A Comparative Study on the Life Satisfaction and Retirement Plan of Middle-Aged Workers Using SPSS Data Process Technology

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Abstract — The study analyzed the life satisfaction and retirement preparation levels of middle-aged office workers in the smart era based on their demographic characteristics. A survey was conducted with 361 office workers in Seoul and the metropolitan area, and the collected data was analyzed through basic statistical analysis and difference analysis. The results showed that gender, age, education, and job type influenced life satisfaction. Male office workers had higher life satisfaction than female office workers, and office workers in their 50s had higher satisfaction than those in their 40s. As education level increased, life satisfaction also increased, and professionals had the highest satisfaction. On the other hand, other wage earners in small businesses had the lowest life satisfaction. In terms of retirement preparation, there were significant differences by occupation in areas such as life planning, job preparation, health preparation, financial preparation, and leisure preparation. Professionals and office workers were the most prepared for retirement, while other wage earners were relatively vulnerable. Based on these results, policy, practical, and academic implications were presented for improving the life satisfaction and retirement preparation of middle-aged office workers. In particular, customized support for vulnerable groups such as female office workers and other wage earners seems necessary. Additionally, retirement preparation support policies and corporate efforts considering job-specific characteristics are required. Future research should systematically explore various factors influencing life satisfaction and retirement preparation, and analyze the impact on life satisfaction after retirement through longitudinal studies.

Keywords- Middle-aged office workers; life satisfaction; retirement preparations.

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I. INTRODUCTION

Modern society is rapidly changing according to dramatically fast growing technology advancements. In particular, the development of smart technology is fundamentally changing the workplace environment. Amid these changes, middle-aged office workers are facing new challenges.

Middle-aged office workers have abundant work experience and know-how, but they often have difficulty acquiring and adapting rapidly changing skills. Moreover, the legal retirement age in Korea is 60, which is earlier than that of other countries, so office workers do not have enough time to prepare for retirement. In fact, the average age of retirement in the longest-working job is only 49.4 years according to Employment Statistics Department [1].

Meanwhile, as life expectancy continues to extend, the quality of life after retirement is becoming important.

Therefore, office workers should think about and prepare for life after retirement. However, there is a lack of research on the life satisfaction and retirement preparedness of middleaged office workers approaching retirement in a rapidly chanign working environment.

Previous studies have focused on retirement preparation, quality of life after retirement, retirement and post-retirement asset holding behavior, and household retirement preparation, but studies on life satisfaction and retirement preparation characteristics according to demographic characteristics of middle-aged office workers approaching retirement are lacking.

Therefore, this study aims to identify the factors affecting the life satisfaction of office workers during employment according to their demographic characteristics. Then, the study will review their retirement planning status, and suggest implications. For this purpose, variables were extracted based on previous studies, a questionnaire was designed, and a survey was conducted among middle-aged office workers aged 40 years or older living in Seoul and the metropolitan area from February 20 to March 31, 2023.

II. MATERIALS AND METHOD

A. The middle-aged

Although the term "middle-aged" is commonly used, there are no regulations or standards for the age range, and policies are defined in different ways depending on the purpose of planning and research.

In foreign countries, the standard for the middle-aged has been set at 40-65 years old, and the term middle-aged appeared in Korea for the first time when the Ministry of Employment and Labor established the Middle-aged Job Hope Center in 2013 [2]. At that time, the middle-aged refers to those aged 40 to 64 years old. Since then, the Ministry of Employment and Labor has set the policy range for the middle-aged at 40 years or older and does not specify the upper age limit.

Statistics Korea conducts an annual survey of people aged 40 to 64 residing in South Korea by defining them as the middle-aged, in order to formulate policies for this specific group [3]. In addition, the Seoul Metropolitan Government proposed the age of 40 to 65 years as the middle aged group in the Seoul Metropolitan Government's middle-aged retirement preparation support plan [4]. Some Korean researchers set the middle-aged group as not only 40-65 years old but also 50 years or older [5].

Thus, the age of 'middle-aged' is applied differently depending on the purpose, but 'middle-aged' is defined as a population group in the intermediate stage between youth and old age. Therefore, this paper attempts to define those over the age of 40 as the 'middle-aged group' and carry out the research.

B. life satisfaction

The concept of life satisfaction began to appear when the Life Satisfaction Index was developed to verify the Activity Theory and the Disengagement Theory [6]. Life satisfaction is a cognitive evaluation of the subjective satisfaction an individual feels throughout his or her life [7].

Since the concept of life satisfaction was first introduced in Korea in 1979, various domestic and international researchers have approached it from a single dimension or multiple dimensions.

Life satisfaction is often used interchangeably with similar concepts such as quality of life, subjective well-being, psychological well-being, and happiness [8]. Life satisfaction refers to "the degree to which a person feels that his or her expectations of life are actually fulfilled" and reflects not only emotional aspects but also objective conditions of life [9]. In other words, life satisfaction refers to a subjective evaluation of one's overall life that is formed by one's internal standards or it can be also influenced by the surrounding social environment [10]. When these various perspectives are put together, life satisfaction can be defined as the degree of positive emotions, subjective satisfaction, and psychological well-being that an individual feels about his or her life.

C. Planning for retirement

Retirement is the state of having reached a certain age and having stopped working. On the other hand, retirement planning indicates the state where the prospective retiree accepts the retirement naturally and is ready to make plans and prepare for any issues or challenges that may arise in life after retirement.

Although the terms retirement planning and planning for leaving a job are often used interchangeably, planning for leaving a job focuses only on changes in the employment relationship, while retirement planning is a more broad concept that includes not only changes in the employment relationship but also biological changes due to aging and life in retirement [11]. In other words, retirement planning is about preparing for life after paid working period ends financially as well as all other aspects of life in advance, and coping with the negative effects that retirement is going to bring about to one's life [12].

In particular, since retirement planning affects the quality of life, it requires balanced preparation not only financially but also in relationship, emotions, and leisure [13]. In other words, retirement planning is not just about preparing for livelihood in old age, but also about preparing for a life in which one remains in the social community and maintaining mental and physical vitality by continuing the work, resulting in maintaining the human networks and social ties. In other words, retirement planning is a process and plan to prepare life resources, including non-financial preparation, to live a happy life in retirement [14].

In the end, retirement planning and post-retirement life can be different depending on how an individual defines and perceives retirement. Therefore, from an individual's perspective, the importance of retirement planning is crucial in preparing for a successful and happy retirement.

D. Literature Review

Prior research has been divided into two categories: demographic characteristics and retirement planning characteristics that affect life satisfaction of employees.

First, according to the prior research on life satisfaction of employees by demographic characteristics, women are less satisfied with their lives than men [15]. It indicates that the life satisfaction may vary by gender, and men may be somewhat more satisfied with their jobs [16].

The higher the education level of the middle-aged, the higher their life satisfaction [17], and the higher the education level, the more satisfied they are with family relations, consumption life, jobs, and leisure life [18]. In addition, higher level of education often leads to higher life satisfaction expectancy [19]. On the other hand, it has been shown that even with high levels of education, low participation in lifelong learning can be associated with lower life satisfaction, and even with low levels of education, high participation in lifelong learning can improve life satisfaction [20]. A study comparing the life satisfaction of married and unmarried employees found that married employees had higher levels of work-family balance and life satisfaction [21]. It was also found that married employees were more satisfied with their lives than unmarried employees due to the life stability that comes with marriage and the support of their spouse and family [22].

Previous studies on retirement planning have been conducted with retirement planning as an independent or dependent variable. Numerous researches have emphasized the need for a multidimensional approach, including life planning, health care, and financial planning, in order to improve retirement planning behaviors of middle-aged. Some researches found that babyboomers also need to prepare in areas such as life planning, health, finance, relationships, and leisure to improve their retirement planning [23].

A research analyzed one's successful retirement life planning by categorizing factors into six areas: life design, work, health, finance, relationship, and leisure in the diagnosis and management of office workers' retirement [11]. Another research tried to measure the retirement planning of young adults who just start working for the first time after graduation in three areas such as financial planning, nonfinancial planning (leisure, social activity, health management), and psychological preparation (life design and preparation after retirement) [24].

Seoul city analyzed characteristics of a successful senior life in its Senior Life Planning Profile Analysis for those over fifty living in Seoul, and explained the impact of personal characteristics, family and social support, and workplace support on retirement planning [25], [26].

In other words, these studies show that life satisfaction differs according to gender, educational background, marital status, and job. Also, they emphasize the importance of retirement planning in various aspects such as life design, work, health, finance, relationship, and leisure, as it will lead them to a positive awareness of life in retirement.

E. Analytical framework and methods

This study identified demographic characteristics such as gender, marriage, age group, educational background, and job for a specific group of office workers in the smart era, and retirement planning characteristics such as life design, work, health, finance, relationship, and leisure. After that, these demographic characteristics were used as independent variables, and their life satisfaction was set as a dependent variable to analyze life satisfaction.

In order to identify the characteristics of each variable, frequency analysis, descriptive statistics, factor analysis, and reliability analysis were conducted with demographic data using SPSS 27.0 program. Then, a proxy variable for life satisfaction was selected and constructed as a dependent variable. After that, t-test and ANOVA were used to determine whether the differences in life satisfaction among employees by demongraphic characteristics and retirement planning characteristics were significant. The difference in retirement planning by group was analyzed by ANOVA in reference with ANOVA Decomposition and Importance Variable Process in Multivariate Adaptive Regression Spline Model[27].

III. RESULTS AND DISCUSSION

This study examines the differences in life satisfaction of office workers according to demographic characteristics and also whether there is any significant difference in retirement planning by group of office workers. The results are as follow.

A. Basic Statistical Analysis Results

1) Demographic characteristics of the samples: Table 1 summarizes the demographic characteristics of 361 office workers over the age of 40, who use smart devices and technologies in their daily lives.

In terms of gender, men are 62.3% (255) and women are 37.7% (136), with more male office workers than female office workers. In terms of marital status, 81.2% (293) are married and 18.8% (68) are single. As for the age group, 70.6% (255) are in their 40s and 29.4% (106) are in their 50s. For education, 7.5% (27) have a vocational collecge degree, 69.0% (249) have a college degree, and 23.5% (85) have a graduate school degree or higher.

The samples are comprised of 34.1% (123) general companies employees (hereinafter referred to as 'office workers'), 31.9% (115) employees in the finance sector, 15.0% (54) of civil servants, 10.8% (39) employees in the professional areas, and 8.3% (30) are employees from other sectors .

The reason that the large number of samples have a college or graduate degree is likely due to the nature of their job which require them to use smart devices or digital tools at their work such as office workers, bankers, civil servants, and professionals.

TABLE I	
DEMOGRAPHIC CHARACTERISTICS	

Category	Туре	Number	Percentage(%)
Gender	Male	225	62.3
	Female	136	37.7
Marital	Married	293	81.2
status	Not married	68	18.8
Age	The 40s	255	70.6
	Over the 50s	106	29.4
Level of education	Vocational college graduation	27	7.5
	College graduation	249	69.0
	Graduate school graduation	85	23.5
Occupation	General office workers	123	34.1
	Finance	54	15.0
	Public servant	39	10.8
	Professional job	30	8.3
	Other	115	31.9

(n=361)

2) Descriptive Statistics Analysis: Table 2 shows the summary of the results of descriptive statistics analysis of each item measured by this study survey. All items were measured on a 7-point Likert scale. In particular, skewness and kurtosis were measured to test whether the observed values were drawn from a population that follows a normal distribution.

Since it is judged that the statistical data do not deviate from the normal distribution only when the absolute value of skewness is less than 2 and the absolute value of kurtosis is less than 7, it is judged that the parameter test method can be used because the data of this study falls under the criteria.

Retirement planning was measured by several factors such as life planning, work readiness, health, finance, and leisure. According to the analysis result, the factor with the highest score was life planning, followed by work readiness, health, finance, and leisure in order.

Life satisfaction was measured by several factors such as health status, economic status, family relations, economic social activities, and overall life satisfaction. As a result, it was found that the most influential factors on life satisfaction are in the order of health status, economic and social activities, family relations, overall life satisfaction, and economic status. In other words, life planning is perceived as the most important in retirement planning, and health status was found to have the greatest effect on one's life satisfaction.

TABLE II

DESCRIPTIVE STATISTICS							
	Μ	SD	Sk	Ku			
Life Design	4.76	511	330	1.379			
Work Preparation	4.72	543	014	.796			
Health	4.68	489	432	.926			
Finance	4.64	483	653	1.330			
Relationship Preparation	4.62	468	643	1.628			
leisure	4.61	467	056	1.200			
Health	4.80	540	-1.607	3.197			
Economic status	4.25	634	.390	.372			
Family relationship	4.57	501	365	-1.703			
1	&4.58	658					
economic			079	176			
Overall life	4.37	649	.693	.353			
	Life Design Work Preparation Health Finance Relationship Preparation leisure Health Economic status Family relationship Social economic activities	MLife Design4.76Work4.72Preparation4.68Finance4.64Relationship4.62Preparation4.62Preparation4.61Health4.80Economic4.25status4.57Family4.57relationship50cial& 4.58economic& 4.58economicactivities	MSDLife Design 4.76 511 Work 4.72 543 Preparation $-$ Health 4.68 489 Finance 4.64 483 Relationship 4.62 468 Preparation $ -$ leisure 4.61 467 Health 4.80 540 Economic 4.25 634 status $ -$ Family 4.57 501 relationship $ -$ Social $\&4.58$ 658 economic $ -$ activities $ -$	$\begin{array}{c c c c c c c c c c c c c c c c c c c $			

(n=361)

3) *Feasibility Study and Reliability Analysis:* Table 3 summarizes the results of factor analysis and reliability analysis that are conducted to examine validity and reliability of the factors identified to affect the life satisfaction.

Factor	Measured items	Factor loading	Cronbach ³ alpha
Life	Health	.461	
Satisfaction	Financial status	.651	
	Family relationship	.754	.651
	Social life	.801	
	Life overall	.605	
Explained variance	65.452		
Eigen Value	1.601		

KMO=.605, Bartlett's sphericity test=304.713, p-value .000

The orthogonal rotation method of principal component analysis has been adopted, and the Eigen Value of the factor was based on 1, and the factor loading value was based on 0.4 or more. As a result of the analysis, it was confirmed that the KMO was .605, and Bartlett's sphericity test was found significant (<.001) resulting in that the correlation matrix was suitable for factor analysis. The probability of significance was .000, and the total explanatory power was 65.452%. Life satisfaction was composed of five measurement variables (health status, economic status, family relations, economic social activities, and overall life), with factor loadings ranging from .461 to .801, and an eigenvalue 1.601. Reliability was calculated using Cronbach alpha, which is generally considered to have internal consistency when it is higher than 0.6. As a result of the test, the reliability was .651 which is higher than 0.6.

B. Analysis of differences

1) An Analysis of Differences in Life Satisfaction by Demographic Characteristics: Table 4 summarizes the analysis of differences in life satisfaction by demographic characteristics.

Life satisfaction by gender is higher for men than for women, which is in line with the results of previous study [16]. However, the national survey on quality of life demonstrated a different result that there was no difference in life satisfaction by gender between men and women [18]. This maybe due to the fact that the sample of this study, which is limited to employees, has different characteristics from the population as a whole. In other words, it shows that women in the workplace may have lower life satisfaction than men due to difficulties in balancing work and family balance, relative difficulties in career development, lack of social support, and lack of gender-equitable organizational culture.

There is no significant difference by marital status, which is in line with previous research [21]. In terms of age, those in their 50s had higher satisfaction than those in their 40s. This is because those in their 50s are able to maintain a better work-life balance due to their job skills and reduced burden of raising children, and they are relatively more stable in terms of assets.

TABLE IIV LIFE SATISFACTION BY DEMOGRAPHIC CHARACTERISTICS							
					Т-	AN	OVA
Ca	ategory	N	М	SD	test (p)	F(p)	Scheffe
Gender	Male	225	4.56	.596	2.120		
Ochaci	Female	136	4.43	.553	(.035)	-	-
Marriage	Married	293	4.51	.600	079		
status	Unmarried	68	4.51	.504	(.937)	-	-
	40's	255	4.47	.613	-		
Age	50's or more	106	4.60	.491	1.986 (.048)		
	Vocational college ^a	27	3.52	.509			
Education level	¹ college ^b	249	4.51	.524	-	-69.79′ (.000)	⁷ a <b<c< td=""></b<c<>
	Graduate school ^c	85	4.81	.393		()	
	Office worker ^a	123	4.43	.641			
Job type	Finance workers ^b	115	4.56	.533			
	Government employees ^c	54	4.52	.540	-	4.026 (.003)	a·b·c·e <b·c·d< td=""></b·c·d<>
	Practitioners	¹ 39	4.79	.409			
	Other salaried employees ^e	30	4.33	.547			

*p<0.05, **p<0.01, ***p<0.001

By education, it was confirmed that the higher the education level, the higher the satisfaction. It is judged that the higher the education level, the more options, flexibility, higher salary and compensation they have in choosing a job, leading them to be more satisfied with their lives. When analyzing by occupation, professionals who have freedom to decide when and how to work and the jobs are stable and socially recognized have higher life satisfaction than other salaried employees such as office workers or workers of small businesses that have limited flexibility at work.

2) Analysis of Differences in Retirement Planning by Group: Table 5 summarizes the analysis of differences in retirement planning by group.

Since retirement is a life event that takes place at a certain time, preparing for such a post-retirement life may vary depending on the characteristics of the individual [28].

As a result of the analysis, in terms of life planning preparation and work preparation after retirement, other payers were the most vulnerable group, while professional workers take the highest, but there was no significant difference between professional and office workers.

Life planning is a design for the future, which specifies and establishes plans for goals throughout one's life, and work is not just a means of generating income, but it means activities in a social network [29]. Therefore, the high level of education and expertise in work of professionals bring better job opportunities and high rewards, making life planning and work preparation easy. On the other hand, other salaried employees lead to a lack of life planning and work preparation due to a relatively low level of education and lack of expertise at work.

Health preparation was found insignificant, and financial preparation can be classified into other salaried employees and the other groups.

Since health problems caused by aging in retirement can limit the autonomy of daily life, health preparation is important because it is also a factor influencing financial stability in retirement. In addition, it is no exaggeration to say that financial satisfaction is the most important factor in retirement satisfaction. Therefore, it is necessary to check one's income and assets before retirement, and set the goals and plans and systematically prepare their lives.

In terms of finance, other salaried employees are less prepared than office workers, those in finance industry, public servants, and professionals. Meanwhile, ilt was confirmed that office workers are the most well-prepared group for relationships and leisure, while other salaried employees are the least prepared group for relationships. This seems to reflect the tendency of office workers to pursue diverse social networks and work-life balance.

On the other hand, other salaried employees and government employees have the most difficulty in preparing leisure. The unstable work life and relatively low social status for other salaried employees and the excessive workload and rigid organizational culture for public servants are thought to be the reasons for their relatively poor leisure arrangements. This is in line with research that suggests that leisure arrangements may differ depending on the size and environment of the company [30]. It should be considered that leisure activities are positively related to life satisfaction of middle-aged and older adults [31]. This is in line with previous studies that found that the degree of retirement readiness varies among employees depending on their circumstances, conditions and differences in their perception about retirement [32].

TABLE V
RETIREMENT PLANNING BY JOB TYPE

					ANOVA	
Cat	tegory	N		SD	F(p)	Scheffe
	Office worker ^a	123	4.75	.609		
	Finance workers ^b	115	4.69	.519		b·c·e<
Life Planning	Government employees ^c				7.097 (.001)	a∙b∙c< a∙d
	Practitioners ^d	39	5.00	.000		
	Other salaried employees ^e					
	Office worker	123	4.67	.687		
	Finance workers ^b	115	4.80	.482		a·b·c·e <
Work preparation		54	4.64	.381	3.803 (.005)	a·b·c·d
	Practitioners ^d	39	4.91	.391		
	Other salaried employees $^{\rm e}$		4.50			
	Office worker ⁸	123	4.56	.498		
	Finance workers ^b	115	4.69	.502		
Health	Government employees ^c	54	4.52	.503	2.024 (.091)	-
	Practitioners ^d	39	5.00			
	Other salaried employees ^e	30	4.33			
	Office worker ^a	123				
	Finance workers ^b	115				
Finance	Government employees ^c	54			6.329 (.001)	e <a·b·c·d< td=""></a·b·c·d<>
	Practitioners ^d	39				
	Other salaried employees ^e	30				
	Office worker	123				
	Finance workers ^b	115				
Relationship	Government employees ^c	54			2.584 (.037)	b·c·d·e <a·b·c·d< td=""></a·b·c·d<>
	Practitioners ^d	39				
	Other salaried employees ^e	30				
	Office worker ⁸	123				
	Finance workers ^b	115				
Leisure	Government employees ^c	54			5.497 (.001)	c·e <a·b·c·d< td=""></a·b·c·d<>
	Practitioners ^d	39			-	
	Other salaried employees ^e	30				

(n=361)

*p<0.05, **p<0.01, ***p<0.001

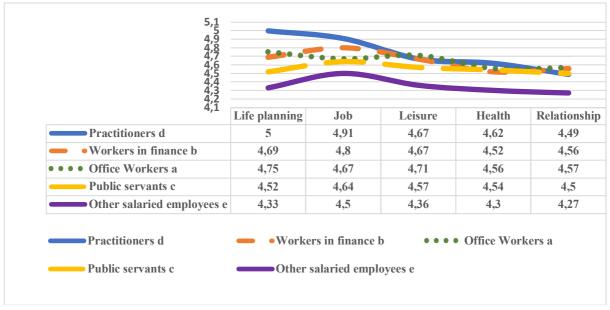


Fig. 1 Retirerement planning by job type

IV. CONCLUSION

In modern society, the workplace environment is fundamentally changing due to rapid technological development including smart technology. Meanwhile, the average retirement age in South Korea is 49.4 years, which is lower compared to other countries, so there is not enough time for middle-aged office workers to prepare for retirement. In such a workplace environment, middle-aged office workers often have difficulty adapting to changes, and their life satisfaction differs depending on the environment in which they are faced. Therefore, middle-aged office workers are anxious about how to prepare their lives for the next 40 years after retirement, and there is an awareness and desire to start preparing for life in retirement while they are still working.

Therefore, this study aimed to identify the factors of life satisfaction according to the demographic characteristics of middle-aged office workers living in the smart era, focusing on the retirement planning situation. Based on the factors derived from the review of previous studies, a survey was conducted among 361 office workers in Seoul and the metropolitan area. The collected data were analyzed through basic statistical analysis and difference analysis to examin the difference in life satisfaction and retirement planning of office workers in the smart era.

As a result of the study, when looking at the demographic characteristics, men occupy 62.3% (255 people) and women occupy 37.7% (136 people), with more male office workers. As for marital status, 81.2% (293 people) were married and 18.8% (68 people) were unmarried. As for the age group, 70.6% (255 people) were in their 40s and 29.4% (106 people) were in their 50s. The overall education level is relatively highwith 7.5% (27 people) of vocational college graduates, 69.0% (249 people) of college graduates, and 23.5% (85 people) of graduate school or higher. In terms of occupation, 34.1% (123 people) are office workers, 31.9% (115 people) are those working in the finance industry, 15.0% (54 people) are government servants, 10.8% (39 people) were

professional workers, and 8.3% (30 people) were other salaried employees. Due to these occupational characteristics, the educational level of the samples is mostly dominated by college and graduate degrees.

In this study, all items were measured on a Likert 7-point scale, and skewness and kurtosis were measured to confirm whether the observed values were drawn from a normally distributed population . Since theskewness was less than 2 and the kurtosis was less than 7, it was determined that theparameter test method could be used because it did not deviate from the normal distribution. Retirement planning was measured in five categories, such as life planning, work preparation, health preparation, financial preparation, and leisure preparation factors, with life planning being the highest, followed by work preparation, health preparation, financial preparation, and leisure preparation. Life satisfaction was measured in terms of health status, economic status, family relations, economic and social activities, and overall life satisfaction factors, and health status was found to have the greatest effect.

Life satisfaction by gender tends to be higher for men than women, which is consistent with the results of previous studies [16]. However, there was no difference according to gender in the National Survey on Quality of Life [33]. This suggests that female office workers have lower life satisfaction due to difficulties in balancing work and family, relative difficulties in career development, lack of social support, and lack of gender equality organizational culture. There was no difference according to marital status, and those in their 50s showed higher satisfaction with their lives than those in their 40s. This is likely due to the ease of maintaining a work-life balance due to reduced job skills and burden of raising children. The higher the education level, the higher the satisfaction level, which is related to the fact more options and flexibility of a job become available for them as well as higher salaries and compensation. When classifying the samples by job type, the progessional group showed the highest life satisfaction who have a stable and socially recognized professions.

It was confirmed that retirement preparation may differ depending on the situation and characteristics of an individual because it is to prepare for life after retirement.

In terms of retirement planning, there were significant differences by job type in each area, such as life planning, work preparation, health preparation, financial preparation, and leisure preparation. This is because retirement planning is about preparing for life after retirement, so it may vary depend on the situation or characteristics of an individual [27].

Professionals and office workers were the most prepared groups for life planning and work preparation after retirement, and other salaried employees were the least and the most vulnerable. There was no difference in health preparation by jot type, but financial preparation was found to be lacking for other salaried employees.

Office workers were best prepared for relationships and leisure, and other salaried employees were insufficiently prepared for relationships. This seems to reflect the social network of office workers and their tendency to pursue worklife balance. On the other hand, it was found that other salaried employees and public servants were difficult to prepare for leisure, which was attributed to the unstable working life, low job position, and excessive workload of other salaried employees, while lack of awareness of leisure life after retirement might be the reason for public servants who are used to a stable life and rigid organizational culture.

This is a reflection of the conditions and realities of one's job characteristics, and it makes us realize that we need to prepare for retirement in advance according to our circumstances in an effort to prepare for an ultra-elderly society where people are expected to live for more than 40 years after retirement.

Therefore, this study attempted to present implications for improving the quality of life of middle-aged workers and preparing for retirement in advance when they still work by examining the difference in life satisfaction and the level of retirement preparation by group according to demographic characteristics of middle-aged workers.

Through the results of this study, the following policy, practical, and academic implications and future research projects can be derived.

In terms of policy implication, it is necessary to provide customized policy support considering gender, age, education, and job characteristics to improve the life satisfaction of middle-aged office workers. In particular, the research found that the life satisfaction of female employees, office workers, and other salaried employees is relatively low, thus, diverse support such as work-life balance support, career development opportunities, and health care services should be more improved customized for these specific groups. In addition, a customized support policy that reflects the characteristics of each job is needed for retirement planning.

Practical implications include the need for corporations to provide flexible work arrangements, self-development support, and health care services to improve the quality of life of middle-aged office workers at the corporate level. In particular, considering the low satisfaction and retirement planning level of other salaried employees, it is important to create an organizational culture that supports their work-life balance and career development. As an academic implication, it is necessary to systematically explore various factors that affect the life satisfaction and retirement planning of middle-aged office workers, and develop an integrated theoretical model based on the results. In addition, a study comparing and analyzing differences between various groups such as region, occupation, and gender is also needed.

Future research needs to identify a wider range of personal, organizational, and social factors that influence life satisfaction and retirement planning level of middle-aged office workers. Furthermore, qualitative research methods should be used to explore in-depth the experiences and perceptions of middle-aged workers. In addition, a longitudinal study is needed on how the life satisfaction and retirement planning level of middle-aged office workers actually affect the quality of life after retirement.

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