mental stress and improves depression, self-esteem, and social skills [19–22]. Thus, the industry classified as “beauty art business” in Korea is believed to have a psychologically positive effect on people, especially the elderly, in terms of appearance improvement.

Among other things, esthetics provides massage as a skin touch service, unlike other beauty art businesses. “Touching” makes people feel loved, accepted, and desirable and it is a necessity for emotional well-being [23]. For example, Rho et al. found that aromatherapy, a kind of esthetics, increased self-esteem and decreased anxiety [24]. Another study also reported that slow-stroke back massage and hand massage showed statistically significant improvements on physiological or psychological indicators of relaxation [25]. Tactile massage, referred to as “taktil massage” in Swedish, is a complementary care method used successfully not only in palliative and geriatric care but also in other health fields to reduce stress [26,27].

In this respect, an esthetic massage program is expected to be a good alternative to improve psychological stability and the happiness index for elderly people. In addition, today, a new generation of consumers also have higher awareness of health and issues relating to the negative effects of some traditional medicines and treatments, which has led to growing demand for relaxation treatments with natural products [28]. Enhancing psychological health through esthetics services could also satisfy this new generation of consumers. Thus, the development of an esthetics service that can simultaneously

promote “physical” and “emotional” satisfaction is highly likely to be applied as a new interventional treatment for all generations, as well as for the happiness index of the elderly.

In this regard, this study was conducted to devise a method that can actually apply esthetics services with these effects.

2.3. Open Innovation for Senior Beauty Services

JinHyo Joseph Yun and Tan Yigitcanlar said, “Firms cannot survive forever, basically because businesses of firms are embedded in the market, and society, which are changing dynamically.”. Further, through “open innovation—open connections between technology, the market, and open business models—we may be able to create new opportunities to link technology, market and society” [29]. Open innovation is a concept that is often viewed as an important factor for the growth of an organization [30].

In order to successfully combine the two concepts of “Happiness Index” and “Esthetics Service” presented in this study, the needs of service consumers, service providers, and the beauty industry were first identified, and these were expanded to new opportunities, that is, new services, through open innovation. This process is essential. The ultimate goal was to raise the happiness index for the elderly by developing programs for the elderly and educating practitioners through this process of service expansion (Figure 2).

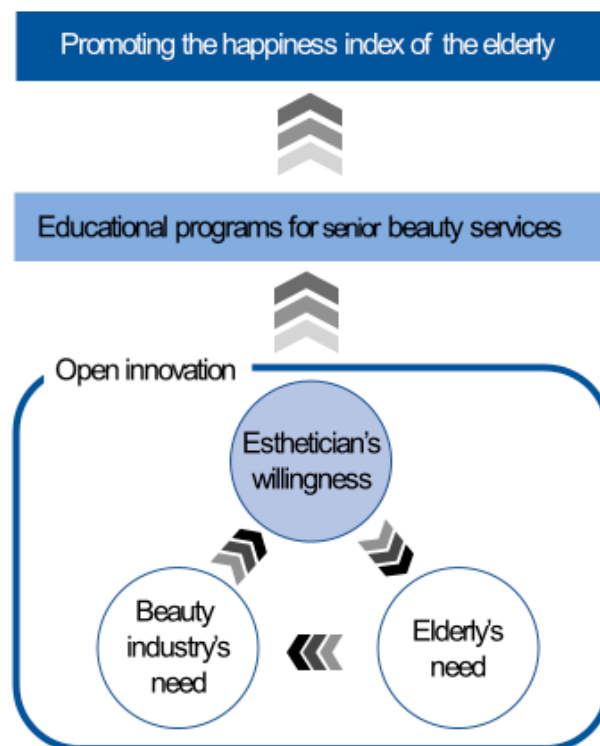


Figure 2. Esthetics program development model to improve elderly happiness index.

In order to develop esthetics training programs, the needs of the elderly, the needs of the industry, and the willingness of the practitioners to be educated must be properly fused; in particular, when considering the students as consumers of education, it is essential to understand what is required at each step in the process for the students [15].

In previous studies, research on the beauty welfare aspect measured the need for beauty care professionals who professionally care for the elderly [31]. However, the survey was limited to some welfare facilities, not the beauty industry, and the study focused on hairdressing, which made prior study on esthetics very insufficient. Although esthetics was found to increase the self-esteem and

happiness of the elderly [32] and improve psychological well-being [33], the common problem raised in the results of many studies was that the research and programs for the elderly were very insufficient and the professional workforce was insufficient.

Therefore, this study, which analyzed and applied the needs of the service providers (estheticians), provides important basic data for the open innovation of beauty education in Korea.

3. Materials and Methods

3.1. Subjects

According to the Korea Statistical Office [34], as of 2017, 225,635 workers were employed in the esthetics industry, and most of these workers were women. Therefore, this study conducted a self-subscribed survey of 600 women engaged in the esthetics industry in Korea for the purpose of developing programs and training of professional estheticians who provide skin care services for the elderly. The questionnaire was distributed and retrieved directly from 1 May 2019 to 8 May 2019 by a cosmetologist who fully understood the purpose of the study. Of the responses, 572 were used for the final analysis.

3.2. Research Tools

The research tool consisted of 33 questions including general characteristics, understanding of the elderly, senior beauty service experience, and educational needs. First of all, the general characteristics consisted of five questions about gender, age, and the percentage of elderly customers they served over the course of a month. Next, their understanding of the elderly was determined based on Palmore's aging quiz scale [35], which consists of physical/physiological (seven items), psychological (six items), and family/social (seven items) questions. The translations and modifications from previous studies [36–38] were developed and used, and Cronbach's alpha of the revised and supplemented understanding scale was 0.737. Lastly, the questions about a senior beauty service experience and educational needs for the elderly consisted of eight questions about volunteering for the elderly and educational experiences related to the elderly, the necessity of education and the necessity of professional occupations, and the preference of related education composition and subjects. This part was newly formed through previous research and a group interview of five domestic skin care experts. The questionnaire was finalized through a pilot test.

3.3. Data Analysis

The collected data were analyzed using SPSS for Windows 21.0. In order to analyze the general characteristics and the present status of volunteer/education experience for the elderly, we used descriptive statistics. In order to investigate the differences in education needs and understanding of the elderly according to general characteristics and the experience of volunteering/education for the elderly, *t*-test and one-way ANOVA were used.

4. Results

4.1. Subjects' General Characteristics

As for the general characteristics of the subjects, 472 persons (82.5%) were under the age of 30, 537 persons (93.9%) were not married, and 35 persons (6.1%) were married. The positions were junior, 230 persons (40.2%); senior, 139 persons (24.3%); manager, 73 persons (12.8%); and director, 130 persons (22.7%). Of those surveyed, 331 (57.9%) persons said that their proportion of elderly customers was less than 20%. Further, 335 persons (58.6%) answered that they have lived together with elderly family in the past or present (Table 1).

Table 1. General characteristics of survey subjects.

Classification		Number	Percentage (%)
Age	Under 30	472	82.5
	Over 30	100	17.5
Marital Status	Unmarried	537	93.9
	Married	35	6.1
Position	Junior	230	40.2
	Senior	139	24.3
	Manager	73	12.8
	Director	130	22.7
Elderly customer ratio	Less than 20%	331	57.9
	20%–30%	164	28.7
	Over 30%	77	13.5
Experience living together with elderly family	Lived together in the past	293	51.2
	Currently living together	42	7.3
	Never experienced living together	237	41.4
Total		572	100.0

4.2. Understanding of the Elderly

The degree of understanding of the elderly was rated as 1 point for the correct answer and 0 point for the wrong answer. The higher the score, the higher the understanding level of the elderly. Based on the analysis, as a result, the average overall understanding of the elderly was 10.20 ± 2.893 points out of 20 points, the physical and physiological area average was 4.18 ± 1.325 out of 7 points, the psychological area average was 3.59 ± 1.323 out of 6 points, and the family and social area average was 2.43 ± 1.497 out of 7 points.

4.3. Experience Volunteering for the Elderly and Education about the Elderly

Based on the analysis, 397 persons (69.4%) showed that they had experience in skin care volunteer work for the elderly. Further, 76 persons (13.3%) had experience in skin care education about the elderly.

4.4. Education Needs for Senior Beauty Services

4.4.1. Major Practical Courses that are Considered Necessary for Senior Beauty Services

Based on the analysis (Figure 3), “Lymph Drainage” drew the highest response with 178 persons (31.1%), followed by “Aromatherapy” with 177 persons (30.9%), “Swedish massage” with 137 persons (24.0%), and “Meridian massage” with 74 persons (12.9%).

4.4.2. Liberal Arts Courses that are Considered Necessary for Senior Beauty Services

Based on the analysis (Figure 3), the liberal arts courses that are considered necessary for senior beauty services were “counseling and psychology”, which was the highest with 251 persons (43.9%), followed by “Behavior and kinematics” with 122 persons (21.3%), “customer service” with 72 persons (12.6%), “nursing” with 69 persons (12.1%), and “nutrition” with 57 persons (10.0%).

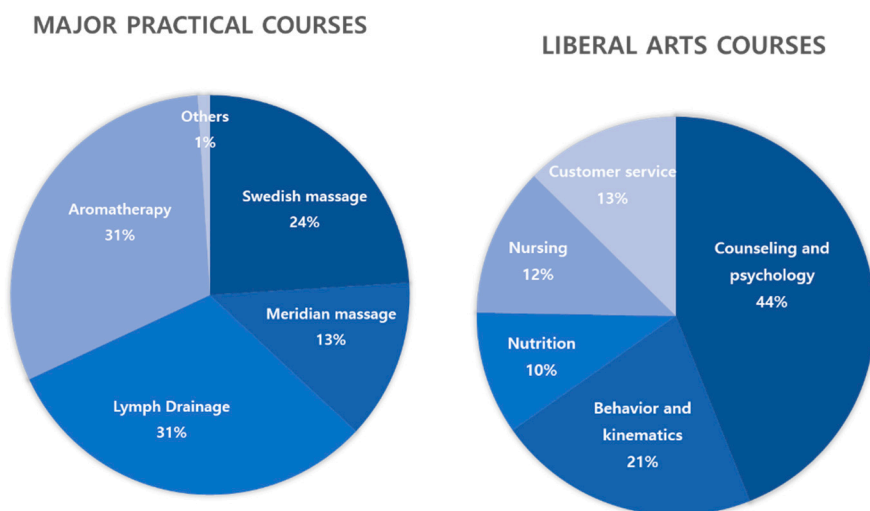


Figure 3. Major and liberal arts courses that are considered necessary for senior beauty services.

4.4.3. Educational Needs and Occupational Necessity for Senior Beauty Services

As a result of the analysis, the educational needs for senior beauty services and the necessity of an occupation group are shown in Table 2. In the case of the necessity of education, 302 (52.8%) of the respondents said that education is necessary, and only 17 (3%) answered that it is unnecessary. In addition, 407 (71.2%) responded that an occupation is needed for senior beauty services.

Table 2. Educational needs and necessity of occupation to provide senior beauty services.

Classification		N	%
Need for education for senior beauty services	Very necessary	95	16.6
	Necessary	302	52.8
	Normal	158	27.6
	Unnecessary	11	2.0
	Very unnecessary	6	1.0
Total		572	100.0
M (SD)		3.95 (0.785)	
Necessity of occupation to provide senior beauty services	Very necessary	101	17.7
	Necessary	306	53.5
	Normal	149	26.0
	Unnecessary	11	1.9
	Very unnecessary	5	0.9
Total		572	100.0
M (SD)		3.95 (0.785)	

4.5. Differences in Educational Needs for Senior Beauty Services According to Understanding and Experience Concerning the Elderly

Based on the analysis of whether there is a difference in educational needs for senior beauty services according to general characteristics, understanding of elderly persons, experience volunteering for the elderly, and educational experience about the elderly, there was a statistically significant difference according to whether a respondent had experience volunteering for elderly persons and was educated about the elderly ($p < 0.05$). Those with experience had higher demand for education about the elderly (Table 3).

First, according to experience with skin and beauty volunteer services for the elderly, it was found that the persons who answered that they have volunteer experience had higher demand for

education for senior beauty services than did the persons who answered that they do not have volunteer experience. Second, according to whether or not elderly skin and beauty education is provided, it was found that the persons who answered that they have educational experience responded that higher education is needed for senior beauty services more than did those persons who do not have education experience. There was no statistically significant difference according to understanding of elderly persons.

Table 3. Differences in educational needs for senior beauty services.

Classification		M	SD	t/F-value	p
Understanding of the elderly	High	3.88	0.741	2.342	0.097
	Middle	3.85	0.724		
	Low	3.71	0.827		
Experience of volunteering for the elderly	Have experience	3.87	0.749	2.206 *	0.028
	No experience	3.71	0.787		
Experience of education about the elderly	Have experience	4.11	0.741	3.536 ***	0.000
	No experience	3.78	0.758		
Total		3.82	0.763		

* $p < 0.05$, *** $p < 0.001$.

4.6. Difference in Need for an Occupation Group for Senior Beauty Services According to Understanding and Experience Concerning the Elderly

The results of analyzing differences in the necessity of an occupational group for senior beauty services according to understanding of the elderly and experience with the elderly are shown in Table 4. There was a statistically significant difference according to whether or not skin care education was conducted for the elderly ($p < 0.05$). In the case of educational experience, the necessity of an occupational group for senior beauty services was relatively higher than that in the absence of educational experience. In addition, there was no statistically significant difference in understanding of the elderly according to volunteer experience ($p > 0.05$).

Table 4. Difference in need for an occupation group for senior beauty services.

Classification		M	SD	t/F-value	p
Understanding of elderly	High	3.90	0.722	1.159	0.315
	Middle	3.87	0.724		
	Low	3.78	0.829		
Experience of volunteering targeted elderly	Have experience	3.87	0.749	0.719	0.472
	No experience	3.82	0.774		
Experience of education about the elderly	Have experience	4.03	0.765	2.173 *	0.030
	No experience	3.82	0.752		
Total		3.85	0.756	0.756	

* $p < 0.05$.

5. Discussion

This study investigated the possibility of open innovation through esthetics education to increase the happiness index of the elderly. We will discuss some of the following to confirm the validity of this study.

The first was to consider 'happiness' as an objective evaluation element of open innovation research in conceptual terms. Happiness regards the way that an individual considers different aspects of life and can be defined as a subjective expression of personal welfare that comprises an evaluation of one's own emotional state and satisfaction with life [38–40], so it was very important to be able to use happiness as an objective indicator of performance measurement.

In particular, since the happiness of the elderly was the main issue of this study, the study focused on where happiness is an important indicator of successful aging in high-income countries [41,42]. The study of happiness is being conducted more actively in developed countries than in less developed countries. Objectively confirming this is the World Happiness Report, which is published annually by UN principal organs. The World Happiness Report, which has been published since 2012, has compared and evaluated the happiness indices of each country. As a result, it was proved that happiness is not merely a subjective feeling of an individual but can make the world an objective indicator of comparability.

Second, it is a discussion about why the happiness of the elderly is an important factor in Korea. For example, Korea ranked 57th out of 156 countries surveyed in the 2018 World Happiness Report [43]. At the same time, in the measuring and analyzing of the Korean Happiness Index [44] conducted by Korea Institute for Health and Social Affairs, the happiness index of Koreans was 6.3 points out of 10. In the results, the age factor showed the highest satisfaction in the 30s and then gradually decreased to the lowest level in the 60s. It is reported that this is different from many countries that generally have a U-shaped happiness index. These findings also prove that the elderly have not been well prepared for the happy retirement in Korea, the most rapid aging in the OECD. Therefore, studying the happiness index of the Korean elderly is a key indicator of the future of Korea, which is rapidly aging.

Third, we discussed whether the esthetics service program actually affects happiness, especially the elderly. This was verified through the analysis of previous studies. In Yun's study [31], middle-aged women argued that increased satisfaction through esthetics management convinced them of their choices and behaviors, leading to an increase in self-efficacy and self-esteem and increased happiness. In addition, the group who received aroma massage for 7 weeks in the experimental group aged 65–85 years showed statistically significant anxiety reduction and self-esteem improvement compared to the control group [24]. In the case of the study by Suzyuki et al. [27] reported that the six-week tactile massage course reduced 'behavioral and psychological symptoms of dementia (BPSD)' for the elderly. It also suggested the possibility of non-verbal communication methods to restore the human senses of severely dementia patients through warm hand-to-hand with nurses.

As such, the esthetics service program was confirmed to increase the happiness of the elderly by increasing self-esteem and self-efficacy. In particular, the esthetics service is a program that provides not only mental satisfaction but also physical satisfaction through touch at the same time, which can help practically the happiness of the elderly.

Last, the discussion is about the implementation of open innovation through esthetics education. In order to actual open innovation to succeed, it is necessary to develop a program in which all three fields are proposed. The three sectors include the elderly who are the service consumers, the estheticians that are the service providers, and the beauty industry that can continue to develop them.

However, over the past two decades, Korean studies have only identified the needs of elderly people who are service consumers. In other words, there was a lack of understanding of the status of professional esthetics to provide services to the elderly and how to commercialize them in the beauty industries. Therefore, as the core of this study, we investigated the general needs of education of service providers, estheticians.

Therefore, a survey was conducted with Korean estheticians and included their understanding of the elderly, their experience in volunteering, whether they had completed education relating to the elderly, and their educational needs related to the management of the elderly. This study was a very important factor in identifying professionalism and commitment to education in the care of the elderly in Korea.

The rate of understanding about the elderly, at 51.0%, was not high. This is similar to the percentage of correct answers (52.6%) attained by dental hygienists in a previous study [45].

In particular, 69.4% of the respondents answered that they had experience in volunteering for the elderly. On the other hand, only 13.3% of the respondents said they had received skin care training for the elderly. This result was slightly higher than that found by Won et al. (2009), who found that 52.4% in beauty services had such experience [46]. This is due to the fact that current esthetics education in Korea is limited to general adults. It is proof that although the human body has very different skin characteristics according to age, esthetics programs provided in the beauty industry are operated without considering this. Even in university, since professional education related to the elderly is not provided, information on the elderly can be obtained only through external activities such as volunteer activities, not through the school curriculum.

On the other hand, those who have experience with the elderly, such as through volunteering and education, consider the need for education in senior beauty services to be higher. This is similar to the finding that 96% of nurses trained in the elderly want to continue their education [47]. There was also a high necessity for a professional occupation relating to the elderly according to those with educational experience. We interpreted that those who have been educated about the elderly have a greater awareness of the necessity for education and consequently wish for more education about the elderly. In order to develop an efficient esthetics program in the future, there will be a need for a way to create various prior experiences with the elderly, such as service for or education about the elderly.

6. Conclusions

The solutions to the problems faced by the elderly should consider not only the “sick” elderly but also the “healthy” ones suffering from general aging. In Korea, which has to prepare for various socioeconomic changes due to rapid aging, it is very important to manage the emotional satisfaction of the elderly. In this regard, it is essential to develop an esthetics program for the elderly that is effective in improving self-esteem and depression in the elderly.

In this study, senior beauty services were proposed to promote the happiness of the elderly, and open innovation of esthetics education was studied to realize this. For successful senior beauty service education, the needs of the elderly, the needs of the esthetics industry, and the needs and wants of the estheticians directly providing the services should be reflected and realized.

From this point of view, a survey and analysis of current estheticians’ understanding of the elderly and the subjects and educational needs for senior beauty services will be very useful data for future program development.

In addition, this study will be a very positive answer to resolve the shortage of professional manpower that has been identified as a problem when discussing professional elderly management in the field of esthetics. As a result, it is significant in that it provides important basic data for the development of programs that can increase the happiness index of the elderly in the future.

A limitation of this study is that the survey was conducted on some estheticians in Korea, and it is difficult to interpret it as the opinion of all estheticians in Korea. In addition, due to the lack of international research on esthetic services, there was an inevitable limitation of discussion to Korean research.

Better results could be expected if more extensive and global studies are developed for the development of various professional senior programs in the future. In addition, it is hoped that this study will contribute to the progress of various studies to improve the welfare level of Korea, as well as the happiness of the elderly.

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References

1. United Nation (UN). *Elderly Livings and Elderly Welfare Policy in Korea*; UN: New York, NY, USA, 2015; Available online: https://www.unescap.org/sites/default/files/Session1_Mr.KimChanWoo_RoK.pdf (accessed on 9 December 2018).
2. Organization for Economic Cooperation and Development (OECD). *OECD Economic Surveys: Korea 2018*; OECD: Paris, France, 2018; Available online: <https://www.oecd.org/eco/surveys/Korea-2018-OECD-economic-survey-overview.pdf> (accessed on 10 May 2019).
3. Korea Statistical Office. 2017 Statistics on the Aged. 2017. Available online: <http://kostat.go.kr/portal/eng/pressReleases/11/3/index.board> (accessed on 30 April 2019).
4. Ministry of Health and Welfare (MOHW). 2017 Survey of the Elderly. 2017. Available online: http://www.mohw.go.kr/react/jb/sjb030301vw.jsp?PAR_MENU_ID=03&MENU_ID=032901&CONT_SEQ=344953 (accessed on 20 May 2019).
5. Celik, S.S.; Kapucu, S.; Tuna, Z.; Akkus, Y. Views and attitudes of nursing students towards ageing and older patients. *Aust. J. Adv. Nurs.* **2010**, *27*, 24.
6. Mimi, M.Y.; Wong, A.M.; Wan, V.T. Happiness among community-dwelling older persons: Is it related to pain and loneliness? *J. Pain Manag.* **2012**, *5*, 163.
7. Helliwell, J.; Layard, R.; Sachs, J. *World Happiness Report 2017*; Sustainable Development Solutions Network: New York, NY, USA, 2017.
8. Park, H.S.; Kang, H.G.; Kim, M.C.; Lee, J.; Paik, J.K. Development of the WISH (Well-Aging Indexing for Senior Health) Platform for Happiness. *J. Open Innov. Technol. Mark. Complex.* **2018**, *4*, 36. [[CrossRef](#)]
9. Cheng, H.; Furnham, A. Personality, self-esteem, and demographic predictions of happiness and depression. *Personal. Individ. Differ.* **2003**, *34*, 921–942. [[CrossRef](#)]
10. Baumeister, R.F.; Campbell, J.D.; Krueger, J.I.; Vohs, K.D. Does high self-esteem cause better performance, interpersonal success, happiness, or healthier lifestyles? *Psychol. Sci. Public Interest* **2003**, *4*, 1–44. [[CrossRef](#)]
11. The National Law Information Center. Enforcement Decree of the Public Health Control ACT. 2016. Available online: <http://law.go.kr/LSW/eng/engLsSc.do?menuId=2§ion=lawNm&query=enforcement+decree+of+the+public+health+control+act&x=0&y=0#liBgcolor2> (accessed on 10 December 2018).
12. Airoso, F.; Andersson, S.K.; Falkenberg, T.; Forsberg, C.; Nordby-Hörnell, E.; Öhlén, G.; Sundberg, T. Tactile massage and hypnosis as a health promotion for nurses in emergency care—a qualitative study. *BMC Complement. Altern. Med.* **2011**, *11*, 83. [[CrossRef](#)]
13. Shin, K.O.; Park, H.S. Antiaging Cosmeceuticals in Korea and Open Innovation in the Era of the 4th Industrial Revolution: From Research to Business. *Sustainability* **2019**, *11*, 898. [[CrossRef](#)]
14. Moon, W.S.; Kim, S.S. A Study on the Status Analysis and the Development plan of Beauty-IT Convergence Industry. *J. Digit. Converg.* **2015**, *13*, 235–243. [[CrossRef](#)]
15. Ah Kim, S.; yun Ryoo, H.; joo Ahn, H. Student customized creative education model based on open innovation. *J. Open Innov. Technol. Market. Complex.* **2017**, *3*, 6. [[CrossRef](#)]
16. Higher Education in Korea. Available online: <http://academyinfo.go.kr/mjrinfor/mjrinfor0450/doInit.do> (accessed on 11 May 2019).
17. Seo, S.M.; Kang, S.K. The Analysis of Beauty Education Study Trend. *J. Korean Soc. Cosmetol.* **2016**, *22*, 1464–1470.
18. Mathes, E.W.; Kahn, A. Physical attractiveness, happiness, neuroticism, and self-esteem. *J. Psychol.* **1975**, *90*, 27–30. [[CrossRef](#)] [[PubMed](#)]

19. Kligman, A.M.; Graham, J.A. The psychology of appearance in the elderly. *Dermatol. Clin.* **1986**, *4*, 501–507. [[CrossRef](#)]
20. Park, Y.H.; Park, M.J.; Jeon, S.B. A Study of Effects of Elderly Women's Interest in Appearance on Life Satisfaction and Depression. *Korean J. Aesthet. Cosmetol.* **2013**, *11*, 383–391.
21. Park, S.H. A Study of the Old Persons Beauty Needs and Beauty Performance. *J. Korean Soc. Cosmetol.* **2006**, *12*, 62–70.
22. Tak, Y.R.; Kim, S. Perceived social support, instrumental support needs, and depression of elderly women. *Korean J. Women Health Nurs.* **2003**, *9*, 449–456. [[CrossRef](#)]
23. Koblenzer, C.S. Psychologic aspects of aging and the skin. *Clin. Dermatol.* **1996**, *14*, 171–177. [[CrossRef](#)]
24. Rho, K.H.; Han, S.H.; Kim, K.S.; Lee, M.S. Effects of aromatherapy massage on anxiety and self-esteem in korean elderly women: A pilot study. *Int. J. Neurosci.* **2006**, *116*, 1447–1455. [[CrossRef](#)]
25. Harris, M.; Richards, K.C. The physiological and psychological effects of slow-stroke back massage and hand massage on relaxation in older people. *J. Clin. Nurs.* **2010**, *19*, 917–926. [[CrossRef](#)]
26. Andersson, K.; Tornkvist, L.; Wandell, P. Tactile massage within the primary health care setting. *Complement. Ther. Clin. Pract.* **2009**, *15*, 158–160. [[CrossRef](#)]
27. Suzuki, M.; Tatsumi, A.; Otsuka, T.; Kikuchi, K.; Mizuta, A.; Makino, K.; Kimoto, A.; Fujiwara, K.; Abe, T.; Nakagomi, T.; et al. Physical and psychological effects of 6-week tactile massage on elderly patients with severe dementia. *Am. J. Alzheimer's Dis. Other Dement.* **2010**, *25*, 680–686. [[CrossRef](#)]
28. Yan, M.-R.; Wang, C.-H.; Cruz Flores, N.J.; Su, Y.-Y. Targeting Open Market with Strategic Business Innovations: A Case Study of Growth Dynamics in Essential Oil and Aromatherapy Industry. *J. Open Innov. Technol. Market. Complex.* **2019**, *5*, 7. [[CrossRef](#)]
29. Yun, J.J.; Yigitcanlar, T. Open innovation in value chain for sustainability of firms. *Sustainability* **2017**, *9*, 811. [[CrossRef](#)]
30. Nho, H.J. Research ethics education in Korea for overcoming culture and value system differences. *J. Open Innov. Technol. Market. Complex.* **2016**, *2*, 4. [[CrossRef](#)]
31. Youn, C.S.; Kim, J.S. The Effect of Middle and Elderly Woman's Skin Care on Happiness. *Korean J. Aesthet. Cosmetol.* **2010**, *8*, 1–14.
32. Choi, S.J.; Kim, S.H.; Choi, E.M. Study on the Status and Needs of Beauty Welfare in Welfare Facilities to Train Beauty Care Social Workers. *J. Health Welf.* **2018**, *20*, 93–110. [[CrossRef](#)]
33. Choi, Y.S.; Kim, Y.H. Effects of the Visual and Tactual Beauty Care Programs on Psychological Well-being of the Elderly Women at the Welfare Center. *J. Investig. Cosmetol.* **2013**, *9*, 279–287. [[CrossRef](#)]
34. Statistics Korea. 2017 The Service Industry Survey. 2017. Available online: http://kosis.kr/eng/statisticsList/statisticsListIndex.do?menuId=M_01_01&vwcd=MT_ETITLE&parmTabId=M_01_01#SelectStatsBoxDiv (accessed on 30 April 2019).
35. Palmore, E.B. The facts on aging quiz: Part two. *Gerontologist* **1981**, *21*, 431–437. [[CrossRef](#)]
36. Kim, S.O.; Oh, H.S.; Wang, M.S. A study on the nursing students' knowledge, attitudes and behavior towards the elderly. *J. Korean Acad. Soc. Nurs. Educ.* **2016**, *22*, 163. [[CrossRef](#)]
37. Kim, S.Y.; Yang, K.M.; Oh, H.E.; Kim, J.S. Nursing and social welfare students' knowledge and attitudes toward the elderly. *J. Korea Gerontol. Soc.* **2002**, *22*, 21–36.
38. Diener, E. Guidelines for national indicators of subjective well-being and ill-being. *Appl. Res. Qual. Life* **2006**, *1*, 151–157. [[CrossRef](#)]
39. Lyubomirsky, S.; Lepper, H.S. A measure of subjective happiness: Preliminary reliability and construct validation. *Soc. Indic. Res.* **1999**, *46*, 137–155. [[CrossRef](#)]
40. Veenhoven, R. Healthy happiness: Effects of happiness on physical health and the consequences for preventive health care. *J. Happiness Stud.* **2008**, *9*, 449–469. [[CrossRef](#)]
41. Sumngern, C.; Azeredo, Z.; Subgranon, R.; Sungvorawongphana, N.; Matos, E. Happiness among the elderly in communities: A study in senior clubs of Chonburi Province, Thailand. *Jpn. J. Nurs. Sci.* **2010**, *7*, 47–54. [[CrossRef](#)] [[PubMed](#)]
42. Luchesi, B.M.; de Oliveira, N.A.; de Morais, D.; de Paula Pessoa, R.M.; Pavarini, S.C.I.; Chagas, M.H.N. Factors associated with happiness in the elderly persons living in the community. *Arch. Gerontol. Geriatr.* **2018**, *74*, 83–87. [[CrossRef](#)] [[PubMed](#)]

43. Sachs, J.D.; Layard, R.; Helliwell, J.F. *World Happiness Report 2018*; Sustainable Development Solutions Network: New York, NY, USA, 2018; Available online: <http://worldhappiness.report/> (accessed on 6 May 2019).
44. Kim, N.; Seo, J.; Jeong, Y.; Lee, J.; Lee, N. *Measuring and Analyzing the Korean Happiness Index*; Korea Institute for Health and Social Affairs: Sejong, Korea, 2018.
45. Lee, J.Y.; Jeong, M.K. Original Article: A Study on the Relationship of Elderly-related Experience to Knowledge of and Attitude to the Elderly in Dental Hygiene Students. *J. Health Inform. Stat.* **2015**, *40*, 140–150.
46. Won, J.J.; Kim, K.Y.; Lee, M.Y.; Choi, K.H. The Activating Scheme of Beauty Welfare Volunteering on the Northern Gyeonggi-do. *J. Korean Soc. Cosmetol.* **2009**, *15*, 855–862.
47. Gilje, F.; Lacey, L.; Moore, C. Gerontology and geriatric issues and trends in US nursing programs: A national survey. *J. Prof. Nurs.* **2007**, *23*, 21–29. [[CrossRef](#)] [[PubMed](#)]



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