Research Article

The Effect of Career Calling on Learning Engagement Mediated by Career Adaptability on Final Students of the Faculty of Business Economics at State University of Padang

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Abstract: The development of higher education requires students to have career readiness and active involvement in the learning process in order to achieve academic and professional success. One important factor that influences learning engagement is career calling, which can increase students' intrinsic motivation in attending lectures. This study aims to analyze the effect of career calling on learning engagement mediated by career adaptability in final year students of the Faculty of Economics and Business, Padang State University. This study uses a quantitative approach with an explanatory research method. Data were collected through a Google Form questionnaire distributed to 280 students and analyzed using the SmartPLS v.4.0.9.9 application. The results of the study indicate that: (1) Career Calling has a positive and significant effect on Learning Engagement; (2) Career Calling has a positive and significant effect on Career Adaptability; (3) Career Adaptability has a positive and significant effect on Learning Engagement; and (4) Career Adaptability is able to positively and significantly mediate the effect of Career Calling on Learning Engagement. These findings reinforce the importance of developing career calling and career adaptability as strategies to increase student learning engagement before the transition to the world of work.

Keywords: Career Adaptability; Career Calling; Learning Engagement

1. Introduction

Students are individuals who are in an important phase to prepare themselves for the professional world through achieving academic success. Academic success itself is defined as an achievement obtained through understanding science and achievements in the field of education that reflect optimal learning outcomes (Asyari, 2018). In the process of achieving this, students are required to not only understand academic material, but also show an optimistic, proactive attitude, and the ability to solve problems effectively (Listiyandini, 2016).

However, the reality in the field shows that not all students are able to deal with academic demands smoothly. One important factor that influences academic achievement is learning engagement. Learning engagement acts as a key predictor in improving academic performance as it reflects the extent to which students are actively, emotionally and cognitively involved in the learning process (Chen & Zhang, 2023). Previous research shows that high levels of learning engagement are positively correlated with the quality of deep learning, decreased dropout rates, increased satisfaction with educational institutions, development of critical thinking skills, career readiness, and students' psychological well-being (Jian et al., 2023).

According to Chen & Zhang (2023), learning engagement is a form of active student contribution that has a direct impact on academic success and the quality of the overall learning experience. These dimensions of engagement include behavioral, emotional, and cognitive aspects that are closely related to task execution and active participation in the lecture process (Reeve & Tseng, 2011).

This phenomenon becomes increasingly important when it is associated with final year students who are in transition to the world of work. At this stage, students are required not only to complete academic studies, but also to prepare themselves for career challenges. Therefore, the development of career calling and career adaptability becomes very relevant. Career calling provides direction and meaning to career choices, while career adaptability helps students to adjust to the demands of the dynamic world of work (Savickas & Porfeli, 2012). Recent research indicates that career calling and career adaptability can play a role in increasing learning engagement, thus supporting students' career readiness (Chen & Zhang, 2023).

Data for 2024 from the Administration of the Faculty of Economics and Business, Padang State University shows a gap between the number of registered 2021 students (1,332 people) and the number who have completed their studies and attended graduation (912 people). This gap reflects the challenges in completing studies in a timely manner, which may be related to low learning engagement and lack of readiness for career transition.

To obtain an initial picture of the level of learning engagement of final year students at the Faculty of Economics and Business, Universitas Negeri Padang, a pre-survey was conducted on 30 participants from various majors. The results of the pre-survey showed variations in the level of student learning engagement, both in behavioral, emotional, and cognitive dimensions. This shows the importance of further exploring the factors that influence learning engagement, especially the role of career calling and career adaptability in shaping optimal learning engagement.

Thus, this study aims to examine the effect of career calling on learning engagement mediated by career adaptability in final year students of the Faculty of Economics and Business, Universitas Negeri Padang. It is hoped that the findings of this study can contribute to designing more effective learning and career development strategies to improve learning engagement and student readiness in facing the world of work.

2. Literature Review

2.1. Self-Determination Theory

Self-Determination Theory (SDT), developed by Edward L. Deci and Richard Ryan (1985), explains that human motivation is influenced by fulfilling three basic psychological needs: competence, autonomy, and relatedness. When these three needs are met, the individual will experience autonomous motivation, namely motivation that comes from

oneself (intrinsic) or that is driven by personal values from external results (extrinsic) (Ryan & Deci, 2000; Gagne et al., 2014). Intrinsic motivation drives individuals to carry out an activity voluntarily and enjoyably, while extrinsic motivation is more instrumental and directed towards obtaining specific results (Ryan & Deci, 2019). In education and career, this theory explains that individuals will actively choose behaviors that support their development, such as making career decisions and showing learning engagement (Rothes et al., 2022; J. Chen & Zhang, 2023). SDT is also closely related to career calling and career adaptability, because the fulfillment of competence and autonomy will strengthen self-confidence in achieving career calling and the ability to adapt to the dynamics of the world of work (Chang et al., 2020; Ryan & Deci, 2000). Thus, SDT becomes an important framework in understanding career motivation and student learning engagement.

2.2 Learning Engagement

Learning engagement refers to students' active involvement in the learning process, both affectively and cognitively. This concept is adapted from work engagement and is defined as a long-term positive condition characterized by enthusiasm, dedication, and deep interest in learning activities (Shang et al., 2022; Ying et al., 2023). Students with high learning engagement show enthusiasm, full concentration, and mental resilience in facing academic challenges (J. Chen & Zhang, 2023). This engagement also reflects the allocation of time and energy for educational activities, both in and out of class (Liu et al., 2023). It is an important indicator of academic achievement and the quality of university education (Fredricks et al., 2004).

Factors that influence learning engagement include individual aspects such as motivation and mental resilience, family factors such as education and parental expectations, and school factors such as teacher support and academic climate (X. Chen & Wang, 2023). In addition, career calling and career adaptability also have a significant effect on student learning engagement (J. Chen & Zhang, 2023).

According to J. According to Chen & Zhang (2023), the three leading indicators of learning engagement are vigor (high enthusiasm and mental resilience in learning), dedication (emotional involvement and commitment to learning), and absorption (full concentration to the point of immersion in learning activities). Thus, learning engagement is important in encouraging academic success and preventing learning fatigue.

2.3 Career Calling

Career calling is a deep belief and passion for a meaningful job or career that aligns with one's life goals. Dik et al. (2012) define calling as a search and experience that provides meaning and alignment with overall life goals. In a professional context, career calling refers to a sustained passion for a particular job, which provides a broader purpose and direction in life (Dobrow et al., 2011). Individuals with a career calling often feel that their work has a

prosocial purpose, namely benefiting others, and not only focusing on material rewards (Zhang et al., 2020). Career calling is also closely related to academic satisfaction and career decision-making, especially in students, where those with a high career calling tend to be more active in developing themselves and achieving academic satisfaction (Duffy et al., 2011). Career calling is important in forming a more meaningful and impactful career. There are two leading indicators of career calling according to Dik et al. (2012), there are two leading indicators of career calling. Presence refers to individuals who feel a calling in their career, which drives them to make positive contributions and undergo self-development (Elangovan et al., 2010). Search refers to individuals who do not feel a calling but actively seek meaning in their work or career, driving self-expression and happiness in life (Li et al., 2021). Thus, career calling helps individuals find deeper meaning in their work.

2.4 Career Adaptability

Career adaptability is the ability of individuals to adapt to changes in career conditions and plan their future career development. According to Savickas & Porfeli (2012), this includes readiness to face predictable tasks and adjustments to unpredictable situations due to changes in work conditions. Career adaptability reflects attitudes, competencies, and behaviors that help individuals manage current and future career challenges (Savickas, 1997).

It involves concern, which is the care for the future and readiness to plan and prepare for a career; control, referring to individuals' ability to manage themselves, regulate career development, and recognize personal responsibility in shaping their career paths; curiosity, which is the ability to explore various career options and opportunities in the professional environment; and confidence, meaning individuals' belief in their ability to overcome obstacles and realize their career goals (Savickas & Porfeli, 2012). Factors that influence career adaptability include age, gender, work experience, family, educational institutions, and socioeconomic status. Individuals with relevant work experience and family support tend to be more prepared for change and plan their careers more maturely.

2.5 Previous Research

A study by Chen and Zhang (2023) entitled The Impact of Career Calling on Higher Vocational Nursing Students' Learning Engagement: The Mediating Roles of Career Adaptability and Career Commitment was conducted on 388 nursing students at two vocational colleges in China. The results showed that career calling had a positive effect on learning engagement, and this relationship was significantly mediated by career adaptability. This study also showed a positive relationship between career calling and career adaptability.

Shang et al. (2022) in their study involving 1,029 prospective teachers at Chinese universities, showed that career calling had a significant and positive effect on learning engagement, with occupational self-efficacy and vocational outcome expectations as mediators in a multiple mediation model.

Research by Liu et al. (2023) involved 300 engineering students from various universities in Indonesia. Using the stratified random sampling method, this study found that professional identity had a positive effect on career adaptability, and learning engagement acted as a mediator in the relationship.

Meanwhile, Oliveira and Marques' (2024) research on 201 college students showed that career adaptability has a positive relationship with engagement and life satisfaction. Douglas and Duffy (2015) studied 330 undergraduate students from various academic backgrounds. The results showed that calling has a positive relationship with career adaptability, especially in the aspects of concern and confidence.

3. Method

This study uses a quantitative approach with an explanatory research type, which aims to test the causal relationship between the independent variable career calling, the mediating variable career adaptability, and the dependent variable learning engagement. The analysis technique used is Structural Equation Modeling (SEM) with the Partial Least Square (PLS-SEM) approach, using SmartPLS 4 software.

The population in this study were all final year students of the Faculty of Economics and Business, Padang State University, totaling 937 people. The sample determination used the probability sampling technique with a cluster random sampling approach. The sample size was determined using the Slovin formula with an error rate of 10%, resulting in a sample of 280 respondents.

1. Results

Measurement Model (*Outer Model*)

A dimension is considered valid if it has an AVE value above 0.5 or if all the variable dimension *loading values* exceed 0.5 so that it can be concluded that the measurement meets the validity criteria.

Validity test

To test the validity of constructs with reflective dimensions, the correlation between dimension scores and construct scores is evaluated. Dimensions are considered valid if the correlation value exceeds 0.7; however, loadings between 0.50 to 0.60 are still acceptable based on the results of the correlation between dimensions and their constructs (Cooper & Schindler, 2006). The value of the factor load on each construct is measured by the loadings factor, which is ≥ 0.5. In this study, researchers set a threshold of 0.7, which indicates that a dimension is considered valid if the correlation value exceeds this standard. To assess whether the discriminant validity of a construct is adequate, attention is paid to the value of cross loadings, which compares the correlation of the dimensions of a construct with other constructs. Discriminant validity is considered adequate if the correlation of the dimensions of the construct has a higher value than the correlation of these dimensions with other constructs. After re-estimating the initial construct model by dropping the dimensions that

fall into the discriminant validity category, the following is a picture of the final model that has been dropped the relationship between learning engagement, career calling, and career adaptability variables.
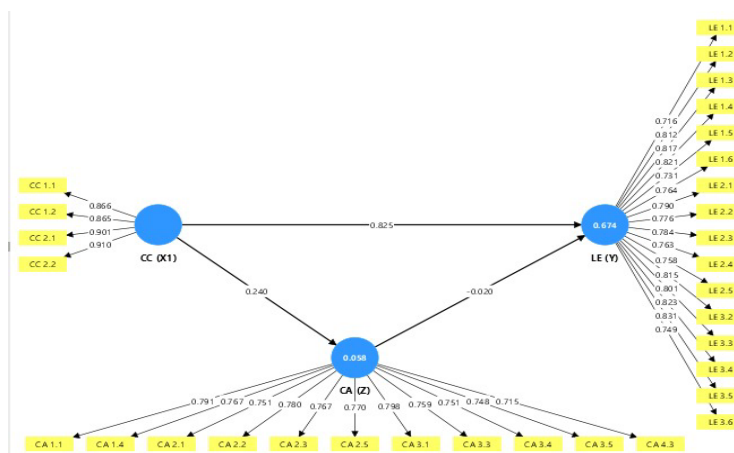

Figure 1. Final Model of the Relationship between the Variables Studied

Source: Test Results Processed with PLS 4

Figure 1 illustrates the final structural model representing the relationships among the variables studied, namely career calling, career adaptability, and learning engagement. The model was derived from data processed using Partial Least Squares (PLS) version 4, and visually outlines the strength and direction of direct and indirect effects among the constructs analyzed in this study.

Table 1. **Validity Test**

Outer Final *Loading*

Aspect			Validity Test
	Attribute Code	Results	Information
Career Calling	X1	0.866	Valid
	X2	0.865	Valid
	X3	0.901	Valid
	X4	0.910	Valid
Learning engagement	Y1	0.716	Valid
	Y2	0.812	Valid
	Y3	0.817	Valid
	Y4	0.821	Valid
	Y5	0.731	Valid
	Y6	0.764	Valid

	Y7	0.790	Valid
	Y8	0.776	Valid
	Y9	0.784	Valid
	Y10	0.763	Valid
	Y11	0.758	Valid
	Y13	0.815	Valid
	Y14	0.801	Valid
	Y15	0.823	Valid
	Y16	0.831	Valid
	Y17	0.749	Valid
Career adaptability	Z1	0.791	Valid
	Z4	0.767	Valid
	Z6	0.751	Valid
	Z7	0.780	Valid
	Z8	0.767	Valid
	Z10	0.770	Valid
	Z14	0.798	Valid
	Z13	0.759	Valid
	Z11	0.751	Valid
	Z15	0.748	Valid
	Z18	0.715	Valid

Source : Data the primary one processed 2025

From the final outer loading results in Figure 1 and Table 1, it can be explained that each dimension in the construct shows a high Convergent validity value, because all of them exceed the 0.7 threshold. Likewise, the cross loading value shows good discriminant validity.

One other way to assess discriminant validity is to compare the Average Variance Extracted (AVE) of each construct with the correlation between that construct and other constructs in the model. The validity of a construct is considered fulfilled if the AVE value is> 0.5.

Table 2**. AVE Analysis**

	(AVE)
Career calling (X)	0.785
Career adaptability (Z)	0.583
Learning engagement (Y)	0.617

Source : Data the primary one processed 2025

Based on table 2, it can be concluded that each construct has a validity above 0.4. This conclusion shows that the level of validity of the construct can be considered good.

Reliability Test

This test is done by looking at and checking the *composite reliability value* of each dimension that measures the construct. The *composite reliability result* will be considered satisfactory if the value is above 0.7. The following are the *composite reliability results* from the Smart PLS output.

Table 3**. Results of Composite Reliability Analysis**

	Composite reliability
Career calling (X)	0.936
Career adaptability (Z)	0.939
Learning engagement (Y)	0.963

Source : Data the primary one processed 2025

Table 3 above shows that the composite reliability value for all constructs is above 0.7, which indicates that all constructs in the estimated model meet the criteria or are reliable.

Structural Model (Inner Model)

The purpose of testing the inner model or structural model is to evaluate the relationship between constructs, assess the significance value, and *R-square* of the research model. Evaluation of the structural model includes the use of *R-square* on the dependent construct, t-test, and the significance of the structural path parameter coefficients. In assessing the model using *the Partial Least Squares (PLS)* method , the initial step involves analyzing R-square for each dependent latent variable. The following are the results of the R-square estimation obtained using Smart PLS

Table 4. **Results of R-square Analysis**

	R-Square
Learning engagement (Y)	0.674
Career adaptability (Z)	0.058

Source : Data the primary one processed 2025

shows the *R-square value of the learning engagement* variable obtained at 0.674, this result shows that 67.4% of the *learning engagement variable* can be influenced by *the career calling* and *career adaptability variables* as mediators. While for *the career adaptability variable* obtained at 0.058, this result shows that 58% of the *career adaptability mediator variable* can be influenced by the *career calling variable* .

Hypothesis Testing

Hypothesis testing regarding direct influence is done by looking at the 1- statistic produced by the structural model (*Innermodel*). The research hypothesis can be accepted if the t-statistic>1.96. The following are the results of the hypothesis test regarding direct influence:

Table 5 **Results of Direct Influence Hypothesis Test**

Influence Direct					
	Original sample (O)	**Sample mean (M)**	**Standard deviation (STDEV)**	**T statistics**	**P values**
Career calling (X) -> *Learning engagement (Y)*	0.825	0.824	0.023	35,467	0.000
Career calling (X) -> *Career adaptability(Z)*	0.240	0.255	0.064	3,729	0.000
Career adaptability (Z) -> *Learning engagement (Y)*	-0.020	-0.0195	0.037	0.542	0.588

Source: Test Results Processed with PLS 4

In PLS 4, statistical testing of each proposed relationship is done through simulation by applying the *bootstrapping method* to the sample. This *bootstrapping approach* also aims to reduce the influence of abnormality problems in the research data. The following are the results of testing using bootstrapping from the PLS analysis:

1) **Testing Hypothesis 1: Influence *career calling* to *learning engagement.***

The results of the first hypothesis test show that *the career calling variable* to *learning engagement* own mark t count of 35,467. This value exceeds the t table value (1.96). This finding shows that there is a significant influence between *career calling* and *learning engagement* . Coefficient track as big as 0.825 indicates that the increase in *career calling level* contribute to increased *learning engagement* . On the other hand, if *career calling* low, then *learning engagement* in students Faculty Economy And Business University Country The field tends to decline.

2) **Hypothesis Testing 2: *career calling* towards *career adaptability* .**

The results of the second hypothesis test show that the *career calling variable* on *career adaptability* has a t-value of 3.729. This value is statistically significant and exceeds the t-table value (1.96). This indicates a significant influence between *career calling* and *career adaptability* . The path coefficient of 0.240 indicates that an increase in the level of career calling is correlated with an increase in *career adaptability* . Conversely, if *career calling* is low, then *career adaptability* in students of the Faculty of Economics and Business, Padang State University will also be low.

3) **Hypothesis Testing 3: The effect of *career adaptability* on *learning engagement* .**

The results of the third hypothesis test show that the *career adaptability variable* on *learning engagement* has a t-value of 0.542. This value is not statistically significant and does not exceed the t-table value (1.96). This indicates an insignificant influence between *career adaptability* and *learning engagement*. The path coefficient of -0.020 indicates that a high level of *career adaptability in students has a negative effect on the level of learning engagement*. Conversely, if *career adaptability* is low, then *learning engagement* in students of the Faculty of Economics and Business, Padang State University will be high, but not significant.

Indirect Effect Hypothesis

The indirect effect hypothesis can be accepted if it produces a T-Statistic > 1.96.

4) Hypothesis Testing Four: The Effect of *Career Calling* on *Learning Engagement* Through *Career Adaptability*.

Table 6. **Calculation Coefficient Variables No Direct**

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics	P values
Career calling **(X) -> Career adaptability (Z) -> Learning engagement (Y)**	-0.005	-0.004	0.010	0.501	0.616

Source: Test Results Processed with PLS 4

Based on the results of the calculation of the indirect variable coefficient, the t-statistic value of the indirect effect of *career calling* on *learning engagement* through *career adaptability was obtained* at 0.501 <1.96, with an original sample of -0.005, it can be concluded that *career calling* has a negative and insignificant effect on student *learning engagement* through *career adaptability* does not grow statistically as a mediating variable in students of the Faculty of Economics and Business, Padang State University.

2. Discussion

The Influence of Career Calling on Learning Engagement

This study shows that career calling has a significant and positive effect on learning engagement in students of the Faculty of Economics and Business, Padang State University. The average score of the career calling variable is 3.6975 (TCR 73.89%) and learning engagement is 3.63 (TCR 72%) indicating that both are in the sufficient category, which means that they still need to be improved. Regression analysis shows a path coefficient value of 0.825 with a t count of 35.467, which is greater than the t table (1.96), indicating a significant influence between the two variables.

Career calling is understood as an internal drive or spiritual motivation that makes students more focused and active in preparing for their future careers. Students with a high level of career calling tend to have greater learning involvement, are future-oriented, and active in career planning and development. This is reinforced by research by Chen & Zhang

(2023) and Shang et al. (2022), which found a positive and significant relationship between career calling and learning engagement.

According to Strauss et al. (2012), career calling can encourage positive career behavior. Students who have it will be more adaptable, actively involved in career activities, and have broader experiences and knowledge (Hirschi, 2011; Hirschi & Herrmann, 2013). Logically, a strong career calling provides a clear foundation in achieving career success, through increased learning engagement as a form of learning adaptation and self-development. Active involvement in learning allows students to acquire relevant skills and knowledge, expand their professional network, and increase readiness to face future challenges.

The Influence of Career Calling on Career Adaptability

This study shows that career calling has a significant and positive effect on career adaptability in students of the Faculty of Economics and Business, Padang State University. The average career calling score of 3.6975 (TCR 73.89%) and career adaptability of 3.9765 (TCR 79.26%) indicate that both are still in the sufficient category and need to be improved. The results of the regression analysis show a path coefficient value of 0.240 with a calculated t of 3.729 which is greater than the t table (1.96), which means that there is a significant influence between career calling and career adaptability.

Career adaptability is an individual's ability to face transitions, challenges, or obstacles in the process of achieving career goals, as well as the ability to carry out tasks related to the chosen field of study or major (Fu & Chen, 2015; Kim et al., 2020). Students who have a strong career calling tend to have an understanding and clarity of direction towards the career they want to achieve, so they are better able to adapt to career demands and environmental changes.

This study is supported by the results of the studies of Chen & Zhang (2023), Ke et al. (2020), and Zhang & Chen (2019) which show that career calling has a positive relationship with career adaptability. Afsar et al. (2019) also found that individuals with high career calling tend to show greater adaptability. Thus, it can be concluded that the stronger the career calling that students have, the higher their ability to adapt to developments and demands of the world of work. This will increase students' confidence in planning, managing, and maintaining their career goals in the future more effectively and steadily.

The Influence of Career Adaptability on Learning Engagement

This study shows that career adaptability has a negative and insignificant effect on learning engagement in students of the Faculty of Economics and Business, Padang State University. The results of the analysis show a path coefficient value of -0.020 with a t count of 0.542, smaller than the t table of 1.96. This means that, although career adaptability is in the fairly high category (average score of 3.9765 and TCR of 79.26%), it does not directly encourage increased learning engagement, which is also still in the sufficient category (average score of 3.63 and TCR of 72%).

Theoretically, career adaptability is expected to encourage learning engagement because individuals with high adaptability are better prepared to face career challenges. However, the results of this study deviate from these expectations. One explanation is that students with high career adaptability tend to focus more on activities outside the classroom such as internships, training, or organizations, which they consider more relevant to career development than formal learning in the classroom.

The mismatch between lecture material and students' career expectations also contributes to low learning engagement, even though their adaptability is high. In addition, students with high career adaptability can experience psychological stress due to high

expectations of themselves, which if not balanced with strong mental resilience, can reduce enthusiasm and participation in learning. Thus, increasing career adaptability does not guarantee high learning engagement if the learning context is considered less relevant. Therefore, it is important for educational institutions to ensure that classroom learning is integrated with students' career needs, while strengthening their psychological resilience in facing academic and career challenges.

The Influence of Career Calling on Learning Engagement Through Career Adaptability as a Mediating Variable

This study shows that career calling does not significantly affect learning engagement through career adaptability as a mediating variable in students of the Faculty of Economics and Business, Padang State University. The results of the statistical test showed a t value of 0.501, smaller than the t table value of 1.96, and the original sample value of -0.005. This indicates that the indirect effect of career calling on learning engagement through career adaptability is negative and insignificant.

This finding contradicts the initial assumption that career calling should encourage learning engagement by increasing career adaptability. One logical explanation for this result is that students who have high career calling tend to set very idealistic and specific career expectations. When these expectations do not match the reality of learning on campus, they can experience disappointment, which causes a decrease in motivation to be actively involved in learning.

In addition, internal or external pressure to fulfill this career calling can cause anxiety that interferes with learning focus. Students with high career calling may feel that the educational process they are undergoing is not relevant to their career goals, so that learning engagement decreases.

Therefore, in order for career calling to truly support learning engagement, it needs to be balanced with an adequate level of career adaptability. This emphasizes the importance of a holistic approach such as realistic career guidance and social support from family and friends. The combination of a strong career understanding and adaptability will help students stay motivated and actively involved in the learning process despite facing challenges.

3. Conclusion

This study concludes that career calling has a positive and significant influence on learning engagement and career adaptability in students of the Faculty of Economics and Business, Padang State University.

This means that the higher the students' perception of their career calling, the higher their involvement in the learning process and their ability to adapt to changes and challenges in career planning. However, career adaptability does not have a significant effect on learning engagement, and is unable to mediate the relationship between career calling and learning engagement. This finding indicates that developing career adaptability alone is not enough to increase learning engagement if it is not accompanied by the relevance of lecture materials to students' career goals. Therefore, educational interventions are needed that support the alignment between career goals, curriculum, and realistic career mentoring in order to increase students' motivation and involvement in the learning process.

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