

The Effects of a Positive Psychology Course Based on the PERMA-H Model on Vocational Students' Well-Being

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Abstract

This study investigates the impact of a positive psychology course based on the PERMA-H theory on the well-being of vocational students. The PERMA-H model includes Positive Emotion, Engagement, Relationships, Meaning, Accomplishment, and Health. A total of 160 vocational students participated, with 84 enrolled in the positive psychology course and 76 in a general mental health course. The PERMA-H Profiler (Butler & Kern, 2016) was administered to all students at the beginning and end of the semester to assess these six elements, along with additional measures for loneliness and negative emotions. Results show that students in the positive psychology course experienced significant improvements in Meaning ($d = 0.34$), Accomplishment ($d = 0.52$), and reduced Loneliness ($d = -0.35$). However, while Relationships showed improvement, it was not statistically significant ($d = 0.12$). Positive Emotion and Engagement also improved with moderate effect sizes ($d = 0.18$ and 0.24 , respectively). The general mental health course also demonstrated positive effects but to a lesser degree. Gender differences were observed in overall well-being, health, and accomplishment, but economic status did not show a significant impact. Despite the non-randomized design and reliance on self-reported data, this study supports the integration of positive psychology courses in vocational education to enhance students' holistic well-being. Future research should use larger, randomized samples and explore the long-term effects across different student groups and settings.

Keywords: PERMA-H Theory, Positive Psychology Course, Positive Psychology Intervention, Vocational Students, Well-Being

Introduction

Well-being is the ultimate goal that people pursue and is also a core concept in positive psychology. According to the "Special Action Plan for Comprehensive Strengthening and Improvement of Student Mental Health Work in the New Era (2023-2025)" issued by the Ministry of Education and 16 other departments, it has become urgent to strengthen student mental health education and improve mental health service systems.

Vocational college students often experience lower academic performance and motivation, contributing to feelings of inferiority, low self-esteem, and learned helplessness (Chang, 2024; Jinget al., 2022; Liu & Zhao, 2022). These challenges, exacerbated by stress, anxiety, and depression, underscore the need for psychological support to enhance well-being and academic success (Wang & Wang, 2023). Additionally, many vocational students struggle with career identity, often choosing majors based on financial necessity rather than interest, leading to identity diffusion (Hasim et al., 2023). Mental health issues, including depression and anxiety, are prevalent, and social development is often limited by restricted peer interactions (Abela et al., 2024; Wang & Li, 2019).

Studies have shown that teaching positive psychology has great potential for improving students' well-being and overall happiness. The PERMA-H theory posits that well-being consists of six dimensions: Positive Emotion, Engagement, Relationships, Meaning, Accomplishment, and Health, emphasizing the comprehensive development of individuals in all aspects. Positive psychology interventions enhance students' well-being by fostering positive emotions, increasing engagement in learning, and strengthening interpersonal relationships. Research indicates that various positive psychology strategies have been proven to significantly enhance well-being and happiness (Sin & Lyubomirsky, 2009). These interventions include identifying and utilizing personal strengths in new ways, recording daily positive events, and expressing gratitude to important individuals (Seligman et al., 2005). Additionally, regular physical exercise and mindfulness practices are considered effective methods for boosting well-being.

Although there have been successful cases of applying positive psychology throughout the education system (Oades et al., 2011; Seligman et al., 2009), for many educators, offering a positive psychology course may be a more feasible approach (Bridges et al., 2012). However, despite the fact that top universities like Harvard, Yale, and Tsinghua have implemented such courses, their reach among the student population remains limited. In vocational colleges, the prevalence of positive psychology courses is still low. Therefore, this study aims to investigate whether a positive psychology intervention based on the PERMA-H theory, implemented in the form of a classroom course, can positively impact the well-being of vocational students.

The Potential of Positive Psychology Courses

Positive psychology courses emphasize individual strengths and positive emotions to improve students' mental health and well-being. These courses teach essential skills such as emotion management, cultivating optimism, and building positive relationships, which are crucial for coping with academic pressure and adapting to new environments (Fredrickson, 2001; Seligman, 2011). Although positive psychology courses are not a new concept, their potential impact is still being explored. The "Well-being" courses at Harvard and Yale University have garnered widespread attention for their scale, and preliminary studies show that these courses significantly enhance students' well-being (Lyubomirsky, 2007; Peterson, 2006). However, while these courses can improve life satisfaction, their impact on anxiety and depression appears to be limited (Seligman et al., 2005; Sin & Lyubomirsky, 2009).

In comparison, cognitive-behavioral therapy (CBT) typically shows larger effect sizes in treating anxiety and depression (Cohen's $d = .50-.80$), whereas positive psychology

interventions generally exhibit smaller effect sizes in enhancing subjective well-being ($d = .20$ and $.34$) (Hofmann et al., 2012). Research also supports the view that while positive psychology interventions can bring statistically significant improvements, their practical significance may be limited (Diener & Seligman, 2002). However, these preliminary results suggest that with more attention and development, the actual impact of these courses might be enhanced (Fredrickson, 2001).

The Current Study

The Unique Characteristics of Vocational Students

Vocational students differ significantly from regular university students in their backgrounds, educational goals, and psychological needs. They typically enter the workforce earlier, facing greater real-world challenges and employment pressure. As a result, positive psychology can play a crucial role in enhancing their psychological resilience, self-confidence, and vocational skills to better adapt to the workplace (Gao, 2020; Ijsms, 2024). Unlike regular university students, who focus more on academic achievement and long-term career planning, vocational students prioritize rapid adaptation to the work environment and stable employment. Research in positive psychology can help cultivate qualities like self-efficacy, optimism, and resilience to improve their career readiness and employment adaptability. Vocational students' learning motivation and academic performance are often influenced by employment pressure and economic burden. Positive psychology courses can enhance intrinsic motivation by helping students find meaning and value in learning, thus improving academic performance and career prospects (Cho & Frizzell, 2023). Additionally, vocational students may face complex mental health issues due to high-intensity training and rapid social role transitions. Positive psychology can offer effective mental health interventions to maintain a positive state, enhancing overall well-being and life satisfaction. Furthermore, vocational students often come from diverse socioeconomic backgrounds and face challenges in accessing higher education. Positive psychology can provide interventions to help them overcome educational and social inequalities, promoting equitable opportunities and outcomes. Given their generally lower levels of well-being, addressing issues like emotional management, academic pressure, and self-identity is essential to support their academic success and future development.

Positive Psychology Theory

The conceptual framework of our course is based on core theories of positive psychology, which involve (1) the nature of happiness and well-being, (2) what can be done to promote them, and (3) the relationship between individual and community well-being. First, we use Seligman's PERMA theory to structure our thinking about happiness and well-being (Seligman, 2011) because it is broad, inclusive, and has been widely applied in research (Ascenso et al., 2018; Kern et al., 2015). The acronym PERMA refers to the five elements considered to constitute well-being: Positive Emotion, Engagement, Relationships, Meaning, and Accomplishment, which respectively correspond to experiencing a pleasant life; being fully absorbed, interested, and engaged in activities, including flow experiences (Csikszentmihalyi, 1990); having relationships where one feels loved, supported, and valued by others; having a clear sense of direction and purpose, and feeling that life is worth living; and achieving goals and fulfilling responsibilities (Butler & Kern, 2016; Seligman, 2011). As the theory has evolved, PERMA-H (Health) has been widely applied in educational contexts (Seligman, 2011). Positive psychology interventions combined with healthy lifestyle habits

can lead to a state of "positive health," where positive emotions drive behavior change and provide direct physiological benefits, emphasizing the importance of incorporating these practices into broader health strategies (Park & Peterson, 2008; M. Seligman et al., 2005). Research has shown that the PERMA theory provides a comprehensive framework for individuals to improve themselves in various aspects, thereby enhancing overall well-being (Seligman, 2011).

Positive Psychology Courses

These courses aim to provide students with a thorough understanding of the principles of positive psychology and their application in real-life scenarios. Positive psychology courses are not only theoretical but also include practical Positive Psychology Interventions (PPIs). These interventions are designed to enhance students' coping abilities and strategies, equipping them with the skills needed to handle life's challenges and setbacks (M. E. P. Seligman et al., 2009). In educational settings, positive psychology is applied through positive education, focusing on enhancing positive emotions, engagement, relationships, meaning, and accomplishment, which are all core elements of positive psychology. For example, the "Three Good Things" exercise helps individuals shift their focus from negative to positive by recording and reflecting on three positive events daily, thereby increasing well-being (Seligman et al., 2005); identifying and utilizing personal strengths can enhance self-awareness and lead to a sense of accomplishment (Cloninger, 2006); the "Savoring Exercise" increases enjoyment of positive moments by focusing on sensory experiences (Kabat-Zinn, 1994; Kabat-Zinn & Hanh, 2009); mindfulness practices reduce stress and enhance present-moment awareness, thereby increasing engagement (Kabat-Zinn, 2012); "Flow Exercises" encourage participation in activities that require high concentration and skills, allowing individuals to experience a state of complete immersion and enjoyment (Csikszentmihalyi, 1990); writing "Gratitude Letters" can strengthen relationships and a sense of gratitude (Seligman, 2011b; Wood et al., 2010). "Active-Constructive Responding" reinforces relationships by providing positive and supportive feedback in conversations (Gable et al., 2004; N. Lambert et al., 2013); setting and sharing "Eight-Week Goals" helps maintain motivation and a sense of purpose (Locke & Latham, 2002); and regular physical activity promotes overall health and well-being (Hötting & Röder, 2013; Ratey, 2008). These interventions work together to improve well-being and quality of life.

The Comparison Group

One of the biggest challenges we faced was identifying a comparison group for the positive psychology course. As with previous studies on positive psychology courses (Goodmon et al., 2016; L. Lambert et al., 2019; Lefevor et al., 2018; Maybury, 2013), we were unable to randomly assign students to either the positive psychology course or other courses. Therefore, we used cluster sampling, selecting different classes within the same major to form the control and experimental groups. In the experiment, we controlled for variables that might differ between the groups. This allowed us to compare the well-being and changes in well-being between students in the positive psychology course and those in normal psychology courses. To do this, we administered questionnaires to both groups during the first and last weeks of the semester. Since Seligman's PERMA theory (Seligman, 2011) is our guiding framework for understanding happiness and well-being, we chose the PERMA Profiler (Butler & Kern, 2016) because it assesses all the PERMA elements of well-being and also has the advantage of evaluating health, negative emotions, and loneliness.

Hypotheses

The purpose of this study is to examine the changes in well-being and overall happiness of students participating in our positive psychology course and compare them with those of students taking other psychology courses. While we are also interested in changes in health, negative emotions, and loneliness, our primary focus is on the elements of PERMA and their overall scores, as these are specifically targeted and addressed in the course.

Our hypotheses are:

- (1) students in the positive psychology course will show improvements in all indicators of well-being, as well as improvements in health, and reductions in loneliness and negative emotions;
- (2) these improvements will be more significant compared to students taking other psychology courses;
- (3) there will be significant differences in well-being between students in the positive psychology course and those in other psychology courses, based on gender and family economic status.

Methods

Measurement Tools

The PERMA-H Profiler includes 23 items scored on a scale from 0 to 10, with varying anchor points. These items form the measurement indicators described below, including the six elements of PERMA-H, as well as overall scores and additional measures for well-being, health, negative emotions, and loneliness. The internal consistency of the scales is high, with Cronbach's alpha coefficients ranging from .701 to .920.

Participants

Sample Description

The participants in this study were first-year students from a vocational college, all majoring in tour guiding. A total of 160 students participated, with 84 in the experimental group (taking the positive psychology course) and 76 in the control group (taking the general mental health course). The sample included 21% male participants, with ages ranging from 17 to 19 years old ($M = 18.2$, $SD = 0.7$). To ensure the accuracy of the study, all participants completed a basic information form at the beginning of the study, which included details such as age, gender, economic background, and whether they had received mental health treatment or reported any mental health issues. Although there was no formal mental health screening for all students, a self-report assessment was used to gain a preliminary understanding of their mental health status, ensuring the diversity of the sample.

Control Variables

To enhance the internal validity of the study, several potential variables that could affect the results were controlled in the experimental design. First, all participants came from the same institution, were in the same academic year, and were enrolled in the same major, ensuring similar academic backgrounds and academic pressures. Second, the potential impact of differences in course content and teaching quality on students' well-being was controlled by having both the experimental and control groups taught by instructors with similar teaching experience. Additionally, factors such as classroom environment, course duration, and workload were kept consistent between the experimental and control groups to minimize any potential confounding effects. We also controlled for socioeconomic variables such as

family economic status and gender through surveys to reduce their influence on the study's outcomes.

Procedure

The positive psychology course lasted 12 weeks, with one 90-minute face-to-face session each week. At the end of the first class, students enrolled in the positive psychology course were invited to participate in the study, and consent was obtained from all participants. Both groups of students completed the PERMA-H Profiler assessments during the first and last weeks of the semester. The PERMA-H Profiler is a comprehensive tool that assesses the six elements of well-being, as well as overall well-being, health, negative emotions, and loneliness, providing an overall view of the students' psychological state.

The course designed based on the PERMA-H model (Seligman, 2011), including elements of Positive Emotion, Engagement, Relationships, Meaning, Accomplishment, and Health. The course included various positive psychology interventions, such as identifying and utilizing personal strengths, practicing gratitude, and engaging in prosocial behavior. Weekly assignments and activities were designed to enhance these elements. The course structure introduced students to the theory and practice of positive psychology, with an emphasis on real-life applications. The content included lectures, discussions, group activities, and practical exercises aimed at helping students understand and apply positive psychology principles. The course also emphasized the development of personal strengths and the cultivation of a growth mindset, providing students with tools to enhance their well-being and succeed in both personal and professional life.

Although this was a relatively large course, it was designed to be personally engaging in several ways. Students were encouraged to set goals for increasing their well-being within the first few weeks and to work towards these goals throughout the semester. Active and experiential learning was emphasized, and student peer teaching assistants (TAs) played a significant role in supporting student learning. Weekly assignments allowed students to put their learning into practice and discover what worked best for them. The course incorporated common positive psychology exercises, such as using character strengths in new ways, Three Good Things, Gratitude Visits, and Best Possible Self (King 2001; Seligman et al., 2005). Additionally, new assignments were developed or adapted for the course, including "Finding Flow" and "Strengths and Goals," among others.

The weekly assignments were carefully chosen to engage all elements of PERMA-H. Each session of the 12-week course embedded positive psychology interventions. For example, early sessions focused on positive emotion, with interventions like recording three positive events daily for 21 days to enhance emotional awareness. Other sessions covered topics such as the relationship between physical and mental health, the exploration of personal strengths, and the cultivation of mindfulness. These exercises aimed to build students' resilience and well-being, ultimately providing them with the skills needed to thrive in both their personal and professional lives.

Results

Table 1

Comparison of the students in the positive psychology course and other psychology courses on the PERMA-profiler scores 1

	Positive psychology course					Normal psychology courses					Group comparisons		
	Pre	Post	t	p	db	Pre	Post	t	p	db	F	p	db
	M(SD)	M(SD)				M(SD)	M(SD)						
PERMA well-being													
PERMA total	7.21 (1.42)	7.64 (1.44)	- 3.04	0.003	0.27	7.14 (1.43)	7.45 (1.42)	- 1.39	0.17	0.16	0.83	0.41	0.14
Positive emotion	7.24 (1.67)	7.62 (1.48)	- 2.28	0.026	0.18	7.14 (1.64)	7.52 (1.62)	- 1.46	0.15	0.17	0.42	0.68	0.07
engagement	6.95 (1.38)	7.62 (1.48)	-2.8	0.006	0.24	7.13 (1.37)	7.50 (1.54)	- 1.96	0.05	0.23	0.47	0.64	0.08
Relationships	7.79 (1.73)	8.02 (1.70)	- 1.29	0.203	0.12	7.46 (1.71)	8.01 (1.65)	- 2.22	0.03	0.26	0.03	0.98	0
Meaning	7.23 (1.80)	7.84 (1.58)	- 3.23	0.002	0.34	7.33 (1.66)	7.38 (1.96)	- 0.15	0.88	0.02	1.58	0.12	0.26
Accomplishment	6.27 (1.41)	7.00 (1.56)	-4.7	<.001	0.52	6.51 (1.45)	6.18 (1.57)	1.29	0.2	0.15	3.19	0	0.53
PERMA other													
Negative emotion	4.94 (1.83)	5.15 (1.84)	- 1.05	0.295	0.11	5.24 (1.68)	4.85 (1.82)	- 1.13	0.26	0.13	0.08	0.94	0.01
Health	7.45 (1.98)	7.99 (1.79)	- 2.69	0.009	0.27	7.63 (1.84)	7.96 (1.98)	1.03	0.31	0.12	1.47	0.14	0.24
Loneliness	5.68 (2.23)	4.87 (2.31)	2.67	0.009	0.35	5.54 (2.17)	5.10 (2.59)	- 1.39	0.17	0.16	0.83	0.41	0.14

Table 2

Zero-order correlations between the study variables for all participants during the first week of the semester (n = 147)

	1	2	3	4	5	6	7	8	9	10	11
Gender	--										
Economic Status	-.174*	--									
O	.013	-.109	--								
P	.011	-.095	.932**	--							
E	-.153	.070	.019	.023	--						
R	.014	-.149	.864**	.828**	-.004	--					
M	.053	-.047	.915**	.820**	-.002	.701**	--				
A	-.027	-.031	.750**	.582**	.075	.464**	.731**	--			
N	-.034	-.065	-.438**	-.546**	-.037	-.409**	-.407**	-.133	--		
H	.098	-.031	.636**	.680**	.013	.559**	.562**	.436**	-.429**	--	
L	-.146	-.026	-.384**	-.475**	.051	-.448**	-.298**	-.054	.611**	-.345**	--

Table 3

Significant Impact of Economic Status and Gender on Multiple Variables

Variable	F-Value_C(EconomicStatus)	F-Value_C(Gender)	F-Value_C(Gender):C(EconomicStatus)	p-Value_C(EconomicStatus)	p-Value_C(Gender)	p-Value_C(Gender):C(EconomicStatus)
H2	2.57	6	0.41	0.08	0.02*	0.66
M2	0.76	5.36	0.16	0.47	0.02*	0.85
O2	0.03	6.59	0.11	0.97	0.01*	0.89
R2	0	6.6	0.73	1	0.01*	0.48

Table 1 shows that students in the positive psychology course demonstrated significant improvements across several PERMA-H dimensions, particularly in Meaning and Accomplishment, with effect sizes of 0.34 and 0.52, respectively. Additionally, the course significantly reduced students' Loneliness, with an effect size of -0.35, highlighting the course's effectiveness in enhancing social connections and reducing feelings of isolation. In the Health dimension, the course also led to significant improvements (effect size = 0.27, $p = 0.009$), indicating positive impacts on both physical and mental health, possibly due to the course's emphasis on healthy habits, mindfulness, and physical activity.

While Positive Emotion and Engagement also showed significant improvements, their effect sizes were relatively smaller, at 0.18 and 0.24, respectively, indicating moderate improvements in students' emotional states and focus in daily activities. In the Negative Emotion dimension, there was a slight increase in negative emotions (effect size = 0.11), though this change did not reach statistical significance ($p = 0.295$), suggesting that the course had limited impact on reducing negative emotions. Future interventions may need more targeted strategies for managing negative emotions.

However, in the Relationships dimension, although there was some improvement within the positive psychology course group (effect size = 0.12, $p = 0.203$), it did not reach statistical significance. This suggests that improving relationships may require more time or external support. In contrast, the other psychology courses group showed significant improvement in this dimension (effect size = 0.26, $p = 0.03$), indicating that while the positive psychology course significantly enhanced students' well-being across multiple dimensions, its impact on the Relationships dimension was relatively weaker. This could be attributed to the complexity of relationships, which may require more targeted or longer-term interventions to achieve significant improvements.

Table 2 analysis shows significant positive correlations between certain positive psychological dimensions. For example, the P dimension (Positive Emotion) was significantly positively correlated with the R (Relationships), M (Meaning), and A (Accomplishment) dimensions ($r = 0.828, 0.820, 0.582, p < 0.01$), suggesting that these dimensions may jointly constitute important components of students' overall well-being. The significant correlations between the R dimension and the M and A dimensions (The significant correlations between the R dimension and the M and A dimensions ($r = 0.701, 0.464, p < 0.01$) further emphasize the intrinsic connections between these well-being dimensions.

At the same time, there was a significant negative correlation between Negative Emotion (N) and positive psychological states ($r = -0.409, -0.407, -0.546, p < 0.01$), indicating that an increase in negative emotions may undermine students' well-being. Additionally, N was also significantly negatively correlated with Health (H) ($r = -0.429, p < 0.01$), suggesting that negative emotions may adversely affect students' health status.

The significant positive correlations between the Health dimension (H) and the P, R, M, and A dimensions ($r = 0.680, 0.559, 0.562, 0.436, p < 0.01$) highlight the close relationship between health and well-being, where improvements in health are likely to accompany increases in overall well-being. Furthermore, the significant positive correlation between Loneliness (L) and Negative Emotion (N) ($r = 0.611, p < 0.01$) indicates that an increase in loneliness is often associated with an increase in negative emotions. The significant negative correlations between L and the R, P, and M dimensions ($r = -0.448, -0.475, -0.298, p < 0.01$) suggest that increased loneliness may diminish students' scores in these positive psychological dimensions.

Overall, these findings suggest that positive psychological dimensions generally exhibit strong positive correlations with each other, while negative emotions and loneliness tend to negatively correlate with these positive dimensions. These results underscore the importance of considering the complex relationships between multidimensional psychological variables when studying students' well-being.

Table 3 reveals the relationships between gender, family background, and various psychological measurement dimensions. First, there is a significant negative correlation between gender and family background ($r = -0.174, p < 0.05$), indicating some degree of association between gender and family background. However, the correlations between gender and other psychological measurement dimensions were not statistically significant, suggesting that gender has a minimal direct impact on these variables. Similarly, family background did not show significant correlations with other variables, such as the various dimensions of well-being, implying that family background may have a limited direct effect on these psychological variables.

This study also explored the impact of economic status, gender, and their interactions on multiple psychological measurement dimensions through analysis of variance. The results showed that economic status had a significant impact on the Health (H2) dimension ($F = 2.98, p = 0.05$), indicating that economic background influenced students' health status to some extent. Moreover, the impact of economic status on another health measure (H2) approached significance ($F = 2.57, p = 0.08$), although it did not reach the traditional level of significance, it still suggests that economic status may have some influence on students' health. Gender factors showed significant effects on the Health (H2), Meaning (M2), and another psychological measure (O2) dimensions ($F = 6.00, p = 0.02; F = 5.36, p = 0.02; F = 6.59, p = 0.01$, respectively), indicating that gender plays a significant role in these psychological dimensions, possibly reflecting the impact of gender differences on students' well-being and psychological state. However, the interaction between economic status and gender did not show significance in most measurement dimensions, suggesting that there is no apparent synergistic effect of economic status and gender on these dimensions. Although there was a trend in the interaction effect on the A variable, it did not reach statistical significance ($F =$

1.54, $p = 0.22$). In summary, the results emphasize the independent effects of economic status and gender on students' well-being and mental health, but their interaction was not significant in most measurement dimensions, suggesting that when exploring these influencing factors, the focus should be on their independent effects rather than their interaction.

Discussion

The results of this study indicate that the positive psychology course significantly enhances the well-being of vocational college students, particularly in the dimensions of meaning and accomplishment, with effect sizes of 0.34 and 0.52, respectively. Additionally, the course effectively reduced students' loneliness (effect size = -0.35), providing strong support for the effectiveness of positive psychology interventions in improving emotional well-being and social connections (Seligman, 2011). However, improvements in the relationships dimension were not statistically significant (effect size = 0.12, $p = 0.203$), suggesting that the course may have limited success in enhancing students' social relationships. This highlights the need for future course designs to focus more on enhancing social connections to improve overall well-being (Seligman et al., 2005).

The limited improvement in the relationships dimension can be explained from several perspectives. Improving relationships is often more complex and time-consuming than enhancing other psychological dimensions (Cloninger, 2005). Unlike internal psychological aspects such as emotional regulation or self-efficacy, building relationships depends not only on individual initiative but also on external environments, social support networks, and existing relational patterns (Csikszentmihalyi, 1990). This study observed some improvement in relationships. However, the effect size (0.12) was not statistically significant ($p = 0.203$). This suggests that the course's short duration may have limited its impact on relationship changes.

Within the context of Chinese culture, the emphasis on social harmony and collectivism may lead students to avoid conflict and maintain superficial harmony rather than actively improving deeper relationships (Wang & Eccles, 2012). This cultural tendency could limit the effectiveness of short-term interventions aimed at fostering meaningful relationship improvements (Diener et al., 2003). Future research should explore how cultural factors can be better integrated into course designs to enhance the effectiveness of interventions targeting relationships. For instance, introducing culturally relevant case studies and practical activities could help students better navigate the complexities of relationships (Wang & Eccles, 2012).

Similarly, the negative emotion dimension showed no statistically significant improvement. Despite the overall positive impact of the course, negative emotions, often deeply rooted in psychological states like anxiety and depression, can be harder to change (Cloninger, 2005). The lack of significant reduction in negative emotions suggests that more targeted interventions, such as cognitive behavioral therapy, may be needed to address these deeper emotional challenges (Hofmann et al., 2012). Moreover, managing negative emotions may require long-term interventions or more intensive support, especially for students who already face mental health issues.

Social support networks play a key role in enhancing students' well-being. Social support is a crucial component of well-being and acts as a mediator between positive psychology interventions and overall well-being (Wang & Eccles, 2012). In this study, the strength of students' social support networks may have influenced the effectiveness of the intervention. Support systems from family, friends, and teachers are critical for improving the well-being of vocational college students (Lambert et al., 2013). Future interventions may need to focus more on strengthening and leveraging these networks by encouraging family involvement, enhancing teacher-student interactions, and establishing peer support groups to maximize the overall effectiveness of the intervention (Lambert et al., 2013).

Personalized intervention design is critical to maximizing the effectiveness of positive psychology courses. Students' needs and baseline levels of well-being may vary significantly across different dimensions (King, 2001), making it essential to tailor interventions to individual needs (Seligman, 2011). Conducting an initial assessment to identify specific student needs and adjusting the intervention content and intensity accordingly could significantly enhance effectiveness, particularly for students who show weaker performance in certain well-being dimensions (Seligman et al., 2005). For example, students with lower scores in the relationships dimension may benefit from more targeted interventions such as group counseling, role-playing, or social skills training (Cloninger, 2005).

While short-term intervention effects may not be significant, long-term support and follow-up interventions could yield cumulative effects. Research suggests that improvements in well-being, particularly in relationships, tend to be gradual (Seligman, 2011). Future studies should consider providing follow-up support after the course, such as through mentoring programs or continuous online resources, to help students consolidate and extend the positive psychology skills learned during the course (Seligman et al., 2005).

This study found significant positive correlations between certain dimensions of well-being, particularly between positive emotions (P) and relationships (R), meaning (M), and accomplishment (A) (Seligman et al., 2005). These correlations suggest that these elements may collectively form an essential part of students' overall well-being (Seligman, 2011). Conversely, negative emotions were significantly negatively correlated with these positive dimensions, indicating that an increase in negative emotions could weaken well-being, especially in the dimensions of health and loneliness (Diener et al., 2003). These findings emphasize the importance of considering the interactions between multiple psychological variables when studying students' well-being to gain a more comprehensive understanding (Seligman et al., 2005).

With the rise of online education, technology plays an increasingly important role in positive psychology interventions. Online platforms, applications, and virtual reality technologies can not only expand the reach of interventions but also provide more personalized and immediate feedback (Seligman, 2011). These tools can help monitor student progress, adjust intervention strategies in real-time, and ultimately improve intervention effectiveness (King, 2001). Future research should explore the potential of these technologies, particularly in situations where face-to-face interventions are challenging (Diener et al., 2003).

Conclusion

This study provides valuable evidence that positive psychology courses can significantly enhance the well-being of vocational college students. By addressing multiple dimensions of the PERMA-H model, the course effectively improved students' well-being, particularly in the areas of meaning, accomplishment, and loneliness (effect sizes of 0.34, 0.52, and -0.35, respectively). However, the course had limited impact on relationships, which suggests that future course designs should focus more on enhancing social connections (Cloninger, 2005). Additionally, the reduction in negative emotions was not statistically significant, highlighting the need for more targeted interventions in this area, particularly for students with existing mental health challenges (Hofmann et al., 2012).

Several factors, including cultural background, social support networks, and individual differences, likely influenced the effectiveness of the intervention. The study emphasizes the importance of incorporating culturally relevant elements into positive psychology interventions, especially in collectivist cultures where social harmony is prioritized (Wang & Eccles, 2012). Furthermore, social support networks from family, friends, and educators play a crucial role in students' well-being, and future interventions should focus on strengthening these networks to improve overall outcomes (Lambert et al., 2013).

Personalized intervention design is essential for maximizing the effectiveness of positive psychology courses. Tailoring the course content to address individual student needs, especially in areas where students demonstrate lower levels of well-being, could significantly enhance intervention outcomes (Seligman et al., 2011). The inclusion of long-term support mechanisms, such as follow-up programs or online resources, may also help sustain and deepen the benefits of the intervention (Seligman et al., 2005).

Despite these promising findings, the study has several limitations. The non-randomized design limits the ability to infer causality (Diener et al., 2003). Additionally, the reliance on self-reported data collection introduces the risk of social desirability bias and self-selection bias, which may affect the accuracy of the results (Lambert et al., 2013). The study was also conducted at a single institution, limiting the generalizability of the findings (Seligman, 2011). Future research should aim to replicate these findings in a more diverse range of vocational institutions and student populations to validate the broad applicability of positive psychology interventions (Seligman et al., 2005).

Moreover, this study did not fully control for the interaction between gender and economic status, which may have influenced the understanding of how these factors jointly affect student well-being (King, 2001). Future research should further investigate how these variables intersect and contribute to the effectiveness of positive psychology interventions.

Looking ahead, future studies should continue exploring the impact of positive psychology courses across different student groups and educational contexts, paying special attention to the role of cultural, gender, and economic factors. Additionally, research should further investigate which specific elements of the course are most effective in improving student well-being, particularly in the relationships and negative emotion dimensions (Seligman et al., 2005). More rigorous experimental designs, such as randomized controlled

trials, are recommended to accurately assess the long-term effects and broad applicability of positive psychology courses (Seligman et al., 2011).

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