

Teacher Support and Career Decision-Making Self-Efficacy Across Gender

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Doi: 10.31316/g-couns.v10i03.9120

Abstract

The career decision-making process is a critical developmental task during adolescence, especially for senior high school students transitioning from further education to employment. This study examined the effect of teacher support on career decision-making self-efficacy (CDMSE), with gender tested as a potential moderator, among 542 students from public senior high schools in Semarang City, Indonesia. Data were analyzed using Hayes' PROCESS Model 1. The findings revealed that teacher support significantly predicted students' CDMSE ($\beta = 0.60$, $p < .01$, 95% CI: 0.50–0.72). Gender differences were also observed, with female students reporting higher CDMSE than male students ($\beta = -2.40$, $p < .05$, 95% CI: -4.46 to -0.35). However, the interaction between teacher support and gender was non-significant ($\beta = -0.19$, $p > .05$), indicating that teacher support contributes similarly to CDMSE across genders. This study offers novel empirical evidence from the Indonesian secondary school context, enriching the Social Cognitive Career Theory (SCCT) through gender-based moderation testing. Practically, the findings highlight the importance of strengthening teachers' roles in school-based career guidance to enhance students' confidence in making informed career choices.

Keywords: career decision-making self-efficacy, gender, teacher support

Article info

Received December 2025, Revised January 2026, Accepted January 2026, Published April 2026

How to Cite:

Sahin, A., Sugiharto, D. Y. P., Sunawan., & Mulawarman. (2026). Teacher Support and Career Decision-Making Self-Efficacy Across Gender. *G-Couns: Jurnal Bimbingan Dan Konseling*, 10 (03), July, 2664-2676. <https://doi.org/10.31316/g-couns.v10i03.9120>

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Available online at <https://journal.upy.ac.id/index.php/bk/index>



INTRODUCTION

Career decision-making is a critical developmental task during adolescence, particularly for senior high school students navigating the transition from formal education to the world of work. At this stage, students are required to make a series of strategic decisions that shape their future educational pathways, occupational choices, and long-term career development. The accuracy and quality of these decisions are crucial, as they are closely associated with life satisfaction, psychological functioning, and individuals' success in fulfilling social and professional roles in adulthood. Consequently, students' readiness to engage in effective career decision-making warrants serious attention in secondary education. Despite this, many students still struggle with indecision and uncertainty in identifying appropriate career paths, suggesting the need to examine developmental predictors that may strengthen decision-making confidence.

One of the most widely recognized psychological indicators of readiness for career decision-making is career decision-making self-efficacy (Bandura, 1997; Betz et al., 1996; Lent & Brown, 2013). Individuals with high levels of CDMSE tend to engage more proactively in career exploration, demonstrate greater resilience when encountering obstacles, and exhibit stronger commitment to the career plans they formulate. Conversely, individuals with low CDMSE may withdraw from opportunities, avoid decision-making responsibilities, and postpone career choices altogether, reinforcing the importance of identifying sources that strengthen this belief (Alissa & Akmal, 2019)

The importance of self-efficacy in educational and career development contexts has been consistently supported by empirical research. Self-efficacy has been shown to make a substantial contribution to academic achievement, career adaptability, and students' career interests and choices (Huang & Kou, 2025; Kumar et al., 2025; Pang et al., 2025). High self-efficacy enables students to more effectively utilize their personal potential and enhances their preparedness to cope with career-related demands, whereas low self-efficacy is frequently associated with career indecision, diminished confidence, and maladaptive academic behaviors (Sahin et al., 2024). These findings underscore that strengthening self-efficacy, particularly in the context of career decision-making, is a critical component of educational services and school-based guidance and counseling programs. However, although extensive research confirms the relevance of CDMSE, studies examining its antecedents, especially within Asian secondary school populations, remain limited (S. Chen et al., 2022; Masi et al., 2025; D. Wang et al., 2024; Zhang et al., 2019).

From the perspective of Social Cognitive Career Theory (SCCT), self-efficacy is shaped through the dynamic interaction of personal, behavioral, and environmental factors. Among these, environmental influences, especially social support, play a pivotal role in developing and reinforcing individuals' confidence in their career decision-making capabilities (Pham et al., 2024; Schunk & DiBenedetto, 2020; Suyitno et al., 2024). Within the school context, teacher support represents one of the most salient and influential sources of social support for adolescents. Teachers function not only as providers of academic instruction but also as significant figures who exert meaningful influence on students' academic, psychosocial, and career development. SCCT also emphasizes that verbal persuasion, vicarious learning, and emotional support can serve as mechanisms through which significant adults, such as teachers, cultivate students' belief that they are capable of succeeding in career-related tasks (Brown & Lent, 2023; Petruzzello et al., 2022; Song et al., 2022).



Teacher support encompasses various forms of assistance perceived by students, including academic and career-related information, emotional encouragement, personal attention, and accessibility when students encounter educational or career challenges. Academic, social, and affective teacher support has been empirically demonstrated to enhance students' confidence in dealing with career challenges and to strengthen their CDMSE (Creamer & Laughlin, 2005; Nauta & Epperson, 2003; Schunk & DiBenedetto, 2020). Moreover, a growing body of research suggests that teacher support often exerts a stronger influence on students' career decision-making self-efficacy than support received from family members or peers, given teachers' perceived credibility and authority in academic and career-related matters. Yet, other studies suggest that social support may vary in influence depending on individual characteristics, implying the need to investigate conditional factors such as gender (Martínez-López et al., 2024; Martinot et al., 2022; Rautanen et al., 2021, 2022)

Nevertheless, the influence of teacher support on CDMSE is not uniform across all students. One key factor that may account for variations in CDMSE is gender. Prior research indicates that male and female students often differ in their self-perceptions, confidence in their abilities, and strategies for coping with career development tasks (Betz & Hackett, 2006; Fouad et al., 2016; S. Lee et al., 2022). These differences are shaped by socially constructed gender roles, prevailing social norms, and culturally embedded expectations within educational and social environments. Some studies report that males exhibit stronger CDMSE due to societal expectations surrounding independence and occupational ambition, while others find females outperform males when they receive structured guidance and support, creating inconsistency in theoretical predictions (Andersen & Smith, 2022; A. Lee & Jung, 2022; Vial et al., 2022; L. Wang & Yu, 2023).

Empirical evidence further suggests that gender differences extend beyond self-efficacy to broader dimensions of career readiness. For example, recent findings indicate that male students tend to exhibit higher levels of career adaptability than female students, particularly in readiness to manage change, future-oriented planning, and confidence in addressing career-related challenges (Sahin et al., 2025). This evidence highlights gender as a critical variable for understanding disparities in students' career preparedness and developmental trajectories. However, conflicting studies have found the opposite pattern in other contexts, wherein female students report equal or even higher levels of CDMSE, particularly when embedded within supportive learning environments, an inconsistency that underscores the urgency to re-examine gendered self-efficacy patterns in diverse populations (Chan, 2022; X. Chen et al., 2023; L. Wang & Yu, 2023; Zander et al., 2020).

In addition to influencing overall levels of career adaptability, gender shapes how students interpret and respond to teacher support. Previous studies have shown that male and female students may differ in their career exploration behaviors, intensity of information-seeking activities, and utilization of available support resources (Abe et al., 2021; Watson & McMahon, 2005). Accordingly, the relationship between teacher support and CDMSE may operate differently across gender groups, underscoring the importance of examining gender as a potential moderating variable. Nevertheless, very few studies have simultaneously modeled these relationships in a single framework; even fewer have tested moderation effects within secondary-level populations in emerging economies (Psaki et al., 2022; Ruiz-Montero et al., 2020; Yu et al., 2021).

Within the Indonesian context, empirical studies that simultaneously integrate teacher support, career decision-making self-efficacy, and gender remain relatively scarce. This gap is particularly noteworthy given Indonesia's predominantly collectivistic



cultural orientation, in which social support plays a central role in shaping individuals' self-beliefs and career readiness. Support from authority figures such as teachers is especially influential in fostering emotional regulation, career adaptability, and self-efficacy as students navigate complex career choices (Hou et al., 2019; Lent & Brown, 2019; Martínez-López et al., 2024; Tentama & Riskiyana, 2020). The scarcity of evidence means it is unclear whether gender interacts with teacher support similarly in collectivistic societies as reported in Western, individualistic contexts making Indonesia an important site for theoretical testing and refinement.

Previous research has also demonstrated that CDMSE functions as a mediator between social support and career maturity (Alissa & Akmal, 2019; Chasanah & Salim, 2019; Hou et al., 2019; Salim et al., 2023). Teacher support not only directly enhances students' self-efficacy but also indirectly contributes to career readiness and maturity through its impact on CDMSE. Therefore, a comprehensive understanding of the interplay among teacher support, CDMSE, and gender is essential for developing career guidance interventions that are both effective and contextually relevant (Bohumira et al., 2019; Cheung, 2024; Marcionetti & Zammitti, 2025). Yet, the relative absence of moderation-focused studies limits the ability to draw firm conclusions regarding whether teacher support influences male and female students differently (Lei et al., 2018; Marcionetti & Zammitti, 2025).

Based on these considerations, the present study holds both theoretical and practical significance by empirically examining the effect of teacher support on students' career decision-making self-efficacy and the role of gender in this relationship. Theoretically, this study seeks to enrich the development of Social Cognitive Career Theory by providing empirical evidence from the context of secondary education in Indonesia. Practically, the findings are expected to inform educators, school counselors, and policymakers in designing career guidance programs that are more responsive, inclusive, and sensitive to gender differences (Choi et al., 2023; Setiawan et al., 2019). Accordingly, the objectives of this study are to: (1) examine the effect of teacher support on students' career decision-making self-efficacy; (2) identify gender differences in levels of career decision-making self-efficacy; and (3) investigate the moderating role of gender in the relationship between teacher support and career decision-making self-efficacy among senior high school students.

METHOD

This study examined the effect of teacher support on career decision-making self-efficacy, with gender tested as a moderating variable. The study population consisted of 6,155 students enrolled in public senior high schools in Semarang City. Using G*Power analysis, a minimum required sample size of 542 students was determined. The sample comprised students aged 15-18 years ($M = 16.4$), representing grades 10, 11, and 12. Socioeconomic backgrounds were diverse and reflected the demographic composition of the participating schools, including students from lower-, middle-, and upper-middle-income households, as indicated by parental occupation and reported household income.

Data collection was conducted using a self-administered questionnaire distributed both online and offline. For the online format, survey links were shared through school learning platforms and class messaging groups with approval from school administrators and homeroom teachers. For the offline format, printed questionnaires were distributed during classroom sessions under teacher supervision. To minimize response bias, students were assured of confidentiality and anonymity, participation was voluntary, and no



identifying information or academic grades were collected. Teachers were instructed not to assist students in answering items to avoid unintentional influence on responses.

The instrument adaptation process followed the guidelines for cross-cultural adaptation of self-report measures proposed by Beaton et al., (2000). These guidelines emphasize achieving conceptual, semantic, and contextual equivalence between the original and adapted versions to ensure the validity and reliability of measurement across cultural and linguistic contexts. The adaptation procedure was conducted systematically through five stages: (1) forward translation, (2) synthesis of translated versions, (3) back-translation, (4) expert panel review, and (5) pre-testing.

Career decision-making self-efficacy was measured using the Career Decision Self-Efficacy–Short Form (CDSE-S) (Betz et al., 1996), which consists of five dimensions: self-assessment, information gathering, goal selection, planning, and problem solving. Items were rated on a 5-point Likert scale (1 = no confidence at all, 5 = very high confidence). Previous research reported a reliability coefficient of .91 (Hampton, 2005), while construct reliability in this study yielded CR = .93, AVE = .72, DV = .85, and Cronbach's alpha = .95.

Teacher support was measured using the Teacher Support Scale (TSS; Metheny et al., 2008), comprising 21 items across four dimensions: Invested, Positive Regard, Expectations, and Accessible. Items were rated on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree), with higher scores reflecting greater perceived support from teachers. The scale demonstrated excellent internal consistency ($\alpha = .96$).

Data were analyzed using Hayes' PROCESS macro Model 1 (Hayes, 2017), a regression-based moderation analysis. Teacher support served as the independent variable, career decision-making self-efficacy as the dependent variable, and gender as the moderating variable. Moderation was tested by entering an interaction term between teacher support and gender. All analyses were performed using ordinary least squares (OLS) estimation. Assumptions of normality, linearity, independence of errors, and homoscedasticity were examined and satisfied prior to hypothesis testing.

RESULTS AND DISCUSSION

Results

The data description of the research results specifically presents the mean intercorrelation and standard deviation of majors and gender. The results of the descriptive analysis showed that the mean value of career decision-making self-efficacy was higher for Male (M=98.74; SD=14.78), Female (M=96.79; SD=13.60), and Teacher Support for Male (M=84.48; SD=12.65) and Female (M=85.16; SD=12.40). The results of descriptive statistics for all variants of the study indicate that the mean value (M) is greater than the Standard Deviation (SD); a higher mean value can be interpreted as indicating good resistance to data distribution.



Table 1.
 Descriptive Statistics

Group	Gender	Mean	Standard Deviation
CD	Male	98.74	14.78
	Female	96.79	13.60
TS	Male	84.48	12.65
	Female	85.16	12.40

The next step is to conduct normality and homogeneity tests. Based on the normality test using the Kolmogorov-Smirnov test, it indicates that the data is normally distributed, then the homogeneity test through the Test of Homogeneity of Variances shows that the data is homogeneous or has the same variance. Next, testing is conducted using Hayes' model 1. The results of the Hayes model 1 analysis are presented in Table 2.

Table 2.
 Hayes Model 1 analysis results

Variabel	B	SE	t	p	95% CI
TS	0.60	0.06	10.40	<0.01	(0.50; 0.72)
JK	-2.40	1.04	-2.29	<0.05	(-4.46; -0.35)
TS × JK	-0.19	0.12	-1.60	>0.05	(-0.42; -0.44)

Based on the results of Hayes model 1 analysis in table 2, the results show that: (1) There is an effect of teacher support on career decision-making self-efficacy ($B = 0.60$; $p = <0.01$); (2) There is a difference in the level of career decision-making self-efficacy between men and women ($B = 2.40$; $p = <0.05$); and (3) There is no interaction level of career decision-making self-efficacy and teacher support between male and female students ($B = 0.19$; $p = >0.05$). Furthermore, to find out the differences in career decision-making self-efficacy from gender can be seen in Figure 1 as follows:



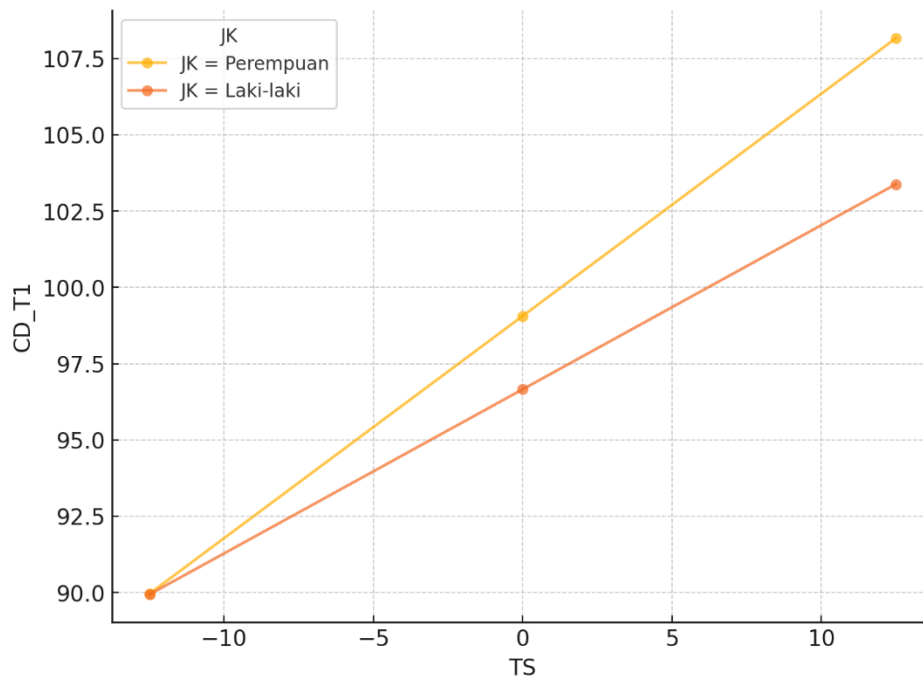


Figure 1. Differences in career decision-making self-efficacy based on gender

Furthermore, to determine whether gender differences in self-efficacy in career decision-making and teacher support are evident, see Figure 1, which shows a positive relationship between teacher support and self-efficacy in career decision-making for both women and men. However, the different positions of the lines and points on the graph indicate differences in career decision-making self-efficacy between the two gender groups. This reflects that although both groups show similar patterns, men and women may experience the career decision-making process with different levels of self-efficacy.

Discussion

Based on the findings described above, teacher support positively and significantly influences students' career decision-making self-efficacy. This finding is consistent with previous studies conducted by Nauta & Epperson, (2003) and Schunk & DiBenedetto, (2020), which emphasize that teacher support plays a crucial role in strengthening students' confidence when making career-related decisions. The consistency between prior research and the current study indicates that supportive interactions with teachers, including guidance, feedback, and emotional encouragement, contribute to students' beliefs in their ability to plan and manage their future careers. In relation to theoretical perspectives on career development, teacher support serves as an important environmental factor that enhances self-efficacy by providing mastery experiences and social persuasion (Wolf et al., 2021).

The next finding indicates a significant difference in career decision-making self-efficacy between male and female students. This result aligns with previous research demonstrating that gender influences how individuals perceive their abilities and confidence in career-related contexts (Betz & Hackett, 2006; Fouad et al., 2016). The consistency between earlier studies and the present findings suggests that gender-based socialization processes, expectations, and experiences may shape students' confidence in making career decisions. These differences may also be influenced by how students



interpret teacher support and develop their career identity within their social and educational environments (Watson & McMahon, 2005).

Furthermore, the findings reveal no significant interaction between gender and teacher support in influencing career decision-making self-efficacy. This indicates that although male and female students differ in their overall levels of self-efficacy, teacher support does not moderate this relationship. In other words, both male and female students respond to teacher support in similar ways. Interestingly, the results show that female students tend to have higher career decision-making self-efficacy than male students. This finding contrasts with previous studies reporting higher self-efficacy among male students, particularly in the context of entrepreneurship and general career decision-making among high school and university students (Kothari, 2016; Wulandari & Purnama, 2024).

The findings of this study have important implications for career guidance and counseling practices in schools. The significant influence of teacher support underscores the need for schools to strengthen teachers' roles as career mentors by providing professional development programs that enhance their capacity to provide both academic and emotional support. Additionally, given the observed gender differences in self-efficacy, school counselors are encouraged to implement gender-sensitive career guidance approaches that address the unique needs and challenges of male and female students. Career guidance programs should not only focus on academic planning but also emphasize developing soft skills, such as self-confidence, adaptability, and interpersonal competence, to better prepare students for future career challenges.

Despite its contributions, this study has several limitations. The cross-sectional research design limits the ability to draw causal conclusions, as the relationship between teacher support and career decision-making self-efficacy may be influenced by other unmeasured variables. In addition, the study did not include other potential factors that may affect self-efficacy, such as family background, peer influence, and personal career experiences. Future studies are therefore recommended to incorporate these variables to obtain a more comprehensive understanding. Furthermore, the measurement of self-efficacy in this study may be constrained by limited instrument validity and reliability; thus, the use of more standardized, rigorously validated instruments is suggested. Overall, this study provides a valuable foundation for future research and the development of more effective and inclusive career guidance practices in educational settings.

CONCLUSION

Based on the data analysis and discussion presented above, it can be concluded that teacher support has a significant effect on students' career decision-making self-efficacy, with higher levels of perceived support associated with greater confidence in making career-related decisions. The findings also reveal a significant gender difference in career decision-making self-efficacy, as female students report higher levels of confidence than their male counterparts, suggesting that gendered experiences continue to shape career development beliefs. However, the absence of a significant interaction effect indicates that teacher support benefits students similarly regardless of gender, thereby reinforcing the Social Cognitive Career Theory (SCCT) assertion that social persuasion serves as a universal environmental mechanism that supports efficacy development. These findings highlight the practical need for schools to strengthen teacher training in career development mentorship and to incorporate gender-responsive counseling approaches that actively engage both male and female students. Future



research is encouraged to investigate the processes behind gender-based differences in self-efficacy using longitudinal or qualitative designs, and to examine how cultural contexts contribute to the formation of efficacy beliefs. Together, these insights underscore the value of school-based support systems in enhancing students' readiness to navigate complex career decisions.

ACKNOWLEDGEMENT

The authors wish to express their sincere gratitude to Universitas Negeri Semarang for the research permission granted under reference number B/28747/UN37.1.1/KM.07/2024, which facilitated data collection for this study. Special thanks are extended to the principals, teachers, and all 542 senior high school students in Semarang City who voluntarily participated and shared their valuable experiences. Finally, the authors acknowledge the constructive feedback provided by the journal editors and reviewers, which significantly improved the quality of this manuscript.

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