

Article

How Important Are Optimism and Coping Strategies for Mental Health? Effect in Reducing Depression in Young People

Jorge Palacios-Delgado ¹, Delia Brenda Acosta-Beltrán ² and Jessica Noemí Acevedo-Ibarra ^{3,*}

¹ Unidad de Investigación en Neurociencias, Facultad de Psicología, Campus Querétaro, Universidad del Valle de México, Querétaro 76230, Mexico; jorge.palaciosd@uvmnet.edu

² Campus Chihuahua, Universidad del Valle de México, Chihuahua 31625, Mexico; deliacostab@gmail.com

³ Departamento de Ciencias de la Salud, Campus Cumbres, Universidad del Valle de México, Av. Las Palmas 5500, Colonia Cima de Las Cumbres, Monterrey 64610, Mexico

* Correspondence: jessinoemiacib@gmail.com

Abstract: Depression is one of the most common disorders worldwide, including in Mexico. Engagement coping and optimism promote mental health, so understanding the mediation of optimism between coping strategies with depression helps to identify the psychological resources that young people can use to mitigate depression. This study aims to test the direct and indirect effects of four coping strategies through three optimism factors on affective depression in a mediator path model in young people. In a cross-sectional study, 848 young Mexican people completed the evaluation instruments of the Trait Depression Inventory, Mexican Optimism Scale (MOS), and Coping Strategies (CSI-SF). Moderate mediation analysis was performed. Optimism and coping strategies significantly predict depression. Furthermore, optimism mediated the association between problem-focused engagement coping and depressive symptoms. Problem- and emotion-focused coping and optimism protect young people from depression. Likewise, young people with greater optimism use problem-focused engagement coping, which reduces depressive symptoms. Psychosocial interventions that promote positive outlook, affective resources, and hope combined with engagement coping strategies are suggested for the management of depression.



Citation: Palacios-Delgado, J.; Acosta-Beltrán, D.B.; Acevedo-Ibarra, J.N. How Important Are Optimism and Coping Strategies for Mental Health? Effect in Reducing Depression in Young People. *Psychiatry Int.* **2024**, *5*, 532–543. <https://doi.org/10.3390/psychiatryint5030038>

Academic Editor: Domenico De Berardis

Received: 1 August 2024

Revised: 4 September 2024

Accepted: 8 September 2024

Published: 12 September 2024



Copyright: © 2024 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

Keywords: depression; coping strategies; mental health; optimism; path model

1. Introduction

One in eight people suffers from a mental disorder worldwide, depression and anxiety being the most prevalent [1]. Of these, 3.8% experience depression, which can have effects at home, work and school [2]. Currently, depression is the most common mental disorder in Mexico [3]; it is estimated that 12.9% of people aged 18 and over have felt depressed in the last week, and 11.6% of people aged 18 to 29 experience these feelings [4]. Therefore, the prevention and treatment of depression in college students has become an important topic of research [5].

There are different types of depressive disorders that present mood symptoms and loss of interest or pleasure over a period of time [6]. However, depression has components that distinguish it from other disorders; for example, the Tripartite Model of Anxiety and Depression is characterized by symptoms such as the absence of positive affect, apathy, hopelessness, extreme fatigue, and lethargy [7]. It has been found that negative affect could increase depression when the individual experiences low positive affect [8].

Coping has proven to be a relevant construct in understanding depression; it is defined as the cognitive and behavioral efforts used to manage internal or external demands that are evaluated as exceeding one's resources, that seek to deal with the problem that is causing stress-distress (problem-focused coping) and to regulate emotion that is caused by the stressful situation (emotion-focused coping). These resources can be positive or negative [9]. It has been reported that the use of maladaptive strategies is the main predictor

of depression levels [10] and the use of emotion-focused avoidant coping is the main predictor of mental illness, while approach-oriented coping is associated with positive scores for psychological well-being in college students [11]. Additionally, individual differences in coping resources such as optimism have direct effects on mental health [12].

Furthermore, optimism is associated with better psychological resistance to coping with stress, in addition to influencing the way in which individuals interpret and process negative experiences [13] that affect mental health, particularly in depression [14,15]. Previous studies have shown that optimism plays a moderating role in the relationship between psychological stress, or coping, and depressive symptoms [16–18].

According to the theoretical model proposed by Greenglass and Fiksenbaum [19], there are resources and results that explain behavior. It has been shown that external resources such as social support and internal resources such as positive affect lead to greater satisfaction with life and less depression [20]. This approach further recognizes that resources (such as emotional support) can serve as important and positive contributions for an individual's behavioral and cognitive coping repertoire. For this study, we consider that resources can be internal (optimism) and external (coping) and that these are positively related. Resources can mediate outcomes. It is important to emphasize that for us, the result is an increase in depression. Previous research indicates that optimism is considered a protective factor against depression in college students [5,21,22]. Optimism refers to a repertoire of positive emotional states that integrate affective resources that are used when faced with the different challenges that arise in life [23]. Brissette et al. [24] found that greater optimism is prospectively associated with a smaller increase in depression and a greater increase in perceived social support.

In this context, it is proposed that optimism can act as a key mediator in the relationship between coping strategies and the presence of depressive symptoms in young people. From our perspective, optimism will buffer the effect of the coping strategies of emotional avoidance and behavioral disengagement [25]. It will also enhance the effect of active problem- and emotion-focused coping strategies [25], reducing the likelihood of experiencing depressive symptoms.

Many studies have established an inverse relationship between optimism and depression [26–30]. The findings suggest that optimism provides people with affective and behavioral resources that protect against the risk of developing depressive symptoms and promote health; therefore, we expect a direct and inverse effect with depressive emotional symptomatology.

From our perspective, taking into consideration a new optimism scale that considers the characteristics of the Mexican population will help test it with different research. Likewise, understanding the mediation of optimism in coping strategies with depression in young people allows us to understand the psychological resources that they use when facing life's challenges [23] and that underlie this relationship; that is, it seems that young Mexicans use optimism as an adaptive coping strategy, and that this can be strengthened. At the same time, it provides a novel perspective on the mediation of optimism, but also offers a solid basis for future research and the development of intervention strategies. Identifying optimism as a key mediating factor provides a more precise focus and has significant implications for clinical practice, as it can be directed to develop prevention, intervention and treatment that must be adapted to the sociocultural context according to the needs of the people. This can help develop strategies that will strengthen positive resources and mitigate the risk of depressive symptoms in young people.

The objective of our study was to test the direct and indirect effects of four coping strategies through three optimism factors on affective depression in a mediator path model. We propose as a hypothesis that optimism has a mediating effect between coping strategies and depression, such that young people with greater optimism perceive less stress when using active coping strategies focused on the problem and emotion. Therefore, they present fewer depressive symptoms.

2. Materials and Methods

2.1. Study Design and Participants

This study employed a non-experimental and cross-sectional design using psychological tests. A non-probabilistic intentional sampling method is used. To calculate the sample size, a total population of 3300 university students registered during 2023 from the different campuses of the three regions of Mexico was considered. A 15% prevalence of depressive symptoms, 50% heterogeneity and a 95% confidence interval were estimated, with a margin of error of 5%, resulting in a sample of 345 participants. For our study, 848 young people participated (51.7% female and 48.3% male, with an age range between 17 and 30 years ($M = 20.44$; $SD = 2.6$). The participants belonged to different cities of Mexico. From this population, the youths who voluntarily applied to participate in the survey were selected as the subjects. The instrument was applied to the participants digitally through a form developed in *Google Forms* and was shared through social networks, with an approximate response time of 25 min. The information was collected between the months of February and March 2023.

2.2. Measures

- (a) *Trait Depression Inventory (T-DEP)*. Adapted into Spanish by Agudelo et al. [31] This is composed of a total of 16 items, eight for *Dysthymia* and eight for *Euthymia*. The items ask to identify the occurrence frequency (trait) for the affective component of depression. The area of content is the frequency of negative affectivity (*Dysthymia*) and positive affectivity (*Euthymia*). The final score for depression is obtained by adding the values. The inventory has reliability and validity.
- (b) *Mexican Optimism Scale (MOS)*. The MOS [23] consists of 15 items, and is divided into 3 factors: affective resources, positive vision, and hope. It is rated on a 5-point Likert scale with reliability and adequate construct validity.
- (c) *Coping strategies (CSI-SF)*. This consists of 16 items on a Likert scale that evaluates strategies focused on commitment and avoidance strategies, as well as two categories of coping, problem solving and resolution through emotion. CIS-SF has been validated for reliability in young people [32].

2.3. Ethical Considerations

All participants were informed about the project (previously approved by the University Ethics Committee, with the registration number PCSUVM-012021). It was made clear to them that their participation was voluntary, that the information was anonymous, and that the confidentiality of the provided data was guaranteed. Participants provided electronic consent and then completed the survey. The research protocol was established in accordance with the regulations of the General Health Law, specifically its section on research with human beings [33].

2.4. Statistical Analysis

Firstly, we used descriptive statistics (e.g., M , and SD) of key variables (i.e., depression, optimism, and coping strategies) and normal distribution assumptions were verified (Shapiro–Wilk normality test). Secondly, we calculated Pearson's correlations between the scores obtained with the depression scale, optimism and coping. The absence of multicollinearity between the studied variables, which was checked by conducting a bivariate correlational analysis, showed a moderately positive correlation coefficient ($r = 0.71$). Arguably, with a correlation coefficient below 0.80, we could proceed with the analysis assuming relative independence among the dependent variables. Similarly, the obtained collinearity statistics (variance inflation factor [VIF] > 10 and tolerance < 0.1) do not reach critical values [34]. Thirdly, we used lineal regression analysis [35] and the SPSS PROCESS macro, Model 1 (Version 4.2) to test the moderation of the optimism between coping strategies and depression. Finally, we used path analysis to evaluate the effects of optimism and coping strategies on depression, as well as to test the moderation of the optimism

between coping strategies and depression. We performed bootstrapping with 1000 samples with ML estimator and normal theory for the analysis of moderated mediation models. Moderated mediation analysis was used to determine whether optimism moderated the indirect relationship between coping strategies and depressive symptoms. The moderated mediation effect is significant when three conditions are met: (1) the CI of the indirect effect from coping strategies for depression through optimism does not contain 0; (2) the CI of the interaction between coping and optimism does not contain 0; and (3) the CI of the index of moderated mediation does not contain 0 [36,37]. Moderated mediation models were interpreted using standardized path estimates (β) and squared-multiple correlations (R^2). Throughout all analyses, $p \leq 0.05$ was interpreted as statistically significant. Effect sizes were reported and interpreted using the conventional metrics as small = 0.10, medium = 0.30 and large = 0.50 [38]. Statistical analyses for the path model were conducted using JASP Program version 0.9.2 (JASP Team, 2021, AMS. The Netherlands).

3. Results

3.1. Demographic Data

Demographic data for each group is shown in Table 1. Women made up 51.7% of the participants. The participants reported that 92.3% are single, 3.8% are married and 3.9 live in a free union. The principal profession is health sciences (46.5%). Among the participants, 59.9% were students, 10% worked and 30.1% both studied and worked. Our sample clustered three regions of the country, 71% from the northern region, 25.4% from the central region and 3.7% from the southern zone.

Table 1. Demographic data of the sample.

Demographic Variables	Frequency	Percentage
<i>Sex—gender</i>		
Men	410	48.3
Women	438	51.7
<i>Marital status</i>		
Single	783	92.3
Married	32	3.8
Free union	33	3.9
<i>Profession</i>		
Health sciences	394	46.5
Social sciences	67	7.9
Arts and humanities	101	11.9
Business	110	13.0
Tourism and gastronomy	15	1.8
Engineering	125	14.7
No profession	36	4.2
<i>Occupation</i>		
Student	508	59.9
Worker	85	10
Student and worker	255	30.1
<i>Region of residence</i>		
North	602	71
South	215	24.5
Center	31	3.7

3.2. Descriptive Statistics and Correlations between the Study Variables

The descriptive statistics of the key variables and Pearson's correlations are found in Table 2. The results showed that depression was negatively correlated with the three factors of optimism, problem focused engagement (PFE)-type coping and emotion focused engagement (EFE) coping; in addition, emotion focused disengagement (EFD) coping and problem focused disengagement (PFD)-type coping were positively correlated. Additionally, correlations of optimism (positive vision, affective resources and hope) were high,

positive and significant with PFE coping, and weaker but still positive with EFE. In addition, optimism (positive vision, affective resources and hope) correlates with EFD coping; they are low and negative, and low with PFD coping are low, but null with positive vision.

Table 2. The descriptive statistics and correlations of the study variables.

	PV	AR	H	PFE	EFD	PFD	EFE	M	SD
Depression	−0.537 ***	−0.559 ***	−0.503 ***	−0.478 ***	0.433 ***	0.232 ***	−0.297 ***	31.42	8.2
Positive Vision	–	0.712 ***	0.608 **	0.566 **	−0.244 **	−0.074 *	0.295 **	21.09	4.6
Affective Resources		—	0.594 **	0.524 ***	−0.277 ***	−0.112 **	0.212 ***	16.47	3.77
Hope			—	0.535 ***	−0.162 ***	−0.119 **	0.273 ***	22.84	4.5
Problem Focused Engagement				—	−0.145 **	−0.041	0.396 ***	13.51	2.5
Emotional Focused Disengagement						0.339 ***	−0.222 ***	12.61	3.0
Problem Focused Disengagement							0.076 *	10.52	3.0
Emotion Focused Engagement								12.43	3.7

Note: PV = Positive vision, AR = Affective resources, H = Hope, PFE = Problem focused engagement, EFD = Emotion focused disengagement, PFD = Problem focused disengagement, EFE = Emotion focused engagement. M = Mean, SD = Standard deviation. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

3.3. Moderating Effects Analysis

Following the moderating effect test procedure, the dependent variable (Dep), the moderating variable (OP), and the independent variable (CE), the product term (CE × OP) of the standardized independent variable and the moderating variable is taken as the independent variable for lineal regression analysis. The results show that the interaction between PFE (coping) and Positive Vision (optimism) ($\beta = -19.97$; 95% CI = -40.34 to 0.389 , $p < 0.05$), as well as PFD (coping) and Affective Resources (optimism) ($\beta = -49.28$; 95% CI = 0.46 to 98.10 , $p < 0.05$) was significant, indicating that optimism moderated the effects of coping on depressive symptoms.

3.4. Direct Effects of Optimism and Coping on Depression

A path model was specified to empirically estimate the effect of optimism and coping strategies on affective depression. The analysis shows that the three factors of optimism, positive vision (which had the largest unique contribution [$\beta = -0.12$, $p < 0.01$]), followed by affective resources ([$\beta = -0.20$, $p < 0.001$]) and hope ([$\beta = -0.15$, $p < 0.001$]) significantly predict depression with a direct effect on it. Optimism explained 37.6% of the variance in depression in the young people. Also, the coping strategies used by young people have a direct effect on depression in this study. The results showed that PFE ($\beta = -0.05$, $p < 0.001$) and EFE ($\beta = -0.18$, $p < 0.05$) could predict depression negatively. EFD ($\beta = 0.08$, $p < 0.001$) and PFD ($\beta = 0.03$, $p < 0.001$) could positively predict depression. As a whole, coping strategies explained 37.7% of the variance in depression symptoms.

Additionally, PFE was also a significant predictor of positive vision ($\beta = 0.20$, $p < 0.001$), affective resources ($\beta = 0.19$, $p < 0.001$) and hope ($\beta = 0.19$, $p < 0.001$), and EFE had a positive influence on hope ($\beta = 0.02$, $p < 0.05$). PFD has a significant and inverse effect on hope ($\beta = -0.02$, $p < 0.01$). EFD significantly predicted positive vision ($\beta = 0.05$, $p < 0.001$) and affective resources ($\beta = 0.06$, $p < 0.001$); see Table 3 and Figure 1.

Table 3. Direct effects of optimism and coping on depression.

Study Variables		β	SE	Z	Confidence Intervals 95%		
					Lower	Upper	
PV	→	Depression	-0.121	0.039	-3.13 **	-0.197	-0.045
AR	→	Depression	-0.207	0.038	-5.94 ***	-0.281	-0.133
Hope	→	Depression	-0.155	0.034	-4.59 ***	-0.222	-0.089
PFE	→	Depression	-0.059	0.013	-4.60 ***	-0.084	-0.034
EFD	→	Depression	-0.082	-0.009	8.98 ***	0.064	0.100
PFD	→	Depression	0.031	0.009	3.52 ***	0.014	0.048
EFE	→	Depression	-0.018	0.008	-2.34 ***	-0.032	-0.003
PFE	→	Affective resources	0.196	0.012	16.31 ***	0.173	0.220
EFD	→	Affective resources	-0.066	0.010	-6.50 ***	-0.086	-0.046
PFD	→	Affective resources	-0.007	0.010	-0.64	-0.026	0.013
EFE	→	Affective resources	-0.008	0.009	-0.98	-0.025	0.008
PFE	→	Positive vision	0.202	0.012	17.28 ***	0.179	0.225
EFD	→	Positive vision	-0.051	0.010	-5.07 ***	-0.070	-0.031
PFD	→	Positive vision	-0.001	0.010	-0.128	-0.021	-0.018
EFE	→	Positive vision	-0.015	0.008	1.75	-0.002	0.031
PFE	→	Hope	0.192	0.012	15.82 ***	0.169	0.216
EFD	→	Hope	-0.014	0.010	-1.39	-0.035	0.006
PFD	→	Hope	-0.029	0.010	-2.86 **	-0.049	-0.009
EFE	→	Hope	0.015	0.008	1.75	-0.002	0.031

Note: PV = Positive vision, AR = Affective resources, H = Hope, PFE = Problem focused engagement, EFD = Emotion focused disengagement, PFD = Problem focused disengagement, EFE = Emotion focused engagement. ** $p < 0.01$, *** $p < 0.001$.

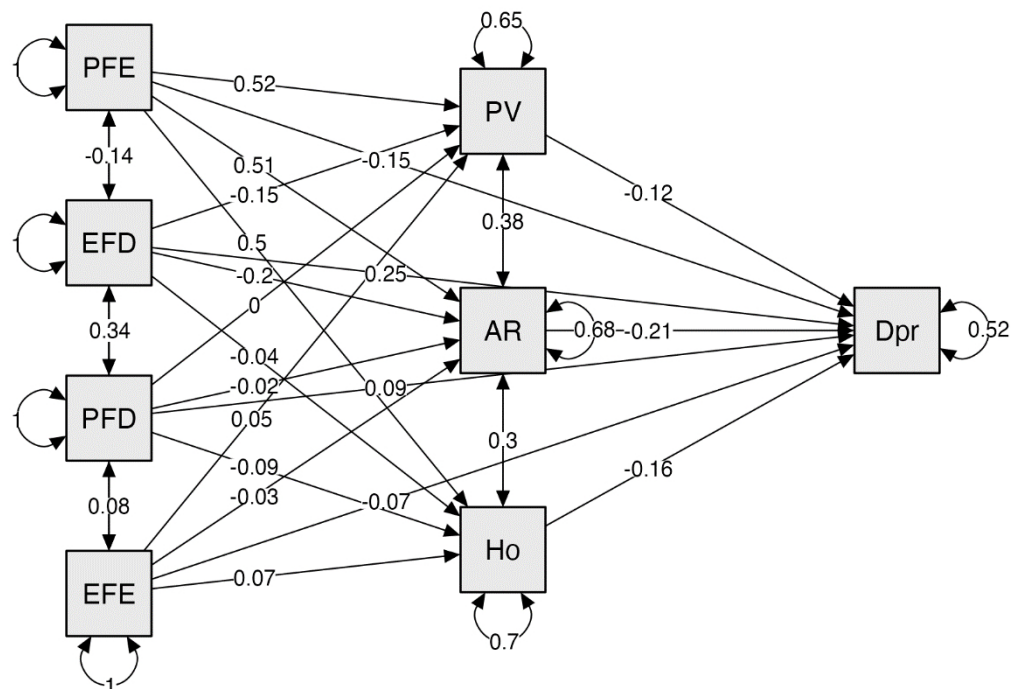


Figure 1. Path model with effects of optimism and coping on depression.

3.5. Indirect Effects of Optimism and Coping on Depression

Standardized indirect effects of the model are also presented in Table 4. These results suggest that coping strategies influence students’ depressive symptoms through optimism. Specifically, positive vision ($\beta = -0.02, p < 0.01$), affective resources ($\beta = -0.04, p < 0.001$) and hope ($\beta = -0.03, p < 0.001$) mediated the association of PFE with depressive symptoms. In the analysis, it is found that EFD is associated with an increase in symptoms of depression,

through affective resources ($\beta = 0.14, p < 0.01$) and positive vision ($\beta = 0.06, p < 0.01$). Therefore, partial evidence is found to affirm that optimism factors are mediators and contribute to the reduction of depression. On the other hand, the evidence found with PFD is significantly associated with positive vision ($\beta = 0.06, p < 0.01$). Finally, EFE has adverse effects on hope ($\beta = -0.03, p < 0.001$), which increases depression levels. There is not enough evidence to confirm that positive vision ($\beta = -0.02, p = 0.151$) and affective resources ($\beta = 0.00, p = 0.352$) are mediators of EFE and that PFD contribute to the variability of the depression. The model that included all variables together accounted for 48% of the variance in depressive symptoms of the young people participating in this research.

Table 4. Indirect effects of optimism and coping on depression.

					Confidence Intervals 95%				
Study Variables					β	SE	Z	Lower	Upper
PFE	→	PV	→	Depression	-0.002	0.008	-3.08 *	-0.040	-0.009
PFE	→	AR	→	Depression	-0.410	0.008	5.20 ***	-0.056	-0.025
PFE	→	Ho	→	Depression	-0.030	0.007	-4.41 **	-0.043	-0.017
EFD	→	PV	→	Depression	0.006	0.002	2.65 **	0.002	0.011
EFD	→	AR	→	Depression	0.014	0.003	4.19 ***	0.007	0.020
EFD	→	Ho	→	Depression	0.002	0.002	1.33	-0.001	0.006
PFD	→	PV	→	Depression	0.006	0.002	2.66 **	0.002	0.011
PFD	→	AR	→	Depression	0.001	0.002	0.55	-0.003	0.005
PFD	→	Ho	→	Depression	0.005	0.002	2.43	0.000	0.008
EFE	→	PV	→	Depression	-0.002	0.002	0.92	-0.002	0.005
EFE	→	AR	→	Depression	0.002	0.002	0.97	-0.002	-1.21
EFE	→	Ho	→	Depression	-0.003	0.001	-2.04 *	-0.006	-2.21

Note: PV = Positive vision, AR = Affective resources, H = Hope, PFE = Problem focused engagement, EFD = Emotion focused disengagement, PFD = Problem focused disengagement, EFE = Emotion focused engagement. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

3.6. Total Indirect Effects

The results of this analysis suggest that the relationship between coping strategies and depression is partially mediated by optimism. Specifically, the standardized results from the test model are shown in Table 5. The PFE ($\beta = -0.245$; 95% CI = -0.290 to -0.200 , $p < 0.001$) of coping on depression decreased and the EFD ($\beta = 0.068$; 95% CI = 0.037 to 0.099 , $p < 0.001$) of coping on depression increased. We may conclude that there is mediation in this model: 95% CI, which does not include 0. The test of the total indirect effect of PFD ($\beta = 0.018$; 95% CI = -0.008 to 0.044 , $p = 0.168$) and EFE ($\beta = -0.011$; 95% CI = -0.038 to 0.015 , $p = 0.396$) in the path model was also not significant.

Table 5. Total indirect effects of coping on depression.

					Confidence Intervals 95%				
Study Variables					β	SE	Z	Lower	Upper
PFE	→			Depression	-0.245	0.023	-10.63 ***	-0.290	-0.200
EFD	→			Depression	0.068	0.016	4.25 ***	0.037	0.99
PFD	→			Depression	0.018	0.013	1.37	-0.008	0.044
EFE	→			Depression	-0.011	0.014	-0.89	-0.039	-0.015

Note: PFE = Problem focused engagement, EFD = Emotion focused disengagement, PFD = Problem focused disengagement, EFE = Emotion focused engagement. *** $p < 0.001$.

4. Discussion

The aim of this study was to test the direct and indirect effects of four coping strategies through three optimism factors on affective depression in a mediator path model.

Our research found that the use of problem-focused and emotion-focused engagement coping strategies protects students from depression, which is consistent with other research [39–44].

Our findings can be explained through the analyzes of Tobin et al. [45] where the structure of coping is described through a hierarchical model with three levels that distinguishes the specific behaviors of each of the four types of coping: problem-focused engagement coping (PFE) with strategies such as problem solving and cognitive restructuring; emotionally focused engagement coping (EFE) such as emotional expression and seeking social support; problem-focused disengagement coping (PFD) with efforts to avoid problems and illusions; and emotion-focused disengagement coping (EFD) with behaviors such as self-criticism and social withdrawal. According to this model, our participants could use PFE and EFE behaviors to cope with stressful situations, reducing depression. In this regard, Özkul and Günüşen [40] show that adolescents with a low or high risk of depression resort to engagement coping techniques such as changing perception, planning time, seeking social support, and practicing a hobby; specifically, adolescents with a low risk of depression resort to problem-solving techniques to cope with stress. They also seek social support and share problems with their parents or peers. Furthermore, Wanjie and Quian [41] observe that the risk of depression in first-year college students is lower in those who experience greater social support and more positive coping styles, which is related to the findings obtained in our study.

Optimism is an important factor in promoting psychological health and affective depression in university students [13,17,27]. The findings of the present study further indicated that optimism mediated the relationship of coping strategies and depressive symptoms. These results suggest that greater optimism reduces the impact of passive coping strategies on the experience of depression.

Based on our findings, we can affirm that the three optimism factors have contrasting effects on the psychological health of young people. Affective resources are the main factor that affects depression; that is, those young people who display affective states that manifest as positive emotional resources (e.g., a happy person in difficult situations) use them to face the adversities of life and to diminish emotional depression, particularly dysthymia. Previous evidence [15,16,26] pointed out that, in the face of an adverse situation, an individual can regulate their affect in a negative or positive way. The second factor that affects depression is hope [23,27,28]. Lack of hope can influence a person's orientation towards life, which can lead to increased levels of depressive symptoms; in young people, low hope can be reflected by the absence of a connection with oneself or others, and is linked to something external, such as family or friends, who help them face adversity. Finally, a greater positive vision on life (e.g., seeing situations in the best possible way) directly affects the functioning of a young person who presents depressive symptoms. Consistent with previous studies [18,29,30], these results support the idea that imagining successful and positive situations reinforces the vision of an optimistic and better future. The above would explain the onset or prognosis of depressive symptoms in young people. Therefore, optimism is presented as a protective factor against depressive symptoms and plays a crucial role in the mental health of young people.

Regarding the indirect effects of coping strategies through optimism on depression, we found that optimistic students use problem-focused engagement coping strategies that reduce depression. It is possible that the affective resources that serve to face adversity, the positive outlook on life and hope as a connection with oneself and others, linked to something external such as family or spirituality that allows one to face adversity [23], lead to the use of problem-focused coping strategies that allow the person's mental health to be protected and therefore reduce depressive symptoms. This coincides with other studies where optimism is highlighted as a protective mechanism of mental health and against depression in college students [5,46]. In addition, it is possible that in our culture young people use affective resources and hope as a longing to cope with demanding situations, while problem-focused commitment coping allows them to take action to solve the problem.

This in turn could perhaps be a more adaptive way of facing life circumstances, which reduces depression.

According to Brissette et al. [24] optimistic people have greater psychological well-being and better adaptation to stressful life events as a result of the coping strategies they use. Additionally, optimistic people seem determined to face problems with active and constructive measures to solve them, and for aspects that cannot be changed, they try to present the situation in the best possible way and accept reality [47]. Problem-solving skills as well as positive psychology skills must be taught in depression prevention programs. Therefore, we suggest evidence-based interventions that promote optimism and strengthen problem-focused engagement coping to reduce depression.

4.1. Limitations

This study has some limitations that must be considered. Firstly, the sample used is not representative of the entire population of young people. Studies with larger and more diverse samples are needed to confirm the results. The study used a cross-sectional design, which does not allow for the establishment of causal relationships. Future research is recommended with longitudinal studies to evaluate the changes in the psychological variables being studied, and to determine if optimism mediates the relationship between coping strategies and depression over time. Additionally, we suggest including other variables such as religious factors, gratitude and happiness in future studies, because these variables could be related to hope and coping strategies, which could improve mental health in young people.

Despite these limitations, this study provides preliminary evidence highlighting that optimism may be an important mediator in the relationship between coping strategies and depression in young people. Future research should replicate and extend these findings to develop more effective interventions for prevention and intervention of depression in its affective aspect.

4.2. Clinical Implications

Our results have important implications for depression prevention and intervention in young people. The study suggests that interventions aimed at increasing positive vision, positive resources and hope can be effective in reducing depressive symptoms in young people, especially if combined with training in active coping strategies. Therefore, we suggest psychosocial interventions that promote optimism and engagement coping strategies, which are intended to eliminate, reduce, or manage stressors or their emotional consequences [25].

Specifically, we would like to recommend affective resources and hope, so that psychotherapy programs focus on these two factors of optimism. By initiating or maintaining an emotional state of happiness and enthusiasm in the face of adverse circumstances, it is possible to have hope that everything can change if the person sets his or her mind to it, with a positive outlook on life. Under this perspective, interventions can potentially improve the mental health and psychological well-being of young people. Furthermore, our findings suggest that addressing depressive symptomatology in its affective component with young people through active coping strategies can help them create action plans and try to put things in perspective, which would be essential components of positive psychology interventions that can be done with young people.

5. Conclusions

In this study, using a path model, the direct and indirect effects of four coping strategies (problem-focused engagement, emotion-focused engagement, problem-focused avoidance, and emotion-focused avoidance) were examined across three factors of optimism (positive vision, affective resources and hope) on depressive symptoms in young people. The results confirmed the main hypothesis. Optimism was found to have a significant mediating effect on the relationship between active coping strategies (problem focus and emotion focus) and

depression. Specifically, young people with greater optimism used active coping strategies, which in turn led to lower depressive symptomatology. The findings provide evidence for prevention and intervention that is implemented in different contexts and that focuses on the development of psychological resources with a significant impact on the mental health of young people.

Author Contributions: Conceptualization, J.P.-D. and J.N.A.-I.; methodology, J.P.-D. and J.N.A.-I.; formal analysis, J.P.-D.; data curation, D.B.A.-B.; writing—original draft preparation, J.N.A.-I.; writing—review and editing, J.P.-D. and D.B.A.-B.; supervision, J.P.-D.; project administration, J.N.A.-I. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Institutional Review Board Statement: The study was approved by the Health Sciences Bioethics Committee, Universidad del Valle de México on 17 August 2021, with the registration number PCSUVM-012021.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study. Digital informed consent has been obtained from the subjects to publish this paper.

Data Availability Statement: The datasets generated during the investigation are available from corresponding author.

Acknowledgments: Special thanks to students who participated in the research. We also extend our gratitude to the Psychology Investigation Group of Universidad del Valle de México for their support in the project.

Conflicts of Interest: The authors declare no conflicts of interest.

References

1. Organización Mundial de la Salud. Informe Mundial Sobre Salud Mental: Transformar la Salud Mental para Todos: Panorama General. Available online: <https://iris.who.int/handle/10665/356118> (accessed on 10 March 2024).
2. Organización Mundial de la Salud. Depression. Available online: <https://www.who.int/es/news-room/fact-sheets/detail/depression> (accessed on 13 March 2024).
3. Secretaría de Salud. 2º Diagnóstico Operativo de Salud Mental y Adicciones. Secretaría de Salud. Available online: <https://www.gob.mx/cms/uploads/attachment/file/730678/SAP-DxSMA-Informe-2022-rev07jun2022.pdf> (accessed on 13 March 2024).
4. Instituto Nacional de Estadística y Geografía. Día Mundial para la Prevención del Suicidio. Available online: https://www.inegi.org.mx/contenidos/saladeprensa/aproposito/2023/EAP_Suicidio23 (accessed on 25 March 2024).
5. Luo, J.; Cao, W.; Zhao, J.; Zeng, X.; Pan, Y. The moderating role of optimism between social trauma and depression among Chinese college students: A cross-sectional study. *BMC Psychol.* **2023**, *11*, 270. [CrossRef] [PubMed]
6. Asociación Americana de Psiquiatría. *Guía de Consulta de los Criterios Diagnósticos del DSM 5*; Asociación Americana de Psiquiatría: Arlington, VA, USA, 2013; ISBN 978-0-89042-551-0.
7. Clark, L.A.; Watson, D. Tripartite Model of Anxiety and Depression: Psychometric Evidence and Taxonomic Implications. *J. Abnorm. Psychol.* **1991**, *100*, 316–336. [CrossRef]
8. Nima, A.A.; Rosenberg, P.; Archer, T.; Garcia, D. Anxiety, Affect, Self-Esteem, and Stress: Mediation and Moderation Effects on Depression. *PLoS ONE* **2013**, *8*, e73265. [CrossRef]
9. Lazarus, R.S.; Folkman, S. *Stress, Appraisal, and Coping*; Springer Publishing Company: New York, NY, USA, 1984; ISBN 0-8261-4191-9.
10. Mahmoud, J.S.R.; Staten, R.T.; Hall, L.A.; Lennie, T.A. The Relationship among Young Adult College Students' Depression, Anxiety, Stress, Demographics, Life Satisfaction, and Coping Styles. *Issues Ment. Health Nurs.* **2012**, *33*, 149–156. [CrossRef] [PubMed]
11. Gustems-Carnicer, J.; Calderón, C. Coping strategies and psychological well-being among teacher education students. *Eur. J. Psychol. Educ.* **2013**, *28*, 1127–1140. [CrossRef]
12. Taylor, S.E.; Stanton, A.L. Coping Resources, Coping Processes, and Mental Health. *Annu. Rev. Clin. Psychol.* **2007**, *3*, 377–401. [CrossRef]
13. Romswinkel, E.V.; König, H.H.; Hajek, A. The role of optimism in the relationship between job stress and depressive symptoms. Longitudinal findings from the German Ageing Survey. *J. Affect. Disord.* **2018**, *241*, 249–255. [CrossRef]
14. Chen, Y.; Su, J.; Zhang, Y.; Yan, W. Optimism, Social Identity, Mental Health: Findings Form Tibetan College Students in China. *Front. Psychol.* **2021**, *12*, 747515. [CrossRef]
15. Carver, C.S.; Scheier, M.F.; Segerstrom, S.C. Optimism. *Clin. Psychol. Rev.* **2010**, *30*, 879–889. [CrossRef]

16. Arslan, G.; Yıldırım, M. Coronavirus stress, meaningful living, optimism, and depressive symptoms: A study of moderated mediation model. *Aust. J. Psychol.* **2021**, *73*, 113–124. [CrossRef]
17. Banerjee, P. Relationship between perceived psychological stress and depression: Testing moderating effect of dispositional optimism. *J. Workplace Behav. Health* **2012**, *27*, 32–46. [CrossRef]
18. Zou, R.; Xu, X.; Hong, X.; Yuan, J. Higher socioeconomic status predicts less risk of depression in adolescence: Serial mediating roles of social support and optimism. *Front. Psychol.* **2020**, *11*, 1955. [CrossRef] [PubMed]
19. Greenglass, R.E.; Fiksenbaum, L. Proactive coping, positive affect, and well-being: Testing for mediation using path analysis considerations. *Eur. Psychol.* **2009**, *14*, 29–39. [CrossRef]
20. Greenglass, E.; Fiksenbaum, L.; Eaton, J. The relationship between coping social support, functional disability and depression in the elderly. *Anxiety Stress Coping* **2006**, *19*, 15–31. [CrossRef]
21. Lun, K.W.C.; Chan, C.K.; Ip, P.K.Y.; Ma, S.Y.K.; Tsai, W.W.; Wong, C.S.; Wong, C.H.T.; Wong, T.W.; Yan, D. Depression and anxiety among university students in Hong Kong. *HKMJ* **2018**, *24*, 466–472. [CrossRef] [PubMed]
22. Shi, M.; Liu, L.; Wang, Z.Y.; Wang, L. Prevalence of depressive symptoms and its correlations with positive psychological variables among Chinese medical students: An exploratory cross-sectional study. *BMC Psychiatry* **2016**, *16*, 3. [CrossRef]
23. Palacios-Delgado, J.; Acevedo-Ibarra, J.N. Psychometric Properties of a New Mexican Optimism Scale: Ethnopsychological Approach. *Eur. J. Investig. Health Psychol. Educ.* **2023**, *13*, 2747–2764. [CrossRef]
24. Brissette, I.; Scheier, M.F.; Carver, C.S. The role of optimism in social network development, coping, and psychological adjustment during a life transition. *J. Pers. Soc. Psychol.* **2002**, *82*, 102–111. [CrossRef]
25. Nes, L.S.; Segerstrom, S.C. Dispositional Optimism and Coping: A Meta-Analytic Review. *Pers. Soc. Psychol. Rev.* **2006**, *10*, 235–251. [CrossRef]
26. Achat, H.; Kawachi, I.; Spiro, A.; DeMolles, D.A.; Sparrow, D. Optimism and depression as predictors of physical and mental health functioning: The Normative Aging Study. *Ann. Behav. Med.* **2000**, *22*, 127–130. [CrossRef]
27. Cobb, C.L.; Schwartz, S.J.; Salas-Wright, C.P.; Pinedo, M.; Martinez, P.; Meca, A.; Isaza, A.G.; Lorenzo-Blanco, E.I.; McClure, H.; Marsiglia, F.F.; et al. Alcohol use severity, depressive symptoms, and optimism among Hispanics: Examining the immigrant paradox in a serial mediation model. *J. Clin. Psychol.* **2020**, *76*, 2329–2344. [CrossRef] [PubMed]
28. Hamilton, J.L.; Connolly, S.L.; Liu, R.T.; Stange, J.P.; Abramson, L.Y.; Alloy, L.B. It gets better: Future orientation buffers the development of hopelessness and depressive symptoms following emotional victimization during early adolescence. *J. Abnorm. Child. Psychol.* **2015**, *43*, 465–474. [CrossRef] [PubMed]
29. Rincón, U.A.; Botelho, S.; Gouveia, J.; da Silva, J. Association between the dispositional optimism and depression in young people: A systematic review and meta-analysis. *Psicol. Reflex. Crit.* **2021**, *34*, 1–14. [CrossRef]
30. Vickers, K.S.; Vogeltanz, N.D. Dispositional optimism as a predictor of depressive symptoms over time. *Pers. Individ. Dif.* **2000**, *28*, 259–272. [CrossRef]
31. Agudelo, D.; Carretero-Dios, H.; Blanco Picabia, A.; Pitti, C.; Spielberger, C.; Buena-Casal, G. Evaluación del componente afectivo de la depresión: Análisis factorial del ST/DEP revisado. *Salud Ment.* **2005**, *28*, 32–41.
32. Tous-Pallarés, J.; Espinoza-Díaz, I.M.; Lucas-Mangas, S.; Valdivieso-León, L.; Gómez-Romero, M.D.R. CSI-SF: Propiedades psicométricas de la versión española del inventario breve de estrategias de afrontamiento. *An. Psicol.* **2022**, *38*, 85–92. [CrossRef]
33. Secretaría de Salud. Reglamento de la Ley General de Salud en Materia de Investigación para la Salud. 2011. Available online: <http://www.salud.gob.mx/unidades/cdi/nom/compi/rlgsmis.html> (accessed on 16 February 2024).
34. Belsley, D.A. Assessing the presence of harmful collinearity and other forms of weak data through a test for signal-to-noise. *J. Econom.* **1982**, *20*, 211–253. [CrossRef]
35. Hayes, A.F. *Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach*, 2nd ed.; The Guilford Press: New York, NY, USA, 2018; ISBN 978-1-60918-230-4.
36. Lacobucci, D.; Saldanha, N.; Deng, X. A meditation on mediation: Evidence that structural equations models perform better than regressions. *J. Consum. Psychol.* **2007**, *17*, 139–153. [CrossRef]
37. Hayes, A.F.; Rockwood, N.J. Conditional Process Analysis: Concepts, computation, and advances in the Modeling of the Contingencies of Mechanisms. *Am. Behav. Sci.* **2020**, *64*, 19–54. [CrossRef]
38. Fritz, C.O.; Morris, P.E.; Richler, J.J. Effect size estimates: Current use, calculations, and interpretation. *J. Exp. Psychol. Gen.* **2012**, *141*, 2–18. [CrossRef]
39. Dafogianni, C.; Pappa, D.; Mangoulia, P.; Kourti, F.E.; Koutelekos, I.; Dousis, E.; Margari, N.; Ferentinou, E.; Stavropoulou, A.; Gerogianni, G.; et al. Anxiety, Stress and the Resilience of University Students during the First Wave of the COVID-19 Pandemic. *Healthcare* **2022**, *10*, 2573–2584. [CrossRef]
40. Özkul, B.; Günüşen, N.P. Stressors and Coping Methods of Turkish Adolescents With High and Low Risk of Depression: A Qualitative Study. *J. Am. Psychiatr. Nurses Assoc.* **2020**, *27*, 458–470. [CrossRef]
41. Wanjie, T.; Qian, D. Depressive symptoms among first-year Chinese undergraduates: The roles of socio-demographics, coping style, and social support. *Psychiatry Res.* **2018**, *270*, 89–96. [CrossRef]
42. Zong, J.G.; Cao, X.Y.; Cao, Y.; Shi, Y.F.; Wang, Y.N.; Yan, C.; Abela, J.R.Z.; Gan, Y.Q.; Gong, Q.Y.; Chan, R.C.K. Coping flexibility in college students with depressive symptoms. *Health Qual. Life Outcomes* **2010**, *8*, 66. [CrossRef]
43. Sawyer, M.G.; Pfeiffer, S.; Spence, S.H. Life events, coping and depressive symptoms among young adolescents: A one-year prospective study. *J. Affect. Disord.* **2009**, *117*, 48–54. [CrossRef]

44. Hussong, A.M.; Miggette, A.J.; Thomas, T.E.; Coffman, J.L.; Cho, S. Coping and Mental Health in Early Adolescence during COVID-19. *Res. Child Adolesc. Psychopathol.* **2021**, *49*, 1113–1123. [[CrossRef](#)]
45. Tobin, D.L.; Holroyd, K.A.; Reynolds, R.V.; Wigal, J.K. The Hierarchical Factor Structure of the Coping Strategies Inventory. *Cogn. Ther. Res.* **1989**, *13*, 343–361. [[CrossRef](#)]
46. Karing, C. Prevalence and predictors of anxiety, depression and stress among university students during the period of the first lockdown in Germany. *J. Affect. Disord. Rep.* **2021**, *5*, 100174. [[CrossRef](#)]
47. Scheier, M.F.; Carver, C.S.; Bridges, M.W. Optimism, pessimism, and psychological well-being. In *Optimism & Pessimism: Implications for Theory, Research, and Practice*; Chang, E.C., Ed.; American Psychological Association: Washington, DC, USA, 2001; pp. 189–216; ISBN 1-55798-691-6.

Disclaimer/Publisher’s Note: The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.