

Long-Term Effect of Parents' Support on Adolescents' Career Maturity



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Abstract

The purpose of this study was to identify the factors influencing adolescents' career development. Using three-wave longitudinal data (Seoul Education Longitudinal Study2010), we examined the direct and indirect effects of parents' support on career maturity, in addition to the mediating effect of self-esteem in the relationship between parents' support and career maturity. We also examined the sex differences in the relationship among the variables. The subjects of this research were 4,187 adolescents who progressed from seventh grade in 2010 to ninth grade in 2012. The results are as follows: First, parental support has differential effects on career maturity via self-esteem. Second, in the longitudinal relationship of parents' support, self-esteem, and career maturity, the developmental differences according to sex were supported empirically. This study finding suggests that it is possible to enhance adolescents' career development by proper interventions in the period of adolescence which take into consideration these sex differences.

Keywords

parents' support, self-esteem, career maturity, longitudinal study

The drastic changes taking place in modern society entail rapid changes in the world of work, with numerous jobs being created or becoming extinct and career opportunities developing and declining. Adolescents in this society are thus undergoing huge difficulties and conflicts in deciding which career to embark on and choosing jobs (Kwak & Kim, 2005). Accordingly, it has become a global trend to establish policies to strengthen adolescents' abilities in diverse ways to aid their career development. A number of organizations including the European Union; the Organization for Economic Cooperation and Development; and the United Nations Educational, Scientific, and Cultural Organization are recognizing the importance of career education and publishing relevant reports (Oh & Jung, 2015).

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South Korea is also reflecting this global trend, recognizing the significance of career education to strengthen adolescents' abilities and creating and enforcing diverse policies for career education. The passage of the Law of Career Education in the National Assembly in 2015 created the foundation on which individuals can actively plan their lives according to their talent and aptitude and develop enterprising career preparation abilities and attitudes. It also clarified the roles and responsibilities for career education, such as the activation of career education and experience in school, support for professional and systematic career education policies, and activation of community cooperation systems (Korea Research Institute for Vocational Education and Training, 2015).

Early studies on career maturity were mostly focused on the relationship between career maturity and individual factors, such as self-concept, learning motivation, academic achievement, work experience while in school, career decision status, gender differences, and grade (J. Kim, Hwang, & Kim, 2011). With the advancement of research into career maturity, interest in the effects of family or school on adolescents' career maturity has increased and, thus, a growing number of studies are taking into account individual and environmental variables in a comprehensive manner (Chung, 2006; Gang, 2001). Although many of the studies on career theories have different perspectives, they agree on the significant influence of parents on adolescents' career development as an environmental variable and the effect of adolescents' self-esteem on their career maturity as an individual variable (J.R. Lee, 2008; E.H. Park, 2006).

However, a cross-sectional approach to the relations among the relevant variables cannot fully examine the developmental tendency of career maturity because career development involves the development of career maturity along the individuals' life cycle and stages (Hartung, Porfeli, & Vondracek, 2005). Therefore, research into the longitudinal relationships is necessary in order to investigate how the relationships among these variables affect adolescents' career development using longitudinal data. By identifying the predictors of career maturity, as well as the mediators that can be controlled by individuals, it is necessary to provide the baseline data of the core abilities that are needed for lifelong career development and to suggest future directions for career education that helps individuals find careers and develop proper abilities and talents in this rapidly changing modern society. To this end, this study set out the following specific research questions. First, does parents' support (psychological, academic, and cultural activities support) have a significant influence on career maturity via self-esteem? Second, is there any difference in the relationships among parents' support, self-esteem, and career maturity between male and female students?

Theoretical Background

Adolescence is a critical period in which career options are explored and decisions made regarding future jobs. Experts thus stress the importance of career education and claim that students must develop individual abilities to explore possible careers and make plans for the future (Im & Kim, 2011). In the same vein, Super (1957) noted that career development is closely related to the developmental stages of human beings, insisting on the successful accomplishment of developmental tasks at each stage. In early adolescence, recognizing one's self and environment and exploring one's own aptitude and abilities play a significant role in career development.

Career maturity is the readiness of the developmental task that the individual faces by reaching a certain developmental stage in his or her biological/social development and social expectation (Super, 1980). Career maturity is a sequence of developmental stages which plans, practices, and modifies one's career based on the understanding of oneself and one's vocation. Career maturity in adolescence is significant in that career matters occurring later in life may be hindered by a lack of understanding of the ways to promote career maturity. Ihm Jung, and Sang (2001) defined career maturity as the affective attitude (personal trait) needed for adolescents to autonomously explore and plan their career, based on their cognitive ability, and the extent to which they implement their own decisions. Ihm and

his colleagues further explained that if adolescents have high career maturity, they take realistic approaches to their career decisions depending on the stages and understanding of how to manage it. Therefore, understanding the career maturity of adolescents is vital in order to support them in deciding their future career paths.

Parents' Support and Career Maturity

Environmental context is an important aspect of career development. Family, school, and community exert influence on career decision and development, and one such important context variable is the parents (A.R. Kim, Lee, & Choi, 2000). Adolescents' experience through their relationship with their parents plays a crucial role in their career development and decision (Seon & Kim, 2008). Parents play a role in their children's career development by means of various types of support for their children (A.R. Kim et al., 2000). Parents' support for their children's education includes psychological support, academic support, and cultural activities support. Therefore, in the current study, parents' psychological bonding with their children, their actions to promote their children's academic achievement, and their provision of cultural experiences are classified as psychological support, academic support, and cultural activities support, respectively.

Psychological Support and Career Maturity

Emmanuelle's (2009) study on 241 adolescents showed that adolescents who are highly attached to their parents tend to have a higher level of career maturity. Studies on Korean adolescents also showed similar findings (M.H. Cho, Choi, & Um, 2006; A.R. Kim et al., 2010).

In terms of career development, the emotional support of parents promotes the level of career decision-making abilities and career awareness and the perseverance needed to achieve career goals. Most adolescents appreciate support from their parents, provided their opinions are respected and treated respectfully, and this provides them with emotional stability which influences their confidence and ability to choose a career (M.R. Lee, 2005).

According to Dietrich and Kracke (2009), the support of parents is well received by adolescents when parents allow them to decide their careers on their own and encourage them to explore various career interests and alternatives. On the other hand, it has been reported that when adolescents perceive that their parents are trying to intervene and control them, they stop the process of exploration and make career decisions without sufficient consideration (Savickas, 2002). S.H. Lee (2009) argued that it is the parents who provide the most influential support when it comes to developing values and H.S. Kim, Hong, and Yoon (2005) stated that a high school student who is well supported by his or her parents shows a high level of career preparation. However, a study by Heo (2009) claimed that the support of parents does not influence career attitude maturity and that career maturity tends to be delayed if the parents play a leading role in the career exploration and decision-making process. This implies that parents should act as assistants rather than leaders, providing their adolescent children with appropriate advice and information and allowing them to think and make decisions independently, because while parental support may help them to develop efficacy, promote functional career thought, and thereby facilitate the process of career preparation, it may also damage their career development if the parental support is perceived as compulsory (H.S. Kim, 2005). In other words, how the child accepts the parent's support is the important factor.

Academic Support and Career Maturity

Parents serve as socializers, who socialize values that form the perception of the appropriateness of children's career-related decisions (Dietrich & Kracke, 2009). Parents play the role of expectancy

socializers, who socialize expectancies that exert considerable influence on children's self-perception that they are academically and professionally competent (Eccles, 1994; So, 2011; Suh, 2008). It has generally been acknowledged that in Korean society "education fever" has some positive influence on students' academic achievement by making parents expect high academic achievement from their children, though excessive expectancy and demands from parents also increase their stress by putting too much pressure on them to exhibit high academic achievement and obtain good exam results (J.B. Kim & Kim, 2009). Previous studies (Fan & Chen, 2001; Yang & Lee, 2008; Yoon, Lee, & Kim, 2005) indicated that parents' academic support exerted effects on children's self-esteem and academic performance which eventually undermine their confidence to make their own career-related choices.

Cultural Activities Support and Career Maturity

Parents' support for cultural activities refers to the overall cultural activities offered to students. Diverse activities help them acquire life skills through extracurricular activities, and planning and studying these activities let them have different perspectives toward life events, create novel, and different ideas; make different interpretations of their environment; and solve problems (Altintas & Osdemir, 2014).

Previous studies on the relation between leisure activities and career development showed that students who felt more confident about and control over their leisure activities had a clearer awareness of their professional goals, interest, and aptitude (Leuty, Hansen, & Speaks, 2016). A survey on adolescents' cultural activities reported that 90% of them believed that cultural activities have a significant effect on adolescents' career development (K.H. Kim, 2009).

Nowadays in Korea, parents take part in adolescents' career development more actively and directly than merely providing information and mental or psychological support (Y.K. Lee, Yun, & Bang, 2012; Seon, 2008). They actively participate in their children's career development by seeking and suggesting relevant cultural activities and engaging in such activities together with their children. It is well acknowledged that various career exploration activities in middle school facilitate students' understanding of their career choices and thus help them to make mature career decisions when entering high school (N.Y. Kim, Yu, & Cho, 2012; S.M. Park, 2003). Therefore, diverse career education programs providing career experience are being developed and conducted to prepare adolescents for an appropriate career, and parents are looking for career-related education programs and fieldwork to facilitate their children's career exploration and decisions. This necessitates comprehensive and practical research into parents' career support activities (H. Lim, Han, Kim, & Seon, 2016).

Relations Among Parents' Support, Self-Esteem, and Career Maturity

Self-esteem is one of the important characteristics that determine the social behavior and role of an individual. That is, self-esteem is the most important factor in an individual's environmental adaptation and positive self-realization and acts as an indicator of social and psychological adaptation (Heo, 2012b). Adolescence is the most important period in terms of the development of self-esteem, because during this period, adolescents develop their perception and assessment of the self to a greater extent than during any other period. If their self-esteem is underdeveloped in adolescence, problems of maladaptation in schools and society may occur, due to a lack of decision-making ability for career decisions and problem-solving (K.H. Kim, 2009).

Studies on the individual internal variable, self-esteem, have shown the significant relationship between self-esteem and career maturity (Heo, 2012a; Kil & Yoon, 2014; Smith & Betz, 2002). Previous studies consistently reported that people with a higher level of self-esteem held a higher level of career maturity (H.S. Kim & Kim, 2007). S.Y. Cho, Moon, and Jung (2005) insisted that higher self-esteem leads people to act concisely with more focused self-evaluation toward their career path.

Higher self-esteem helps adolescents have a more positive self-image which, in turn, gives them confidence to pursue their career path in a direction more in line with their ability and desires (M.R. Kim, 2005).

Previous research on the association between adolescents' relationship with their parents as significant others and their self-esteem reported that parents served as emotional supporters and advisors, and also as referrers in the formulation of self-concept (Hay & Ashman, 2003). A number of other studies also reported that a positive relationship with parents significantly influenced children's self-concept development (S.R. Lee & Park, 2005). It has been widely argued in the literature that although adolescents' self-esteem depends on diverse psychological and social factors, their parents are responsible for the largest part (Chung, 2007; M.R. Lee, 2005).

Sex Differences in Career Maturity

Previous studies showed inconsistent results regarding sex differences in career maturity. Several studies showed that female students had higher scores in terms of career maturity than males (S.Y. Cho & Kim, 2014; J. Kim, & Lee, 2010), while other studies showed the opposite results (Chung & Lee, 2005), and some found no sex differences at all (Chae & Mah, 2015; Hirschi, 2009; H. Lim & Lee, 2014). It is important to look at the developmental path leading to differences in career maturity across sex rather than just looking at career maturity as an outcome variable.

Previous research has found that parents have different expectations for their children's career depending on their gender (B. Kim & Kim, 2006). This suggests that their support activities should also differ according to their gender. Studies indicating gender differences in parents' career-related activities reported that daughters tended to communicate with their parents more deeply and thus experience more support from them, while sons tended to experience parents' interference more (Dietrich & Kracke, 2009). It is possible that such gender differences in parents' career-related activities will affect their children's career-related self-esteem, leading to differences in career maturity.

Therefore, the present study predicts that gender differences in parents' support will exert an influence on children's self-esteem and career maturity. It aims to investigate gender differences in the relations among the factors being explored, including the effect of parents' support on children's career maturity through the mediation of self-esteem. If it finds gender differences in the models on relations among variables, it is expected to enable optimized approaches for different genders, which would allow adolescents' career maturity to be more effectively enhanced.

Method

This study used the data drawn from the base year (2010), and first (2011) and second (2012) follow-up surveys, of the Seoul Education Longitudinal Study (SELS). This is 3-year panel data collected when the respondents were attending middle school. Specifically, in 2010, the SELS data were collected from 4,653 seventh graders attending 74 middle schools across the country, chosen by three-stage stratified cluster sampling. We used a longitudinal subsample of 4,187 students for this study. This sample included 1,356 (32.4%) females and 2,831 (67.6%) males. The mean and standard deviation of the participants' age in 2010 were 12.83 and 0.38, respectively.

Measures

To investigate the long-term effects of parental support on children's later career maturity, we utilized the longitudinal data set. Specifically, parental support variables were selected from Time 1 (2010), children's psychological factor (i.e., self-esteem) was selected from Time 2 (2011), and outcome

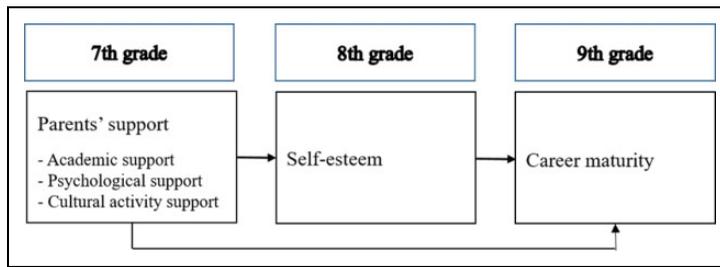


Figure 1. Hypothesized mediational model.

variables (i.e., career maturity) were selected from Time 3 (2012). Parental background variables from Time 1 were used as control variables in the structural modeling.

Parental Support Scale. The items in the SELS survey were selected from the Korean career-related parental support based on Turner, Alliman-Brissett, Lapan, Udipi, and Ergun's (2003) Career-Related Parent Support Scale. This scale includes three factors: parental psychological, academic, and cultural activities support factors. The parental psychological support factor includes 10 items (e.g., my parents talk to me when I am worried about my future career). Parental academic support includes 12 items (e.g., my parents help me pick out classes that will help me in my career). Lastly, parental cultural activities support includes 4 items (e.g., my parents let me do activities outside of school that teach me future job-related skills). The reliability coefficients using Cronbach's α coefficient for psychological, academic, and cultural activities support factors were .78, .67, and .86, respectively.

Rosenberg Self-Esteem Scale. Self-esteem was measured using the Rosenberg Self-Esteem Scale (Rosenberg, 1965). The scale comprises 10 self-appraisal statements (e.g., "I believe I am as valuable as other people"). Each statement has four response options (from 1 = *not at all true of me* to 4 = *very true of me*), and higher scores reflect a greater level of self-esteem. The Rosenberg Self-Esteem Scale has been widely used in measuring self-esteem among adolescents (Paxton, Neumark-Sztainer, Hannan, & Eisenberg, 2006; Rosenberg, 1965; Schmitt & Allik, 2005). For the present sample of students, the internal consistency of the scale was acceptable (Cronbach's $\alpha = .93$).

Career Maturity Scale. Career maturity was measured using the career maturity inventory (Crites, 1978). The scale comprises seven self-appraisal statements (e.g., I do not have enough information about my competencies or personal traits such as what I like to do and what I do well). Each statement has five response options (from 1 = *not at all true of me* to 5 = *very true of me*), and higher scores reflect a higher level of career maturity. Its reliability and validity are well-documented with Korean adolescents (Cha, Kim, Lee, & Kim, 2007; Heo, 2012a). For the present sample of students, the internal consistency of the scale was acceptable (Cronbach's $\alpha = .86$).

Data Analysis

To assess the plausibility of the hypothesis that the relationship between parental support and student career maturity is mediated by students' self-esteem, we tested a hypothesized mediational model. For the Structural equation Modeling (SEM) analysis, we used the questionnaire items as measured variables to represent the latent variables in the model shown in Figure 1. Since we hypothesized that there were both direct and indirect effects of parental support on the students' career maturity via self-esteem, we tested the mediational model. Finally, bootstrapping was conducted to test the statistical significance of the mediation effect. All analyses were conducted using Amos 15.0 (Arbuckle,

Table 1. Descriptive Statistics for Study Variables and Correlation.

Study variables	1	2	3	4	5
(1) Academic support		.28***	.40***	.17***	.12***
(2) Psychological support	.26***		.27***	.40***	.32***
(3) Cultural activity support	.36***	.17***		.17***	.13***
(4) Self-esteem	.18***	.42***	.10***		.48***
(5) Career maturity	.18***	.34***	.10***	.53***	
<i>M</i>					
Male	26.78	18.69	7.86	18.02	15.18
Female	27.08	18.59	7.91	17.74	15.09
<i>SD</i>					
Male	4.54	4.27	1.87	4.22	3.26
Female	4.43	4.14	1.79	3.98	3.13
<i>Skewness</i>					
Male	-0.27	-0.61	0.21	-0.28	-0.39
Female	-0.37	-0.39	0.09	-0.15	-0.24
<i>Kurtosis</i>					
Male	0.79	0.38	0.32	0.27	0.15
Female	1.38	0.11	0.22	0.14	-0.27

Note. Correlations for males are below the diagonal; correlations for females are above the diagonal.

*** $p < .001$.

2003). Because our data contained missing values, we conducted our analyses using full information maximum likelihood estimation. Missing rates of variables ranged from 0.7% to 1.4%.

In general, χ^2 goodness-of-fit tests are known to be sensitive to the sample size, particularly when it is large (Steenkamp & Baumgartner, 1998). In these cases, the null hypothesis may be rejected, and a model determined to be statistically inadequate may be ruled adequate. Therefore, we decided to assess the model fit based on several other criteria. Specifically, we used the nonnormed fit index (NNFI; Bentler & Bonett, 1980), comparative fit index (CFI; Bentler, 1990), and root mean square error of approximation (RMSEA; Steiger & Lind, 1980). We used values lower than .08 for the RMSEA, and values close to .95 for the NNFI and CFI, to find a good-fitting model.

Results

Table 1 provides the correlation, mean, standard deviation, skewness, and kurtosis of the variables in our study. According to the guidelines of severe nonnormality (i.e., skewness greater than 3; kurtosis less than 10) proposed by Curran, West, and Finch (1996), the normality assumption of all of the variables was well met.

Figure 2 provides the standardized coefficients from the final model. The bootstrapping method was employed to test the statistical significance of the mediation effect (see Table 2). The results showed that for the male group, two types (i.e., psychological and academic) of support from parents had indirect effects on career maturity via the mediating variable, while for the female group, psychological support from parents had an indirect effect on career maturity. For both groups, parents' psychological support also exerted a direct effect on career maturity.

Discussion

The present study examined the longitudinal structural relationships among the types of parents' support, adolescents' self-esteem, and career maturity. This section discusses the results of this study relating them to the previous findings.

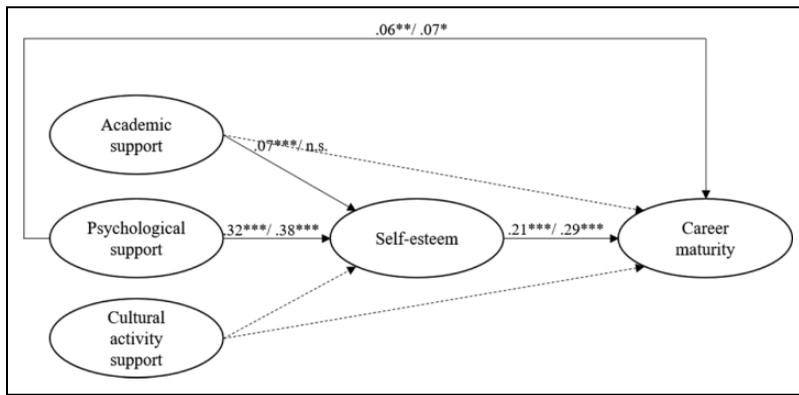


Figure 2. Final model with standardized estimates. * $p < .05$. ** $p < .01$. *** $p < .001$; coefficients for males are on the left; coefficients for females are on the right.

Table 2. Results for Indirect Effect in the Model.

Path	Unstandardized Coefficient	SE	Standardized Coefficient	95% CI (Bootstrap With Bias Correction)	
Male					
Academic support → Self-esteem → Career maturity	.003**	.001	.014	0.004	0.025
Psychological support → Self-esteem → Career maturity	.014**	.002	.064	0.048	0.082
Cultural activity support → Self-esteem → Career maturity	.004	.002	.019	-0.003	0.016
Female					
Academic support → Self-esteem → Career maturity	.001	.002	.005	-0.01	0.021
Psychological support → Self-esteem → Career maturity	.034**	.006	.109	0.08	0.148
Cultural activity support → Self-esteem → Career maturity	.011	.009	.015	-0.003	0.036

Note. CI = confidence interval.
 * $p < .05$. ** $p < .01$. *** $p < .001$.

First, self-esteem mediated the support from parents and had a positive influence on career exploration and planning. In other words, support from parents enhances the formulation of positive self-esteem in adolescents and, in turn, improves their career maturity. These results imply that improving adolescents' self-esteem is effective at improving their career maturity in the long term and that parents' support is an important factor affecting their self-esteem.

The results of the current study support the previous findings that attachment and intimacy with parents increased children's confidence in career decisions, which positively influenced their career maturity (H. Park & Jun, 2014; Tokar, Withrow, Hall, & Moradi, 2003). Moreover, this study also supports the previous studies which reported a mediating effect of self-esteem (M.R. Kim & Lee, 2015; You, 2012). M.R. Kim and Lee's (2015) study showed that self-esteem exerted a mediating effect on the relationship between parents' support and career maturity using cross-sectional data. Similarly, You's (2012) study on the relations between primary school students' self-esteem, career maturity, and contextual support, such as attachment to parents, peers, and teachers, reported significant effects of

contextual support on self-esteem, and self-esteem on career maturity, indicating that self-esteem had a significant mediating effect on the influence of contextual support on career maturity. The findings of the current study are consistent with these previous results and confirm the significant mediating role of self-esteem in the relationship between parent support and career maturity.

Second, the study results showed that there was a sex difference in the relations among the variables. It was shown that parents' psychological support indirectly influenced students' career maturity through the students' self-esteem and that parents' psychological support directly influenced the career maturity of both the male and female students. These results show that psychological support has a significant positive impact on children's career maturity regardless of gender. It suggests that parents' psychological support is helpful for children's career decisions and development, as M.R. Lee (2005) claimed that children felt more confident in their abilities when supported by their parents psychologically (through encouragement, trust, and respect), which facilitated their career decisions. The current study not only supports these findings but also confirms that psychological support from parents is a crucial factor for both genders. In relation-oriented relationships between parents and children in Korea, parents were found to voluntarily and closely engage in their children's career decisions (Y. Lim, Jung, & Sang, 2001; Seon, 2009).

However, it was shown that while the male students' career maturity was indirectly influenced by both the psychological and academic types of parental support via a mediator, the female students' career maturity was only influenced by parental psychological support via a mediator. This is in line with previous findings. The male students are more highly influenced by their parents' academic involvement compared to the female students (Hwang, Kim, & Ryu, 2003). That is, when the male students perceive that their parents are expecting academic success from them and supporting them academically, they are more likely to increase their career ambitions and act toward their career path. This finding only applies to Korean adolescents; thus, in a future study, cross-cultural comparisons are needed to confirm this result.

Lastly, this study also revealed that parents' support for career-related behavior does not influence children's career maturity. This is in the same vein as previous findings that while it could actually be helpful when parents actively tried to assist their children's career development, the overdominance of parents could also have a negative impact (S. Kim & Lee, 2007). That is, the career-related activities measured in this study are not activities led by the children themselves, but ones that are selected and suggested by their parents, resulting in choices based on what the parents want or what the society considers a good career, rather than what the children themselves want. This could be why they failed to positively affect the children's career maturity. Similarly, Larson and Wilson (1998) argued that high expectations or pressure from parents caused problems in children's career decisions, and J.H. Kim, Kim, You, Hwang, and Rho (2007) also showed that children faced difficulty in exploring potential careers when their parents displayed excessive interference or one-sided expectations. Particularly, parent-oriented career decisions are a crucial cause of career indecision and addressed as a major topic in career counseling (S. Kim & Lee, 2007). The range of adolescents' career exploration and decision is limited by their parents' support and acceptability (Middleton & Loughhead, 1993). Therefore, the current study suggests that parents should keep an appropriate distance and help their children successfully perform developmental tasks, rather than trying to provide direct assistance.

The following are specific measures needed to support students' career guidance based on the results of this research. First, it is true that most career guidance or career counseling programs in current middle and high schools focus on self-understanding by psychological testing and career information exploration. This method has limitations in that it reflects the perspective of career decision rather than that of career development. Being equipped with a mature career attitude is the most important factor in adolescent career guidance when considering career as a process of learning to develop one's career path through the diverse opportunities that one encounters throughout one's life, rather than as a single choice, as in the case of the planned happenstance models which are currently attracting

attention. Furthermore, the importance of self-esteem, which is closely related to career attitude maturity, needs to be recognized. Therefore, in the career guidance programs in middle and high schools, more attention needs to be given to improving the self-esteem of the students.

Second, since the influence of parental support on adolescents' career attitude maturity has been confirmed, parental education on the appropriate role of parents should be promoted. Parental education programs about the role of parents should be developed and practiced, and they would be expected to be more effective if they were combined with the career guidance programs of middle and high schools, because parental support has an impact on the development of children's self-esteem, which further leads to career attitude maturity, as demonstrated by the results of this research.

This study has several limitations. We utilized the students' self-report measures of parents' support. In a future study, more comprehensive data collection, such as separately measuring maternal and paternal support, could provide a richer account of the impact of parenting on career maturity. In terms of the mediating variables, future studies need to explore possible contextual factors, such as the level of support by other family members, general family relations, and peer and teacher support, and there could be stronger empirical explanations for later career development.

Conclusion

Overall, this study found that parents' psychological, academic, and cultural support exert a longitudinal influence on adolescents' career maturity and that self-esteem plays a key mediating role in this relationship. These results suggest that parents of adolescents need to facilitate their children's self-esteem and provide an environment for them to explore their career path wisely in the fast-changing society. An important practical implication here is that in order to encourage adolescents' career preparation, not only must support be provided, but we also need to help them choose their career based on their values and aptitudes with confidence by enhancing their self-esteem. In addition to this, the existence of sex differences in the developmental path to career maturity confirmed the need to adapt these interventions accordingly.

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