



Effect of grit on career decision-making self-efficacy through intrinsic motivation among working university students

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Article Info	Abstract
Keywords: Grit, career decision-making self-efficacy, intrinsic motivation	Career decision-making self-efficacy (CDMSE) plays a crucial attribute for working university students. However, not all students possess this confidence. Individuals who strongly believe in their abilities are more likely to take proactive steps toward achieving their goals, which in turn affects their behavior and performance. Therefore, this study aims to examine the effect of grit on CDMSE through intrinsic motivation (IM) among working university students. This research employs a quantitative approach with a correlational design using an ex post facto method. This study involves sample from 161 working university students from Tangerang, selected using proportional sampling. Data were analyzed using multiple regression analysis. The regression analysis results indicate a significant effect of grit on CDMSE through IM ($\beta = 0.170$, $p < 0.05$). However, this study is limited to a single geographic area, restricting the generalizability of the findings. Therefore, future research should expand a study population to a broader and more diverse sample. Additionally, qualitative research designs are recommended for future studies to provide a deeper exploration of career-related experiences among working university students.
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Introduction

The development of university students is categorized as a transition from late adolescence to early adulthood, typically ranging from ages 18 to 25 (Santrock, 2011). This transitional stage is characterized by experimentation and exploration in career paths, identity formation, and lifestyle choices (Santrock, 2011). Therefore, early adulthood presents individuals with critical developmental tasks, one of which is preparing for workforce entry and career establishment (Utami, 2020). In this context, preparation involves the fostering career decision-making self-efficacy (CDMSE) as a crucial psychological factor that enables students to navigate uncertainties and make informed career choices (Xin et al., 2020).

A widely adopted strategy for enhancing CDMSE is engaging in both academic studies and employment simultaneously (Setiawan & Legowo, 2018). However, the decision to work while pursuing higher education is far from straightforward, requiring thoughtful deliberation and considerable personal commitment.

It is because working university students often face significantly greater demands than their non-working friends. One of the most prevalent challenges is the difficulty in managing conflicting academic and professional responsibilities, particularly when coursework deadlines overlap with job obligations. Moreover, the considerable energy expenditure required for the working university students can lead to physical and mental exhaustion. It often detracts from students' academic performance and overall well-being (Remenick & Bergman, 2021; Setiawan & Legowo, 2018).

Several reasons motivate students to work while pursuing a degree in university. First, some students seek employment to support their family's financial needs. Second, others aspire to achieve financial independence. Lastly, social and relational factors, such as keeping up with societal trends and expanding their social circles, also affects students' decisions to work while pursuing their studies (Sakdiyeh, 2023; Remenick & Bergman, 2021). Beyond the challenges faced by working university students, maintaining intrinsic motivation (IM) is essential for navigating the demands of higher education. IM refers to a student's internal drive to achieve

academic goals through processes of interest and exploration (Schunk et al., 2014; Seel, 2012). Students with high levels of IM tend to develop greater confidence in their academic abilities, which, in turn, positively affects their CDMSE.

IM comprises four key aspects such as interest, perceived competence, perceived choice, and pressure/tension. CDMSE refers to an individual's belief in their ability to successfully complete tasks and overcome challenges related to career decision-making. One of the primary challenges for working university students is balancing academic responsibilities with professional commitments. Individuals with high CDMSE are generally more inclined to embrace complex and demanding decisions with confidence. It is supported by Andini, (2025) who stated that a strong sense of CDMSE enables individuals to confront career challenges proactively and pursue career development opportunities.

A preliminary study conducted by the researchers involving 20 working university students in Tangerang revealed several key findings. The majority of students (75%) reported that their jobs were unrelated to their field of study. While 85% of students selected their academic major based on personal interest, only 40% worked in jobs that aligned with their interests. Furthermore, 90% of them whose jobs were unrelated to their field of study acknowledged that they had to acquire new knowledge and skills. However, this misalignment between work and academic discipline contributed to a decrease of academic performance for 80% of the students.

Other than that, working university students often struggle with managing their time between academic responsibilities and employment (55%). Additionally, 55% have consideration in taking a leave from their studies, and 25% have actually taken a leave. This issue is closely related to the problem-solving aspect of CDMSE, as it reflects students' ability to persist despite challenges. Therefore, according to findings from the preliminary study, it indicates that working university students in Tangerang have not yet effectively managed their schedules between work and academic obligations. Furthermore, 40% of these students do not intend to continue their current jobs after graduation. This is linked to the planning aspect of CDMSE, which involves future career preparation. The results suggest that many working university students in Tangerang have yet to develop a well-structured career plan.

Internships or work experience are insufficient for career development; psychological strengths are also essential for students balancing work and academic life. Psychological strength encompasses a student's thoughts, emotions, and behaviors that contribute to realizing their potential and achieving personal well-being, both internally and externally. One of the critical psychological traits in this context is grit, which has been found to positively correlate with academic achievement and CDMSE (Ting & Datu, 2020).

According to Khoirunnisa, (2023) grit plays a crucial role in helping students maintain IM. It is defined as the combination of perseverance and passion in the pursuit of long-term goals. Grit consists of two primary components, which are passion (sustained interest in a goal) and perseverance (the ability to persist despite difficulties) (Duckworth et al., 2007). In addition, Ting & Datu, (2020) also stated that grit supports individuals in making appropriate career decisions, ultimately enhancing their confidence in the choices they make regarding their professional futures. A study conducted by Andini, (2025) found a positive relationship between grit and CDMSE. Students with high levels of grit are more likely to demonstrate strong motivation in pursuing their long-term goals. However, working university students may experience lower IM due to the challenges of balancing their academic studies, work commitments, and personal learning efforts. This imbalance can negatively impact their academic performance (Putri, 2023).

Students who choose to work while pursuing their degree inevitably face difficulties in making career-related decisions. Grit plays a crucial role in helping students cope with academic and professional pressures, enabling them to persevere despite challenges. In addition to grit, social support from family, friends, and the workplace can serve as a significant factor in enhancing students' confidence and belief in their career decision-making abilities. Conversely, a lack of social support can lead to confusion and uncertainty, making it more difficult for students to determine their future career paths. Given these challenges, it is essential to examine the effect of CDMSE on students' ability to choose suitable career paths. High self-efficacy can help students navigate career uncertainties and better prepare for professional life. Moreover, IM serves as a mediating factor in this process, reinforcing students' resilience and commitment to their long-term career aspirations.

Method

The research design employed in this study is an ex post facto method, involving a sample of 161 working university students. The sampling technique used was proportional random sampling. The study utilized three psychological scales, all of which had been tested for validity and reliability. Each item on these scales was rated using a five-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree)

The first scale is Grit Scale consisted of 25 items measuring two key dimensions: passion and perseverance. After the validity testing, 22 items were concluded as valid (0.378 to 0.697) and reliable (0.836).

The second scale is CDMSE Scale which originally contained 39 items assessing five indicators: self-appraisal, occupational information, goal selection, planning, and problem-solving. The validity testing resulted in 23 items are considered valid (0.380 to 0.790) and reliable (0.762). Lastly, the IM Scale consisted of 31 items measuring four dimensions: interest, perceived competence, perceived choice, and pressure/tension. After validity testing, 22 items are considered valid (0.361 to 0.586) and reliable (0.813).

The data analysis in this study involved several statistical tests, including classical assumption tests, hypothesis testing, cluster analysis (to categorize participants into high, moderate, and low levels based on the measured constructs), multiple regression analysis, path analysis, and the Sobel test. The regression analysis was conducted in two models. Model 1 examined the direct effect of grit (X) on CDMSE (Y). Model 2 (Sobel test) analyzed whether IM (Z) mediated the relationship between grit (X) and CDMSE (Y). A significance value of $p < 0.05$ was used to determine whether the relationships between variables were statistically significant. The contribution of each variable to the overall model was assessed using the R^2 (R-Square) value, indicating the proportion of variance explained by the predictor variables.

Result and Discussion

The results of the descriptive analysis indicate that the mean score for grit was $M = 81.80$, $SD = 13.075$, for CDMSE was $M = 89.86$, $SD = 17.020$, and for IM was $M = 79.60$, $SD = 11.015$. The descriptive statistics for all research variables reveal that the mean (M) values are higher than their corresponding standard deviation (SD) values. A higher mean relative to the standard deviation suggests that the data distribution is well-represented by the mean (Table 1).

Table 1. Results of Descriptive Statistical Analysis

		1)	2)	3)
1)	Grit	-		
2)	CDMSE	0.79*	-	
3)	IM	0.81**	0.89**	-
	Mean	81.80	89.86	79.60
	SD	13.07	17.02	11.01
	Min	26	23	30
	Max	115	110	110

Information: * $p < 0.01$; ** $p < 0.05$

The results of the path analysis and Sobel test presented in Table 2 demonstrate a significant effect of grit on CDMSE ($\beta = 0.436$, $p < 0.05$). Additionally, IM was found to have a significant effect on CDMSE ($\beta = 0.347$, $p < 0.05$). Lastly, grit was shown to affect CDMSE indirectly through IM ($\beta = 0.170$, $p < 0.05$). The key finding of this study highlights the positive effect of grit on CDMSE. Students with high levels of grit are better equipped to navigate challenges in both academic and professional settings. As a result, they demonstrate greater resilience in overcoming difficulties and achieving their career goals. Individuals who exhibit consistency in interests and perseverance in their long-term aspirations tend to develop stronger confidence in their career decision-making abilities. This study further revealed that working university students display high levels of persistence and determination, which enhances their self-efficacy when making career-related decisions.

Table 2. Results of Path Analysis

Predictor	β	t	p	R	R^2	F	p
Criterion: IM (Z)				.761	.574	108.578	<0,01
Grit (X)	.490	6.787	<0,01				
Criterion: CDMSE (Y)				.840	.701	125.878	<0,01
Grit (X)	.436	6.337	<0,01				
IM (Z)	.347	2.251	<0,01				
Mediator	β	Z_{Sobel}	SE			p	
X1-Z-Y	0.170	3.106	0.61			<0.05	

CDMSE refers to students' confidence in their ability to make informed career choices. Students with high CDMSE are more proactive in career-related behaviors, such as seeking relevant information, developing necessary skills, and taking concrete steps toward achieving their career goals. One key factor affecting CDMSE is grit, which reflects a student's capacity to persist over an extended period and persevere in the pursuit of meaningful goals. According to the findings of this study, it indicates a positive relationship between grit and CDMSE. Students with high levels of grit are better equipped to face challenges in both academic and professional domains, enabling them to overcome obstacles and work toward their career aspirations. These findings align with the research of Xu et al., (2025), which emphasizes the link between career preparation and CDMSE. In particular, working university students must carefully navigate career-related decisions by considering various factors, including personal goals, preferences, expectations, and individual capabilities (Xin et al., 2020).

In addition, the cluster analysis results reveal that 58 students exhibited high levels of grit, while 52 students demonstrated high CDMSE. Individuals who maintain consistent interests and demonstrate strong perseverance in their efforts are more likely to achieve their long-term goals. This study further confirms that working university students tend to exhibit high levels of perseverance and commitment, leading to greater confidence in making career decisions. This study's findings reinforce previous research indicating that grit has a positive effect on CDMSE. Students who display persistence and passion in their academic and professional pursuits tend to develop stronger confidence in their career decision-making abilities. Therefore, working university students with high grit are more likely to sustain motivation throughout their studies and employment, ultimately fostering a stronger sense of self-assurance in their career choices (Ting & Datu, 2020; Vela et al., 2018).

The findings of this study align with the research conducted by Pleace & Nicholls, (2022), which identified a positive relationship between IM and CDMSE. Individuals are more likely to be intrinsically motivated when they possess a strong internal drive, which in turn enhances their self-efficacy. The data analysis further supports this, demonstrating a positive effect of grit on CDMSE, with IM acting as a mediating variable. Thus, IM successfully functions as a bridge between grit and CDMSE. This mediation suggests that grit and CDMSE can have significant implications for individuals' career success and goal attainment when reinforced by IM. These findings also align with the study by Sun et al., (2026), which reported a significant relationship between grit and IM. When students are intrinsically motivated, they are more likely to persist through challenges, which gradually strengthens their confidence in making career decisions (Pleace & Nicholls, 2022).

Moreover, the study highlights the positive effect of IM on CDMSE. Cluster analysis results indicate that 54 students demonstrated high IM, while 52 students exhibited high CDMSE. The study found that working university students with high IM also tend to have high CDMSE. Their strong internal drive makes them more proactive in seeking career-related information, developing relevant skills, and expanding their professional networks. This IM remains an underexplored variable in research, making its role in this study a noteworthy contribution. This study provides new insights by confirming that IM serves as a mediator between grit and CDMSE. Cluster analysis further reveals that working university students with high IM tend to exhibit greater consistency and perseverance, resulting in stronger confidence in their abilities.

Other than that, IM plays a significant role in enhancing grit among university students. Students who demonstrate perseverance in completing their tasks are often intrinsically motivated. (Sun et al., 2026) found that perseverance is insufficient unless it is driven by IM. Otherwise, students merely attempt to outperform their less persistent peers without genuine internal motivation. Through grit, perseverance and consistency in interests serve as key motivational drivers that encourage students to stay committed to their academic pursuits (Von Culin et al., 2014).

The experience of simultaneously pursuing degree and working equips students with the ability to navigate various challenges, such as time management, work-related pressure, and academic responsibilities. This experience fosters resilience among working university students in Tangerang, enabling them to persist in achieving their goals. As a result, they develop a strong internal drive (IM), which boosts their confidence in making and pursuing career decisions. Furthermore, working university students often develop superior problem-solving and adaptability skills due to their exposure to dynamic workplace challenges. These competencies, in turn, enhance their readiness to face uncertainties in their future careers.

The discussion conducted in this study reinforces the idea that working university students exhibit high levels of grit and IM, which in turn contributes to enhancing strong CDMSE. However, a key limitation of this study is that the research was conducted exclusively within the Tangerang area, limiting the generalizability of the findings. Future research should consider expanding the sample to include a broader population.

Additionally, subsequent studies could adopt a qualitative research design to explore career-related experiences and decision-making processes among working university students

Conclusion

This study concludes that grit is positively associated with career decision-making self-efficacy (CDMSE) through intrinsic motivation among working university students ($\beta = 0.170, p < .05$). These findings highlight the importance of perseverance, consistency of interests, and intrinsic motivation in strengthening students' confidence in making career-related decisions. The results also provide practical implications for university guidance and counseling services, particularly in developing career development programs that foster grit and intrinsic motivation among working students. However, the study's correlational design and limited geographical coverage restrict causal interpretation and generalizability. Therefore, future research should involve larger and more diverse populations, employ longitudinal or experimental designs, and integrate qualitative approaches to provide a deeper understanding of the psychological mechanisms underlying career decision-making self-efficacy among working university students.

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