

# The Correlation of Career Adaptation and Career Preparation Behavior: The Mediating Role of Career Decision Self-Efficacy

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**Abstract**— Career preparation is important for students. Therefore, it is important to consider the factors that influence it, namely career adaptation and career decision self-efficacy. The online data on demographics, career preparation behavior, career adaptation, and career decision self-efficacy were collected from 241 university students. This study found that career decision self-efficacy can mediate the relationship between career adaptation and career preparation behavior. The results show that the indirect effects of career adaptation indirect effects and career preparation behavior through career decision self efficacy are significant ( $\beta = 0.1308$ ;  $SE=0.0256$ ;  $95\% CI = 0.0877, 0.1892$ ). The total effect was significant ( $\beta = 1700$ ;  $SE = 0.0228$ ;  $p=0,000$ ). These results indicate that the proposed mediation model is acceptable. So, educational institutions need to pay attention to the character of their students, especially in self-efficacy in making career decisions that will be taken, so that they can support them in achieving optimal career preparation.

**Keywords:** *career preparation, self-efficacy, career adaptation*

## I. INTRODUCTION

The digital revolution, globalization, and demographic change are changing the labor market today. A highly educated workforce is one of the main pillars of global competitiveness that is increasingly supported by economic knowledge. But for each employer, what matters is the relevance of education and training to job requirements. So that today many people decide to attend tertiary education in order to get the desired job.

However, in reality, we still find different things. For example, in Indonesia, based on the results of an open unemployment rate survey based on the level of education conducted by BPS, it showed that in 2018 there were 5.29% of tertiary education graduates in Indonesia in the position of being open unemployed. While on the other hand, expand access to everyone's education to achieve their educational potential. This is important to overcome problems related to the mismatch between labor demand and labor supply, so that educated young people can find suitable jobs and contribute to socio-economic development. As such, it is necessary to pay attention to the relationship between the education system and the labor market, at the same time as ongoing efforts to expand access to education. In this case, the school-to-work

information approach is useful in evaluating the effectiveness of the education system in terms of how successfully school graduates enter the labor market of the education system.

Therefore, career preparation behavior is very important to be considered for college students, so that they become better prepared in the face of the real work world. But in the process of realizing career preparation behavior, many factors influence, especially from within individuals. Factors that can influence include career adaptability and confidence in career decision making itself.

Career preparation behavior is a complex process because of difficulties in adjusting to career choices and is also influenced a lot by personal considerations [1]. Many young adults find it difficult to make career decisions, and this is due to uncertainties, pressures, or worries related to regret in the future [2]. This condition can cause individuals to use suboptimal ways of responding to adjustments, decision making, and preparation, choosing to procrastinate in making decisions, or actually involving other parties in sharing responsibility for the results of the decision.

Career preparation behavior is an increase in self-awareness and understanding of work in the future with important considerations in understanding the work chosen. Career preparation can also increase the assets that exist in individuals such as abilities and can overcome deficits such as the lack of special preparation in individuals [3]. Lack of career preparation has a direct or indirect effect on adjustment that can cause problems in the future and can facilitate the collection of problems in social functions [4]. Career preparation behaviors are practical and specific career-related behaviors [5]. Career preparation behavior is reportedly related [5] and unrelated [6] with career obstacles.

Furthermore, the study of career decision self-efficacy was begun by Betz and Hackett [7]. With the first study combining career development and self-efficacy, which suggested that career decision self-efficacy could influence task performance or decision making when self-efficacy was related to ability performing assignments applied to the career field. Based on this description, it can be said that career decision self-efficacy based on Bandura's theory is defined as an individual's trust in him or his ability to be effectively involved in the tasks and

activities of career decision making [8]. Taylor and Betz [9] conveyed that there were five aspects to be considered contained in career decision self-efficacy, namely self-appraisal, occupational information, goal selection, planning, and solving problem (problem-solving).

Basically, an individual's ability in career adaptation has been defined as a psychosocial construct that reflects an employee's resources to manage a challenge at work, as well as a career that will affect the integrity of the individual itself in their social environment [10]. Savickas and Porfeli [11] characterize resources from career adaptation as a form of human capital that accumulates over time and changes due to education, training, and work experience. When referring to Savickas and Porfeli [11], career adaptation is an individual's attempt to construct to conceptualize coping resources to make changes in themselves and situations to effectively manage career-life. Career adaptation can be seen through several aspects, namely career concern, career control, career curiosity, and career confidence.

The general objective of this study is to examine how the factors that exist in individuals can influence the behavior of career preparation. The predictor variables include career adaptation variables and career decision self-efficacy. Career decision self-efficacy is considered to act as a mediator for career adaptation, and career preparation behavior.

## II. MATERIAL AND METHODS

### A. Participant

Participants involved in this study were students who were declared active in the current semester and had taken at least four semesters of education, both male and female. The number of participants involved in this study was 241 students who took part and filled out the research measuring instrument completely.

### B. Procedures

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### C. Instruments

The data were collected using a psychological scale, namely career preparation behavior scale, career adapt-abilities scale, and career decision self-efficacy. The scale used in this study was adapted from the results of previous studies. For each answer on these scales, there are five alternative answers. The career preparation behavior scale is presented with questions such as "How much time have you spent preparing for a career in the past six months?" The items are measured on a five-point Likert scale where "there is no time at all" and "very much time." The career adaptation scale alternative

answers are also a Likert scale ranging from "not strong" to "strongest." While the scale of career decision self-efficacy alternative answers is Likert scale ranging from "not at all" to "extremely."

The career preparation behavioral scale adapted from the scale compiled by Choi and Kim (2013) consists of seven items with a Cronbach's alpha reliability of 0.788 and a corrected item-total correlation score range of 0.394-0.695. This shows that the measurement using the career preparation behavior scale has a consistency or confidence level of 78.8%. The following are examples of items presented to participants "I have tried to find information about vocational education or training institutions/programs from the Internet, books, or brochures" and "I have talked with friends, relatives, parents, or professors about my potential jobs or future careers."

The career adaptation scale adapted from the Career Adapt-Abilities Scale (CAAS International) compiled by Porfeli and Savickas (2012) consists of 24 items with a Cronbach's alpha reliability of 0.937 and a corrected item-total correlation score range of 0.399-0.723. This shows that the measurement using a career adaptation scale has a consistency or trust level of 93.7%. The following are examples of items presented to the participant in the concern aspect "Thinking about what my future will be like," in the control aspect "Making decisions by myself," in the curiosity aspect "Exploring my surroundings," and in the confidence aspect "Taking care to do things well."

Furthermore, the career decision self-efficacy scale adapted from the scale compiled by Taylor and Betz (1983) consists of 25 items with a Cronbach's alpha reliability of 0.927 and a corrected item-total correlation score range of 0.331-0.742. This shows that the measurement using a career adaptation scale has a level of consistency or trust of 92.7%. The following are examples of items presented to participant in the sub-dimensions of self-appraisal (SA): "I can define the type of lifestyle I would like to live," in the sub-dimensions of occupational information (OI); "I can find out about the average yearly earnings of people in an occupation," in the sub-dimensions of goal selection (GS); "I can choose a career that will fit my interest," in the sub-dimensions of planning (PL); "I can prepare a good resume." In the sub-dimensions of problem-solving (PS) "I can change careers if I did not like my first choice."

## III. RESULTS AND DISCUSSION

### A. Results

#### 1) Demographic Profile

Based on the data obtained through the questionnaire obtained a general description related to demographic data. The data showed that 61 male participants were male students. While participants who were female were 180 students. The data appears in table 1.

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TABLE I. PARTICIPANT DATA DESCRIPTION BASED ON GENDER

Gender	Quantity	Percentage (%)
Male	61	25,31
Female	180	74,69
<b>Total</b>	<b>241</b>	<b>100</b>

Based on career goals that have been specifically selected by the participants, 113 data were obtained from participants who had career goals, 120 subjects did not yet have career goals, and as many as eight subjects did not answer. The data appears in table 2.

TABLE II. PARTICIPANT DATA DESCRIPTION BASED ON SPECIFICALLY CHOSEN CAREER GOALS

Career goals	Quantity	Percentage (%)
Have a specific goal	113	46,89
Don't have a specific goal	120	49,79
No answer	8	3,32
<b>Total</b>	<b>241</b>	<b>100</b>

This study also identified several activities undertaken by students in addition to attending lectures. These activities are involved in apprenticeship activities. In table 3, there is information about the percentage of students who are involved in the organization and have internship experience.

TABLE III. PARTICIPANT DATA DESCRIPTION BASED ON ORGANIZATIONAL AND INTERNSHIP EXPERIENCE

Experience	Quantity	Percentage (%)
Have experience	44	18,26
Do not have experience	197	81,74
<b>Total</b>	<b>241</b>	<b>100</b>

There are some specific skills possessed by each participant, namely the ability in administration, business, art (including photography, music, singing, and drawing), foreign language skills (including English, Arabic, and Japanese), public speaking, fashion, sports, catering and cosmetology. In

table 4, there is information about the percentage of students who have special skills.

TABLE IV. PARTICIPANT DATA DESCRIPTION BASED ON SPECIFIC SKILLS

Specific Skill	Quantity	Percentage (%)
Do not have a specific skill	27	11,20
Administration	5	2,07
Specific skill-based on a study program	60	24,90
Foreign language skills (English, Arabic, and Japanese)	106	43,98
Business	4	1,66
Arts (photography, music, singing, and painting)	16	6,64
Public Speaking	15	6,22
Fashion	1	0,42
Sports	2	0,83
Cullinary art	4	1,66
Make-up artist	1	0,42
<b>Total</b>	<b>241</b>	<b>100</b>

2) *Descriptive Statistic*

Based on the results of data analysis that has been done, it is obtained norms of research data description, which contains basic statistical functions. This is shown in table 5.

TABLE V. DESCRIPTIVE STATISTIC

Variable	Mean	SD
Career preparation behavior	22,28	4,621
Career adaptation	94,98	11,826
Career decision self-efficacy	88,97	12,367

Based on research data, the variables of career preparation, career adaptation, and career decision self-efficacy. This will be presented in five norms, namely "very low", "low", "medium", "high", and "very high". The following is a categorization of career preparation, career adaptation, and career decision self-efficacy of participants in this study. The percentage of related data can be seen in table 6.

TABLE VI. PERCENTAGE OF CATEGORIZATION OF CAREER PREPARATION BEHAVIOR, CAREER ADAPTATION, AND CAREER DECISION SELF-EFFICACY

Categorization	Career preparation behavior		Career adaptation		Career decision self-efficacy	
	f	%	f	%	f	%
Very high	12	4,98	43	17,84	7	2,91
High	85	35,27	123	51,04	35	14,52
Medium	99	41,08	65	26,97	104	43,15
Low	38	15,77	7	2,90	72	29,88
Very low	7	2,90	3	1,25	23	9,54
<b>Total</b>	<b>241</b>	<b>100</b>	<b>241</b>	<b>100</b>	<b>241</b>	<b>100</b>

Based on the description of the data above it can be seen that the level of participant's career preparation behavior shows

varied results. Meanwhile, career adaptation shows results which are mostly in high categorization. Then for career

decision self-efficacy, it shows that most of them are in medium condition, even though the data also shows that there are respondents who are in low categorization.

3) Examining the Mediation Model

The next step is to conduct an analysis to find out whether career decision self-efficacy will mediate the relationship between career adaptation and career preparation behavior. This mediation analysis was carried out using concurrent bootstrapping procedures, as suggested by Preacher and Hayes, with the PROCESS macro at SPSS (Hayes, 2013; Preacher and

Hayes, 2008). By adopting the bootstrapping method, we avoid the problem of non-normality in the sampling distribution (Preacher and Hayes, 2008). They suggest that the mediating effect can be said to have occurred when the product of the path between the independent variable and the mediator (path a) and between the mediator and the dependent variable (path b) is statistically significant. Furthermore, the indirect effect of the independent variable must be significant (i.e., zero does not occur between LL and UL) through the bootstrap test. The following table 7 shows the results of data analysis.

TABLE VII. THE RESULTS OF DATA ANALYSIS

Variable	Coeff (β)	se	p	
Career decision self-efficacy ← Career adaptation	0,6958	0,0505	0,000	Significant
Career preparation ← Career decision self-efficacy	0,1888	0,0265	0,000	Significant
Career preparation ← Career adaptation	0,0392	0,0278	0,1593	Not significant

The results of data analysis showed that the product of the path (a1) between career adaptation and career decision self-efficacy (b = 0.6958; SE = 0.0505; p = 0,000) the results showed were statistically significant (p <0.001). Then the path (b1) between career decision self-efficacy and career preparation (b = 0.1888; SE = 0.0265; p = 0.000) results are statistically significant (p <0.001). The results confirm the mediation model, showing that career decision self-efficacy mediates career adaptation and career preparation behavior. Both products of the line (a) and line (b) also confirm a simple correlation analysis.

Furthermore, career decision self-efficacy will mediate the correlation between career adaptation and career preparation behavior. To test this mediating effect, we follow the approach recommended by Preacher and Hayes (2008). The mediation model is carried out by running PROCESS v2.16.3 on SPSS, model 6 (Hayes, 2013). The results show that the indirect effect of the indirect effect of career adaptation and career preparation behavior through career decision self efficacy is significant (Effect = 0.1308; SE = 0.0256; 95% CI = 0.0877, 0.1892). The total effect is significant (Effect = 1700; SE = 0.0228; p = 0.000). Figure 1 presents these findings. These results indicate that the proposed mediation model is acceptable.

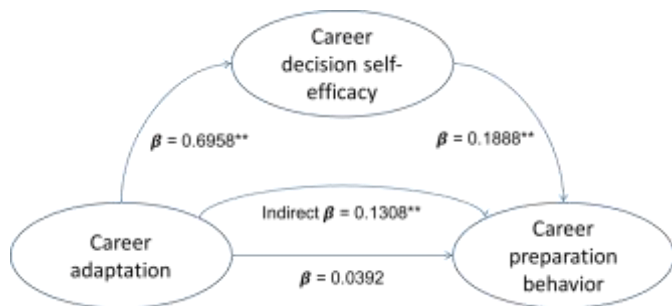


Fig. 1. Path diagram for the mediation model.

B. Discussion

Based on the results of the study, it can be concluded that career decision self-efficacy can mediate the relationship between career adaptation and career preparation behavior. This shows that career decision self-efficacy has a role in

linking individual career adaptation with career preparation behavior. These results are consistent with previous studies linking each variable (Choi & Kim, 2013; Guan, Capezio, Restubog, Read, Lajom & Li, 2016; McLennan, McIlveen & Perera, 2017; Tsai, Hsu & Yang, 2017). If we talk about career adaptation, it will face a developmental line where individuals must build a foundation regarding (a) caring about the future, (b) control over their lives, (c) curiosity about work careers, and (d) self-confidence to build the future and deal with career obstacles (Savickas, 2002, 2013). Based on this, it can be said that when individuals have high career adaptations, they will be confident of their abilities in making career decisions. Until finally, it will affect his behavior in preparing for a career to be undertaken. Furthermore, this study is also in line with previous findings of the importance of career decision self-efficacy related to career preparation behavior. When an individual has high self-efficacy, he will consider himself as having the ability to take action to modify the environment in order to be successful in a given task (Clapp-Smith et al., 2009), in this case, we can associate it with individual career preparation. Therefore, in order for an individual's career development to be effective, in addition to making career adaptations, he must have confidence in his career decisions so that he will make optimal career preparation.

IV. CONCLUSION

Overall, the results of this study indicate the important role of career decision self-efficacy as a mediator that bridges the relationship between career adaptation and career preparation behavior. The results of this study can be used as a basis for designing career development programs for students. So far, the programs provided at universities have not been optimally integrated. Although the apprenticeship program and fieldwork practice (PKL) are considered to be sufficient to support students in preparing for their careers, it turns out that it does not directly improve their career preparation behavior. In order for these programs to run optimally, support programs that can improve student career self-efficacy decisions are needed. Programs that can be used to optimize student career self-efficacy decisions include providing guidance through career counseling and career mentoring. Career counseling programs can provide support to students in an effort to increase efficacy

in their abilities to their efficacy in career decision making. While career mentoring is a program where there are successful alumni in certain fields sharing their experiences and giving feedback directly to students. Bandura (1994) states that successful experiences gained from past activities are a source of self-efficacy in individuals.

Apart from the results of research that can have implications for the career development process of students, there are some limitations of research that can be used as suggestions in further research. First, try to get samples from more diverse universities, to be able to overcome the limitations of generalization. Second, future research must broaden models that support student career development. Finally, other career-related concepts are also considered as predictors of career decision making and career preparation behavior in students.

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