

The Effect of a Career Reading Program on Career Maturity and Work Value of Elementary School Students in Korea

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Abstract: This study investigated the effect of a career reading program on career maturity and intrinsic work value of 5th grade elementary school students in Korea. The study classified 5th graders into experimental (28 students) and control (29 students) groups. Students in the experimental group completed a total of 10 sessions of a career reading program. Control group students received no intervention. The career development inventory and the work value test were administered to all students of the two groups before and after the intervention as the pre-test and post-test. The experimental group showed improvement in post career maturity including general career maturity and the sub-factors of self-awareness and career planning. Further, the experimental group showed improvement in post intrinsic work value including the sub-factors of service, theory, self-expression, and independence. This study concluded that the career reading program had significant effects on improvement of career maturity and intrinsic work value for elementary school students. Implications and recommendations for future research are discussed.

Introduction

Historically, the concept of student career development has been upheld as one of the most important duties of education in Korea. Despite this philosophical value, the implementation of career education in schools has been lacking (Jung et al., 2015). In response to this criticism, advances have been made in the last decade, including the incorporation of career education into the classroom in the 2009 revised educational curriculum in Korea. New career education and guidance teachers have been certified for middle school and high school.

Career education has been expanding qualitatively and quantitatively since that revision. 5,208 certified career education and guidance teachers have been assigned newly to 94.5% of middle schools and high schools by 2014 (Seo, Kim, Park, & Jung, 2016). 77.5 % of middle schools and 44.5 % of high schools offered 'career and vocation' in the regular curriculum and 89.8% of middle schools and 62.8 % of high schools delivered career activities as parts of the curriculum of creative activities (Korean Statistical Information Service, 2018). The Free Semester¹ has been implemented since 2016 in middle schools

¹ The Free Semester is a one-semester system in middle schools that aims to enhance the happiness and well-being of students by giving them opportunities to explore dreams and aptitudes through participatory instructions, diverse learning experiences, and flexible curricula. Students are encouraged to develop key competencies through experience-based activities (e.g., discussions, science labs, project-based learning) and Free Semester activities (e.g., career exploration, theme-based learning, fine arts/physical activities, club activities). (Retrieved from <http://english.moe.go.kr/sub/info.do?m=040101&s=english>)

nationwide in Korea. And this program has been proved to enhance career maturity, school adjustment, and happiness of students who participated (Joo, Kim, & Yang, 2017). However, career education has not yet fully reached elementary schools. Certified career education and guidance teachers have not been placed in elementary schools and any specific subject such as 'career and vocation' for the career education are not included in the curriculum of elementary schools except for extracurricular activities. This study was intended to find concrete answers for how career education should be implemented in elementary schools to facilitate career education for elementary school students in Korea.

Super (1980) defined the elementary school years as the period of active development of career-related attitudes, interests, skills, and values. Following Super's model, the elementary school curriculum of Korea should aim to help students to recognize their individuality and talents, to instruct students to have open-mindedness and a positive attitude towards work and their careers, and to provide opportunities to understand, explore, and experience the occupational world by using school and community facilities and human resources (Ministry of Education, 2015). In other words, career awareness and self-understanding and understanding of the occupational world should be the primary objectives of career education in Korea.

Also, an important issue in Korea recently is the excessive pursuit of extrinsic work value. Careers or occupations fulfill intrinsic work values such as self-realization or sharing social roles beyond intrinsic work values such as earning money or achieving status. However, intrinsic work values are not taught properly to Korean students. Specifically, the prestige-oriented occupational view, including the traditional sense of occupational hierarchies, has reinforced a tendency to look down on "blue-collar" jobs in preference to "white-collar" jobs. Due to this work value and attitude, career

education must be cultivated in students (Hwang, 2013). Therefore, career maturity and acquisition or improvement of intrinsic career value needs to be emphasized in career education in elementary schools.

Another important consideration is what teaching methods would be effective in elementary career education. Recently, an important keyword within career education in Korea is 'job experience.' The Ministry of Education of Korea enforced mandatory activities for job experience for all middle school students in Korea from 2016. The current job experience program is not developmentally appropriate to apply to elementary school students because it is mainly focused on experiencing the field of job performance in individual work units.

A reading activity is another form of experiential learning that might be a better fit for elementary school students. The effects of reading-oriented group programs that aim to foster career development through self-understanding, establishing career identity, improving career maturity, acquiring career information, and overcoming career barriers have been documented in various empirical studies (e.g., Bae, 2003; Billups & Peterson, 1994; Choi, 2006; Han, 2007; Kwon, 2010; Lee, 2016; Lee, 2011; Park, 2016; Son, 2007). Their results identified that reading activities help students explore careers and positively impact career development. Therefore, this study intended to develop a career reading program that focuses on career development and the improvement of intrinsic values of elementary school students, and demonstrated the effect of the program with a quasi-experimental research design. The research questions of this study were:

Does the career reading program significantly improve the career maturity of elementary school students?

Does the career reading program significantly improve the intrinsic work value of elementary school students?

Career Maturity

In Korea, career maturity has been defined as a continuous process of integrating career planning and career choice based on self-understanding and the understanding of work in the occupational world (Kim, Jung, & Kim, 2006). Developmental theorists view careers as proceeding throughout a lifetime, instead of by a certain moment's decision. These scholars, such as Super, emphasized the concept of career maturity, which explains that the ability for determining career fit changes according to self-understanding and the understanding of the occupational world as children grow. The concept of career maturity is one of the key concepts of Super's career development theory. Super (1955) defined the degree of career maturity as "the position an individual reaches in a series of career development." Gribbons and Lohnes (1964) defined career maturity as the readiness in career choice or career planning. Crites (1961) also defined the concept of career maturity as a relational position in comparison to the task performance of a group who is in the same developmental stage in career recognition, career choice, and the career planning stage based on self-concept and the knowledge of the world of work.

Kim and Lim (2011) classified influencing factors on career maturity of Korean students into individual, family environmental, and school environmental factors. Beginning with individual factors, gender differences were found, showing higher career maturity in female students compared to male students (Kim, 1989). In addition, students who reported a clearer self-concept also scored higher in career maturity (Kim & Kim, 2008). Family environmental factors showed that academic backgrounds and parental income influence career maturity, with parental socioeconomic status being the most influential (Choi, 2007). School environmental factors such as student union and club activities helped students to acquire rational decision making and leadership skills.

School activities can provide opportunities to develop basic vocational abilities, and moreover, to develop career competency. According to Lee (2011), career education programs of schools have a positive effect on the career development and the learning attitude of elementary school students. Specifically, they foster recognition of personal relationships, understanding of one's own characteristics, understanding of the use of career information, understanding of decision making, life role planning, and career planning processes, and increased interest in learning and preference for cooperative work. Therefore, developmentally appropriate career education in elementary schools could assist students with fully developing and understanding their aptitude, interest, personality, and ability, and to help students to reach a matured attitude towards work.

Work Value

Work values, personal values, and goals are central to career choice and occupational satisfaction. Work value (or occupational value) is a concept of attaching value to an occupation. Career education should be aimed for students to develop career recognition, to understand the vocational landscape, and to integrate their intrinsic values with modern society and the dramatic changing world of work (Lee & Sohn, 2006). In general, life value has been considered in Korea as the long-lasting belief for which behavior is more appropriate, personally or socially (Korea Employment Information Service, 2014). Although life value is considered a consistent view of right and wrong, work value might be limited to the job or work-related area (Judge & Bretz, 1992).

Work value has been considered a key factor in career choice and career development. Aptitude and interest are often discussed as primary motivators within career exploration and career choice. However, work value was suggested as a more essential and a more fundamental characteristic than occupational

interest (Holland, 1985; Rokeach, 1973). The vocational adjustment theory of Dawis and Lofquist (1984; Dawis, 2005) supposed that individual needs and values played an important role in work adjustment and career choice and that the vocational adjustment is higher when one's needs match work values related to the rewards of work.

Work value has been classified in different ways. Nevill and Super (1989) considered value as a goal that people pursue in order to meet their needs, as value arises from desire. They classified work value into satisfaction with professional activity itself (intrinsic value) and satisfaction with the result of career activities (extrinsic value). Intrinsic work value puts meaning on work itself, while extrinsic value signifies work conditions or monetary rewards (Au, 2009; Kalleberg, 1977; Kim et al., 1998; Seon, Hwang, & Kim, 2009). Typically, intrinsic work values attach importance to autonomy and interest while extrinsic work values attach importance to wage and job security (Au, 2009).

Career theories introduced in the early 1990s include the value-centered model of career development (Brown, 1996). Brown suggested that human behavior is significantly influenced by individual value. Unlike other career theories, the value-centered career model suggests that interest plays a less central role in career choice. Instead, it defines interest as a preference index that has been sorted through based on value, with value playing a pivotal role in goal-setting and the career decision-making process. For example, a value for community service plays a prominent role in choosing jobs that involve helping others. People with a high value of autonomy choose jobs that allow them to express this value of autonomy (Zunker, 1998). Brown (1996) suggested that focusing on values can facilitate choosing and pursuing a goal even when self-efficacy is low, and proposed that value plays the most important role in the process of choosing a career. According to Judge and Bretz (1992), university students with

a success-oriented work value tended to select occupations that highlight achievement.

The importance of work values in youth career choice has been emphasized for a long time (Dukes, 1955), but there is little research undertaken on the development of work values (Porfeli, 2007). Among career development theories, Gottfredson's (1996, 2005) career theory describes the development of career values during childhood and adolescence. Gottfredson's career developmental theory explains the stages of personal development associated with work values, explaining how individual aspirations develop. Their model begins with orientation to size and power (3-5 years old) and orientation to sex roles (6-8 years old), in which children pursue occupations based on their sex roles. Orientation to social valuation (9-13 years old) makes children exclude occupations with a social status that is too high or too low. The final developmental stage is presented as an orientation of the internal and unique self (age 14 and older), in which the establishment of internal selves makes career choices based on characteristics such as interest, ability, and value. Although Gottfredson did not directly explain the concept of occupational value, her concepts of gender role, social status, and personal characteristics, which are the criteria of each stage of development of job aspirations, reflect occupational values.

According to Lee (1993)'s research investigating work values of Korean elementary and middle school students, these students pursued external values such as job status or income. It was also confirmed that external work values decrease starting from the 10th grade and intrinsic work values were steadily increasing from the 7th grade, but this change was not statistically significant (Seon, Hwang, & Kim, 2009). In terms of work value, unlike adults, a child's work value reveals a stronger desire for compensation than can actually be fulfilled in a job (Marini, Fan, Finley, & Beutel, 1996). Therefore, it is easy for the child to focus

on the external value of the work more than adults. This suggests that vocational value education should be provided starting from elementary school to pursue and form desirable work values. Considering the developmental characteristics of children, career education through experiences might be effective and the development of the child's work values could be facilitated when the labor market and role of workers are experienced (Johnson, 2001). Therefore, career education at the elementary school level needs to comprise direct and indirect experiences of the world of work to teach desirable and intrinsic work values.

Career Reading Program

Hwang (2013) summarized a theoretical approach of career reading for accomplishing career education goals for the Korean national curriculum (Ministry of Education, 2012). The Korean national curriculum of career education has defined four key areas of career education: self-understanding, the understanding of work and the vocational world, career exploration, and career design and preparation. Reading as part of the career curriculum focuses on themes of forming values, establishing self-identity, and planning one's future dream. Chun (2003) demonstrated that reading activities help children build a dream by exposing them to indirect experiences through stories. Stories enhance thinking ability and the value of communication. Reading programs also demonstrated increased career development and higher achievement motivation for elementary school students (Hwang, 2009). Hwang (2015) found that career education using reading also lowers career barriers of 5th and 6th grade students in areas of the lack of confidence, conflict of gender roles, gender discrimination, and the lack of job information. Also, effects on elementary students' self-concept and career maturity were found (Kim & Kim, 2015). Lim (2014) proposed that career exploration through career reading can supplement the limitations of traditional career education because it increases

self-understanding, instills work values, and fosters the development of attitudinal traits required for job performance. She developed the activities that consisted of 'who I am', 'what kind of person I am', 'what leads a person to success', and 'aptitude, occupation, and value of labor' as a step-by-step career exploration process. Her work influenced the direction of career education through developing reading libraries and fostering a culture of reading.

There are still no sufficient studies on how reading programs can best achieve career education goals or how the exploration of work value can be facilitated by class activities. Although book lists and activities for general reading activity programs have been introduced, the concept of career reading and book lists for career reading programs are still unclear. Also, while there are many studies focused on the career education of elementary school students, the majority aim to enhance career recognition, career maturity, and career development. There is a scarcity of intervention studies that focus on the improvement of intrinsic work values for this population. Therefore, there is a great need for career education programs that focuses on improving work values according to the development stage of elementary school students.

In response to this problem, a career reading program for elementary school students was constructed with a specific focus on intrinsic work values in this study. The purpose of this study was to investigate if this career reading program could be used meaningfully to develop students' career maturity and intrinsic work values of community service, sense of accomplishment and worth, and professional activity.

Methods

Participants

This quasi-experimental study investigated changes in career maturity and intrinsic work value after the delivery of a career reading program to 5th grade students in Seoul, Korea.

The participants were recruited from one elementary school. All students from the 5th grade of one elementary school were administered tests (career maturity and intrinsic work value) and two groups were selected based on the similarity of the means of the test scores. The experimental group consisted of 28 students (14 boys, 14 girls) from one class. The control group consisted of 29 students (15 boys, 14 girls) recruited from another class in the same grade. In efforts to select a homogenous control group, the gender and age of home-room teachers, academic achievement of students, class size, and gender ratios were considered.

Measures

Career Maturity

To measure the effects of the career reading program on career maturity, this study used the career development inventory for elementary school students developed indigenously in Korea by Lee (2005). It consists of 41 questions with three sub-scales of self-awareness, education and occupational exploration, and career planning. The reliability (Cronbach's α) of whole test, self-awareness, education and occupational exploration, and career planning was 0.96, 0.89, 0.88, and 0.92 respectively. Additional reliability and validity information can be found in Lee (2005).

Intrinsic Work Value

To measure the effects of the career reading program on intrinsic work value, this study used the vocational value test for elementary school students in Korea. The test was developed indigenously by Paek (1980) and has been used extensively in previous research conducted in Korea. It comprises two dimensions of intrinsic work value and extrinsic work value, although this study used only the intrinsic work value sub-scale. It consists of 18 questions which comprise

six factors of service, theory, self-expression, satisfaction, interest, and independence. The reliability (Cronbach's α) of whole intrinsic work value, service, theory, self-expression, satisfaction, interest, and independence was 0.85, 0.66, 0.66, 0.64, 0.68, 0.63, and 0.60 respectively. Additional reliability and validity information can be found in Paek (1980).

Intervention

We organized the career reading program activities based on the reading-oriented career education program developed by Park (2010) and the guidebook of career reading (Reading Korea Organization, 2013). The topic and content of each session was adapted based on the reading-based career group counseling program developed by Lee (2010). The contents and theme of each session were reconstructed and revised to match the developmental level of the 5th grade students. The revised contents of each session were validated by three different professors who have doctoral degrees in counseling psychology, counseling education, and educational psychology respectively.

The selection of reading materials for self-understanding, forming occupational attitude and value, and career planning was a fundamental step in the research process. We collected book lists from various resources, including previous research (Lee, 2010; Park, 2010), a list of recommended books by the Seoul Metropolitan Office of Education (2014), and books suggested in the Guidebook of Career Reading (Reading Korea Organization, 2013). All books are written mainly in text with a little illustration. The title of the books selected in this study and the reasons for selecting them are as shown in Table 1.

Table 1
Book titles and reasons for selection

Session	Title	Author	Reasons for selection
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1	You are Special	Mac Lucado	A children's story for thinking about their own values. A fairy tale for accepting myself the way I am instead of viewing myself from other people's perspectives, and for realizing that I am a precious being.
2	A Happy Street Sign Cleaner	Monica Feth	A fairy tale for looking into the meaning of interest in career choice. The story of a cleaner who only insists on cleaning because he is good at it, instead of choosing a career by other people's requests or a prestigious job.
3	A Junk Seller, Rokke	Josep Vallverdú	A book for exploring the meaning of work and attitude towards work through a main character who cannot go to school due to a difficult financial situation. Instead, the main character picks up "junk" to make a living.
4	My Snail Bride	Lee, Keum Ii	A story for casting away prejudice about work and learning about equal gender roles. Readers learn about the sharing of household tasks through the story of Jisu, who learns to understand better about the feelings of her unemployed dad.
5	The Hen Who Dreamed She Could Fly	Hwang, Sun Mi	A fairy tale for thinking about dreams and goals through life, death, sacrifice, and the process of realizing a dream of a hen named Leafie, who escapes her hen house with great sacrifice.
6-7	A 14-Year Old Life Mentor	Kim, Bo Il	A mentor story for thinking about extrinsic and intrinsic values and searching for a mentor. Characters who lived by focusing on their intrinsic value rather than pursuing fame and fortune are emphasized.
8-9	The Man Who Planted Trees	Jean Giono	A book for inculcating positive future-oriented value into children. A story about the process of hope and happiness restoration, as a barren wasteland is changed into a green forest by the persistent effort of an old shepherd.

The career reading program was conducted as the weekly class activities for the 'Creative Experiential Activity.' The book used in each session was introduced to students to read 1 to 2 weeks ahead of each session. The 'Creative Experiential Activity' is one of the subjects that all students took as part of the curriculum. The program consisted of 10 sessions and each session was 40 minutes long. Starting with an introduction of the program, the program

consisted of understanding yourself (sessions 1-2), understanding the occupational world (sessions 3-5), improving attitude and value toward the occupational world (sessions 6-7), career planning (sessions 8-9), and the completion stage of the program (session 10). The program included a diverse range of delivery methods including a lecture, a debate activity, group counseling, a group discussion,

sharing thoughts, and cooperative learning according to the characteristics of each session.

Procedure

The content and structure of the career reading program was developed, organized, and validated from March to August, 2015. In September 2015, measures of career maturity and intrinsic work value were administered to select a control group class that was the most similar to the experimental group. Subsequently, ten sessions of the career reading program were delivered to the experimental group during their creative experience activity class from October to November, 2015. Students in the control group did not receive any programs outside of normal school activities.

At the end of the program, post-tests were administered to the two groups of students at the same time. Data collected in this study were analyzed using the SPSS 21.0 Program. First, an independent sample *t*-test was conducted for a homogeneity test on career maturity and intrinsic work value by groups. Secondly, analysis of covariance (ANCOVA) was conducted to identify the differences between

the pre-test and post-test of career maturity and intrinsic work value in experimental and control groups.

Results

Homogeneity Test of Preliminary Inspection

The results of the independent sample *t*-test for career maturity is shown in Table 2 and intrinsic work value in Table 3. No statistically significant differences were found between the experimental group and the control group on career maturity, for the whole test and the three dimensions ($p > .05$). This result confirmed that the two groups were homogeneous in terms of prior career maturity. In addition, the whole and most sub-scales (theory, self-expression, satisfaction, and interest) of intrinsic work value did not show a statistically significant difference between the experimental group and the control group ($p > .05$). However, sub-scales of service and independence were significantly different ($p < .05$). Therefore, ANCOVA was chosen as the analysis method to statistically control the difference between the two groups.

Table 2
Homogeneity test of career maturity between groups

Variables	Groups	Cases	Mean	SD	<i>t</i>	<i>p</i>
Self-awareness	Experimental	28	3.66	.643	-1.250	.216
	Control	29	3.89	.755		
Education and work exploration	Experimental	28	3.40	.751	-.686	.496
	Control	29	3.54	.790		
Career plan	Experimental	28	3.39	.819	-1.532	.131
	Control	29	3.71	.797		
Career maturity	Experimental	28	3.46	.672	-1.330	.189
	Control	29	3.70	.718		

Table 3
Homogeneity test of intrinsic work value between groups

Variables	Groups	Cases	Mean	SD	<i>t</i>	<i>p</i>
Service	Experimental	28	3.49	.638	-3.692	.001
	Control	29	4.16	.733		
Theory	Experimental	28	3.71	.613	-.376	.709
	Control	29	3.79	.940		
Self-expression	Experimental	28	3.90	.470	-.269	.789
	Control	29	3.95	.862		
Satisfaction	Experimental	28	3.95	.572	-.240	.811
	Control	29	4.00	.895		
Interest	Experimental	28	4.14	.663	.563	.576
	Control	29	4.03	.783		
Independence	Experimental	28	3.20	.524	-3.249	.002
	Control	29	3.82	.866		
Intrinsic work value	Experimental	28	3.73	.332	-1.673	.102
	Control	29	3.96	.643		

Differences in Career Maturity

ANCOVA was conducted to verify the changes of career maturity in the experimental group and the control group. The result of analyzing the pre- and post-scores for the adjusted means of

the total and the three dimensions of career maturity is shown in Table 4. There was a significant difference in the post-test score of general career maturity between the experimental group and the control group, when prior test scores of general career maturity were

treated as covariates. This confirms that the career reading program had an effect on improving participants' general career. Also, the results indicated the career reading program had a small effect to enhance general career maturity of students according to Cohen (1992)'s guideline.

The ANCOVA of the three dimensions of career maturity showed that post-test scores of self-awareness and career planning showed a significant difference between the experimental group and the control group, when the pre-test scores of self-awareness and career planning

were treated as covariates. The career reading program has an effect on improving self-awareness and career planning of elementary school students. The effect size estimate indicated the career reading program had a small effect to enhance self-awareness and career planning of students. However, the experimental group and the control group did not show significant differences in post-test scores for the education and work exploration dimension of career maturity.

Table 4

Pre and post scores for career maturity and adjusted post scores

	Groups	Pre		Post		Adjusted post-score		<i>F</i>	<i>p</i>	η^2
		Mean	SD	Mean	SD	Mean	SD			
Self-awareness	Experimental	3.66	.643	4.10	.504	4.15	.086	12.182	.001	.184
	Control	3.89	.755	3.78	.573	3.73	.084			
Education and work exploration	Experimental	3.40	.751	3.90	.592	3.93	.118	2.899	.094	.051
	Control	3.54	.790	3.68	.823	3.65	.116			
Career planning	Experimental	3.39	.819	4.03	.518	4.10	.101	8.293	.006	.133
	Control	3.71	.797	3.75	.692	3.69	.099			
Career maturity	Experimental	3.46	.672	4.01	.439	4.06	.088	8.123	.006	.131
	Control	3.70	.718	3.74	.633	3.68	.087			

Differences in Intrinsic Work Value

There was a significant difference between the experimental and control groups on adjusted post-test scores of general intrinsic work value when the pre-test score of the general intrinsic work value was treated as a covariate. This confirms that the career reading program conducted in this study has an effect on the general intrinsic work value of elementary school students. The effect size indicated the career reading program had a small effect on the intrinsic motivation of students, according to Cohen (1992)'s guideline.

The result of conducting covariate analyses by sub-scales is as follows. When pre-test scores

were treated as covariates, the adjusted post-test scores for the experimental group were significantly higher than the post-test scores for the control group for service, theory, self-expression, and independence. In other words, the ANCOVA results confirmed that the career reading program had an effect on improving service, theory, self-expression, and the independence of elementary school students. The results also revealed that the career reading program had a small effect to enhance service, theory, self-expression, and independence of students. However, it was revealed that the post-test scores of the experimental group and the control group were not significantly different for the satisfaction and interest sub-scales.

Table 5
Pre and post scores of intrinsic work value and adjusted post scores

	Groups	Pre		Post		Adjusted post-score		<i>F</i>	<i>p</i>	η^2
		Mean	SD	Mean	SD	Mean	SD			
Service	Experimental	3.49	.638	4.10	.826	4.38	.106	9.340	.003	.147
	Control	4.16	.733	4.18	.738	3.91	.104			
Theory	Experimental	3.71	.613	4.00	.731	4.04	.090	4.753	.034	.081
	Control	3.79	.940	3.79	.940	3.76	.089			
Self-expression	Experimental	3.90	.470	4.35	.625	4.37	.101	8.696	.005	.139
	Control	3.95	.862	3.97	.865	3.95	.099			
Satisfaction	Experimental	3.95	.572	4.32	.706	4.34	.104	3.887	.054	.067
	Control	4.00	.895	4.07	.856	4.05	.102			
Interest	Experimental	4.14	.663	4.36	.780	4.32	.115	2.130	.150	.038
	Control	4.03	.783	4.05	.790	4.08	.113			
Independence	Experimental	3.20	.524	4.00	.870	4.26	.128	12.287	.001	.185
	Control	3.82	.866	3.85	.876	3.60	.126			
Total intrinsic value	Experimental	3.73	.332	4.19	.564	4.29	.077	13.788	.000	.203
	Control	3.96	.634	3.98	.644	3.89	.075			

Discussion

This study examined the implementation of a reorganized a career reading program for facilitating career development and pursuit of intrinsic work value. It verified the program's effectiveness through a quasi-experiment design and analysis of covariance. The effects and implications of applying a reorganized career reading program on elementary school students are as follows.

Effects on Career Maturity

Elementary school students who participated in the career reading program showed improvement in career maturity compared to the control group. Grade level, effect area, and contents of the program were different, but the result is consistent with results from previous research that verified the effects of a career

education program using reading (Bae, 2003; Billups & Peterson, 1994; Choi, 2006; Han, 2007; Kwon, 2010; Lee, 2016; Lee, 2011; Park, 2016; Son, 2007). Further, the study revealed that a reading program can improve career maturity if the career reading program was organized, books were appropriately selected, and the activities were tailored to the level of understanding and developmental stage of elementary school students.

In terms of dimensions of career maturity, the results reveal that career reading programs are effective for improving elementary school students' self-awareness and career planning, while the career reading program did not improve their education and work exploration. Because the career reading program was focusing on understanding oneself, understanding the occupational world,

improving attitude and value toward the occupational world, and career planning, it might not reach to the education and work exploration of students. Also, there are inconsistent results in previous research. For example, Jung, Lee, and Kim (2014) identified that career reading significantly improved directivity of career, understanding of occupation, and the rationality of career selection among dimensions of career maturity. However, self-understanding, professional gender bias, autonomy, and pride did not significantly differ, which is a conflicting result from the results of this study. A career reading program according to the Holland classification of career type (Jung, Lee, & Kim, 2014) was insufficient for improving autonomy and self-esteem. It may have been difficult for sufficient self-exploration activities because it was a career reading based on the career interest.

Effects on Intrinsic Work Value

The career reading program with elementary school students showed improvement in intrinsic work values including service, theory, self-expression, and independence sub-scales. This signifies that the career reading program reorganized in this study had a small but significant positive effect on intrinsic work values of elementary school students. With the previously described problems of pursuing extrinsic work values, the discovery of a career education program that can improve intrinsic work value has great significance. However, the effect was not established in the satisfaction and interest areas. One possible reason for this result is that learning experience and the career experience of children showing relatively high satisfaction and interest in pre-homogeneity tests before the program.

Program contents, target grade level, and subject area are different in this study, but in a previous study on improvement of intrinsic work value, Lee (2013) investigated improvement in intrinsic work value by applying a career education program to

educational television for 6th grade students. Lee reported that 8 sessions of their program had a significant effect on the service and theory subareas of intrinsic work value and a positive effect on achievement motivation. Cho (2010) investigated the effects of a career reading program on the formation of career identity and work value of middle school students. Cho found significant improvements on extrinsic work value but not on intrinsic value for male middle school students. These results conflict with the result of the present study due to different program targets and gender differences. The eight session career reading program of Cho (2010) to improve work values of 8th grade male students supports the result of Yang and Jung (1998) that male middle school students tend to put higher value on exercising influence on others through work or on financial compensation. Furthermore, the most substantial difference is age, which suggests that intervention or enhancement for formation of intrinsic work value needs to be provided as early as possible.

Implications

Generally, the purpose of a career reading program is to instruct students about career meaning and to introduce reading career related books as a means of understanding careers, career exploration, and for carving out a future. So far in Korea, job experience has been considered an effective way of having desirable occupational consciousness (Lee, 2005) and job experience was identified as the program that is most interesting to Korean elementary students (Jung et al., 2017). Indirect experiences have also been considered meaningful to overcome the lack of experiential activity in elementary career education. Career reading programs can provide indirect job experiences to elementary school students. There have been many career education programs through reading, but most programs had limitations of introducing career information only. It is difficult to understand

the occupational world without experience in practical work and occupation. This study aimed to expand the indirect experience of children by reading various books featuring career exploration. It was designed for students to explore characters in books, to acquire self-understanding, information on careers, and to approach a unique value such as joy, interest, and service through a specific occupation. This study reorganized a career reading program and verified the effectiveness of the program for career maturity and intrinsic work value. We expect this career reading program will be incorporated into the career education program during creative experiential activities based on the curriculum in elementary school in Korea.

This research provided evidence to support the merits of improving intrinsic work values with a career reading program. The process of acquiring intrinsic value is considered very important because intrinsic values are hardly acquired when people face real world problems throughout their life. Children's work values reveal a stronger desire for compensation than can actually be fulfilled in a job (Marini, Fan, Finley, & Beutel, 1996) and intrinsic work values were hardly changed after elementary school in Korea (Seon, Hwang, & Kim, 2009). This suggests that vocational value education should be provided starting from elementary school to pursue and form desirable work values. Previous career reading programs has been mainly organized by providing a list of books introducing occupations of different types of professions. However, this approach is insufficient to clarify work value of children. The present study reorganized a career reading program to provide an understanding of various work values in the world of work and to educate the importance of intrinsic work values. The successful outcome of this research may convince teachers and career guidance professionals of the possibility of improving intrinsic work values and will provide a tool for career education. However, specific guidance for teaching methods that can improve career

recognition and maximize indirect experience of exploration of work value is still needed.

It is still necessary to look for ways to improve students' work values and career maturity, which have a close relationship with career development. The career reading program can be considered as one of the ways to do so. Applying a career reading program for career recognition and career exploration can make a more positive and long-term educational effect on the career education of elementary school students. Therefore, career reading programs to provide a correct understanding on career education in schools will improve career maturity and intrinsic values of elementary school students.

Limitations and Recommendations for Future Research

Next, these limitations of this study and suggestions for a follow-up study are discussed. First, the effectiveness of the career reading program was statistically significant, but the effect sizes were small. While the career reading program redesigned and implemented in this study showed the potential to enhance career maturity and intrinsic career values of students, it also requires modifications and supplements to be a more effective program. Further study is expected to develop a more effective career reading program to enhance career maturity and intrinsic values.

Second, the results are limited to certain regions because they were obtained by selecting 5th grade students in Seoul, Korea. Further, prudence is needed to generalize the research results because the sample size was small. Therefore, the results need to be verified through more extensive studies on the same age groups and also through lower grade elementary school students from different regions.

Third, this study only investigated intrinsic values among work values. Therefore, in-depth research on overall work value, including not only intrinsic work value but also extrinsic

work values, would be recommended. There were setbacks in interpreting the results during the analysis process because there were not many precedent studies on intrinsic work values conducted on elementary school students. A study by Cho (2010) conducted on middle school students yielded a different pattern of results from the present study of extrinsic intrinsic values of a career reading program. Therefore, studies on a more general and wide range of work values are necessary.

Fourth, development of a work value assessment tool for elementary school students is considered necessary. Paek's (1980) scale, used in this study, was difficult to apply to today's generation of children because it was produced so long ago. It was not easy to find different assessment tools for intrinsic and extrinsic work values. Taking the rapid growth rate of elementary school students into consideration, the development of work value testing tools for elementary school students is considered necessary.

Fifth, it is necessary to conduct additional development of a career reading program according to the level, understanding, and developmental stage of children and the arrangement of a list of books. Career reading is reading for careers. Career reading education would have to be classified differently from general reading education workbooks. It is not a course of reading activities using workbooks but requires serious thought about how it is related to the goal of career education and how selected books should fit with this objective. The response and the participation rates of children were very positive in the present study. Therefore, training on career reading, a supply of career related books, research on teaching methods, and more teachers who are enthusiastic about career reading programs are needed.

References

Au, Y. K. (2009). Multilevel analysis on the change of students' intrinsic and extrinsic work values. *Korean Journal of Educational Psychology*, 23, 801-817.

- Bae, E. K. (2003). *The effect of group bibliotherapy program on high school girls' career decision-making self-efficacy and career attitude maturity* (Unpublished master's thesis). Keimyung University, Daegu, Korea.
- Billups, A., & Peterson, G. W. (1994). The appreciation of career literature in adolescents. *The Career Development Quarterly*, 42, 229-237. <https://doi.org/10.1002/j.2161-0045.1994.tb00938.x>
- Brown, D. (1996). Brown's value-based, holistic model of career and life-role choices and satisfaction. In D. Brown, L. Brooks and Associates, *Career choice and development* (3rd ed., pp. 337-372). San Francisco, CA: Jossey-Bass.
- Cho, M. J. (2010). *The effects of career counseling program by bibliotherapy on the career identity and vocational value formation of middle school students* (Unpublished master's thesis). Incheon National University, Incheon, Korea.
- Choi, H. S. (2006). *The effects of reading-based career group counseling and career decision self-effectiveness and career attitude maturity* (Unpublished master's thesis). Kangwon University, Kangwon, Korea.
- Choi, S. J. (2007). Latent growth curve model on career maturity and self-efficacy, SES, school record of adolescent. *Studies on Korean Youth*, 18(3), 31-57.
- Chun, M. K. (2003). *A relationship between reading tendency and career recognition of elementary school students* (Unpublished master's thesis). Sookmyung Women's University, Seoul, Korea.
- Cohen, J. (1992). A power primer. *Psychological Bulletin*, 112(1), 155-159.
- Crites, J. O. (1961). A model for the measurement of vocational maturity. *Journal of Counseling Psychology*, 8, 255-299. <https://doi.org/10.1037/h0048519>
- Dawis, R. V. (2005). The Minnesota theory of work adjustment. In S. D. Brown & R. W. Lent (Eds.). *Career development and counseling: Putting theory and research to work* (pp. 3-22). New York, NY: John Wiley & Sons.
- Dawis, R. V., & Lofquist, L. A. (1984). *A psychological theory of work adjustment: An individual-differences model and its applications*. Minneapolis, MN: University of Minnesota Press.
- Dukes, W. F. (1955). Psychological studies of values. *Psychological Bulletin*, 52, 24-50. <https://doi.org/10.1037/h0040430>
- Gottfredson, L. S. (1996). Gottfredson's theory of circumscription and compromise. In D. Brown, L. Brooks, & Associates (Eds.), *Career choice and development* (3rd ed., pp. 179-232). San Francisco, CA: Jossey-Bass.
- Gottfredson, L. S. (2005). Applying Gottfredson's theory of circumscription and compromise in career

- guidance and counseling. In S. D. Brown & R. W. Lent (eds.), *Career development and counselling: Putting theory and research to work* (pp. 71-100). Hoboken, NJ: John Wiley & Sons.
- Gibbons, W. D., & Lohnes, P. R. (1964). Relationships among measures of readiness for vocational planning. *Journal of Counseling Psychology*, 11, 13-19. <https://doi.org/10.1037/h0044801>
- Han, J. A. (2007). *The effects of career-reading program on the career-decision self-efficacy and career attitude maturity of high school girls* (Unpublished master's thesis). Kangwon University, Kangwon, Korea.
- Holland, J. L. (1985). *The self-directed search: Professional manual 1985 edition*. Odessa, FL: Psychological Assessment Resources.
- Hwang, D. Y. (2015). *The effect of career education through the use of reading on the awareness of career barriers in higher-grade elementary schoolers* (Unpublished master's thesis). Gyeongin National University of Education, Incheon, Korea.
- Hwang, M. H. (2013). Exploring the possibility of reading as career education activity. *The Journal of Education*, 33(2), 55-71.
- Hwang, N. Y. (2009). *The effects of job search-oriented reading counseling program on elementary school students' career development and achievement motivation* (Unpublished master's thesis). Kongju University, Chungnam, Korea.
- Johnson, M. K. (2001). Change in job values during the transition to adulthood. *Work & Occupation*, 28, 315-345. <https://doi.org/10.1177/0730888401028003004>
- Joo, H. J., Kim, Y. S., & Yang, J. S. (2017). *The effectiveness and task of 'The Free Semester' program in Korea*. Sejong: Korea Research Institute for Vocational Education and Training.
- Judge, T. A., & Bretz, R. D. (1992). Effects of work values on job choice decisions. *Journal of Applied Psychology*, 77, 261-271.
- Jung, C. Y., Jeong, J., Lee, J., Jeong, D., Lim, H., Lee, S., & Lim, J. (2015). Career education in South Korea: Current status and future direction. *The Journal of Career Education Research*, 28, 155-171.
- Jung, J. C., Kim, J. H., Bang, J. H., Nam, J. S., Jeong, J. E., Lee, H. M., & Im, S. H. (2017). The direction of career education in elementary school according to introduction of career teacher in elementary school. *Journal of Korean Practical Arts Education*, 23, 143-164.
- Jung, S. Y., Lee, O. R., & Kim, J. S. (2014). The Effects of reading program based Holland's career code on career maturity. *Development of Thinking*, 10(1), 21-41.
- Kalleberg, A. L. (1977). Work values and job reward: A theory of job satisfaction. *American Sociological Review*, 42(1), 124-143. <https://doi.org/10.2307/2117735>
- Kim, B. S., Kang, I. K., Jin, M. S., Chang, W. S., Kim, H. D., Kwon, J. H., Jeong, Y. K., Kim, H. S., & Lee, Y. K. (1998). *Study on the Korean vocational consciousness*. Seoul, Korea: Korea Research Institute for Vocational Education and Training.
- Kim, B. W., Jung, C. H., & Kim, B. S. (2006). *Career counseling for school* (2nd ed.). Seoul, Korea: Hakjisa.
- Kim, H. O. (1989). *The relationship between the career maturity levels of Korean adolescents and the related variables* (Unpublished doctoral dissertation). Konkuk University, Seoul, Korea.
- Kim, J. U., & Kim, J. H. (2008). The relationship of self-concept, learning motivation, and children's career maturity. *The Journal of Career Education Research*, 21, 127-143.
- Kim, S. Y., & Kim, H. J. (2015). The effects of group counseling oriented career recognition program using biblio-activity on elementary school students' self-concept and career maturity. *Social Science Research*, 26, 249-265.
- Kim, N. O., & Lim, H. J. (2011). The effects of students' experience of school activities on their career maturity. *Studies on Korean Youth*, 22, 261-281.
- Korea Employment Information Service (2014). *Occupational value survey of 2014*. Seoul, Korea: Korea Employment Information Service.
- Korean Statistical Information Service (2018). *The current career education, (2017 Survey)*. Retrieved from http://kosis.kr/statisticsList/statisticsListIndex.do?menuId=M_01_01&vwcd=MT_ZTITLE&parmTabId=M_01_01&parentId=O.1;O1.2;O1_11216.3;#O1_11216.3
- Kwon, E. S. (2010). *The effects of class-unit bibliotherapy program on the elementary school student's career self-efficacy* (Unpublished master's thesis). Kyungpook National University, Daegu, Korea.
- Lee, H. K. (2010). *Development and effects of career group counseling program using biblio-activity* (Unpublished doctoral dissertation). Yeungnam University, Gyeongbuk, Korea.
- Lee, H. R., & Sohn, H. S. (2006). The effects of career exploration program based on multiple intelligences on vocational values and career maturity of middle school students. *The Journal of Childhood Education*, 15, 101-116.
- Lee, J. A. (2013). *The effects of EBS-based career education program on intrinsic work value and achievement motivation of elementary school students* (Unpublished master's thesis). Seoul Women's University, Seoul, Korea.

- Lee, J. B. (2005). *The development and validation of a career development inventory for elementary school students* (Unpublished doctoral dissertation). Seoul National University, Seoul, Korea.
- Lee, O. (1993). Career perception and work values of Korean student youth. *Studies on Korean Youth*, 15, 32-44.
- Lee, Y. H. (2016). How to build up dream in school library through “Dream Book Dotum” program. *Digital Library*, 83, 41-80.
- Lee, Y. K. (2011). The effects of a career education program on elementary school children’s career-development and learning attitude. *The Journal of Elementary Education Studies*, 18, 225-246.
- Lent, R. W., Brown, S. T., & Hackett, G. (1994). Monograph: Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of Vocational Behavior*, 45, 79-122. <https://doi.org/10.1006/jvbe.1994.1027>
- Lim, M. H. (2014). *The public library’s career-searching reading education cultivating dreams and talents*. Seoul, Korea: Jungdok Public Library.
- Marini, M. M., Fan, P., Finley, E., & Beutel, A. M. (1996). Gender and job values. *Sociology of Education*, 69, 49-65. <https://doi.org/10.2307/2112723>
- Ministry of Education (2015). *General and particular framework of elementary and middle school curriculum*. Seoul, Korea: Ministry of Education.
- Nevill, D. D., & Super, D. E. (1989). *The Values Scale: Theory, application and research: Manual*. Sunnyvale, CA: Consulting Psychologists Press.
- Paek, Y. K. (1980). *A study on work value of elementary-middle-high school students* (Unpublished master’s thesis). Korea University, Seoul, Korea.
- Park, B. R. (2010). *The effects of reading-centered career program on career development of elementary school Students* (Unpublished master’s thesis). Ajou University, Gyeonggi, Korea.
- Park, J. A. (2016). A study on the effects of career reading research program on career maturity. *Digital Library*, 83, 23-40.
- Porfeli, E. J. (2007). Work values system development during adolescence. *Journal of Vocational Behavior*, 70, 42-60. <https://doi.org/10.1016/j.jvb.2006.04.005>
- Reading Korea Organization (2013). *Career reading guidebook: Higher grade of elementary school*. Seoul, Korea: Gorae Book.
- Rokeach, M. (1973). *The nature of human values*. New York, NY: Free Press.
- Seo, Y. J., Kim, S. W., Park, C. S., & Jung, Y. K. (2016). *Current status and task of career education in Korea*. Sejong: Korea Research Institute for Vocational Education and Training.
- Seon, H. Y., Hwang, M. H., & Kim, Y. B. (2009). The change of adolescents’ value pursuing in career choice. *Asian Journal of Education*, 10(1), 155-173.
- Seoul Metropolitan Office of Education (2014). *Happy school and classroom improving future through career education*. Seoul, Korea: Seoul Metropolitan Office of Education.
- Son, B. G. (2007). *The effect of bibliotherapy on the career maturity of middle school students* (Unpublished master’s thesis). Kumoh National Institute of Technology.
- Super, D. E. (1955). Dimensions and measurement of vocational maturity. *Teachers College Record*, 57, 151-163.
- Super, D. E. (1980). A life-span, life-space approach to career development. *Journal of Vocational Behavior*, 13, 282-298. [https://doi.org/10.1016/0001-8791\(80\)90056-1](https://doi.org/10.1016/0001-8791(80)90056-1)
- Yang, H. J., & Jung, C. Y. (1998). A study on work values and occupational preferences of junior high school students. *The Journal of Vocational Education Research*, 17(1), 41-54.
- Zunker, V. G. (1998). *Career counseling: Applied concepts of life planning* (5th ed.). Pacific Grove, CA: Brooks/Cole.