Yeun-Mi Kim, Chang-Bae Ko

Abstract— The purpose of this study is to analyze turnover intention of caregivers who provide their services to the elderly. Types of caregivers with turnover intention were identified and categorized using Q Methodology. The categorization seeks to aid in development of effective caregiver turnover management system. The Q Population of the study was constructed through unstructured interviews with 5 caregivers with less than 1 year of experience,3 caregivers with turnover experience, 5 care recipients and 4 family caregivers. The caregivers either worked in long-term elderly care facilities, or in-home care facilities in 'K' State 'S' City. 38 final Q Sample was finally selected amongst 55 Q Population. The Q Samples was then categorized such that the 33 caregivers formed a forced quasi distribution. Data analysis was conducted using PC QUNAL program. A typology of 6 types of turnover intention of caregivers was identified, and they were named: caregivers who cannot adjust to shift work, "housekeeper" caregivers, caregivers with difficult livelihood, "complaining" caregivers, caregivers who are concerned with their health, and caregivers with interpersonal issues. The study seeks to provide basic data through which caregivers' turnover intention can be understood from the perspectives of caregivers, care recipients, and family caregivers. Furthermore, it seeks to serve as basic data for future development of caregiver turnover management program.

Index Terms— Caregiver, Turnover Intention, Q Methodology, Caregivers' Turnover

I. INTRODUCTION

Number of elderly has been increasing rapidly in South Korea. In 2010, it had 5.55 million elderly, which accounted for 10% of the population. It now accounts for 20.8% of the population, making Korea a *super aged society*. Average elderly life expectancy for South Korean female is 84.1, and 77.2 for male, and 80.8 overall [1], presenting higher figure than OECD average elderly life expectancy of 79.2. Many health problems have surfaced with the aging population – around 90.9% of elderly suffer from chronic diseases, with 43.3% experiencing difficulties in carrying out activities of daily living [2].

In South Korea, the responsibility of taking care of elderly parents was borne by their families. Nevertheless, with structural changes to the society, including the emergence of nuclear families, low birth rate, and increasing number of working women, questions as to who, where, and how the Korean elderly would be taken care of have emerged. In other

Manuscript received Nov 24, 2016

Yeun Mi Kim, Nursing, Suwon Women's University, 72 Onjung-ro, Gweonseon-gu, Suwon-si, Gyeonggi-do, 16632, Rep. of Korea.

Chang Bae Ko, Business Administration, Kungdong University, Gosoung-gun, Kangwon-do, 24764, Rep. of Korea

words, due to the aforementioned structural changes, families can no longer subsume enough responsibilities to take care of their elderly parents [3]. As such, the South Korean government has introduced the Long Term Care Scheme in 2008, with the mission that the elderly would be taken care of by both their immediate families and the wider society. This led to an increase in the number of geriatric hospitals, long-term elderly care facilities and in-home care facilities, and to the introduction of new class of jobs called elderly caregivers.

According to the Ministry of Health [4], the number of caregivers has increased consistently from 232,639 in 2011, to 233,459 in 2012, to 252,663 in 2013, in conjunction with the implementation of Long Term Care Scheme. The turnover rate for caregivers was around 41% [5] in 2011-2012. Despite the high turnover rate, the employment rate of caregivers is only at 22%, and most caregivers who have license to practice are not seeking employment [6].

Caregivers make up the highest percentage of manpower in long-term elderly care facilities and in-home care facilities, and the high turnover rate of caregivers, who are the key personnel, would present a barrier to providing sustainable and stable services to the elderly[7]. Furthermore, the high turnover rate can lead to other negative consequences, such as relative lack of experienced caregivers in the system, leading to lower quality of care, and discouragement of existing labor force [8]. These, in turn, might lead to distrust and dissatisfaction amongst the elderly care recipients and their families.

Trust given by the organizations can lead to improvement in job satisfaction and reduction in turnover intention [9, 10, 11], and as such, long-term elderly care facilities should pay increasing amount of attention to caregivers who quit, so as to maintain the integrity of the institution. To gain more knowledge and better understanding about the turnover intention of caregivers, caregivers should be encouraged to express their experience and their turnover intentions. Understanding and analyzing the factors that contribute to their decision to quit could help in the development of effective turnover management system.

Q Methodology is a useful method to discover caregivers' subjective judgment and thoughts regarding turnover, and on various factors that contribute to their turnover intention. The statements used in the Q Methodology study could be utilized in the future to predict and assess caregivers' turnover intentions, and could be utilized in long-term elderly care facilities and in-home care facilities for strategic development of their organizational management. The study would also help the facilities, care recipients and their family caregivers to better understand caregivers' turnover intention, and for the

institutions to strategically develop management systems through which they can reduce the turnover rate.

II. PURPOSE OF STUDY

The study aims to analyze types of caregivers' turnover intentions, and their characteristics. The specific purposes are as below:

- 1) Identify types of caregivers' turnover intentions.
- 2) Analyze and describe the different types and their characteristics.

III. RESEARCH DESIGN

This study is an exploratory study designed using Q Methodology so as to identify the subjectivity of caregivers' turnover intention, and to explain their characteristics.

A. Q Sample

In this study, the Q Sample is defined as extracted items from the Q Population, which is the turnover intention from the perspective of both the caregivers themselves, and of the care recipients and the their families. The Q Sample was obtained from structured interviews with 5 caregivers with experience of less than 1 year, 3 caregivers with turnover experience, 5 care recipients, and 4 family members. Literature review on caregivers, turnover, and turnover intention was first conducted. The purpose of study was explained to directors of long-term elderly care facilities and in-home care facilities in South Korea 'K' State 'S' City, before obtaining consent. The study was conducted after approval from H University's Institutional Review Board (IRB) (HYI-14-009-2), till January 31, 2014. 55 statements were extracted from the structured interviews. To confirm the validity of the statements, the questions were independently verified and reviewed by 2 Nursing professors who were domain experts on Q Methodology, and 3 Graduate School students with experience in writing theses, involving Q Methodology. The independent verification and review enabled the study to combine similar statements and review potential ambiguities in the statements. Two caregivers, who were not part of the study, were also consulted so as to test and verify their understanding of the statements. 38 questions on caregivers' turnover intention were ultimately selected for the Q Sample.

B. P Sample Selection

The purpose of the study is to understand the meaning of caregivers' turnover intention from the perspectives of caregivers, care recipients and the family caregivers. The P Sample was extracted via principle of small sample used in Q Methodology [12]. The purpose of the study was explained to directors of long-term elderly care facilities and in-home care facilities in South Korea 'K' State 'S' City, before obtaining their consent. The study was from February 1, 2014, to April 15, 2015, with 35 caregivers who agreed to the study.

C. Q Sorting

O Sorting was conducted by asking the study participants to read the 38 Q Sample statements, and to rate the statements according to whether they felt positive or agreed with the statements (+), felt negative or disagreed (-), or felt neutral or neither disagreed nor agreed with the statements (0). The answer sheet was designed such that each statement had forced quasi distribution; 3 cards were given for each of ± 3point, 5 cards for each of \pm 2 point, and 7 cards for each of \pm 1 point, and 8 cards for 0 point. Q Sort distribution was obtained from the scores. Each survey participant was first asked to classify the statements into 3 broad categories of 'agree (positive)', 'neither disagree nor agree (neutral)' or 'disagree (negative)', and then to identify statements that they agreed and disagreed the most with, and to give the score cards to those statements, thus ending with the neutral statements. P Sample was asked to write its reasons behind the extreme scores given to the statements they agreed or disagreed with, and their feelings about the statements, so as to derive insights during the analysis of the Q Factors. The completion of the survey, Q Sorting and interview took around 30 minutes to 1 hour in general.

D. Data Analysis

Q Sample distribution was obtained from 38 Q Statements scored and sorted by 35 caregivers in the P Sample. According to their level of agreement or disagreement, the statements were scored from 1 (disagree the most) to 7 (agree the most), increasing by a scale of 1. The given scores were coded according to the statement number, and analyzed using PC-QUNAL program, to obtain statements' Z-Scores and perform principal component factor analysis.

IV. RESULTS

A. General Characteristics of the P Sample

The general characteristics of the caregivers in the P Sample are as follows: they have an average age of 47.94, and 33 of them (94.28%) are females. Most of them (28 caregivers, 80%) have religions. For highest education level achieved, 18 of them graduated from high school (51.42%), 7 graduated from technical college (20%), 7 graduated from middle school (20%), and 3 graduated from university (8.57%). Also, 18 of them work at long-term elderly care facilities (51.42%), and 17 at in-home care facilities (48.57%), and the average working experience is 20 months.

B. Formation of Q Factor

During the typology analysis, number of factors was varied with the minimum requirement of Eigen value 1.0, and started from no pre-determined factors. The different results from different number of factors were compared, with consideration to the percent of total variance explained by different factors; the analysis eventually resulted in a typology of 6 types. Eigen value and variance of the 6 different types show that the 6 types account for 53.5% of the total variance

Table 1. P Sample's characteristics and factor weights are as shown in Table 2.

C. Analysis of Q Types

Type 1: Caregivers who cannot adjust to shift work

7 caregivers were classified as Type 1; 6 were female and 1 was male; highest education attainment was high school for 3, technical college for 3, and university for 1. The working experience varied from 2 months to 45 months. 5 out of 7 were working in a long-term elderly care facilities Table 3. Type 1 showed strong levels of agreement to statements, including: 'Night shift is hard.' (Z-Score=1.59), 'Shift work is hard.' (Z-score=1.39), and 'Seeing colleagues who moved to institutions with better working conditions make me discouraged.' (Z-score=1.06). In contrast, Type 1 showed strong levels of disagreements to the statements, including: 'We have different religions.' (Z-Score=-1.65), 'I started to dislike old person's odor from some day.' (Z-score=-1.62), and 'The work hurts my ego.' (Z-score=-1.62). Caregivers who belonged to Type 1 expressed inability to adjust to irregular lifestyle, and consequent social life, forced by 2-shift or 3-shift system imposed. They also expressed that they were discouraged when they saw their colleagues moving to better workplaces, but got along with other colleagues within the workplace. As such, the study named this type caregivers who cannot adjust to shift work.

Type 2: "Housekeeper" caregivers

6 caregivers were classified as Type 2; all of them were female, and worked for in-home care facilities. 4 of them were high school graduates Table 4. Type 2 showed strong levels of agreements to statements, including: 'I feel like a housekeeper.' (Z-Score=2.56), 'Care recipient makes too many requests to do household chores.' (Z-score=1.67), and 'Care recipient's family make various requests.' (Z-score=1.62). In contrast, Type 2 showed strong levels of disagreements statements, including: to ʻI professionalism.' (Z-Score=-2.43), and 'It is more difficult to take care of Grade 1 care recipients, than to look after Grade 2 or 3 recipients.' (Z-score=-1.34). Caregivers who belonged to Type 1 felt that the care recipients and/or their families were making unreasonable requests, and gave instructions and treated them like housemaids instead. As such, the study named this type "housekeeper" caregivers.

Type 3: Caregivers with difficult livelihood

6 caregivers were classified as Type 3; 4 were female and 2 were male; highest education attainment was high school for 2, technical college for 2, middle school for 1, and university for 1. The working experience varied from 1 month to 41 months. 4 out of 6 were working in a long-term elderly care facilities Table 5. Type 3 showed strong levels of agreements to statements, including: 'The wages are relatively low.' (Z-Score=2.42), 'The work does not really help my household's financial security.' (Z-Score=1.28) and 'When I am with the elderly, I feel as if I am seeing my future self, so I feel sad.' (Z-score=1.20). In contrast, Type 1 showed strong levels of disagreements to statements, including: 'Where I work is too far away from home.' (Z-Score=-2.19), 'It is more

difficult to look after care recipients from rich families.' (Z-score=-1.40), and 'I make too many mistakes.' (Z-score=-1.28). Caregivers who belonged to Type 3 expressed their uncertainty as to whether they should continue to work as caregivers, in view of their responsibility as the family's wage earner; for males, they were in dilemma due to the poor working conditions they were facing. Nonetheless, they were professional about the job, and felt sympathy with the elderly, as they thought their future might resemble theirs. As such, the study named this type caregivers with difficult livelihood.

Type 4: "Complaining" caregivers

6 caregivers were classified as Type 4; all of them were female. Highest education attainment was high school for 4, and middle school for 2. The working experience varied from 3 months to 43 months. 3 out of 6 were working in long-term elderly care facilities, and the remaining 3 in in-home care facilities Table 6. Type 4 showed strong levels of agreement to statements, including: 'When I am with the elderly, I feel as if I am seeing my future self, so I feel sad.' (Z-Score=2.49), 'It is more difficult to take care of Grade 1 care recipients, than to look after Grade 2 or 3 recipients.' (Z-score=1.78), 'I feel like a housekeeper.' (Z-score=1.74), and 'I can't get off work on time because I have too much overtime tasks.' (Z-score=1.16). In contrast, Type 4 showed strong levels of disagreements to statements, including: 'I sometimes get suspected as a thief.' (Z-Score=-1.98), and 'It is easy to get sexually harassed from care recipients or their families.' (Z-score=-1.64). Caregivers who belonged to Type 4 mostly thought of transferring their workplace from in-home care facilities to long-term elderly care facilities, or vice versa and settle down. They mostly thought that their working conditions were sub-optimal, and being middle-aged individuals, they sought for more comfortable workplace than they were passionate about the job itself. As such, the study named this type "complaining" caregivers.

Type 5: Caregivers who are concerned with their health

6 caregivers were classified as Type 5; all of them were female. Highest education attainment was high school for 4, technical college for 1, and middle school for 1. The working experience varied from 6 months to 25 months. They were either working in in-home care facilities or transferred to long-term elderly care facilities from in-home care facilities Table 7. Type 5 showed strong levels of agreements to statements, including: 'My health is not good, and it is deteriorating.' (Z-Score=2.04), and 'It is more difficult to take care of Grade 1 care recipients, than to look after Grade 2 or 3 recipients..' (Z-score=1.32).In contrast, Type 5 showed strong levels of disagreements to statements, including: 'The work does not really help my household's financial security.' (Z-Score=-1.91), and 'The work does not suit my personality.' (Z-score=-1.87). Caregivers who belonged to Type 5 were mostly between mid-40s and early-60s, and did not have good health, but wanted to work as long as the work did not worsen their health conditions. As such, the study named this type caregivers who are concerned with their health.

Type 6: Caregivers with interpersonal issues

4 caregivers were classified as Type 6; all of them were female. Highest education attainment was middle school for 2, technical college for 1, and high school for 1. The working experience varied from 12 months to 45 months. 3 out of 4 were working in long-term elderly care facilities, and one of them was working as a team leader in the facility Table 8. Type 6 showed strong levels of agreements to statements, including: 'I have interpersonal issues with my colleagues.' (Z-Score=1.61), and 'I sometimes get suspected as a thief.' (Z-score=1.11). In contrast, Type 5 showed strong levels of disagreements to statements, including: 'I feel frustrated because the care facility's environment is not lively.' (Z-Score=-1.89), and 'I mind what other workers in the institution, senior nurses, and care recipients and their families think of me.' (Z-score=-1.62). Caregivers who belonged to Type 6 had more than 12 months of experience, yet had interpersonal issues with other people in the facilities or the care recipients. As such, the study named this type caregivers with interpersonal issues.

V. DISCUSSION

Caregivers have an important position in the South Korean society, as they are key to providing crucial services to the elderly. Their provision of continuous, stable care giving services is essential for our future society. This exploratory study has categorized and analyzed different types of turnover intention, as there had been no previous studies that have classified such different types of turnover intention and their characteristics.

This study has categorized the different types of caregivers' turnover intention and characteristics through Q Factor Analysis (Q Methodology), and sought for appropriate management methods for respective types. Caregivers were categorized according to their turnover intention, as follows: caregivers who cannot adjust to shift work, "housekeeper" caregivers, caregivers with difficult livelihood, "complaining" caregivers, caregivers who are concerned with their health, and caregivers with interpersonal issues. Their characteristics are analyzed and discussed below.

Type 1 was named caregivers who cannot adjust to shift work, and shift work, especially night shifts, was a main consideration in their turnover intention. Also, they expressed insomnia and excessive daytime sleepiness as difficulties arising from shift work. These sleep-related problems result from destruction of normal sleep cycles, and may cause various issues, such as psychological and physiological health problems, problems in their family and social lives, and reduction in work efficiency[13]. The sleep-related problems due to shift work can adversely affect the caregivers' efficiency and precision in carrying out their responsibilities, as well as their job and workplace involvement, reducing the quality of care provided to the care recipients. As such, there is a need for development of health care program for caregivers that aid in better management of their circadian rhythms.

Type 2 was named "housekeeper" caregivers, and they were affected by sense of calling for the job and social recognition of the job with respect to their turnover intention. Although caregivers provide intimate care to the elderly, they suffer from poor working conditions. Furthermore, for those

providing in-home care services, they often succumb to unreasonable demands to do household work, as they fear that their contract might terminate if they do not do so. Also, due to the poor working conditions, it is difficult for them to have professional dignity and pride as caregivers. Organizational structure has influenced occupational identity of caregivers. Studies have shown that social support mediates organizational peculiarities and occupational identity [14], thus reflecting a need for social support system to increase sense of calling for the care giving profession. There needs to be laws and regulations that protect caregivers against physical and verbal assault and from unreasonable demands. Also, there needs to be clear definition of the responsibilities of caregivers and education of caregivers' families thereof, education to enhance sense of calling amongst the caregivers, and advertisement to improve the social recognition of

Type 3 was named caregivers with difficult livelihood, and they were affected by wages, household income, working conditions and treatment. Their choice of job was strongly motivated by their desire to contribute to their families' financials. According to National Health Insurance Service [15], caregivers have high turnover rate even after obtaining their licenses, and suffer from low wages and inferior working conditions, as they are mostly contract workers that work on part-time basis. Also, due to the high level of intensity required in their work, caregivers are susceptible to musculoskeletal diseases and work-related injuries. As such, for the elderly to enjoy sustained care service from the same caregivers, welfare support could be given to the elderly so that the benefits could be passed down to the caregivers, in terms of better working conditions. This is especially the case for care recipients with senile dementia as frequent change of caregivers could lead to aggravation of their conditions.

Type 4 was named "complaining" caregivers and they were affected by personalities, interpersonal relationship and wages. Most of them refuse to acknowledge or do not like to think of ageing, and they had rather pessimistic views of their future. Previous studies have shown that negative correlation between job satisfaction and turnover intention [6. 16], and that the factors that affect decision to work include pride and joy that people have in their profession. As such, to reduce Type 4's turnover intention, there needs to be healthy and stable organizational culture, and improvements in occupational consciousness on the part of the caregivers themselves.

Type 5 was named caregivers who are concerned with their health, and they were affected by the elderly care recipients, night shift, health, safety, work-related stress, wages and other working conditions. This type can be seen as a common type that all caregivers, ranging from new to experienced ones, can fall under. They lack sense of calling and pride in the profession, as they perceive their youthfulness to be drained away by taking care of the elderly. Everyone ages and there needs to be acceptance that aging is a natural process. Korean elderly perceives health, relationship, and comfort as important factors for successful aging [17]. As such, there needs to be development of corresponding Korean nursing intervention model for the elderly.

Type 6 was named caregivers with interpersonal issues, and they were affected by factors including relationship with the institution and colleagues, working environment, and wages. This type has high turnover intention due to difficulties in

International Journal of Engineering Research And Management (IJERM) ISSN: 2349- 2058, Volume-03, Issue-11, November 2016

interpersonal relationship with their colleagues or with the institution. As such, there needs to be development of a program to train the caregivers to adapt to their new workplace and to form new interpersonal relationship, as well as prior character aptitude tests for caregivers. Although having to conform to care recipients' or care institutions' demands, and providing corresponding care services are seen as essential realities to provide responsible and efficient care services [18], they can also be a contributing factor in turnover intention of caregivers. As such, there needs to be development of various continuous self-development programs so as to fulfill caregivers' need for self-improvement and new experiences as they become more experienced.

VI. CONCLUSION AND SUGGESTIONS

This study utilized Q Methodology so as to provide a subjective analysis structure and to identify types of caregivers' turnover intention. By identifying different types of turnover intention and their characteristics, the study seeks to provide basic data for future development of caregivers' turnover management programs. This study was an exploratory one, and based on the information gathered through structured interviews and literature review, 38 final Q Sample statements were extracted, and 33 caregivers in Korea's 'K' State 'S' City were asked to score the statements. The collected data was analyzed using PC QUNAL program, and Q Factor analysis was done through principal component analysis.

The turnover intentions of the caregivers were categorized through a typology of 6 types: caregivers who cannot adjust to shift work, "housekeeper" caregivers, caregivers with difficult livelihood, "complaining" caregivers, caregivers who are concerned with their health, and caregivers with interpersonal issues. Caregivers who cannot adjust to shift work thought of quitting due to irregular lifestyle due to 2-shift or 3-shift working conditions they encountered. "Housekeeper" care givers thought of quitting due to unreasonable demands and monitoring by the care recipients or their families. Caregivers with difficult livelihood expressed poor financial payoff of the job, as they had to take care of their families' financials. "Complaining" caregivers sought for comfortable and stable jobs, and expressed relevant problems with long-term elderly care facilities and in-home care facilities. Caregivers who are concerned with their health were mostly women in their late 40s, and were worried about their health deteriorating. Caregivers with interpersonal issues, lastly, thought of quitting due to interpersonal issues with institution personnel and care recipients.

Above explains caregivers' turnover intention types observed from the study. The analysis of the meaning and reasons behind caregivers' turnover can serve as useful basic data for turnover management program for the different types of caregivers. Furthermore, for development of proper care system, understanding frictions between caregivers, and care recipients and their family givers needs to be prioritized. And in order to solve such problems, there needs to be education of Long Term Care Scheme to the care recipients' families, development of family education system, and continuous

re-education of caregivers to improve their efficiency. Furthermore, to reduce turnover intention of caregivers, there needs to be a change in the working environment of care facilities and open and accommodating attitudes on the part of the facilities personnel. Most importantly, caregivers need to perform their responsibilities with a sense of professional consciousness and sense of community. To achieve this, there could be development of instruction manual for caregivers as well as care recipients and their families in various facilities, so as to provide a more structured long-term care. Caregivers and the wider society will age themselves as well, and for healthy and successful aging, improvement in the elderly care services is crucial.

REFERENCES

- [1] Statistics Korea, 2010. http://www.kostat.go.kr/
- Korea Institute for Health and Social Affairs, 2013. https://www.kihasa.re.kr/
- [3] R. M. Kim, "Study on factors that affect turnover intention in long-term elderly care facilities – focus on Gyeonggi-do Gwangju-Si", Unpublished Master thesis University of Seoul, Seoul, 2010.
- [4] 2010, University of Seoul Graduate School of Urban Sciences, Department of Social Welfare Master's Thesis.
- [5] Ministry of Health and Welfare. 2014 http://www.mohw.go.kr/front_new/index_jsp
- [6] Korea National Council on Social Welfare, "Will excess supply of caregivers stop?," *Journal of the Social Welfare*, vol. 21, pp. 14-15, 2010
- [7] National Health Insurance Service, 2011. http://www.nhis.or.kr/retrieveHomeMain.xx
- [8] S. Powell, J. Myra and R. O. York, "Turnover in county public welfare Agencies," *Journal of Applied Social Sciences*, vol. 16, pp. 111-127, 1992
- [9] G. U. Eom, "Strategic Proposal for the Improvement of Labor Quality in Long-term Elderly Care Facilities in Korea," Problems with Long-Term Insurance System for the Elderly in Korea and Development Plan, pp. 45-79, 2008.
- [10] P. W. Hom and R. W. Griffeth, "Employee Turnover, Cincinnati, OH: South-Western College Publishing," 1995.
- [11] L. Rhoades and Eisenberger, "Perceived Organizational Support: A Review of Literature," *Journal of Applied Psychology*, vol. 87, 698-714, 2002.
- [12] D.H. Ahn, and J. A. Jun, "The Impact of Hotel F & B Employee' Perceived Organizational Support on Organization Trust and Job Satisfaction, Turnover Intention," *Journal of Foodservice Management*, vol. 13, pp. 227-298, 2010.
- [13] H. K. Kim, "Q-Methodology for Subjectivity Studies," *Journal of Nursing*, vol. 6, pp. 1-11, 1992.
- [14] L. D. Christopher, R. Timothy, R. Gary, K. W. James and R. P. Thomas, "Shift work sleep disorder: Prevalence and Consequences beyond that of Symptomatic day Workers. Sleep", vol. 27, pp. 1453-1462, 2004.
- [15] G. S. Park, M. R. Lee and H. J. Shin, "A Study on the Effect of Social Support on the Relationships between Organizational Characteristics and Professional Identity of Care Provider .Elderly Welfare Study, vol. 57, pp. 315-332, 2012.
- [16] S. Y. Yun, Y. S. Seo and Y. C. Kwon, "Factors Influencing the Turnover Intention in Long-Term Care Hospital Care Workers," *Journal of digital convergence*, vol. 13, pp. 321-329, 2015.
- [17] H. L. Kim, J. H. Mo and S. H. Kim, "The Effects of Turnover Intension on Long-term Care Workers' Occupational Stress," *Journal of Korea Governance*, vol. 17, pp. 205-227, 2010.
- [18] H. K. Choi, "The Concept of Successful Aging as Perceived by Korean Elderly: Constructing Prototype Models and Intervention Strategies in Korean Cultural Context," 2004-041-C00422 research report, 2004. https://www.krm.or.kr/krmts/search/detailview/research.html
- [19] H. J. Ko, "Effect of Perception on Caregivers' on Service Satisfaction," Unpublished Master thesis, Hanseo University, Chungnam, 2010.

had taught a professor (2014~2015) Nursing at the Department of Nursing, Kyungbuk college located in Youngju Korea, too..

Yeun-mi Kim, she teaches Nursing at the Department of Nursing, Suwon Women's University located in Suwon Korea. She began her career as a nurse of Ewha Women's University Medical Center from 1991 to 2000 after graduated Jeju Hala University (1990), M.S.(2011) in Elderly Dementia Nursing from Hanyang University, and a Ph.D. in Women Health Nursing (2015) from Hanyang University. Her recent research interest is to apply intervention for multicultural couple happiness. She had worked a researcher (2012~ 2014) at the School of Nursing, Hanyang University located in Seoul Korea. And she had worked a chief (2007~2010) at the Health Center, Kyungdong University located in Kangwon Korea. she

Chang-bae, Ko, he teaches Depart of Business Administration, Kyung Dong University located in Kangwon Korea. His recent research interest is to service customer for organization trust and job satisfaction.

TABLE 1. EIGEN VALUE AND VARIANCE OF THE DIFFERENT TYPES

	Түре І	Type II	TYPE III	TYPE IV	TYPE V	TYPE VI
EIGEN VALUE	6.524	3.063	2.742	2.298	2.077	2.031
Variance	0.186	0.088	0.078	0.066	0.059	0.058
CUMULATIVE VARIANCE	0.186	0.274	0.352	0.418	0.477	0.535

Table 2. P Sample types' characteristics and factor weights

Type	Number	Gender	Age	Religion	Highest education	Workplace	Working Experience(months)	Factor Weights
Type1	2	F	42	None	Vocational College	I	45	0.499
N=7	4	F	55	None	High School	F	11	1.031
	7	F	53	Buddhist	High School	I	24	1.854
	12	F	26	Christian	Vocational College	I	24	0.686
	18	M	29	Buddhist	University	I	45	0.827
	23	F	44	Buddhist	High School	I	42	0.899
	26	F	55	None	Vocational College	F	2	0.572
Type2	10	F	55	Christian	Middle School	F	10	1.161
N=6	15	F	62	Catholic	High School	F	2	1.276
	17	F	45	Buddhist	High School	F	24	0.683
	25	F	44	Buddhist	Vocational College	F	8	1.379
	28	F	47	Buddhist	High School	F	43	0.619
	31	F	55	Christian	High School	F	29	0.967
Type3	14	F	49	Catholic	High School	I	25	0.582
N=6	19	M	29	Buddhist	University	I	41	0.944
	21	M	29	Catholic	Vocational College	I	8	0.646
	22	F	49	None	Vocational College	F	12	1.723
	27	F	57	Buddhist	Middle School	I	24	0.868
	33	F	42	Buddhist	High School	F	1	0.518
Type4	8	F	44	None	High School	I	3	0.755
N=6	24	F	43	Buddhist	High School	I	43	0.385
	29	F	55	None	High School	F	8	0.685
	30	F	57	Others	Middle School	F	36	0.988
	32	F	61	Christian	Middle School	F	7	1.827
	34	F	44	Buddhist	High School	I	2	1.159
Type5	1	F	60	Buddhist	High School	F	8	0.624
N=6	5	F	50	Buddhist	Vocational College	F	6	0.836
	13	F	54	Christian	Middle School	I	25	0.827
	35	F	47	Buddhist	High School	F	7	2.511
	3	F	55	Buddhist	High School	I	8	0.582
1	1		1		<u>I</u>	I	<u>!</u>	!

	20	F	37	Buddhist	High School	I	24	0.412
Type6	6	F	53	Buddhist	Middle School	I	45	0.899
N=4	9	F	44	None	High School	F	12	0.981
	11	F	53	Buddhist	Middle School	I	45	1.004
	16	F	58	Christian	University	I	36	2.030

I: Long-term elderly care facilities; F: In-home care facilities

Table 3. Items with Z-Scores greater than +1.00 or less than -1.00 in Type 1

Statement	Z-Score
23. My original intention has disappeared.	1.60
15. Night shift is hard.	1.59
37. It is more difficult to take care of Grade 1 care recipients, than to look after Grade 2 or 3 recipients.	1.50
16. Shift work is hard.	1.39
26. I feel like my youthfulness is being drained away.	1.36
2. Care recipient's family makes various requests.	1.32
32. Work-related stress has been accumulating.	1.28
14. When I am with the elderly, I feel as if I am seeing my future self, so I feel sad.	1.18
10. As female, it is hard to look after male care recipients.	1.11
35. Seeing colleagues who moved to institutions with better working conditions make me discouraged.	1.06
5. It is hard to get along with other workers within the institution.	-1.02
28. I have stopped smiling.	-1.55
24. I started to dislike old person's odor from some day.	-1.62
4. The work hurts my ego.	-1.62
38. We have different religions.	-1.65

Table 4. Items with Z-Scores greater than +1.00 or less than -1.00 in Type 2 $\,$

Statement	Z-Score
3. I feel like a housekeeper.	2.56
8. The wages are relatively low.	1.78
1. Care recipient makes too many requests to do household chores.	1.67
2. Care recipient's family makes various requests.	1.62
35. Seeing colleagues who moved to institutions with better working conditions make me	1.18
discouraged.	
6. I face too much intervention from my supervisor.	1.18
9. I mind what other workers in the institution, senior nurses, and care recipients and their	1.03
families think of me.	
28. I have stopped smiling.	-1.00
23. My original intention has disappeared.	-1.03
33. I make too many mistakes.	-1.04
13. The work does not suit my personality.	-1.09
34. It is hard to adjust because I am not familiar with the work.	-1.27
37. It is more difficult to take care of Grade 1 care recipients, than to look after Grade 2 or 3 recipients.	-1.34
20. I lack professionalism.	-2.43

Table 5. Items with Z-Scores greater than +1.00 or less than -1.00 in Type 3 $\,$

Statement	Z-Score
8. The wages are relatively low.	2.42
27. My health is not good, and it is deteriorating.	1.84
26. I feel like my youthfulness is being drained away.	1.70
18. The work involves too many random chores.	1.43
7. The work does not really help my household's financial security.	1.28
14. When I am with the elderly, I feel as if I am seeing my future self, so I feel sad.	1.20
31. I sometimes get suspected as a thief.	-1.12
29. I have interpersonal issues with my colleagues.	-1.26
5. It is hard to get along with other workers within the institution.	-1.28
33. I make too many mistakes.	-1.38
36. It is more difficult to look after care recipients from rich families.	-1.40
21. Where I work is too far away from home.	-2.19

Table 6. Items with Z-Scores greater than +1.00 or less than -1.00 in Type 4 $\,$

Statement	Z-Score
14. When I am with the elderly, I feel as if I am seeing my future self, so I feel sad.	2.49
37. It is more difficult to take care of Grade 1 care recipients, than to look after Grade 2 or 3 recipients.	1.78
3. I feel like a housekeeper.	1.74
8. The wages are relatively low.	1.39
17. I can't get off work on time because I have too muchovertime tasks.	1.16
4. The work hurts my ego.	1.06
15. Night shift is hard.	-1.03
24. I started to dislike old person's odor from some day.	-1.07
13. The work does not suit my personality.	-1.22
38. We have different religions.	-1.23
29. I have interpersonal issues with my colleagues.	-1.44
11. It is easy to get sexually harassed from care recipients or their families.	-1.64
31. I sometimes get suspected as a thief.	-1.98

International Journal of Engineering Research And Management (IJERM) ISSN: 2349- 2058, Volume-03, Issue-11, November 2016

Table 7. Items with Z-Scores greater than +1.00 or less than -1.00 in Type 5 $\,$

Statement	Z-Score
27. My health is not good, and it is deteriorating.	2.04
8. The wages are relatively low.	1.91
36. It is more difficult to look after care recipients from rich families.	1.52
37. It is more difficult to take care of Grade 1 care recipients, than to look after Grade 2 or 3 recipients.	1.32
3. I feel like a housekeeper.	-1.18
24. I started to dislike old person's odor from some day.	-1.22
22. I don't feel inspired to do charitable acts.	-1.51
12. My family is against the work.	-1.68
28. I have stopped smiling.	-1.87
13. The work does not suit my personality.	-1.87
7. The work does not really help my household's financial security.	-1.91

Table 8. Items with Z-Scoresgreater than +1.00 or less than -1.00 in Type 6 $\,$

Statement	Z-Score
2. Care recipient's family makes various requests.	1.86
29. I have interpersonal issues with my colleagues.	1.61
23. My original intention has disappeared.	1.33
8. The wages are relatively low.	1.32
18. The work involves too many random chores.	1.14
31. I sometimes get suspected as a thief.	1.11
1. Care recipient makes too many requests to do household chores.	1.08
35. Seeing colleagues who moved to institutions with better working conditions make me discouraged.	1.07
27. My health is not good, and it is deteriorating.	1.04
20. I lack professionalism.	-1.07
15. Night shift is hard.	-1.30
34. It is hard to adjust because I am not familiar with the work.	-1.39
13. The work does not suit my personality.	-1.59
22. I don't feel inspired to do charitable acts.	-1.61
9. I mind what other workers in the institution, senior nurses, and care recipients and their families think of me.	-1.62
25. I feel frustrated because the care facility's environment is not lively.	-1.89