



The Role of Mastery Goal on Life Satisfaction Using PERMA as A Mediator for College Students

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Abstract

This study examined the relationship between mastery goals, including task-based and self-based competence, and positive emotions, engagement, relationship, meaning, and accomplishment (PERMA), which may affect life satisfaction. Mastery goals, PERMA, and life satisfaction were examined using a relationship study model. The current study involved 260 English education programs, with 81 (31.2%) male students and 179 (68.8%) female students. AMOS 18 was used to conduct a confirmatory factor analysis (CFA). The results of the current study demonstrate that task-based competence influences life satisfaction. In contrast, self-based competence was found not to affect life satisfaction. Analysis of SEM revealed significant influences of task-based competence on PERMA and no significant relationships between self-based competence and PERMA. PERMA partially mediates the influence of task-related competence on life satisfaction. The indirect effects of self-based competence on life satisfaction were observed through PERMA as a complete mediator. The novelty of the current research lies in its focus on mastery goals, the target population of college students, and the mediating role of PERMA. These contributions are critical, as teachers or instructors are responsible for developing student well-being and life satisfaction.

Keywords:

Factor Analysis;
Mastery Goals;
Life Satisfaction;
PERMA;
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1- Introduction

Recently, there has been an increasing focus on promoting well-being in educational settings [1–4]. Humans inherently strive for happiness and a fulfilling life [5]. Seligman [6] coined the term 'flourishing' or 'well-being' to describe this pursuit of happiness and a good life. Previous studies have shown that psychological well-being is desirable for personal success [7] and achievement [8]. Despite the importance of psychological well-being, scholars have paid little attention to this topic, especially in the context of English education programs [9]. Therefore, exploring the relationship between psychological well-being and English education is important to better understand how these programs can promote fulfilling lives and support personal success. Findings from previous research on life satisfaction and happiness confirm that individuals who are happy and satisfied with their lives typically promote career adaptability [10], improve good development and reduce problem behaviors [11], promote social interaction [12], improve individual support [13], increase commitment [13, 14], and enhance achievement [15]. Research has shown that positive relationships with peers [16], children, and parents [17] can contribute significantly to happiness. However, it is surprising that university students between the ages of 15 and 40 are dissatisfied with their lives [18, 19]. For example, 25% of engineering students suffered from depression, 32% suffered from anxiety, and 20% reported suffering from stress.

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Many potential factors may influence students' life satisfaction [20]. Previous studies have extensively addressed academic performance and physical activities [21], educational growth [22], social networking sites, social benefit and social overload [23], perceived parenting styles, academic achievement and motivation [24], emotional intelligence, and grit [25], constructs of subjective norms, general health, positive attitude, and optimism [26], academic performance, social anxiety, depression, and social networking sites [27], grit, stressful life events, and depression [28], and family, academic satisfaction, and self-esteem [29] among higher education students. To the best of our knowledge, the influence of mastery goals and PERMA on the life satisfaction of college EFL students in Indonesia has not been examined yet. This research contributes to empirical knowledge by examining the relationship between mastery goals and PERMA on the life satisfaction of college EFL students in Indonesia. The research contributes to existing empirical knowledge and provides a foundation for future interventions and initiatives to improve college students' life satisfaction.

To increase students' life satisfaction, mastery goals and PERMA, consisting of positive emotions, engagement, relationship, meaning, and accomplishment, are essential and fundamental, as examined in this study. According to the theory of happiness [30], the core lies in how people envision their lives going, which relates to goals. Thus, previous studies have confirmed that mastery goals [31] and PERMA [32] are recognized as key characteristics of life satisfaction, especially among English language learners [33]. In the model developed by Seligman [6], the PERMA flourishing model indicates life satisfaction for the general public and is referred to as multidimensional well-being. Previous research has demonstrated that people with greater well-being factors, such as the proposed PERMA, tend to have more positive physical health, life contentment, and proficient success, especially in the adult population [34]. In addition, previous researchers have extensively studied the well-being of college students [18, 35, 36]. However, the factors influencing college students' life satisfaction concerning their goals and PERMA levels remain unclear and questionable, especially when PERMA is examined as a mediator of well-being. A standard framework does not provide evidence of factors contributing to life satisfaction. Therefore, studies on how PERMA might influence this relationship among university students (adolescents aged 15–40 years) remain insufficient. In the present study, we propose to extend the existing literature on life satisfaction by discussing the association of mastery goals, PERMA, and life satisfaction, which is the first study of its kind. The study examines the relationship between mastery goals and PERMA on tertiary students' life satisfaction in English education programs.

1-1- Summary of Hypotheses

The following hypotheses provide this study with a sense of direction:

- H1.*** There is a significant causal relationship between the subconstruct of mastery goals and life satisfaction.
- H2.*** Significant causal relationships exist between the subconstruct of mastery goals and PERMA.
- H3.*** PERMA mediates the associations between the mastery goals subconstruct and life satisfaction.

2- Literature Review

2-1- Mastery goals

Achievement goal theory includes several types of models [37, 38]. One of these models is the mastery goal, which involves achieving or presenting an ability, such as finding and overcoming challenges (adaptive), as described by Stout and Dasgupta [39]. The mastery goal is a critical aspect of the learning process [40], as it promotes success [41], influences performance [42], and facilitates the use of problem-solving techniques [43]. Mastery-oriented Mathematics learning generally leads to better teamwork and a willingness to collaborate [40]. Students who adopt a mastery-oriented approach are self-regulated and use self-monitoring and organizational strategies to adapt to failure on specific problems [44]. Point-goal orientation in mathematics focuses on meeting students' specific competencies, which can be promoted by using a variety of mathematical topics rather than focusing exclusively on the course [45].

Elliot & McGregor [46] categorized approach and avoidance goals as the main focus of their target model. The mastery approach goal involves mastering assignments, learning, and knowledge acquisition. This approach emphasizes self-improvement, progress, and a thorough understanding of the task (task goal). The avoidance goal, the most recent addition to the model, aims to avoid errors and incomplete task mastery. It uses standards that prevent errors and improper task completion. The 3x2 performance target model is a model that focuses on achieving task-based competence, self-based competence, and avoiding mastery while avoiding task-based incompetence or self-based incompetence [47]. A task-approach goal to achieve task-based competence contrasts with a task-avoiding goal to prevent task-based incompetence. Self-based competence is the evaluative reference point, and the intrapersonal track is the focus of attention. Students with self-approach goals intend to improve their performance, whereas students with self-avoidance goals do not intend to perform worse than before [48].

2-2-The PERMA Profiler

Positive psychology researchers have focused on studying the theory of well-being, which is related to authentic happiness with the three dimensions of pleasure, engagement, and meaning, as proposed by Seligman [6]. Seligman's latest model, the PERMA model, was used to measure happiness in the present study. Seligman proposed that the theory of well-being aims to enhance flourishing by promoting five dimensions: positive emotions, engagement, relationships, meaning, and accomplishment. Previous research has shown that the PERMA model is valid and reliable for measuring well-being in different contexts [34, 49]. This finding has sparked renewed debate and demonstrated the effectiveness of the PERMA model as the latest framework. However, it is important to consider cultural differences, which become more apparent as research is conducted in different contexts [50]. Overall, the PERMA model can be a useful tool for improving well-being by promoting positive emotions, engagement, relationships, meaning, and accomplishment, and it can be used to evaluate the effectiveness of interventions to enhance well-being in different contexts.

According to Diener [51], positive emotions are the ultimate goal for all people. The theory of genuine happiness and well-being, as outlined by Seligman [6], also emphasizes the importance of positive emotions. Positive emotions are one of the five dimensions of the PERMA framework that enable individuals to expand their choices, maximize their resources, and seek new perspectives, positive relationships, and activities [6]. Positive emotions help individuals visualize goals and challenges, open the mind to new perspectives and problem-solving techniques, maintain excitement by preserving health, strengthen bonds with others, provide a foundation for self-regulation, and guide the actions of teams, social systems, and nations [52]. Positive emotions include fun, comfort, warmth, and ecstasy [6].

While the dimension of interaction with other structures is rarely clearly defined [53], within the PERMA framework, it is defined as permeation and interest [54]. In addition, Csikszentmihalyi [55] claimed that the dimension of engagement is the degree of focus and absorption that individuals experience daily. Engagement also refers to the connection between people's sense of their actions and their sense of being connected to the actions [6]. According to Appleton et al. [56], it also includes behavioral entanglement and psychological interest. Therefore, engagement may represent a favorable way of life [54].

According to Seligman [6], the relationship dimension of well-being is being socially reinforced, supported, encouraged, and fulfilled by others. It includes feeling valued and cherished by others and identifying with someone, as suggested by Forgeard et al. [57] and Doyle et al. [58], respectively. Positive relationships, especially intimate relationships, are essential for fulfilling the basic requirement of well-being [59]. In a university setting, good relationships with fellow students and faculty can help students feel a sense of belonging, support, and inclusion in the campus community. New connections with others can also allow students to create and contribute to interpersonal interactions within their community, as Doyle et al. [58] pointed out. Positive relationships are critical to promoting well-being, and universities should prioritize creating an environment that fosters positive relationships among students, faculty, and staff.

An individual's life is useful and connected to something greater than themselves has been interpreted as meaning [6]. Moreover, it is indicated by a person's intentional behavior in his or her environment [60], caused by factors and involvement [61]. According to Steger et al. [62], meaning is experienced when people understand and accept the world and their place in it. Relationships, friends, family, educational pursuits, and spirituality are important sources for making sense of one's everyday life [63].

Completion was defined as an objective academic success [54]. Seligman [6] Accomplishment is the purposeful progress toward goals, performing effectively daily, and retaining a sense of fulfillment that conveys good prosperity and health. Accomplishment also refers to the feeling of working toward and achieving a goal, mastery, and efficiency in solving problems [64], gaining insights, and experiencing autonomy [65]. Meaning is associated with accomplishment. Doyle et al. [58] proved that people who have achieved much have a better sense of purpose.

2-3-Life Satisfaction

Diener [66] the long-term degree of happy emotions, life satisfaction as part of subjective well-being (SWB), and the absence of unpleasant experiences. Researchers have recognized that life satisfaction is often used to control well-being [67]. It is generally considered the cognitive dimension of subjective well-being [68]. According to Veenhoven [69], life satisfaction is integrated into the science of positive psychology, which focuses on identifying strengths and developing them as a buffer against the progression of psychopathological problems. As part of the hedonic model [70], life satisfaction is an overall assessment by which people assess their lives in general [66]. Similarly, life satisfaction is how people define their satisfaction in terms of important features of the living space and life [71].

These assessments are constant over long periods and are determined by personality characteristics [72]. However, individuals' life satisfaction may vary as their living conditions change [66]. According to Diener et al. [73], factors that might influence life satisfaction evaluations were demonstrated values and relevance of data, availability and attention, top-down bias, and evaluation standards. Interestingly, a strong relationship between life satisfaction and numerous

desirable outcomes is consistently found [10, 13, 14, 74, 75]. These findings suggest that positive psychology research within the scope of English education programs can appear promising, especially where students' academic performance may be influenced by their overall life satisfaction.

2-4-The Interrelationship between Mastery Goals, PERMA, and Life Satisfaction

Previous studies have found that achievement and affiliation goals are associated with life satisfaction [76]. Moreover, people who simultaneously score high on achievement goals report the greatest satisfaction with the requirement for competence [77]. Mastery goals, as a dimension of achievement goals, are also associated with positive work-related motivation (engagement and job satisfaction) [78, 79]. Papaioannou et al. [80] also claim mastery goals are positively associated with satisfaction in sports. As the mastery goal also relates to intrinsic motivation [81], intrinsic motivation was moderately and positively related to all facets of coach satisfaction [82]. Interestingly, research demonstrates that both subconstructs of task-based and self-based mastery goals are consistent with life satisfaction [83].

The multidimensional domains of well-being are related to life satisfaction [34]. Positive feelings, relationships, and accomplishments stand out [54], and meaning and engagement are helpful features in increasing life satisfaction [84]. Research shows positive moods correlate strongly with life satisfaction [85], although a weak relationship has also been found [84]. Smedema et al. [86] pointed out that the feeling positive effect is associated with overall life satisfaction. Thus, positive emotions tend to permeate deep learning better. With good emotions and deeper learning, students will perform better academically.

People need the environmental dimension of meaning to live fulfilling lives and feel adapted to society. A greater sense is derived to maintain a positive relationship between satisfaction with life [87] and achievement outcomes [88]. Moreover, quality of life increases simultaneously with greater accomplishments [89]. Levasseur et al. [89] confirmed that a sense of achievement in social life was associated with positive health, well-being, and quality-of-life outcomes. In addition, engagement is the strongest factor in regenerating a positive effect and life satisfaction [84]. Regarding positive relationships, close relationships aim to pay attention to a basic need for well-being [59]. A study Schimmack et al. [72] showed that positive relationships with others are beneficial. According to PERMA, there is a relationship between functional impairment and life satisfaction [90]. Therefore, mastery goals, including task-based and self-based competence, and PERMA are significant predictors of life satisfaction.

According to happiness theory, the main focus of happiness is on people's conception of how their lives will go, which refers to a set of goals [30]. Previous research has examined the direct effects of students' mastery goals on well-being in some contexts (e.g., education, sports, and work) [91]. For example, people with higher achievement goals predict positive emotions [92], but different achievement goals lead to different outcomes. Moreover, most previous studies used a dichotomous model, a trichotomous model, and a 2x2 achievement goal. Therefore, a 3x2 performance goal was used to fill this research gap. In particular, mastery goals for positive emotions such as pleasure have been consistently identified [31]. Regarding the relationship between mastery goals and engagement, research has examined the effects of mastery goals on engagement. There is evidence of a positive relationship between mastery goals and behavioral engagement [93].

A recent study examined the relationship between students' mastery goals and their positive relationship [94]. Evidence shows that students with mastery goals are more inclined to improve in their social work environment by establishing instrumental exchange correlations. In addition, achievement goals influence interactional behavior when students are involved in collaborative activities. Since importance actualizes goals [95], it is claimed that higher levels of meaning have contended to be positively connected to aims and objectives. Yeager and Bundick [96] also claimed that people with deliberate aspirations to work could find meaning in their lives and school work. Finally, other studies have found a relationship between mastery goals and accomplishment. Research has shown that mastery goals positively correlate with academic achievement or accomplishment. Therefore, mastery goals and PERMA consistently and significantly predict life satisfaction. The subconstruct of mastery goals, including task avoidance, job approach, self-avoidance goals, and the PERMA process, are positive indicators of life satisfaction.

3- Research Methodology

The present study aimed to test the associations between mastery goals and PERMA that influence life satisfaction using structural equation modeling (SEM) [97]. This study used a quantitative approach and a relationship study model to examine and measure the correlation between mastery, PERMA, and life satisfaction [98]. Figure 1 shows a flowchart of the research methodology in this study. The preparatory phase of the study focused on formulating the problem and setting the research objectives. Once the research objectives are established, the instrument used for data collection is validated by experts to ensure its reliability and validity. The researchers submitted a research ethics application to adhere to ethical standards and obtain the necessary approvals and permissions. Informed consent forms were carefully prepared and given to participants to ensure informed consent and voluntary participation. The data collection phase was followed by data analysis. This phase generally involved descriptive and confirmatory factor analyses (CFA) as

primary techniques. By examining the results obtained from the data, meaningful conclusions were drawn to answer the research question. Finally, the research findings were communicated through article writing. This type of writing includes summarizing the research process, presenting the results, and discussing the implications of the findings.

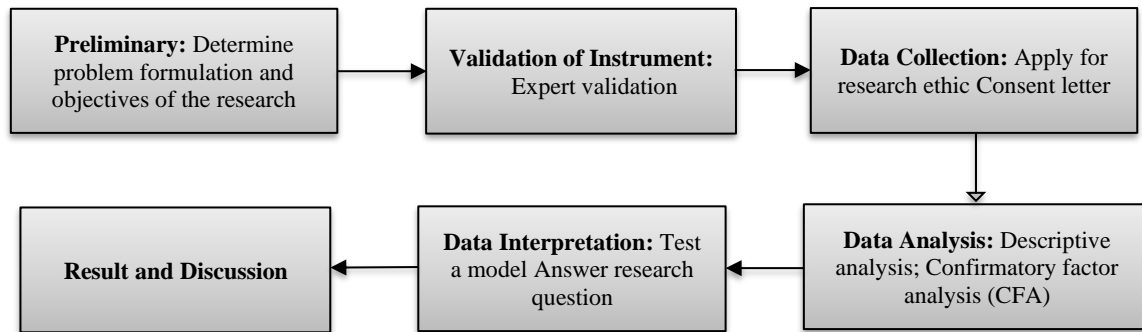


Figure 1. A flowchart of research methodology

3-1-Participants and Procedure

The target population of the current study was undergraduate and postgraduate students aged 15 to 40 years enrolled in English education programs in Indonesia. We used the cluster random sampling method because the current study selects clusters rather than individuals [99]. As a result, the survey included 260 undergraduate and postgraduate students from Indonesian English education programs. Female respondents were 179 (68.8%), and male respondents were 81 (31.2%), ranging from 18 to 22 years. The Riau Provincial Government (Department of Investment and Integrated One-Stop Services) approved the study. All participants included in the present work gave their informed consent. All selected individuals completed the free survey during the research hours. They also completed the questionnaire, which included five questions about life satisfaction, 15 questions about PERMA, and 12 questions about the 3x2 achievement goal.

3-2-Data Collection Tools

The SWLS included a seven-point scale ranging from "strongly disagree" (1) to "strongly agree" (7). The reliability scores of the scales exceeded the desirable standard of 0.70 ($\alpha = 0.83$). The PERMA profiler CR was 0.836, and the ideal score exceeded 0.6. This result was highly internally consistent. The overall AVE item score was 0.562, above the usual cut-off value of 0.5, showing acceptable discriminant validity for the research. Butler and Kern [64] adopted the instrument, which includes five subconstructs classified as positive emotion, commitment, relationship, meaning, and achievement. Each subconstruct contains three items per PERMA domain. The PERMA profiler uses a ten-point scale, with "never" (1) being the lowest and "complete" being the highest (10). Reliability scores in this study are above the ideal level of 0.70 (positive emotion, = 0.82), (engagement, = 0.70), (relationship, = 0.76), (meaning, = 0.87), and (accomplishment, = 0.80). All PERMA profiler CR scores ranged from 0.67 to 0.87 and exceeded 0.6, the ideal standard score. This result was highly internally consistent. The AVE of the four latent constructed structures ranged from 0.51 to 0.69 and exceeded 0.5, showing acceptable discriminant validity for this research.

We adopted the instrument from Elliot et al. [47]. The six subconstructs include task approach, task avoidance, self-reliance and self-evasion, another approach, and other avoidance objectives. The survey measures only task approach goals, task avoidance targets, self-approach objectives, and self-avoidance goals. The questionnaire consists of six questions representing the two elements; the item formats are on a seven-point Likert scale from "strongly disagree" to "strongly agree" [99]. Three items in the task approach dimension had a reliability of 0.77, and three items in the task avoidance dimension had a reliability of 0.87. Three items under the self-approach goal dimension had a reliability of 0.88, and the self-avoidance goal dimension had a reliability of 0.92 with three items. Scores ranged from 0.81 to 0.92, exceeding the ideal standard score of 0.6, indicating strong internal consistency in the analysis of CR.

3-3-Data Analysis

The current study also considered normality, missing values, outliers, and multicollinearity issues. For this purpose, the SPSS 23.0 program was used before the main analysis. At the same time, we calculated the skewness and kurtosis values for each item as a reference point for the normal universal structure for a latent variable at a significant 0.05 level [100]. Finally, according to Kline [101], a correlation table with relationships smaller than 0.90 is considered free of multicollinearity.

Using AMOS 18.0, CFA techniques were used to determine if the Indonesian setting's dimensionality and factor loading patterns were appropriate. According to Awang [102], Chi-square (χ^2), Comparative Fit Index (CFI > 0.90), Tucker-Lewis Index (TLI > 0.90), and Root Mean Square Approximation Error (RMSEA < 0.08) were evaluated as fit.

In addition, Cronbach alpha values were calculated to determine the reliability and split-half correlations of the questionnaire (total and sub-dimensional). In the present study, alpha coefficients were not expected to be relatively high. In a survey, an alpha coefficient of 0.60-0.70 is considered good, according to Hair et al. (2010). CR must be above 0.60 and the AVE above 0.50 [102].

For the analysis of the mediation effect, a bootstrapping technique was calculated using a percentile-corrected method (Guan, 2003). By handling a sample of size n as a miniature representation of the population, the bootstrapping technique produces an evidence-based representation of the sampling distribution of the mediation effect [103]. This method has been replicated a total of k times (usually at least 1000). A total of five thousand subsamples have been recommended for bootstrapping procedures. However, in the current research, the maximum likelihood bootstrapping procedure was performed with a 1000 sample and a 95% confidence interval for bias correction [103]. Interestingly, according to Guan [104], the AMOS program is suitable for managing non-normal data.

4- Research Findings

4-1- Preliminary Analysis

The missing values in this study varied between 0 and 0.5% per item. Since the missing data were less than 5%, the missing responses deal with maximum probability (ML). Table 1 shows the mean, standard deviations, correlation matrix, skewness, and kurtosis for all variables.

Table 1. Correlation means and standard deviations

Variable	Mastery goals	PERMA	Life satisfaction
Mastery Goals	1	-	-
PERMA	0.274**	1	-
Life Satisfaction	0.158*	0.637**	1
Skewness	-0.69	-0.87	-0.63
Kurtosis	1.15	1.11	0.48
Mean	5.30	7.19	4.61
Standard Deviation	0.94	1.15	1.17

Table 1 shows that the initial analysis of all mastery goal, PERMA, and life satisfaction measures reached normality, with skewness and kurtosis ranging from 0.63 to 1.15. According to Mardia [105], the multivariate kurtosis coefficient and the critical ratio should be examined regarding multivariate normality. When the critical ratio exceeds five, the data do not appear normally distributed [106]. The current research shows a coefficient of multivariate kurtosis of 302.703 and a critical ratio of 55.696, indicating that the data in this study are not normally distributed. The bootstrapping procedure was used to obtain precise and stable estimates of the parameters. For multi-coordination, the intercorrelations between mastery goal, PERMA, and life satisfaction ranged from 0.158 to 0.637, and the discriminant validity of the variables was considered to be achieved because the correlation table was less than 0.90 [101]. Mastery goals had a mean of ($M = 5.30$ and $SD = 0.94$), PERMA had a mean of ($M = 7.19$ and $SD = 1.15$), and life satisfaction had a mean of ($M = 4.61$ and $SD = 1.17$).

4-1-1- Measurement Models

This study utilized Confirmatory Factor Analysis (CFA) techniques to assess the factorial validity of the five PERMA sub-constructs, mastery goals' two sub-constructs, and life satisfaction construction. The PERMA measurement model displayed a satisfactory fit to the data, as evidenced by the following fit indices: $\chi^2 = 138.814$, $\chi^2 / df = 1.928$, CFI = 0.967, TLI = 0.958, and RMSEA = 0.060. These values indicate that the observed data align reasonably well with the hypothesized model. Similarly, the mastery goal measurement model demonstrated an acceptable fit to the data, with the following fit indices: $\chi^2 = 65.014$, $df = 1.354$, CFI = 0.992, TLI = 0.989, and RMSEA = 0.037. These results suggest that the observed data are consistent with the proposed model of mastery goals. Furthermore, the life satisfaction measurement model exhibited an acceptable fit to the data, as indicated by the following fit indices: $\chi^2 = 5.614$, $\chi^2 / df = 2.807$, CFI = 0.991, TLI = 0.973, and RMSEA = 0.079. These values suggest that the observed data align reasonably well with the hypothesized model of life satisfaction. Based on the CFA results, the measurement models for PERMA, mastery goals, and life satisfaction demonstrated a satisfactory or acceptable fit to the collected data, supporting the factorial validity of these constructs in the study context.

4-2- Structural Model

In the current study, the SEM outputs reveal $\chi^2 = 845.859$, $\chi^2 / df = 2.163$, RMSEA = 0.067, TLI = 0.900, and CFI = 0.907. In the current study, all assessments lead to an acceptable model. The weights for each of the five PERMA

substructures ranged from 0.59 to 0.89, the weights for the two mastery goals ranged from 0.56 to 0.94, and the weights for the life satisfaction structure ranged from 0.62 to 0.83. The results confirm that the values of the loading factors exceeded the ideal threshold of 0.50 [100]. Table 2 shows that the hypothesized structural model is superior.

Table 2. Results of the hypothetical structural model

Parameter	Coefficient
χ^2	845.859
χ^2/df	2.163
RMSEA	0.067
TLI	0.900
CFI	0.907

Furthermore, the CFA model shown in Figure 2 was the final structural model that showed relationships between mastery goal, PERMA, and life satisfaction in the Indonesian context. The finalized structural model that emerged from this study can be used to clarify the relationship between mastery goal, PERMA, and life satisfaction discovered in a previous study.

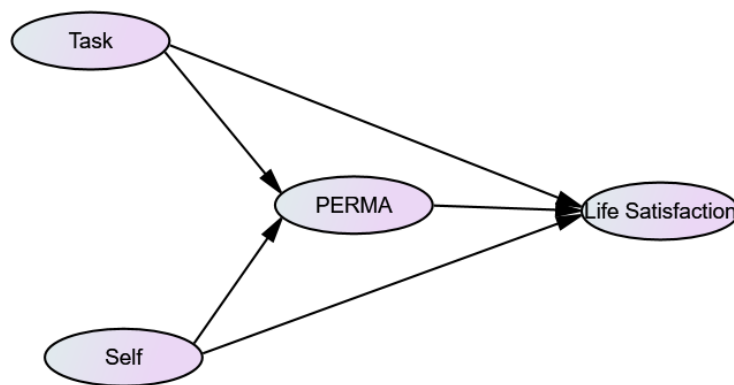


Figure 2. The final model of the study

4-3-Relationships between Sub-construct of Mastery Goals and Life Satisfaction

The study's results suggest that task-based talents play a significant role in influencing life satisfaction. The results support hypothesis H0, which assumes no significant causal relationship exists between self-based competence and life happiness. The analysis shows no statistically significant relationship between self-based competence and life happiness, as indicated by the coefficient ($\beta = 0.038$, $t = 0.816$, $p > 0.05$). Thus, it can be concluded that self-based competence does not influence life satisfaction. In contrast, the results suggest task-based competence is critical to students' life satisfaction. The study shows that students with higher task-based talents experience greater life satisfaction. This means the skills and abilities associated with specific tasks and activities strongly impact individuals' happiness and fulfillment. The study highlights the importance of task-based competence for life satisfaction while finding no significant relationship between self-based competence and life happiness. These findings suggest that focusing on developing task-specific abilities and talents may have a stronger effect on students' overall life satisfaction than self-awareness or general self-based competence.

4-4-Relationships between the Sub-construct of Mastery Goals and PERMA

Contrary to hypothesis H0, the results indicate significant causal relationships between task-based competence and PERMA. This result implies that task-based competence plays a significant role in influencing PERMA. The coefficient ($\beta = 0.326$, $t = 3.724$, $p < 0.05$) indicates that higher levels of task-based competence are associated with higher levels of PERMA. Therefore, hypothesis H0 was not fully confirmed. Consistent with our hypothesis H02b, the results support the notion that there are no significant causal relationships between self-based competence and PERMA. The coefficient ($\beta = 0.155$, $t = 1.659$, $p > 0.05$) indicates no significant relationship between self-based competence and PERMA. This result suggests that self-based competence does not play a significant role in influencing PERMA. The results highlight the importance of task-based competence in contributing to PERMA, while self-based competence is not considered as important in promoting PERMA in students. These findings suggest that fostering task-specific skills and talents may have a greater impact on promoting positive emotions, engagement, relationships, meaning, and accomplishments among students, as envisioned by the PERMA framework.

4-5-Mediating Effects of PERMA on the Relationships between Sub-construct of Mastery Goal and Life Satisfaction

As a result, it was predicted that PERMA would regulate and favorably affect the relationships between mastery goals and life satisfaction. The findings of an indirect effect study using the AMOS programs are shown in Table 3.

Table 3. An indirect effect study

Path	Direct effect		Indirect effect		Result
	β	P values	β	P values	
TBC→PERMA→LS	0.155	0.042	0.314	0.001	Partial Mediation
SBC→PERMA→LS	0.131	0.092	0.286	0.001	Full Mediation

The results presented in Table 3 show the indirect impact of PERMA on the subconstructs of mastery goals and life satisfaction. Specifically, PERMA partially affects life satisfaction, as evidenced by a positive coefficient ($\beta = 0.155$, $p < 0.05$) for task-based competence. This result suggests that higher PERMA levels are associated with increased task-based competence, which has a statistically significant direct effect on life satisfaction ($\beta = 0.155$, $p < 0.05$). It should be noted, however, that hypothesis H03a was not fully confirmed, implying that additional factors may influence the relationship between PERMA, task-based competence, and life satisfaction. Nonetheless, the results suggest that individuals with high PERMA scores are more likely to have higher life satisfaction. Furthermore, the analysis shows a full mediation effect of PERMA for self-based competence on life satisfaction. The coefficient for this mediation effect is positive ($\beta = 0.131$, $p > 0.05$), indicating that PERMA fully mediates the relationship between self-based competence and life satisfaction. In other words, self-based competence does not directly affect life satisfaction ($\beta = 0.131$, $p > 0.05$). This result is consistent with hypothesis H03b, which was not fully confirmed. Similar to task-based competence, students who exhibit high levels of PERMA and self-based competence are more likely to experience a sense of fulfillment in their lives. The results highlight the importance of PERMA in influencing task-based and self-based competence, which in turn affects life satisfaction. While the direct effects of this subconstruct of mastery goals on life satisfaction vary, high PERMA scores are consistently associated with higher life satisfaction among study participants.

5- Discussion

According to the results of SEM, task-based competence impacts life satisfaction. The positive relationship is consistent with previous research findings [77, 79]. Perceptions of ability may be an explanation for this finding. Students with task-based competence (e.g., 'doing the task right' or 'not doing the task wrong'). Most likely, all that is required is to indicate a task cognitively and recognize whether or not the task has been completed. Individuals with a task-approach goal are more likely to complete tasks successfully. They also take the overall requirements of the task as a measure of evaluation. Another reason can be explained by Ames [37], who points out that autonomy plays an important role in the environment that contributes to task-based competence. The purpose of students' autonomy is to strive to promote and appreciate their personal goals, values, and interests. Gillet et al. [99] showed that autonomous and controlling rationalities underlie their search for satisfaction in educational and work environments. Moreover, this relationship could be maximized by the PERMA component. The bootstrapping result showed that PERMA partially mediated the relationship between task-based competence and life satisfaction. The explanation for this positive correlation is that PERMA, as a mediator, effectively regulates students' happiness levels while working toward a goal, regardless of their strong achievement goals. In addition, the current study also showed that multiple domains of well-being are associated with life satisfaction [32, 54, 107].

Self-based competence and life satisfaction are not directly related to our study. Previous studies did not reach the same results [77]. According to a recent study, life satisfaction correlates with self-based competence. Also, students' self-based competence was not critical to their life satisfaction. Some define competence as performance compared to achievement or private expectations (e.g., 'doing better than before' or 'avoiding doing worse than before'). This method of thinking is not ideal, influencing its positive effects, such as satisfaction. Individuals who focus on self-based competence are less optimal regarding phenomenological experiences and competence-relevant information [108]. Moreover, task-based competence was not positively related to absorption in class, learning efficiency, and intrinsic motivation [47]. However, students with self-based competence with a higher PERMA would most likely enjoy a more satisfying life. The results of this study also support the notion that the positive associations between positive emotions, relationships, and accomplishment can be used to explain how PERMA functions as a mediator in the relationship between life satisfaction and self-based competence [54], meaning and engagement [84], and life satisfaction. For example, positive emotions can serve to envision and defiance, open the mind to new ideas and problem-solving, maintain health by retaining excitement, build bonds with significant others, provide the basis for self-regulation, and influence the behavior of communities, social systems, and nations [52].

In addition, the current study found a significant direct causal relationship between task-related competence and PERMA. The positive relationship is consistent with previous research findings [31, 92]. One possible reason for this finding is that individuals who organize task-based competence focus on task completion and thus increase task

performance. According to Elliot et al. [47], students who strongly emphasize task-based competence typically have good material retention, deep learning, and wise strategy use [48]. Individuals who focus on good material absorption in class, deep learning, and effective strategy use typically have positive emotions such as enjoyment, higher engagement, positive peer and teacher relationships, and achieve better academic achievement. For example, mastery goals promote higher levels of students' task involvement. However, the important role of self-based competence has no bearing on successful PERMA. We cannot replicate previous work showing a positive relationship between students' self-based competence and PERMA [91]. One possible explanation is that self-based competence is less effective when faced with obstacles. Therefore, individuals with self-based competence are not optimal regarding emotions, engagement, relationships, meaning, and achievement. Elliot et al. [47] found a positive and negative correlation between self-approach, self-avoidant goals, and energy in the classroom.

6- Conclusion

Promoting well-being has become increasingly important in education due to the recognition of the importance of promoting the holistic development of students. This study examined the relationship between mastery goals, specifically task-based and self-based competence, and PERMA, which can influence life satisfaction. By exploring these relationships, valuable insights can be gained to inform interventions and practices that improve student well-being. The study's results support the importance of task-based competence for PERMA and students' life satisfaction. This suggests that the skills and abilities associated with specific tasks and activities are critical to developing positive emotions, engagement, relationships, feelings of meaning, and accomplishments. On the other hand, the study found that self-based competence did not directly influence PERMA or life satisfaction. Although self-awareness and self-based competence are important aspects of personal development, they may not have the same level of influence on overall well-being as task-based competence. In addition, the study shed light on the mediating role of PERMA in the relationship between mastery goals and life satisfaction. Task-based competence partially mediates PERMA's influence on life satisfaction, suggesting that PERMA acts as a mediating mechanism through which task-based competence influences individuals' overall life satisfaction. In contrast, PERMA fully mediated the relationship between self-based competence and life satisfaction, suggesting that it influences life satisfaction primarily indirectly through its influence on PERMA. The novelty of the current research lies in its focus on mastery goals, the target population of college EFL students, and the mediating role of PERMA. The implications of these findings are significant, especially for educational institutions in Indonesia. To improve students' quality of life and promote their well-being, it is critical to prioritize the development of task-based competence and the cultivation of PERMA components in English education programs.

6-1- Limitation of Study and Future Directions

The current study has several limitations that may be addressed in future studies. First and foremost, our study is correlative. Therefore, it is difficult to fully explain the relationship between mastery goals, PERMA, and life satisfaction. However, SEM suggests causal relationships. Therefore, an experimental study should examine mastery goals, PERMA, and life satisfaction. Second, we studied undergraduate and postgraduate students of English education programs in Indonesia without differentiating them by gender. Sosik et al. [91] argued that since only university students enrolled in the Faculty of Education were included in the sample, the gender of the sample was biased, and the differences in psychological well-being between male and female students became more apparent with an increase in learning goal orientation. These contributions are critical because teachers or instructors are responsible for developing students' well-being and life satisfaction. Thus, it is important to design curricula that consider students' mastery goals.

7- Declarations

7-1- Author Contributions

Conceptualization, R.H.; methodology, S.L.; software, S.L.; validation, M.R.B.M.S.; formal analysis, R.H.; investigation, R.H.; resources, M.R.B.M.S.; data curation, R.H.; writing—original draft preparation, R.H.; writing—review and editing, H.; visualization, M.R.B.M.S.; supervision, H.; project administration, S.L.; funding acquisition, S.L. All authors have read and agreed to the published version of the manuscript.

7-2- Data Availability Statement

The data presented in this study are available upon request from the corresponding author.

7-3- Funding

The authors received no financial support for the research, authorship, and/or publication of this article.

7-4- Institutional Review Board Statement

The university reviewed and approved the studies involving human subjects. Before commencing the survey, respondents were provided with informed consent, ensuring their participation was voluntary and guaranteeing anonymity.

7-5- Informed Consent Statement

The study participants gave informed consent to provide data and be available for the survey.

7-6- Conflicts of Interest

The authors declare that there is no conflict of interests regarding the publication of this manuscript. In addition, the ethical issues, including plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication and/or submission, and redundancies have been completely observed by the authors.

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