

## Exploring Postponing Career Decisions of Indonesian Vocational Students from Biopsychosocial Dimension: A Path Analysis

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### KEYWORDS

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Postponing Decision-  
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Aspiration, Parent  
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### ABSTRACT

Career decisions encourage students to get opportunities in various career path after graduating. Procrastination in career decision-making made the chance reduced by the time their hanging decision. In wider effect, this impacts the national level of educated unemployment. Multiple factors can be a potential source of procrastination in career decisions. Exploring these factor should be considering the biopsychosocial dimension as genetic and behavior, psychological development, and social-cultural interact on the decision making process. This research aims to examine the influence and relationship between parental expectations and personal career aspirations of vocational school students in the postponing of career decisions, which is mediated by students' dependency and compromise skills. The research method uses quantitative with a non-experimental design. The data analysis technique uses path analysis. The research subjects were 450 vocational school students in East Java, Indonesia. The research results show that parental expectations mediated by dependency positively affect postponing career decision. Students' compromise skills negatively affect postponing career decision. Furthermore, personal career aspirations have a negative direct and indirect effect on the students' postponing career decisions, which is mediated by this research variable. The research results recommend that demographic and cultural exploration be carried out to compare research results comprehensively.

## 1. Introduction

Many skills affect students' career choices and decisions (Mberia & Midigo, 2018; Ngussa & Charles, 2019). Almost every student faces the challenge of their career choice due to low career decision skills (Sharif, Ahmad, & Sarwar, 2019). Career decisions are frequently discussed as a challenging subject in the 21st century (Kulcsár, Dobrea, & Gati, 2020; Ramli et al., 2022). This issue impacts a person's career path as the career choice and path increases, making it a more complicated decision (Willner et al., 2015). Responding to this difficulty, some students tend to postpone their career decisions. This phenomenon often occurs among students at their time closer to graduating from school and entering the workplace. Postponing in including career decisions had the same perspective as procrastination behavior problem in career counselling (Garvelink et al., 2019; Ramli et al., 2023) Postponing career decisions occurs when students experience internal conflict responding to career information. Postponing career decisions in advance affects individual work attitudes and behavior (Asio & Riego de Dios, 2021). Research on postponing career in India shows that 20% of all students identified as experiencing delays (Gurumoorthy & Kumar, 2020). Postponing career decision was associated with feelings of discomfort regarding the situation faced by student (Hanafi et al., 2022; Hen & Goroshit, 2020). Previous research stated that postponing decision-making was rarely analyzed, especially related to academic experienced by students at school (De Palo, Monacis, & Sinatra, 2019). Academic experience was one of primary contributors to develop students as potential human resources, especially based on their knowledge and skills (Uyar, 2019; van der Want, Schellings, & Mommers, 2018) Postponing career decision as one of procrastination behavior problems led to negative impact in almost all situations (Asio & Riego de Dios, 2021). Career decision delays had a serious impact on a student's career development. If students postpone their decision, they tend to create new problems, miss chance, and regret them. Life regret because of inaction was found to have longer-term negative effects on people's lives than regretful because of wrong choices (Goroshit, Hen, & Ferrari, 2020).

Career decision problem related to the career path in a long-term plan that made biased on the priority to decide. Facing this challenge, students need good self-control to properly limit their doubt and make the right decisions. This self-control also made them clearly regulate their priority and avoid postponing any priority of their career path (De Paola & Scoppa, 2015). Indonesia had Vocational high schools as one of educational setting to facilitate three aspects of students' work readiness, which was knowledge, attitudes, and skills (Inderanata & Sukardi, 2023; Widayati, MacCallum, & Woods-McConney, 2021). Theoretical knowledge and practical skills were the main learning focused on the vocational high school to help students ready for work with skills (Mndebele & Dlamini, 2008).

This was supported by learning activities combined and balancing these two learning orientations in students' academic lives (Hidayah, Fauzan, et al., 2022). As vocational high school provides a balanced portion of skills development, students might have the proper resources to make the decision efficiently (Gati, Amir, & Landman, 2010; Gati, Levin, & Landman-Tal, 2019; Wu, 2012). However, there are some predictors outside academic life that also contribute to student's career decisions (Hubbard & McDonald, 2014). In socio-cultural perspective, students' parents might have their perspective for their child career path (Blazic et al., 2023). This perspective might be various and not always related to the student's vocation in their school (Li & Tien, 2023) (Wahyuni et al., 2019). Any differences of parent and child perspective on career path might also conclude the Postponing career decision by the children. Students personality might become another dimension that contribute to their Postponing career decision (Abdul Latheef, 2022). Based on the ideas, postponing career decision becomes students' procrastination behavior that led to bigger impact, especially on their career path (Yolvi et al., 2023). Exploring these model might considering both biopsychosocial dimension as the model had complex structure related on the decision making process (Veysi et al., 2021). As Parental might contribute on genetic behavior and child physical dependencies (Afridah et al., 2023), the personal aspiration as psychological development (Hidayah et al., 2022, 2023), and social-cultural interaction by compromise skills (Ramli et al., 2022), led to influence students' Postponing Career Decision. This research aims to explore the factors contributing to students' Postponing Career Decision. The predictor factors defined as their "Parent Expectations" and their "Personal Career Aspiration" (Padmanabhan et al., 2019). This research also explores the mediator variable that affect the factors contribution based on students' personality. The mediator variables predicted in this research were the "Dependencies" and "Compromise" skill of the students. Furthermore, this research question defined as follows: Is there a direct effect between Parent Expectation, Personal Career Aspiration, Dependencies and Compromise to students' Postponing Career Decision? Is there an indirect effect from Parent Expectation and Personal Career Aspiration mediated by Dependencies and Compromise to students' Postponing Career Decision?

## 2. Methodology

### *Participants*

This research involved 450 students as participants selected using purposive random sampling. The selection process used the purposive criteria to cluster and select the samples. The purposive criteria of the sampling used the Parent expectation open questionnaire to cluster the samples to "Related Choice" parent expectation and "Different Choices". All participants in both clusters then selected randomly to get the 223 students with Related Choice of their parent expectations, and 227 students with Different Choice. As the selection method used, the descriptive detail of the participants is shown in Table 1.

Table 1. Descriptive of the reseach participants.

Parent Expectation	Male	Female	Total
Related Choicce	98	125	223
Different Choice	99	128	227

Total	197	253	450
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### Data collection procedures

This research used quantitative non-experimental method with mediation analyses design. This research explores the effect of Parent Expectation and Personal Career Aspiration as Exogenous variable mediated by Compromise and Dependencies variables to students' Postponing Career Decision as endogenous variable. Mediation analysis or Path-Analysis is relevant to measure the direct and indirect effect of both variables to the endogenous variables. Furthermore, this analysis also gives detailed description using path diagram to show the effect of each variable. Measurement process in this research used four scale as follows, (i) Personal Career Aspiration scale, (ii) Compromise on Career Decision scale, (iii) Dependent on Career Decision scale, and (iv) Postponing Carer Decision scale. All the four instruments were Likert scale with the five level of scales (1-very unsuitable to 5-very suitable). The instruments used have been tested in a reliability and validity test which is described in Table 2.

Table 2. Descriptive of the the reliability test results.

Estimate	Personal Career Aspiration (X2)	Compromise on Career Decision (Y1)	Decencies on Career Decision (Y2)	Postponing Carer Decision (Z)
N-item	7	8	7	12
Point estimate of Cronbach's $\alpha$	0.716 (High reliability)	0.768 (High reliability)	0.663 (High reliability)	0.644 (High reliability)
95% CI lower bound	0.666	0.748	0.605	0.605
95% CI upper bound	0.759	0.787	0.714	0.691
Item-validity range (Product-moment)	0.776 – 0.817 (sig. at $p < .001$ )	0.660 – 738 (sig. at $p < .001$ )	0.761 – 0.786 (sig. at $p < .001$ )	0.199 – 0.724 (sig. at $p < .001$ )

### Data analysis

As the research objective, the path analysis became the primary data analysis in this research. Specifically, the descriptive analysis became the initial stage to measure the statistical distribution of the research data. The path analysis used multiple linear regression to measure each variable's correlations and effect estimation. The regression focused on measuring the direct effect of (i) Exogenous variables to intervening variables, (ii) exogenous variables to endogenous variables, and (iii) intervening variables to endogenous variables. The following regression results focused on indirect effect analyses of exogenous variables mediated by intervening variables to endogenous variables. Based on the mediation analysis, the path analysis model is described in a picture to show the direction effect of each variable in this research.

### 3. Results and discussion

The descriptive results show the data distribution of each variable in detail. Table 3 shows the descriptive analysis of the mean, standard error mean, standard deviation, minimum and maximum score of the Personal Career Aspiration, Compromise skills, Dependencies and Postponing Career Decision variables. Table 4 Explain the contingency table as a data description of the Parent Expectation.

Table 2. Descriptive Statistic Factors of Postponing Career Decision.

	Gender	N	Mean	SE mean	SD	Mean Percentage
Personal Career Aspiration	Male	197	29.043	0.143	2.006	82.980
	Female	253	29.734	0.104	1.653	84.953
Compromise	Male	197	30.293	0.123	1.722	75.733
	Female	253	30.925	0.088	1.396	77.313
Dependencies	Male	197	20.953	0.170	2.386	59.867
	Female	253	19.357	0.129	2.050	55.307
Postponing Career Decision	Male	197	29.940	0.197	2.764	49.900
	Female	253	29.422	0.169	2.686	49.037

Based on the data in Table 1, the distribution of participants with "Related choices" was 49.56%, almost half of the participants. The remaining 50.44% of participants describe their "Different choices" with their Parents' Expectations. Data in Table 1. fit the purposive sampling method used to determine the balanced number of participants for both conditions of Parent expectation. Table 2 describes the Personal Career Aspiration and Compromise variable mean achieved at the high level in general, besides the dependencies was at a moderate level and Postponing Career Decision was at a low level. Furthermore, the mean percentage of overall participants was determined as follows: (I) Personal Career Aspiration was at 84.09% (high), (ii) Compromise was at 76.52% (high), (iii) Dependencies was at 57.30% (moderate), and (iv) Postponing Career Decision was at 49.41 (Low)..

### Path Analysis Results

The primary analysis stage of Mediation analysis is described in Table 3, Table 4, and Figure 1. The data in Table 3 represents the direct effect of the exogenous and intervening variables on the endogenous variable. Table 4 illustrates the indirect effect of exogenous variables through intervening variables on the exogenous variables. Based on the data in Table 3 and Table 4, the model fit of the path diagram is shown in Figure 1. Based on Table 3, both exogenous variables positively affected Compromise as an intervening variable. In the following data, "Parents' Expectation" positively affected the "Dependencies" variable, while personal career ambition showed the opposite effect. Furthermore, both exogenous variables and compromise variables negatively affect the Postponing Career Decision, while the Dependencies show a positive effect and correlation to the Postponing Career Decision.

Table 4. Direct effect of each variable

	Estimate	S.E	z-value	p	95% Confidence Interval	
					Lower	Upper
Parent Expectatio → Compromise	0.113	0.083	1.361	0.173	-0.050	0.275
Personal Career Aspiration → Compromise	0.259	0.023	11.350	0.000	0.214	0.303
Parent Expectation → Dependencies	0.078	0.094	0.832	0.405	-0.106	0.263
Personal Career Aspiration →	-0.032	0.026	-1.223	0.221	-0.082	0.019

Dependencies						
Parent Expectation → Postponing Career Decision	-0.038	0.091	-0.416	0.678	-0.216	0.140
Personal Career Aspiration → Postponing Career Decision	-0.092	0.028	-3.236	0.001	-0.148	-0.036
Compromise → Postponing Career Decision	-0.116	0.052	-2.227	0.026	-0.218	-0.014
Dependencies → Postponing Career Decision	0.137	0.046	2.983	0.003	0.047	0.227
Note. Delta method standard errors, normal theory confidence intervals, ML estimator.						

Table 5. Indirect effect of exogenous variables to endogenous variable

	Estimate	S.E	z-value	p	95% Confidence Interval	
					Lower	Upper
Parent Expectation → Compromise → Postponing Career Decision	-0.013	0.011	-1.162	0.245	-0.035	0.009
Personal Career Aspiration → Dependencies → Postponing Career Decision	0.011	0.013	0.802	0.423	-0.015	0.037
Personal Career Aspiration → Compromise → Postponing Career Decision	-0.030	0.014	-2.185	0.029	-0.057	-0.003
Personal Career Aspiration → Dependencies → Postponing Career Decision	-0.004	0.004	-1.132	0.258	-0.012	0.003
Note. Delta method standard errors, normal theory confidence intervals, ML estimator.						

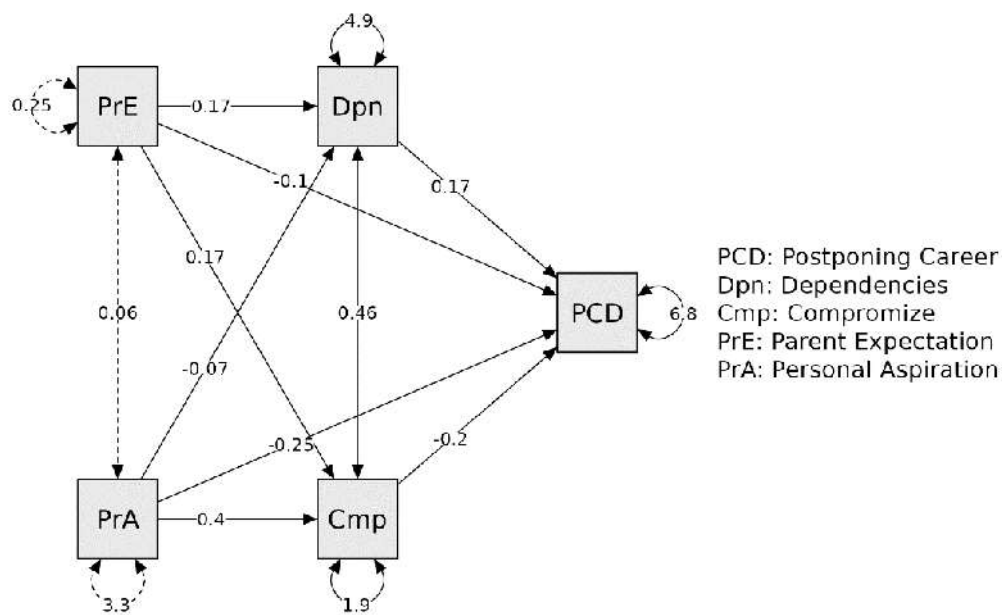


Figure 1. Model fit of Path Diagram of Postponing Career Decision Factors.

Based on Table 4, Parent Expectation shows a negative indirect effect on Postponing Career Decisions through the Compromise variable, while it shows a positive indirect effect through the Dependencies variable. On the other hand, Personal Career Aspiration negatively affects Postponing Career Decision through Compromise and Dependencies variables. Figure 1 shows the path-diagram analysis of postponing career decision factors based on parent expectations and personal career aspiration mediated by dependencies and compromise variables. As the previous data described, Personal Career Aspiration indicates a strong negative effect on Postponing Career Decisions, both directly and indirectly. The other result indicates that the Compromise variable also had a negative effect on Postponing Career Decisions, both as a direct effect and a mediation variable. Based on these results, the first research questions had been answered as there was direct effect on exogenous and intervening variables to the endogenous variable. Both of Parent Expectation, Personal Career Aspiration, Dependencies and Compromise had a direct effect to students' Postponing Career Decision. Furthermore, there were also indirect effects from Parent Expectation and Personal Career Aspiration mediated by Dependencies and Compromise to students' Postponing Career Decision. This result answered the second research.

Parent expectations became an external factor in students' career decision-making. In particular, socio-cultural factors in Indonesia tend to place parents in a strong significant other role (N Hidayah et al., 2022). This role provided a large portion of parental involvement in children's decision-making. The position of children in collective Indonesian culture placed parental approval and support as one of the factors considered in determining their career (Minina & Pavlenko, 2022; Fitriyah et al., 2022). Motivation for having the right career is generally understood to originate from the student's desires, but in certain cultures, career decisions are motivated by the desire to make parents happy (Griffin & Hu, 2019). Parents' different expectations regarding students' career decisions did not affect any delays in students' career decisions. This research showed a direct effect of parents' expectations on students' Postponing career decisions in negative coefficients. Those values meant the differences in the parents' expectations lower the possibility of students' postponement of career decisions (Venant, Arego, & Ngussa, 2021). Parents' expectations of students' careers play an essential role and can be used to encourage students' motivation to make the right career decisions according to the student's potential (Sawitri, Creed, & Zimmer-Gembeck, 2014). This research also examines the indirect relationship between parental expectations and postponing career decisions, mediated by students' compromising behavior. The study results show that parents' expectations and students' compromises made the postponing career decisions have small potential, as indicated by a negative score of effect.

Compromising skills become skills that can handle differences in students' career decision-making processes. Compromise provided a balance of perspectives on differences (Darimis et al., 2022), including differences in parental expectations and personal aspirations (Eather, Fray, & Gore, 2020). Furthermore, compromise in decision-making provided more accurate considerations to find each alternative's benefits and subsequent impacts (Tholen, 2022). Meanwhile, Parents' different expectations might affect the increasing possibility of students postponing career decisions, especially when students' dependencies follow the differences. Students' abilities in their socio-cultural position (related to parent-child position) responded differently to their parents' different expectations of their career path. In this study, students with high dependency were a risk factor in postponing career decisions (To et al., 2022). A positive score effect in the results indicated this condition. Students' with high parental dependence tend to be involved and rely on their parents in various things. In particular, this provides a more significant share of parental expectations in children's decision-making. Differences in parents' expectations and personal aspirations can cause great confusion in children and increase the potential for postponing career decisions (Ahn et al., 2022).

Furthermore, as parents play an essential role in their students' career decisions, they also need their wisdom to give them a proper chance to grow and develop. Some parents made "Related choices" as their expectation to support any student's decision (Aditama et al., 2023). Parents' approval and support are closer to social acceptance and reinforcement for students. Specifically, parental cognitive, affective, and behavioral influences students' career development, especially on their expectations and career decisions (Hidayah, Ramli, et al., 2022; To et al., 2022; Fauzan et al., 2023). Another factor measured in this study was students' Personal Career Aspirations. Personal career aspiration is an internal factor that arises from students' hopes and insights to achieve their ideal careers (Danziger & Eden, 2006; Virtič & Šorgo, 2022). Personal career aspiration is a form of initial motivation for determining a student's career and tends to interact with various aspects within and outside themselves (Karami, Ismail, & Md. Sail, 2011; Atmoko et al., 2022; Fitriyah et al., 2021). Personality, abilities, skills, talents, and interests are aspects of the student's self that can strengthen, weaken, or even re-direct their career aspiration. Socio-cultural factors, parents/significant others, and career trends in children's environments also have the same influence, especially on collective culture in Indonesia (Fitriyah & Djazilan, 2020).

Postponing career decisions can be avoided when students have good personal career aspirations and compromise skills. Based on this study's results, personal career aspirations negatively correlate with Postponing career decisions, as indicated by a negative effect score. This meant the higher the personal career aspirations, the more students would avoid postponing their career decisions. Personal career aspirations developed in line with students' experiences exploring information about careers from various media sources and other people (Bariyyah et al., 2021). Personal career aspirations can be assessed regarding job security, job choice, prestige, and justification (Al-Bahrani et al., 2020; Gore et al., 2015). Any sources of postponing career decision related to how the students' prioritize and gaining meaning of their life and career path (Barrett, 2021). Their internal motivation, aspiration and ideal expectation of the future proven as the one of the main variables to determine their career decisions skills. However, Indonesia collective cultures might placed the external factors role (Fitriyah et al., 2022; Ramli et al., 2022) on students' career decision skills. Integrating in balance between socio-cultural expectation, especially parents, and the students' career aspiration might led to the effective career decisions. Failing to compromise and balancing these factors might become students career problem. As the research results describe, there were some limitations to this research. Socio-cultural values and parenting style might become contributor variables that have not been explored, especially related to the parents' expectations of students' career paths. As career decisions were related to every high school student, this research was limited and focused only on vocational high school students. Moreover, Indonesia had senior high school and religion-based schools to the same degree that have not been explored.

#### 4. Conclusion and future scope

This research aims to explore the determinants factors of Postponing Career Decision of Indonesia Vocational high-school using path analysis. This research had been identified the direct and indirect effect of the exogenous variable (Parent Expectation, and Personal Career Aspiration) dan Mediation Variable (Compromise, and Dependencies) to the Endogenous variable (Postponing Career Decision). Both of Parent Expectation, Personal Career Aspiration, Dependencies and Compromise had a direct effect to students' Postponing Career Decision. Furthermore, there were also indirect effects from Parent Expectation and Personal Career Aspiration mediated by Dependencies and Compromise to students' Postponing Career Decision. This result answered the second research. A wider exploration on parenting style, socio-cultural and demographical setting might add more insight to define and determine the Postponing career decision of Indonesian students. This might identified the risk factor and background analysis of students career decision problem analysis.

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#### Conflict of interest

There is no conflict of interest in this reaserch, and publications

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