

The moderating role of psychological flexibility in the relationship between perfectionism and depressive symptoms in female university students

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Abstract

Aim: The aim of this study was to investigate the moderating role of psychological flexibility in the relationship between perfectionism and depressive symptoms in female undergraduate students of Alzahra University.

Method: This study was conducted on a sample of 500 female students who were selected using multi-stage cluster random sampling. The instruments used included the Tehran Multidimensional Perfectionism Scale (Beshart Mohammad Ali 2007), the Multidimensional Psychological Flexibility Inventory (MPFI) (Rolfes et al., 2018), and the Beck Depression Inventory (Beck 1960).

Result: The results of structural equation modeling analysis showed that perfectionism and psychological inflexibility were positively and significantly predicted depressive symptoms, and psychological flexibility had a significant association with depressive symptoms. Also, psychological flexibility was able to significantly moderate the relationship between perfectionism and depressive symptoms, such that female university students with higher levels of psychological flexibility showed less experience of depression.

Conclusion: These findings emphasize the importance of psychological flexibility as a protective and moderating factor in reducing the negative effects of perfectionism in female university students' depressive symptoms and help to develop preventive programs to increase psychological flexibility among this group.

Keywords: Psychological flexibility, perfectionism, depressive symptom.

Introduction

Student life is one of the most important and challenging periods of life that is accompanied by many changes in social, academic and personal fields. This period causes and increases various psychological pressures and stresses. Female students may be more exposed to these pressures due to their social and individual roles and expectations (Qasemi et al., 1404). Study shows that the rate of depression among female students is much higher than that of boys, and this issue requires more detailed studies, and depression, as a common condition among students, especially female students, is caused by several factors, including perfectionism (Basharan 2023). Major Depressive Disorder is characterized by a persistent and pervasive mood disturbance, leading to significant functional impairment in daily activities. Diagnosis requires the presence of at least five symptoms, including a depressed mood, loss of interest or pleasure, and changes in weight or sleep patterns, lasting for a minimum of two weeks (American Psychiatric Association, 2013).

Perfectionism is considered a personality trait that leads an individual to achieve unrealistic standards and may lead to anxiety, self-satisfaction and ultimately depression. Perfectionism means striving to achieve high standards and desirability (Flett and Hewitt 2002). This personality trait is divided into several dimensions: (1) Self-oriented perfectionism: individuals seek to achieve very high standards that are determined mostly by themselves and their personal expectations. They usually expect to perform perfectly in all aspects of life and always be the best. (2) Other-oriented perfectionism: individuals seek to do good and influence others and evaluate themselves based on the standards and expectations of others. They may constantly seek the approval of others and strive for their satisfaction. (3) Socially-prescribe perfectionism: individuals' standards and expectations are determined based on the specific society and culture in which they live. These individuals usually seek to conform to the values and needs of their society and desire to be accepted in their social environment. A study by Su et al. (2023) showed that people with self-centered perfectionism are at higher risk of developing depression. Also, a study by Abdollahi and colleagues (2020) indicated that socially-prescribe perfectionism is associated with more severe depression, especially in women. In another study, Gorkovaya and Biletskaya (2023) examined the relationship between perfectionism, depression, anxiety, and stress in psychiatric and neurology residents. The results indicate that people with higher levels of perfectionism have higher levels of depression, anxiety, and rumination (Memarzadeh et al., 1404).

Psychological flexibility plays an important role as a positive trait and a moderating factor. Psychological flexibility is defined from the perspective of the acceptance and commitment approach as an individual's ability to accept negative experiences and emotions, rather than avoid them. In the acceptance and commitment model, there is a central hexagon, each of whose elements contributes in some way to strengthening psychological flexibility. These six aspects include acceptance (this process means accepting uncontrollable and unwanted thoughts and feelings, rather than pushing them away or withdrawing from them. The person learns to observe them instead of resisting them), living in the present moment (the person is encouraged to pay attention to their

current experiences and avoid judging them. This improved awareness of the present moment allows the person to deal with their feelings and thoughts more effectively), prioritizing values (in this stage, the person identifies and determines their values and goals in life. This action helps the person make decisions according to their values), committed action (the person examines and takes specific, practical steps to realize their goals and values. This commitment to action helps the person take effective steps to improve the quality of their life), disintegration (in this process, the person learns how to distance themselves from their thoughts and observe them as objects of witness, rather than to view them as absolute reality) and the self as content (the individual is encouraged to view themselves as an observer of their thoughts and feelings. This view of themselves allows the individual to observe and experience feelings and thoughts without fully identifying with them) (Hayes, S. C. & Strossahl, 2012). It is conceivable that people with high levels of psychological flexibility can more easily cope with the stresses of perfectionism and find healthier ways to manage their emotions and stresses (Lewin, 2023). Perfectionism as a personality trait leads an individual to achieve unrealistically high standards. This pressure to achieve perfection brings with it intense feelings of self-criticism and fear of failure. When perfectionists are faced with the inability to meet their expectations, they experience deeper feelings of frustration and inadequacy. In these circumstances, psychological flexibility can play a prominent role as a protective factor. People with higher flexibility can more effectively cope with unrealistic expectations and use failures and setbacks as opportunities for learning and growth. They are able to manage the pressures of perfectionism and accept the realities of life instead of falling into a cycle of feelings of hopelessness. In this way, flexibility can greatly reduce the negative effects of perfectionism and prevent the occurrence of depressive symptoms (Inozzo et al., 2023).

Considering these issues, the aim of the present study is to investigate the moderating role of psychological flexibility in the relationship between perfectionism and depressive symptoms in female students. It should be noted that previous studies have not examined perfectionism, inflexibility, and flexibility simultaneously with depressive symptoms in female students. Also, the moderating role of psychological flexibility in the relationship between perfectionism and depressive symptoms in female students has not been studied, and this study seeks to investigate the above issues.

Methodology

The participants of this study included 500 female undergraduate students at Alzahra University with the following age distribution: 24% (120) were in the 18-19 age group, 46% (230) in the 20-22 age group, and 30% (150) in the 23-24 age group. The average age of the participants was 21.89 years with a standard deviation of 3.7 years. In terms of educational level, 24% (120) were in the first year of undergraduate studies, 31% (155) in the second year of undergraduate studies, 25% (125) in the third year of undergraduate studies, and 20% (100) in the fourth year of undergraduate studies. Regarding marital status, 83.4% (417) were single and 16.6% (83) were married. Also, in terms of

employment status, 15.6% (78) were reported to be employed and 84.4% (422) were reported to be unemployed (see Table 1).

Table 1: Frequency Distribution and Percentage of Demographic Characteristics of Participants (n = 500)

Variable	Grouping	Frequency (n)	Percentage (%)
<u>Age</u>	<u>18-19 years</u>	<u>120</u>	<u>24.0</u>
	<u>20-22 years</u>	<u>230</u>	<u>46.0</u>
	<u>23-24 years</u>	<u>150</u>	<u>30.0</u>
<u>Educational Level</u>	<u>First-year Bachelor</u>	<u>120</u>	<u>24.0</u>
	<u>Second-year Bachelor</u>	<u>155</u>	<u>31.0</u>
	<u>Third-year Bachelor</u>	<u>125</u>	<u>25.0</u>
	<u>Fourth-year Bachelor</u>	<u>100</u>	<u>20.0</u>
<u>Marital Status</u>	<u>Single</u>	<u>417</u>	<u>83.4</u>
	<u>Married</u>	<u>83</u>	<u>16.6</u>
<u>Employment Status</u>	<u>Employed</u>	<u>78</u>	<u>15.6</u>
	<u>Unemployed</u>	<u>422</u>	<u>84.4</u>

Procedure of study

The data collection process and questionnaires used in this study, which is related to the doctoral dissertation of the first author, have been approved by the Ethics Committee of the University of Sciences and Research. Before data collection, permission to conduct research among students was obtained from the faculties and educational departments. Data were collected from 20 Farvardin 1404 to 10 Khordad 1404. After that, verbal permission was obtained from each professor to distribute the questionnaire package among the students. All respondents were informed about the purpose of the study. In addition, they were informed that their participation in this study was voluntary and anonymous and that they could leave the study at any time. Informed written consent was obtained from the respondents in this study for their participation in the research. Respondents completed demographic questions along with the four main research questionnaires. After the questionnaire packages were completed by the students (completion time about 35 minutes), they handed over the questionnaire to the researcher. A total of 550 questionnaires were distributed to undergraduate students, of which 500 usable questionnaires were returned, 28 students did not complete the questionnaire and their questionnaires could not be used for analysis, and 18 students were excluded from the analysis due to their age over 24 years. In addition, 4 cases were excluded from the analysis due to outliers. Therefore, the sample size in this study was 500 undergraduate students aged 18 to 24.

Measures

Tehran Multidimensional Perfectionism Scale (Besharat Mohammad Ali 2007)

The Tehran Multidimensional Perfectionism Scale was designed by Besharat (2007) and is a 30-question test based on previous scales (Frost, Martin, Elhart, & Rosenblatt, 1990, by Besharat, 2007) in Persian. This scale measures the three dimensions of self-centered perfectionism, other-centered perfectionism, and socially prescribe perfectionism on a

five-point Likert scale from 1 to 5. The minimum and maximum scores of the subject in the three subscales of the test are 10 and 50, respectively. The Cronbach's alpha coefficients of the self-centered perfectionism, other-centered perfectionism, and socially prescribe perfectionism subscales in a sample of five hundred students at the University of Tehran were calculated to be 90.91.81, respectively, indicating acceptable internal consistency (Besharat, 2007). Correlation coefficients between the scores of 78 subjects were calculated on two occasions with an interval of two to four weeks to measure test-retest reliability. These coefficients were significant at the 0.001 level for self-centered perfectionism (0.84), other-centered perfectionism (0.79), and socially prescribe perfectionism (0.85), respectively, which indicates satisfactory test-retest reliability of the scale. In order to examine concurrent validity, a significant negative relationship with mental health and a significant positive relationship with interpersonal problems were reported (Beshart and Farhamand, 2018). In the present study, Cronbach's alpha coefficients for self-centered perfectionism, other-centered perfectionism, and socially prescribe perfectionism were 0.88, 0.89, and 0.82, respectively.

Multidimensional Psychological Flexibility Questionnaire (MPFI) (Rolfes et al., 2018)
This questionnaire consists of 60 items of psychological flexibility (30 items) and psychological inflexibility (30 items) (Rolfes et al., 2018). The psychological flexibility dimension consists of six subscales (acceptance, present-moment awareness, self-as-context, disintegration, values, and committed action), each subscale being measured with 5 items. The psychological inflexibility dimension consists of 6 subscales (experiential avoidance, lack of contact with the present moment, self as content, fusion, lack of contact with values, and lack of action), each of which is measured by 5 items. Response options range from 1 (never) to 6 (always). The total scores of psychological flexibility and psychological inflexibility are calculated by summing the scores of the six subscales for each dimension. A higher score in each dimension indicates higher levels of psychological flexibility and psychological inflexibility. Azadfar and Abdollahi (2022) showed excellent internal consistency for all subscales of the MPFI-60.

Beck Depression Inventory (Beck 1960)

This questionnaire consists of 21 questions, each addressing a specific aspect of depression (Beck, Steer, & Brown, 1996). These aspects include feelings of sadness, hopelessness, sleep, appetite, energy, and feelings of worthlessness. Each question has four options that assess the severity of symptoms on a scale from "none" to "very severe." The scores for each question range from 0 to 3, and the total score ultimately helps determine the severity of depression. The cutoff points in this questionnaire are as follows: scores of 0 to 13 indicate no or minimal depression, scores of 14 to 19 indicate mild depression, scores of 20 to 28 indicate moderate depression, and scores of 29 to 63 indicate severe depression. Beck et al. (1996) reported a Cronbach's alpha of 0.93 for this questionnaire. Also, in a convergent validity study, this questionnaire was examined with the Hamilton Depression Scale, and its correlation coefficient was reported to be about 0.68 to 0.86 (Beck et al., 1996). The alpha coefficient in Iranian research for this scale was 0.91 (Abdollahy, 2019). In the present study, the alpha coefficient for this questionnaire was 0.89.

Results

Data analysis at two levels of descriptive and inferential findings was performed using SPSS 26 and AMOS 24 softwares. In this study, incomplete and missing data related to 28 questionnaires from the total number of participants were removed from statistical analyses using the case deletion method after careful review and ensuring that they could not be completed or corrected. To detect outliers, the Mahalanobis distance analysis method was used (Klein, 2016). Based on standard criteria, observations with a probability value (p-value) related to the Mahalanobis distance of less than 0.001 were considered outliers. After this analysis, 4 questionnaires were removed from the analysis process due to being in the outlier range, which led to a reduction in the sample size to 500 participants in the final stage. Skewness and kurtosis were used to assess the normality of the research data. The skewness index examines the degree of symmetry of the data distribution, so that values close to zero indicate a symmetrical and normal distribution. The kurtosis index also measures the degree of concentration of the data around the mean, and values close to zero indicate a normal distribution. The values of skewness (-1.23 to 0.65) and data kurtosis (-1.89 to 91.) were in the ranges of ± 3 and ± 5 , respectively, which indicates that the distribution of the research data is normal. These findings confirm that the data under study meet the necessary conditions for conducting parametric analyses (Klein, 2016).

Measurement model

In this section, the fit of the measurement model of all research variables is evaluated using confirmatory factor analysis (CFA). The aim of this stage is to measure the degree of conformity of the proposed measurement structure with the empirical data. According to the standards of factor analysis, if at least three indices of the fit criteria (such as CFI ([Comparative Fit Index](#)), RMSEA ([Root Mean Square Error of Approximation](#)) and χ^2/df) are within the acceptable range of values, it can be concluded that the model has a good fit.

[Table 2: Model Fit Indices](#)

Model	CMIN/DF	P	GFI	CFI	NFI	RMSEA
Proposed Model	2.81	0.001	0.90	0.91	0.91	0.048
Saturated Model			1.00	1.00	1.00	
Independence Model	5.40	0.001	0.14	0.00	0.00	0.11

The findings in Table 2 show that the measurement model presented in this study has all the necessary conditions for a good fit. Based on the results obtained in the above table, the normalized chi-square index (CMIN/DF) is equal to 2.81, which is smaller than 5, indicating that this model is in a good condition. The values of the remaining indices were

above the acceptable cut-off line of 0.90, which are desirable, and the value of the RMSEA index, as the most important index of overall fit, was equal to 0.048, which is smaller than 0.08, indicating that in general the model has a relatively good fit (Klein, 2016).

Structural model

In the structural equation modeling stage, the research hypotheses are tested and the coefficient of determination (R^2) is obtained. In the assumed model, perfectionism, psychological flexibility, and psychological inflexibility (predictor variables) are exogenous variables and the depressive symptom variable (criterion variable) is endogenous variable, as follows (Figure 1). As seen in Figure 1, there were significant and positive relationships between perfectionism ($\beta=.32$, $p<0.001$) and psychological inflexibility ($\beta=.58$, $p<0.001$) with depressive symptoms. In contrast, there was a significant and negative relationship between psychological flexibility and depressive symptoms ($\beta=-.37$, $p<0.001$).

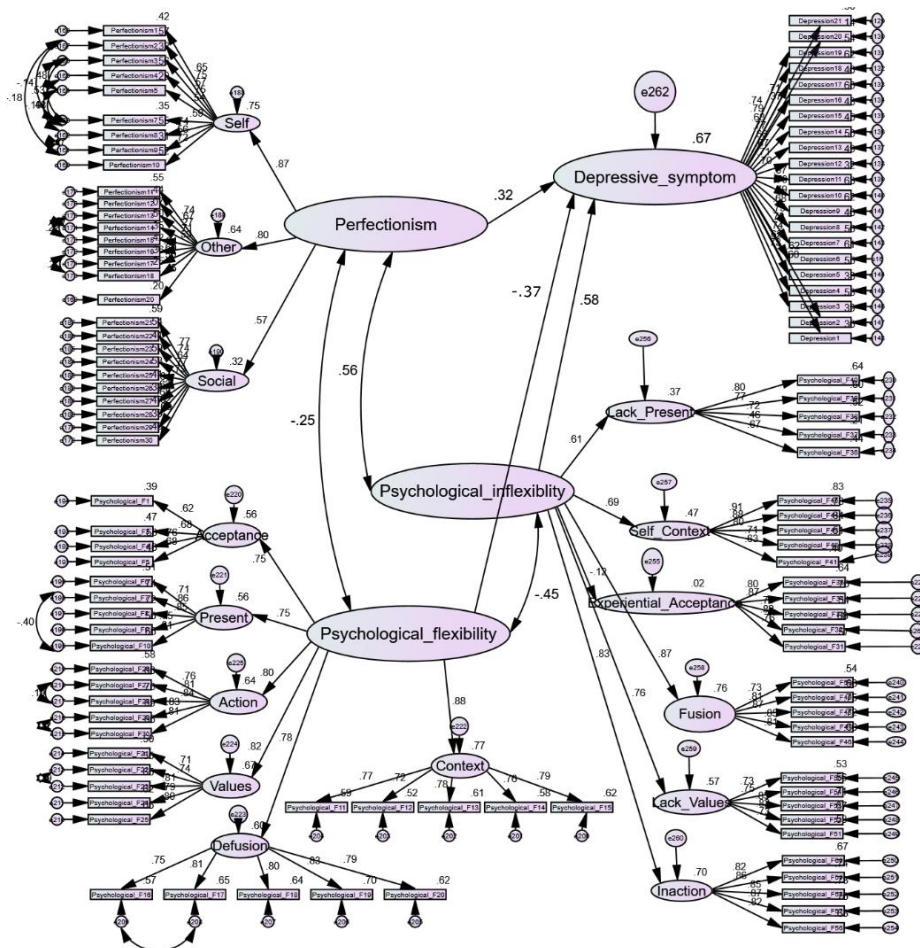


Figure 1. Structural model of depressive symptoms

The coefficient of determination R^2 shows how much of the criterion variable can be explained by the predictor variables. Based on the findings of the structural model that can be seen above, the variables of perfectionism, psychological flexibility, and psychological inflexibility explained 67% of the changes in the variable of depressive symptoms (see Figure 1).

Psychological flexibility moderation test

This study examines the psychological flexibility moderation test between perfectionism and depressive symptoms using the multi groups analysis for different groups. In the first step, in this study, the range of psychological flexibility scores is between 30 and 120

with a median of 77. Based on the median, we divided the individuals into two low and high groups. The number of the low group is 257 people and the high group is 243 people. In the second step, to create a moderating effect in the overall model, it must be shown that the variable model (meaning that there is a difference between the assumed model for one group and the assumed model for the other group) is better than the fixed model (meaning that there is no difference between the assumed model for one group and the assumed model for the other group). In the third step. If the fit indices for the variable model are better than the fixed model, it can be concluded that the moderating variable has played a moderating role. In the fourth step. Examining the beta coefficients and the significance level in the two groups. When the moderating variable has a significant relationship in one group and no significant relationship in another group, or when the sign of the beta coefficient is different in one group from the another, it indicates the moderating role of the moderating variable (Baron and Kenny, 1986).

[Table 3: measurement fit indices for the Psychosocial Flexibility moderation Model](#)

Model	CMIN/DF	GFI	CFI	TLI	IFI	RMSEA
Fixed Model	1.72	0.83	0.70	0.82	0.84	0.045
Variable Model	1.51	0.90	0.89	0.90	0.84	0.041

The results of Table 3 showed that the fit indices in the variable model are better than the fixed model and indicate the moderating role of psychological flexibility in the assumed model. As you can see, the fit indices for the variable model are better than the fixed model. Therefore, the psychological flexibility variable has played a moderating role in the assumed model.

The hypotheses of the psychological flexibility moderation model are as follows: Hypothesis 4: Psychological flexibility acts as a moderator in the relationship between perfectionism and depression. In the low group the relationship between perfectionism and depressive symptoms was significant at the 0.001 level ($\beta=0.69$) while the same relationship was not significant in the high flexibility group ($\beta=0.07$). Therefore, psychological flexibility has played a moderating role.

Psychological Inflexibility Moderation Test

In this study, the range of psychological inflexibility scores is between 30 and 180 with a median of 118. Based on the median, we divided 260 people into two groups: low inflexibility and 240 people in the high inflexibility group.

[Table 4: measurement fit indices for the Psychosocial Inflexibility moderation Model](#)

Model	CMIN/DF	GFI	CFI	TLI	IFI	RMSEA
Fixed Model	1.66	0.68	0.78	0.78	0.79	0.04

Variable Model	1.68	0.64	0.77	0.78	0.78	0.04
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The results of Table 4 showed that the fit indices in the fixed model were slightly better than the variable model, indicating that psychological inflexibility did not play a moderating role in the proposed model.

Discussion

The main aim of this study was to investigate the relationship between perfectionism, psychological flexibility, and psychological inflexibility with depressive symptoms and to investigate the moderating role of psychological flexibility in the relationship between perfectionism and depressive symptoms in female undergraduate students at Alzahra University. The results of structural equation modeling showed that there were positive and significant relationships between perfectionism and psychological inflexibility with depressive symptoms, and there was a significant negative relationship between psychological flexibility and depressive symptoms. The results of multi-group analysis showed that psychological flexibility played a moderating role in the relationship between perfectionism and depressive symptoms.

The first hypothesis showed that there is a positive and significant relationship between perfectionism and depressive symptoms. This finding is consistent with numerous studies that confirm the negative effect of perfectionism on mental health. In this section, by focusing on the three dimensions of perfectionism (self-oriented, other-oriented, and socially-prescribe perfectionism), the possible mechanisms of the effect of these variables on depression are explained (Kim & Lee, 2025). self-oriented perfectionism involves setting unrealistic standards for oneself and striving to achieve them excessively. Students with this trait tend to be extremely self-critical at the slightest failure. The Beck Depression Inventory (BDI) also shows that such individuals score high on the “guilt” and “worthlessness” subscales. Instead of being resilient, these students engage in a cycle of frustration with negative self-talk (e.g., “I’m not good enough”). Studies have shown when faced with academic obstacles (e.g., low grades), self-oriented perfectionists tend to ruminate rather than correct their ways, which is a strong predictor of depression (Aghili & Khoshbakht, 2025; Felt & Hoyt, 2015). Other-oriented perfectionism involves having unreasonable expectations of others (e.g., classmates or professors). In the sample of this study, this dimension is particularly exacerbated in competitive academic environments. Interpersonal conflicts, when others do not meet one’s standards, create feelings of anger and frustration. These negative emotions contribute to depressive symptoms in the long term. Studies show that students with other-oriented perfectionism suffer from damaged relationships due to controlling behaviors. Lack of social support is also a risk factor for depression. These individuals may unconsciously impose their

standards on those around them, which causes rejection and increases feelings of loneliness and depression (Flett & Hewitt, 2015, 2020; Smith et al., 2022). Socially-prescribe perfectionism reflects a fear of social judgment. In Iranian society, especially among female students, the pressure to be perfect (both in education and in gender roles) can exacerbate this dimension. Students who believe that society expects them to be flawless experience deep shame when they fail. This shame is associated with depressive symptoms, such as feeling punished. The dependence of self-worth on objective achievements (such as high GPA) causes a person's identity to be shaken in times of academic crisis. Another factor is the burnout caused by the appearance of being "perfect" in public, which requires a lot of mental energy and gradually causes emotional exhaustion and depression (Flett & Hewitt, 2002; Stuber, 2018).

The second hypothesis suggests that psychological flexibility is negatively related to the depressive symptoms. This finding suggests that students who have a higher level of psychological flexibility are less likely to experience depressive symptoms (Ozetkin et al., 2025). Psychological flexibility, as the core of acceptance and commitment therapy (ACT), consists of six interrelated processes that will be explained in terms of their impact on reducing depressive symptoms (Hayes et al., 2011). Acceptance means being open to internal experiences, both pleasant and unpleasant, without trying to change or avoid them. Students who are able to accept negative emotions such as sadness, anxiety, or frustration are less likely to engage in rumination. This trait can prevent the onset of depressive symptoms, especially in a university environment full of stressful situations. Acceptance frees up a person's mental energy for valuable actions by reducing resistance to unpleasant experiences. Cognitive dissonance refers to the ability to view thoughts as passing events in the mind, without being attached to them or controlled by them. Students who are good at this skill are able to see negative thoughts, such as "I'm a failure" or "I'll never succeed," as mere thoughts, not absolute facts. This ability prevents negative automatic thoughts from becoming depressive cycles. Relating to the self as context refers to understanding oneself as a context in which experiences come and go, rather than identifying with the specific content of thoughts or feelings. Students who develop this perspective are able to cope with emotional ups and downs and academic challenges without harshly judging themselves. This trait prevents the formation of negative overall beliefs about themselves that are common in depression. Relating to the present moment, mindfulness, and being present in the present moment enable students to let go of ruminating about the past or worrying excessively about the future. This skill can prevent wasting mental energy on uncontrollable issues, especially in a college environment that requires focus on current tasks. Mindfulness allows people to shift their resources to what they can do in the present moment. Values are general, meaningful orientations that give purpose to one's life. Students who are connected to their personal values show greater motivation and resilience, even in the face of academic or social obstacles. This value-based orientation acts as a protective factor against the feelings of

emptiness and purposelessness that are key symptoms of depression. Committed action, the process of engaging in behaviors consistent with values, despite obstacles and unpleasant experiences. Students who are able to act on their values, even when faced with academic or interpersonal challenges, are less likely to fall into the trap of inaction and withdrawal that are characteristic of depression. Committed action fosters a sense of efficacy and control over one's life (Aharon et al., 2024; Cheng et al., 2024; Hayes et al., 2011).

The third hypothesis suggests that psychological inflexibility is negatively correlated with depressive symptoms. This finding suggests that students with higher levels of psychological inflexibility are more likely to experience depressive symptoms (Yang et al., 2025; Zhang and Yan, 2024). Psychological inflexibility, as opposed to psychological flexibility in acceptance and commitment therapy (ACT), involves six reverse processes that are discussed in detail below and how they affect the development and persistence of depressive symptoms (Hayes et al., 2011). Experiential avoidance refers to attempts to control or escape unpleasant internal experiences (thoughts, feelings, memories). Students who engage in this maladaptive pattern try to avoid negative emotions such as sadness, anxiety, or hopelessness at all costs. This avoidance may be relieving in the short term, but in the long term it leads to an increase in the intensity and frequency of these experiences. In a university environment that is full of stressful situations, this pattern can create a vicious cycle that leads to the emergence and persistence of depressive symptoms (Lee et al., 2025). Cognitive entrapment means clinging to thoughts and beliefs and considering them as absolute facts. Students who are caught in this pattern accept negative thoughts such as "I am incompetent" or "I will never succeed" as unchangeable truths. This state, especially in the face of academic challenges, can lead to the formation of negative overall beliefs about oneself, the world, and the future, which are key components of depression. Entrapment with negative thoughts severely reduces a person's ability to problem-solve and cope with problems (Fancioliacci et al., 2024). Identification with content, this process means identifying with specific thoughts and feelings and considering them as the complete definition of the self. Students who are caught up in this pattern may define themselves entirely with thoughts such as "I am a failure" or "I am a bad student." This excessive identification leads to reduced self-esteem and the formation of a persistent negative view of themselves, which is a core feature of depression. In the competitive environment of college, this pattern can be especially damaging (Godarzi & Servin, 2024). Neglecting the present moment means living in the past or future, instead of paying attention to the present. Students caught up in this pattern may constantly ruminate on past mistakes or worry excessively about the future. This state depletes the individual's psychological resources and reduces their ability to effectively deal with current challenges. In an academic environment that requires focus on current tasks, this pattern can lead to decreased academic performance and increased feelings of helplessness (Lee et al., 2025). Lack of clarity of values means a lack of clear

and meaningful direction in life. Students who lack clear values may feel empty and aimless, which is a common symptom of depression. In an academic environment that requires motivation and perseverance, a lack of clear values can lead to a lack of motivation and reduced efforts to achieve academic goals. This can be especially exacerbated in female students who may be under greater social pressures (Fanciolacci et al., 2024). Inaction or maladaptive action, this process means not taking action towards valued goals or acting on momentary impulses. Students caught in this pattern may avoid academic and social activities or make decisions based on temporary emotions. This pattern can lead to social isolation, academic failure, and a decreased sense of efficacy, all of which are risk factors for depression. In a college setting, this can create a vicious cycle of avoidance and reduced self-esteem (Pariger, 2024).

The fourth hypothesis suggests that psychological flexibility acts as a moderator in the relationship between perfectionism and depression, such that in the low group the relationship between perfectionism and depressive symptoms was significant at the 0.001 level ($\beta = 0.69$), while the same relationship was not significant in the high flexibility group ($\beta = 0.07$). Therefore, psychological flexibility played a moderating role. Based on Acceptance and Commitment Theory (ACT) (Hayes & Pearson, 2005), psychological flexibility refers to an individual's ability to accept internal experiences (such as negative thoughts and feelings) without avoiding or fighting them, and to commit to value-based actions. This theory emphasizes that neuroticism and mental disorders such as depression are caused by experiential avoidance and cognitive stickiness (i.e., getting caught up in inflexible thoughts and beliefs) (Trindade and Hemek In this study, people with high perfectionism tend to set unrealistic standards for themselves and, if they fail to meet these standards, experience feelings of failure and self-blame, which can lead to depression. People with high psychological flexibility have the ability to engage in cognitive dissonance, meaning they can view perfectionistic thoughts such as "I have to be perfect" as mere passing thoughts rather than absolute truths. When faced with failure, they distance themselves from self-critical thoughts rather than unconditionally accepting them. For example, after receiving a score of 18, instead of ruminating, they say to themselves, "I'm thinking I'm a failure, but that's just a thought." Another key characteristic of these people is emotional acceptance. They do not suppress or deny negative emotions caused by shortcomings, such as disappointment or shame, but rather allow these emotions to be experienced without resistance and gradually decrease. This approach prevents temporary disappointment from turning into lasting depression. Rather than focusing exclusively on outcomes, these people emphasize the process of learning and growth. They align personal standards with deeper values, such as realistic progress. For example, instead of saying, "I probably should write the best paper," they tell themselves, "I want to write a paper that will help me grow academically" (Landy et al., 2020). People with low psychological flexibility have cognitive stickiness, meaning they accept perfectionistic thoughts as absolute truths. They interpret any flaw as confirmation

of their inadequacy. For example, they interpret a minor mistake in a presentation as meaning, “I am a terrible speaker.” Another characteristic is experiential avoidance. These people strongly avoid unpleasant emotions associated with failure, such as shame or anxiety. This avoidance leads to inappropriate behaviors such as procrastination or, in more severe cases, substance abuse. Such patterns exacerbate a vicious cycle of reinforcing perfectionism and depression. These people tend to have rigid values and accept unrealistic standards as the only measure of personal worth. Failure to meet these standards They interpret this as meaning that life is worthless. For example, they tell themselves, “If I don’t get into medical school, my life has no meaning” (Chang et al., 2018).

Implications of study

Given the confirmation of the moderating role of psychological flexibility and considering that this study is structural equation modeling and not an intervention study, it is conceivable that the use of ACT therapy to increase acceptance, mindfulness, and value orientation in perfectionistic individuals would be effective. Also, since psychological inflexibility did not play a moderating role in this study, it is suggested that therapists focus on strengthening flexibility rather than focusing solely on reducing inflexibility. Using standardized questionnaires to identify students who score high on perfectionism could be used as a screening tool to provide early interventions to them.

Limitations and suggestions for Future Studies

Despite its valuable achievements, this study has limitations that should be considered in interpreting the results and designing future research. This study was conducted using a cross-sectional method, which limits the possibility of inferring causal relationships between variables. It is suggested that future studies examine causal relationships between variables using longitudinal or experimental designs to determine the direction of effects more precisely. The research sample consisted mainly of students who may have specific demographic characteristics. It is suggested that future studies be conducted with more diverse samples, including different age groups, clinical populations, and individuals with different educational and economic levels, to increase the generalizability of the results. The use of self-report questionnaires may be affected by biases such as the tendency to respond favorably to social cues. It is suggested that future studies use multiple assessment methods, including clinical interviews, behavioral observation, and peer or family reports.

Conclusion

The results of this study showed that there were positive and significant relationships between perfectionism and psychological inflexibility with depressive symptoms, and there was a significant negative relationship between psychological flexibility and

depressive symptoms. The results of multi-group analysis showed that psychological flexibility played a moderating role in the relationship between perfectionism and depressive symptoms, and psychological inflexibility did not play a moderating role between perfectionism and depressive symptoms.

Compliance with ethical guidelines: This article is taken from the doctoral dissertation of the Second author in the field of counseling in the Faculty of Psychology, University of Mohaghegh Ardabili. In order to maintain the observance of ethical principles in this study, an attempt was made to collect information after obtaining the consent of the participants. Participants were also reassured about the confidentiality of the protection of personal information and the presentation of results without mentioning the names and details of the identity of individuals.

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