Factors Influencing Career Preparation Behaviours during Career Decision — Case Study on Students Majoring in Dental Technology

Sook Jeong Lee¹, In Ho Jeong^{2*}, Ye Jong Lee³ and Yong Ju Kang⁴

¹Department of Dental Hygiene, Silla University, Busan, Korea ²Department of Dental Technology, Gimcheon University, Gimcheon, Korea; jih4611@hanmail.net ³Department of Social Wealth, Gimcheon University, Gimcheon, Korea ⁴Department of Dental Hygiene, Jinju Health College, Jinju, Korea

Abstract

The purpose of this study is examined the direct or indirect effect with career goal setting and career preparation behaviour which is between university & college's career development programs and employment and is finding the structural difference on degree of satisfaction. Selecting one's career is one of the most important decisions for individuals because it will have a strong influence on his/her life. Especially for college students who are in the process of getting ready to step into the society after the graduation, career decision making becomes one of the most difficult tasks and a real one.

Keywords: Career Decision, Career Goal Setting, Career Preparation, Career Preparation Behaviour, Dental Laboratory Technology

1. Introduction

What could be some of the variables that affect SRH? Among the general characteristics are age and gender ^{6,9,16}, whether they live alone⁹ and level of education and income ^{6,17,18}. Career decision can be considered to have the utmost significance to an individual as it determines both the direction and quality of one's life¹. According to Super's career development stages theory, the career decision made during adolescence is a preparation stage for transitioning from school to the occupational world and it is a period for making rational career decisions and forming self-identity². Furthermore, the time spent in university before entering into society is a period of decision and preparation which are critical to career development³. University students contemplate over their

futures and collect various information and data using career information centers, job fairs, mass media and so on for career decision to lead a better life. They also engage in limitless competition to acquire a better job by building careers through work experience. Judging by the fact that the majority of precollege students already worry about employment, it is imperative to not only search for various information and make a rational decision but also engage in actual preparation activities in order to step into the occupational world and achieve successful employment⁶. The various career preparation behaviours for employment must not only include cognition and attitude related to career selection but also the actions which are taken to decide a career and to carry out that decision. Therefore it can be said to be crucial in career decision. Career preparation behaviours are not a career-

^{*} Author for correspondence

related dimension of actions which are cognitive or attitudinal but rather practical and specific. Thus, the term refers to the actions needed to make rational and correct career decisions, and the actions which are needed to carry out the decisions after it has been made. It refers to the how much effort an individual has put into making the right career decision and specifically how he/she has faithfully put behavioural effort into achieving the career goals⁴. Kim Bong Hwan⁴ explains the concept of career preparation behaviour in multiple aspects, the first being information gathering activity. This includes information about oneself such as ability, aptitude, interest, personality etc, and also information related to the occupational world that one is interested in such as the current status of the job, vision, method of recruitment, promotion course, job environment and so on. This kind of activity for gathering information efficiently and rationally can be said to be very important career preparation behaviour. Second, there is the activity to acquire necessary tools. This refers to the activity of purchasing equipment, tools and textbooks which are necessary in the preparation process of desired employment. The task of acquiring the various needed equipment in achieving one's career goal is an essential important career preparation behaviour and it also includes the acquisition of other certificates and licenses which each job demands. Thirdly, there is the practical effort for achieving the set goal. In other words, this is a mutual process with the necessary tools in goal achievement. If time and effort are not invested despite the purchasing of necessary tools, it cannot be seen as genuine career preparation. After Kim's research4 which attempted to conceptualize career preparation behaviour, the behavioural aspect related to an individual's career selection has gained acknowledgment and research have been carried out in various field recently in Korea⁸⁻¹⁰. However most of the research focus on either a specific field or adolescents or university students and there has not been many studies on students majoring in dental technology. Especially, in the case of students who specifically choose colleges for a career in dental technology or university students majoring in dental technology, as the opportunity for these students to work as dental technician expands upon graduation, the preparation of specific and practical career preparation behaviour for dental technicians is urgent. Thus, the current knowledge, attitude, and also the process of acquiring techniques must also be well crafted for the

coming future. Therefore, in order to lead a life in as a member of society with a job, much preparation must be made during the time in university. In this perspective, this research aims to find out what methods are prepared by not only current university students but also preuniversity students to solve the problems related to career selection, and also to provide base line data for the development of career decision programs for career preparation.

2. Methodology

2.1 Subjects of Research

In this research, a self-administered questionnaire survey was conducted on students majoring in dental technology from two universities in city D and province G over the period of two weeks beginning from May 11th 2012 to May 25th. Excluding 46 surveys which were unreliable, 454 survey answers out of 500 were used in data analysis. The research instrument used in this study was devised by Kim Bong Hwan4 for the measurement of the career preparation behaviours of students majoring in dental technology. In terms of the reliability of this research instrument, the Croncbach's alpha coefficient was 0.853.

2.2 Data Processing and Analysis

Data analysis for this research used statistical analysis utilizing SPSS 19.0. The analysis contents was done through frequency analysis in order to find out general facts, and for the average of career preparation behaviour of research subjects' information gathering activity according to sex, age, school system, activity for acquiring necessary tools, practical effort for goal achievement, cross analysis process was used. A correlation analysis was used for the lower factors between career preparation behaviours, and a regression analysis was used to find out the influence between the factors of general characteristics and career preparation behaviours.

3. Findings

3.1 Cenetal Characteristics of the Research Subject and Result

The general characteristics are shown in Table 1. Out of a total of 454 respondents, 64.1% were male while 35.9% were female. In terms of age, 87.7% were below 23 years

old, with 64.3% being freshmen, 21.4% being sophomores, and 14.3% being juniors. In terms of school systems, 70.5% were college students while 29.5% university students showing that there were more students from 3-year-course colleges.

Table 1. General characteristics of the respondents

Variables		Category	Person (%)
General characteristics	gender	male	291(64.1)
		female	163(35.9)
	age	≤23	398(87.7)
	(years)	≥24	56(12.3)
	grade	first	292(64.3)
		second	97(21.4)
		third	65(14.3)
		fourth	
	faculty	college	320(70.5)
		university	134(29.5)
total			454(100.0)

The test analysis between the factors related to career preparation behaviours according to sex, age and school system is shown in Table 2. In the test analysis between the factors related to career preparation behaviours according to sex, information gathering activity, activity for acquiring necessary tools, practical effort for goal achievement were not given statistical significance, (p<0.05), while the test analysis between the factors related to career preparation behaviours according to age were in terms of information gathering activity, activity for acquiring necessary tools, (p<0.05). In the test analysis between the factors related to career preparation behaviours according to school systems, activity for acquiring necessary tools was statistically significant.(p<0.001)

Table 3 shows the correlation analysis of the factors between the career decision and career preparation behaviour of students majoring in dental technology. Especially, the more activities for acquiring necessary tools there were, the more practical efforts for goal

Table 2. Test analysis between the variables gender, age, faculty according to career decision level and career preparation behaviour

Division	1	Collection of information	Activities necessary	For practical efforts to	Career preparation
		activity	tools to equip	achieve the goals	behaviour
gender	Male $n=291\pm(S.D)$	$3.18\pm(0.94)$	$2.27\pm(0.97)$	$2.19\pm(1.06)$	$2.43\pm(0.84)$
	Female $n=163\pm((S.D)$	$3.22\pm(0.93)$	$2.26\pm(0.93)$	2.11±(0.78)	$2.41\pm(0.78)$
	t-value	-0.47	0.13	0.78	0.18
	p-value	0.63	0.89	0.43	0.85
age	\leq 23 n=398±(S.D)	$3.16\pm(0.90)$	$2.23\pm(0.93)$	2.16±(1.03)	$2.39\pm(0.80)$
	≥24 n=56±(S.D)	$3.46\pm(1.12)$	$2.54\pm(1.12)$	$2.19\pm(0.98)$	$2.64\pm(0.96)$
	t-value	-2.24	-2.27	-0.17	-2.17
	p-value	0.02*	0.02*	0.85	0.30
faculty	College n=320 \pm (S.D)	$3.22\pm(0.98)$	$2.40\pm(0.97)$	2.19±(1.05)	$2.51\pm(0.85)$
	University n=134±(S.D)	$3.13\pm(0.83)$	$1.95\pm(0.84)$	$2.10\pm(0.95)$	$2.20\pm(0.71)$
	t-value	0.90	4.63	0.84	3.74
	p-value	0.36	0.00**	0.39	0.00**

^{*} p<0.05, ** p<0.01, *** p<0.001

achievement there were, showing the highest correlation (r=0.610). The correlation between information gathering activity and activity for acquiring necessary tools was next (r=0.422), while the correlation of information gathering activity and practical efforts for goal achievement came next (r=0.3220). These all showed statistically significant differences (p<0.01).

Table 3. The relationship between career preparation behaviour variables

Variables	The correlation between the constructs		
	Collection	Activities	For practical
	of	necessary	efforts to
	information	tools to	achieve the
	Activity	equip	goals
Collection of infor-	1		
mation activity			
Activities neces-	0.422**	1	
sary tools to equip			
For practical	0.320**	0.610**	1
efforts to achieve			
the goals			

^{*} p<0.05, ** p<0.01, *** p<0.001

In the results of the regression analysis on the factors influencing career preparation behaviour, juniors had a more positive influence on career preparation behaviour than freshmen, while in terms of school systems college students had a more positive influence on career preparation behaviour than university students (Table 4).

(Career Preparation Behaviour)Y= 2.500 -0.005 +0.073 -0.092 +0.320 -0.363

4. Conclusion

In the result of the survey of 454 dental technology majors attending 3 different universities in Daegu, Kyung Buk, 3 questions were given for information gathering activity,

Table 4. The effect of career preparation behaviour

Model		Non-standardised coefficients		Standardised coefficients	t	Significance probability	
		В	Standard error Beta		-		
1	(Constant)	2.500	.068		36.621	.000	
	Sex group	005	.081	003	063	.950	
	Age group	.073	.128	.029	.572	.567	
	Year group 1 0=Freshmen vs 1=Sophomores	092	.100	046	921	.358	
	Year group 2 Freshmen vs Juniors	.320	.120	.136	2.658	.008	
	School System group	363	.089	201	-4.069	.000	
		r			f	p	
		.056	.045		5.282	.000	

10 questions for activity for acquiring necessary tools, and 3 questions for practical effort for goal achievement. The total scores were used for the aim of helping the career counseling and guidance of university students.

A frequency analysis was used in order to find out the distribution of variables of research subjects, and a cross analysis was used on information gathering activity, activity for acquiring necessary tools, practical effort for goal achievement according to the subjects' sex, age, and school system, while a regression analysis was used for the lower factors between career preparation behaviours.

1. Discussion on the Relation between Career Decision Level and Career Preparation Behaviour Level

It turned out that career decision level is avg. 3.52 (SD 0.05) out of 5, which is slight above the average of 3. Career preparation behaviours were proved to be avg.

2.42 (SD 0.05), which is slightly below the average 3.

According to the precedent study4 that researched on the career decision level and Career preparation behaviours of collegians, both factors turned out to be low as a whole regardless of department and school year. It indicates that career counseling and instruction should be provided in a way that they help collegians act for substantial preparation for career finding while they explore and make a decision of their careers.

2. Hypothesis Testing

The results of this study can be summarized as follows:

First, a survey was carried out with 454 students attending the Department of Dental Laboratory Science in Taegu and Kyungbuk area. The pool of the respondents consists of freshman (6.43%), sophomore (21.4%) and junior (14.3%) in terms of school year and those in junior college (70.5%) and 4-year university (29.2%) by school system. Of the respondents, 54.0% live in large cities and 57.5% answered they were satisfied with campus life. 69.2% responded that they would find a job related to their major (dental laboratory science), which is high ratio.

Second, the hypothesis of "there will be a difference in career decision level and career preparation behaviours by sex, age or/and school system" was tested. According to the test, "there will be a difference in career decision level and career preparation behaviours by sex" was not supported by the empirical data. Between-group difference test didn't support the difference by sex. This result is contrary to the precedent studies^{4,13} demonstrating that there was a difference in career decision level by sex. However, there are other studies11,14 that didn't support the difference in career decision level by sex. Therefore, it is too early to come to conclusion regarding the hypothesis.

The hypothesis of "there will be a difference in career decision level and career preparation behaviours of the majors in dental technology by age" was supported. More specifically, the correlation between career decision level and career preparation behaviours and age turned out that the older the majors are, the more they makes preparatory behaviours of collecting information and obtaining necessary qualifications, which are the sub-factors of career preparation behaviour. This finding also does not agree with that of the precious studies4,12 that brought forth the result that age is correlated with career decision level. On the other hand, the present study is agreed with the finding by Kang Young Suk et al.10 who conducted a study with social welfare majors demonstrated that age does not have significant impact on career decision level. However, Given that those who enter college at relatively late age and student returning to school after military service or leave have clearer sense of purpose; it carries more weight that age is an important variable for career decision level.

The hypothesis of "there will be a difference in career decision level and career preparation behaviours of the majors in dental technology by school system" was supported. Looking more down to it, enrolled students in junior college are better in preparing for necessary tools.

Third, the correlation among the sub-factors of career decision level and career preparation behaviours was tested. It resulted in the discovery that, for career decision that is a sub-factor of career decision level, the more

the majors make preparation to acquire necessary tools, the higher efforts they make to achieve a target. Next, it turned out that the more they collect information, the better they are at preparing for necessary tools and also the better they are at collecting information, the better they are at making practical efforts to achieve a target. In addition, it was proved that, in case that career hasn't been determined, the more they collect information, the better they are at preparing for necessary tools. In turn, the better they are at collecting information, the better they are at making practical efforts to achieve a target.

It turned out that career decision level is avg. 3.52 (SD 0.05) out of 5, which is slight above the average of 3. Career preparation behaviours were proved to be avg. 2.42 (SD 0.05), which is slightly below the average 3.

The average of career preparation behaviour was 2.42 (standard error 0.05) which is slightly lower than the normal level 3. The results of preceding research analyzing the career decision level and career preparation behaviour on university also showed a generally low result regardless of majors or age. This shows that career counseling and guidance is needed in universities to allow students in Korea to search for careers or make decisions and prepare for practical career selections.

In the result of correlation analysis between age and career preparation analysis, it is shown that the confidence in information gathering activity and activity for acquiring necessary tools, which are lower factors in career preparation behaviour, becomes higher as one is older. It is shown that students attending 3-year-course colleges are better at acquiring necessary tools, showing the difference of career preparation behaviour of dental technology majors according to school systems.

In the result of the correlation analysis between the lower factors of career preparation behaviour, it is shown that information gathering activity and activity for acquiring necessary tools have a positive relationship while information gathering activity and practical effort for goal achievement also has a positive relationship.

The research results imply the following about future students majoring in dental technology.

As the fact that an older student has higher confidence in career decision level and career preparation behaviour shows, the role of the professor seems to be important in understanding the individual characteristics (returning students), the way of thinking in terms of career selection and beliefs of the students, and also in improving the effects of education. In addition, as practical effort for goal

achievement can be made through information gathering activity, the relationship between the professor and student is important in the sense that the professor can provide the basic background for satisfying the societal, psychological demands as a human being experiencing self-concept and self-realization in school. It also seems that professors can play the role of motivating students so that they have pride in selecting jobs as dental technicians.

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