








## Research Article

# The Effect of Progressive Perfectionism on Self-Efficacy and Critical Thinking of Students of Islamic Azad University, Gorgan Branch

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## ARTICLE INFO

## ABSTRACT

### Keywords:

Progressive Perfectionism,  
Self-efficacy,  
Critical Thinking,  
Students.



### Received:

02 April 2023

### Received in revised form:

18 April 2023

### Accepted:

06 May 2023

### Published:

May 2023

Pp.66-85

**Background and Objectives:** The overarching objective of the present study is to investigate the impact of progressive perfectionism on self-efficacy and critical thinking among students of Islamic Azad University, Gorgan Branch.

**Methodology:** This research was an applied study in terms of purpose and descriptive-survey in terms of methodology. The statistical population consists of 12,790 undergraduate, graduate, and doctoral students of Islamic Azad University, Gorgan Branch. Based on the Krejcie and Morgan table (1970), a sample of 375 individuals was selected using stratified random sampling by gender. Data were collected using three questionnaires: the Progressive Perfectionism Questionnaire by Asadpour (2017) with 28 items, the Self-Efficacy Questionnaire by Sherer et al. (1982) with 17 items, and the Critical Thinking Questionnaire by Ricketts (2003) with 33 items. The face and content validity of the instruments were confirmed by experts, and their reliability was calculated using Cronbach's alpha coefficient, yielding 0.89 for the progressive perfectionism questionnaire, 0.93 for the self-efficacy questionnaire, and 0.92 for the critical thinking questionnaire. Data analysis was conducted using structural equation modeling, univariate regression, and multivariate regression tests.

**Results:** The results indicated that progressive perfectionism has a significant positive impact on the self-efficacy and critical thinking of students at Islamic Azad University, Gorgan Branch, and the proposed model demonstrates a good fit. Furthermore, among the dimensions of progressive perfectionism, goal-directedness and striving for excellence have a significant positive impact on students' self-efficacy and critical thinking.

**Conclusion:** The findings of this applied survey-based study indicate that progressive perfectionism plays a significant positive role in enhancing the self-efficacy and strengthening the critical thinking of students at Islamic Azad University, Gorgan Branch. Among these, the components of goal-directedness and striving for excellence, as key dimensions of this type of perfectionism, contribute the most to explaining these effects. Therefore, fostering a constructive perfectionist attitude in educational settings can be regarded as an effective strategy for promoting students' cognitive abilities and positive beliefs.

**Citation:** Azizi, R., Golafshani, A., Mahdian, Z. and Nouri Sorkhdehi, A. (2023). The Effect Of Progressive Perfectionism On Self-Efficacy And Critical Thinking Of Students Of Islamic Azad University, Gorgan Branch. *The New Approaches in Humanities*, 1(1), 66-85.

 <http://10.22034/NAHQ.2026.573326.1018>

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## Introduction

Personality is one of the most fundamental subjects in psychology and the central theme in discussions concerning learning, motivation, perception, emotions, intelligence, and the like. In the discourse of personality, perfectionism is often regarded as a type of trait or characteristic with a multidimensional structure that can play a significant role in adaptive or maladaptive behaviors (Hewitt et al., 2022). Perfectionism refers to self-destructive thoughts and behaviors aimed at achieving extremely excessive and unrealistic goals. Perfectionism is, in fact, an irrational belief individuals hold about themselves and their environment. Perfectionists believe that they and their surroundings must be perfect, that any effort in life should be free of mistakes and errors, and they often anticipate and fear non-acceptance and rejection by others. With this fear, they become defensive against criticism from others, thereby frustrating and alienating them. Without realizing it, perfectionists also expect others to meet their extremely unrealistic standards and consequently become demanding and critical of others. Due to this vicious cycle, perfectionists often have difficulty maintaining close relationships with others, and therefore experience less satisfaction in their interpersonal relationships (Khalatbari et al., 2011). Perfectionists, based on what Burns calls all-or-nothing thinking, engage in a dichotomous or bipolar evaluation of their experiences, and thus their way of thinking is divided into positive and negative poles. Therefore, some aspects of perfectionism are positive, progressive, beneficial, and adaptive, while others are negative, harmful, and maladaptive (Nejad-Irani, 2017).

On the other hand, another variable of importance in educational environments is self-efficacy. Self-efficacy is derived from Bandura's social cognitive theory and refers to the role of an individual's beliefs and judgments about their capabilities in performing tasks. Many human behaviors are aroused and controlled by self-influence mechanisms, among which none is more important and pervasive than the belief in personal self-efficacy (Warren et al., 2021).

One personality construct that exists to varying degrees in individuals and can influence the type and level of progress and success of individuals, including students, is perfectionism (Aghamirzaie Mahalli et al., 2020). It involves setting high standards for performance, evaluation, and positive feelings and satisfaction toward oneself (Khosropour & Nikoie, 2015). Perfectionism is fulfilling one's own and others' expectations with a quality superior and better than what the situation requires, and it is a personality trait that plays an important role in individuals' adjustment (Negru-Subtirica et al., 2023).

All individuals need to actualize their potential abilities to the highest possible extent and achieve growth beyond their current state. The natural tendency of individuals is to move along the path of realizing their own potential, although they may encounter some environmental and social obstacles along the way. Of course, achieving perfection and actualizing one's latent and potential talents and abilities is inherently very valuable, and in this context, perfectionism is a positive and commendable matter. However, what is referred to here is the excessive or negative aspect of perfectionism (Olsson et al., 2022). Hamachek (1978) considers perfectionism to have two dimensions: normal (positive) and abnormal (negative). He believes that normal or progressive perfectionists enjoy striving and competing for excellence and perfection while being well aware of their personal limitations. In contrast, abnormal and inhibitive perfectionists are never satisfied with their performance due to unrealistic expectations (Endleman et al., 2022). They are constantly influenced by the fear of failure and therefore perceive the environment as threatening and unsupportive (Stoeber & Carr, 2017). In general, progressive perfectionism is associated with healthier experiences, including striving for achievement, positive affect, high self-esteem, self-efficacy, self-actualization, and academic and occupational performance. These individuals have a strong need for personal achievement and success (Asadpour et al., 2021). The reason for the success of individuals with normal and progressive perfectionism is that besides being aware of their capabilities, they are also aware of their limitations and accept both personal and social limitations well; therefore, these individuals possess

higher self-efficacy.

Self-efficacy is a key variable in Bandura's (1977) social-cognitive theories. Self-efficacy is a stable and clear sense of an individual's competence and capability to effectively cope with many stressful situations (Mirshekari & Saadatmand, 2015). In academic environments, self-efficacy refers to students' beliefs about their ability to perform assigned academic tasks. Students who believe they can succeed in their studies show more willingness, effort, and perseverance in performing academic tasks and have more confidence in their abilities (Orujlu & Hemmati Maslakkpak, 2017). Beliefs related to self-efficacy influence goals and aspirations and constitute human behavioral outcomes. Self-efficacy determines how individuals evaluate obstacles. Individuals with low self-efficacy are easily convinced when facing difficulties that their behavior is futile and quickly give up. However, individuals with high self-efficacy overcome obstacles by improving their self-management skills and perseverance and withstand problems.

On the other hand, another variable effective in student learning and academic achievement is critical thinking. Critical thinking, as an expression of learning, familiarizes learners with the art of reasoning and logic, increases their preparedness for dynamic situations outside the classroom, and provides them with the necessary competence for living better and understanding better (Yekta Koushali et al., 2017). In other words, critical thinking is a cognitive process in which the individual engages in judgment and decision-making by examining reasons, analyzing information, and drawing conclusions from them (Dekker, 2020). If individuals use critical thinking skills, they gain deep and clear perspectives, become interested in events, choose an acceptable method, and act fairly. Therefore, individuals with critical thinking skills perform better and consequently have higher self-efficacy.

Sadeghian et al. (2012), in a study titled "The Effectiveness of Teaching Dimensions of Perfectionism on the Growth of Self-Efficacy in Students of Special Schools" conducted on 120 perfectionist female students referring to the Imam

Hossein Counseling Center in Yazd, obtained the following results: An educational program based on the lived experiences of perfectionist students had a significant effect on self-efficacy. Also, the specific intervention program for perfectionists impacted increasing students' academic, social, and emotional self-efficacy.

Nikoogoftar and Hajkazemi (2022), in a study titled "The Relationship of Anxiety and Self-Efficacy with Academic Procrastination in Students: The Mediating Role of Perfectionism" conducted on 349 students of Payame Noor University in Tehran, obtained the following results: Based on trait-state anxiety, self-efficacy, and positive perfectionism, academic procrastination can be predicted, and negative perfectionism also significantly predicted academic procrastination. Furthermore, the mediating role of perfectionism in the relationship between trait-state anxiety and self-efficacy with academic procrastination was confirmed.

Asadpour et al. (2021), in a study titled "Identifying and Ranking the Dimensions and Components of Perfectionism and Its Impact on the Performance of Managers of the Education Department of Mazandaran Province" conducted on 338 managers, deputies, and heads of departments of the Education Department and managers and deputies of schools in Mazandaran province, obtained the following results: Perfectionism has two dimensions (progressive and inhibitive). The progressive dimension has four components (goal-directedness, striving for excellence, desire for order, and positive personal standards), and the inhibitive dimension has five components (need for approval, concern over mistakes, rumination, doubt about actions, negative personal standards). Also, progressive perfectionism had a positive and significant impact on managers' performance, while inhibitive perfectionism had a negative and significant impact on managers' performance.

Khodadadi (2011), in a study titled "Investigating the Relationship between Perfectionism and Emotional Intelligence with the Academic Achievement of Second-Grade High School Students in Sirik County" conducted on 305 second-

grade high school students in Sirik County, obtained the following results: Increasing the dimensions of perfectionism (order and organization and goal-directedness) in students significantly increased their academic achievement. Also, emotional intelligence plays a significant role in students' academic achievement.

Aghamirzai Mahallie et al. (2020), in a study titled "The Impact of Progressive Perfectionism on Organizational Learning and Organizational Ethics at Mazandaran University of Medical Sciences" conducted on 341 employees of Mazandaran University of Medical Sciences, obtained the following results: Progressive perfectionism has a positive and significant relationship with organizational learning with a standardized coefficient (0.65) and with organizational ethics with a standardized coefficient (0.58).

Vakilian and Khalatbari (2019), in a study titled "The Relationship between Perfectionism and Organizational Commitment with Self-Efficacy" conducted on 120 employees of Qazvin Glass Factory, obtained the following results: The correlation coefficients between the two variables of perfectionism and self-efficacy, as well as between the two variables of organizational commitment and self-efficacy, were significant. Also, perfectionism and organizational commitment significantly had the ability to predict self-efficacy.

Khatib Zanjani and Hamzehzadeh (2019), in a study titled "Investigating the Relationship between Perfectionism and Academic Procrastination with Critical Thinking among Female Student Teachers in Khoy City" conducted on 225 female student teachers in Khoy City, obtained the following results: There is a positive relationship between positive perfectionism and critical thinking, and an inverse and significant relationship between negative perfectionism and critical thinking among female student teachers in Khoy City. There is an inverse and significant relationship between academic procrastination and critical thinking among female student teachers in Khoy City. There is a direct and significant relationship between perfectionism and academic procrastination among female student teachers in Khoy City.

Golestani et al. (2018), in a study titled "The Relationship between Self-Oriented and Socially Prescribed Perfectionism with Academic Burnout Considering the Mediating Role of Intrinsic and Extrinsic Motivation" conducted on 240 students of Farhangian University in Semnan, obtained the following results: Self-oriented perfectionism has a negative and significant relationship with students' academic burnout. Self-oriented perfectionism also showed a negative relationship with students' academic burnout indirectly through the mediation of intrinsic academic motivation. Furthermore, socially prescribed perfectionism had a negative and significant relationship with students' academic burnout, but no significant effect was found for socially prescribed perfectionism in relation to academic burnout with the mediating role of extrinsic motivation.

Ford et al. (2023), in a study titled "Perfectionism and the Growth of Math Self-Efficacy in Students," found that high school students who were self-oriented perfectionists reported higher levels of mastery experiences, vicarious experiences, social messages, and self-efficacy. Conversely, students who felt external pressure to be perfect (i.e., socially prescribed perfectionism) reported lower levels of mastery experiences, vicarious experiences, and self-efficacy, as well as higher levels of negative physiological and affective states. Also, there was a significant relationship between perfectionism and self-efficacy.

Endleman et al. (2022), in a study titled "Longitudinal Association Between Perfectionism and Academic Achievement in Adolescence," found that there is a positive and significant relationship between perfectionism and academic achievement. Also, perfectionism can significantly predict students' academic achievement.

Han et al. (2022), in a study titled "Relationships Between Perfectionism and Academic Performance in Chinese University Athletes: The Mediating Role of Achievement Motivation," found that dimensions of perfectionism (concern over mistakes, doubt about actions, personal standards) are significantly related to academic performance. Also, achievement motivation plays a mediating role in the relationship between perfectionism and academic performance in university

athletes.

Kilmen (2022), in a study titled "Prospective Teachers' Career Goal Orientations, Their Self-Efficacy Beliefs and Perfectionism: A Mediation Analysis," found that different aspects of perfectionism and professional self-efficacy beliefs predict different professional goal orientations of prospective teachers. Socially prescribed perfectionism positively and significantly predicted prospective teachers' professional self-efficacy beliefs. While doubt about actions positively predicted work-avoidance goal orientation, concern over mistakes positively predicted performance-avoidance goal orientation of prospective teachers.

Therefore, considering the importance of progressive perfectionism, self-efficacy, and critical thinking in educational environments, this research seeks to investigate the impact of progressive perfectionism on the self-efficacy and critical thinking of students at Islamic Azad University, Gorgan Branch. Based on the findings, we aim to provide necessary and constructive strategies and guidelines to the managers and officials of Islamic Azad University, Gorgan Branch, to enhance progressive perfectionism, self-efficacy, and critical thinking among students. Through this, we hope to contribute to the academic progress of students and ultimately pave the way for future research.

## **Methodology**

This research was applied in terms of purpose and descriptive-survey in terms of method. Since it examined the current situation, it fell under descriptive research, and given that it used a questionnaire and solicited opinions to investigate the impact of progressive perfectionism on students' self-efficacy and critical thinking, it was classified as survey research. The statistical population of this research consisted of all undergraduate, graduate, and doctoral students of Islamic Azad University, Gorgan Branch, totaling 12,790 individuals. Based on the Krejcie and Morgan table (1970), with a 95% confidence level and a measurement error

of  $\alpha = 5\%$ , a sample of 375 individuals was selected using stratified random sampling by gender, as detailed in Table 3-1.

The purpose of the present research was to investigate the impact of progressive perfectionism on the self-efficacy and critical thinking of students at Islamic Azad University, Gorgan Branch. This research was applied in terms of purpose and descriptive-survey in terms of method. Its statistical population consisted of all students of Islamic Azad University, Gorgan Branch, totaling 12,790 individuals. Based on the Krejcie and Morgan table (1970), with a 95% confidence level and a measurement error of  $\alpha = 0.05$ , a sample of 375 individuals was selected using stratified random sampling by gender. Data were collected using the Perfectionism Questionnaire by Asadpour (2017) with 28 items and 4 components (goal-directedness, striving for excellence, desire for order, and positive personal standards), the Self-Efficacy Questionnaire by Sherer et al. (1982) with 17 items and 3 dimensions (willingness to initiate effort, willingness to expend effort to complete tasks, and persistence in the face of obstacles), and the Critical Thinking Questionnaire by Ricketts (2003) with 33 items and 3 dimensions (creativity, maturation, and commitment). The face and content validity of the instruments were confirmed by the supervisor and advisor professors and experts, and their reliability was calculated using Cronbach's alpha coefficient: 0.89 for the progressive perfectionism questionnaire, 0.93 for the self-efficacy questionnaire, and 0.92 for the critical thinking questionnaire, which were statistically confirmed. For data analysis, descriptive statistics (frequency, percentage frequency, graphs, tables, mean, and standard deviation) and inferential statistics (structural equation modeling, univariate regression, and multivariate regression tests) were used. The researcher analyzed the data obtained from the questionnaires after extraction and classification using SPSS21 and LISREL8.5 software.

**Table 1.**

Number of Population and Sample by Gender

Gender	Population	Sample	Percentage
Female	7,126	209	56%
Male	5,664	166	44%
Total	12,790	375	100%

## Results

Specific statistical methods are required for data analysis. Data analysis is the stage where the information obtained from the data collection phase is prepared for comparison and analysis concerning the research hypotheses.

In fact, in data analysis, we seek to obtain results about the population through observations extracted from it. In this chapter, descriptive and inferential statistical methods were used for data analysis. After data collection, in order to organize the data and information and achieve the desired criteria, it is necessary to summarize the data and information.

Given the materials presented in the previous chapters (introduction, literature review, and research methodology), this chapter deals with the analysis of the data obtained from the study and the descriptive and inferential investigation of the target statistical population. Through data analysis, the researcher discovers, identifies, and classifies the facts and results.

In this research, the researcher analyzed the data and information obtained from the questionnaire, after extraction and classification, using SPSS21 and LISREL8.5 software.

The findings from the descriptive section showed that 55.7% of the participants were female and 44.3% were male. Additionally, 27.5% of the participants were in the age group below 20 years, 39.7% were in the 20-25 age group, 12% were in the 26-30 age group, and 20.8% were in the age group above 30 years. Furthermore, 43.5% of the participants were single and 56.5% were married. Regarding the educational level, 51.5% were undergraduate students, 30.7% were graduate students (Master's), and 17.8% were doctoral students. To examine and

test the normality of the data distribution, the Kolmogorov-Smirnov test was used, the results of which are presented in Table 2.

**Table 2**

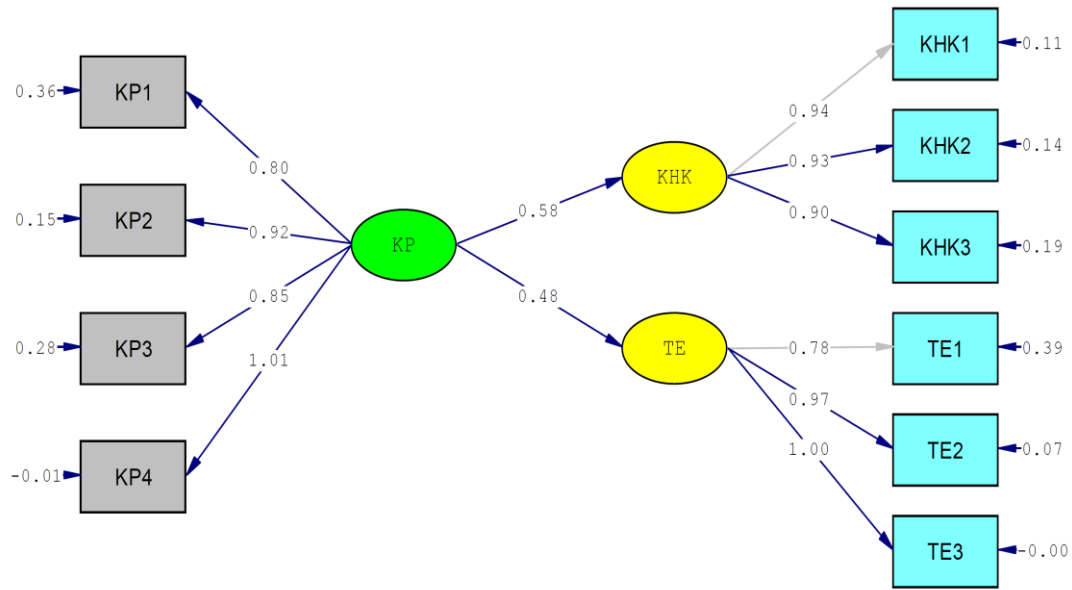
Analysis of Data Distribution Normality

Research Variables	Mean	Standard Deviation	Sample Size	z-statistic	Significance Level
Progressive Perfectionism	3.668	0.978	375	1.339	0.053
Self-Efficacy	3.635	0.860	375	0.871	0.434
Critical Thinking	3.564	0.904	375	0.884	0.415

According to Table 2, at a 95% confidence level and a measurement error of  $\alpha = 0.05$ , since the significance level for all variables is greater than 0.05 (Sig. > 0.05), the data follow a normal distribution. Therefore, the use of parametric statistical tests for inferential data analysis is permissible. The main research hypothesis stated that progressive perfectionism affects the self-efficacy and critical thinking of students at Islamic Azad University, Gorgan Branch. To examine this hypothesis, structural equation modeling was used, and its results were calculated based on the relationships between variables using LISREL software. Figure 1 presents the standardized coefficient estimates in the model, Figure 2 presents the t-test coefficient estimates in the model, and Table 3 presents the model findings at a significance level of 0.05.

H<sub>0</sub>: Progressive perfectionism does not affect the self-efficacy and critical thinking of students at Islamic Azad University, Gorgan Branch.

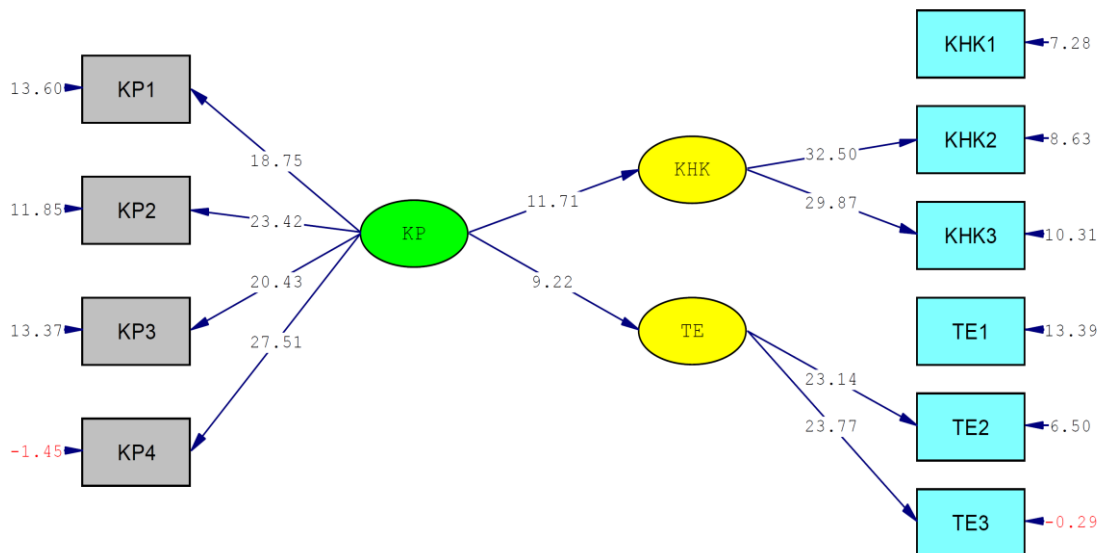
H<sub>1</sub>: Progressive perfectionism does affect the self-efficacy and critical thinking of students at Islamic Azad University, Gorgan Branch.



Chi-Square=94.87, df=33, P-value=0.00000, RMSEA=0.071

Figure 1. Standardized Coefficient Estimates in the Model

According to figure 1, progressive perfectionism has a direct and significant effect on self-efficacy with a standardized coefficient of 0.58 and on critical thinking with a standardized coefficient of 0.48.



Chi-Square=94.87, df=33, P-value=0.00000, RMSEA=0.071

Figure 2. T-test Coefficient Estimates in the Model

According to Figure 2, the t-value for all paths is greater than 1.96, which confirms the existence of a significant relationship between the variables. The calculated t-value between the two variables of progressive perfectionism and self-efficacy is 11.71; the calculated t-value between the two variables of progressive perfectionism and critical thinking is 9.22. This indicates a significant relationship between the variables.

**Table 4**  
Results of Model Findings at a Significance Level of 0.05

No.	Hypotheses	t-statistic	Standardized Coefficient	Test Result
1	Progressive perfectionism has a positive and significant impact on students' self-efficacy.	11.71	0.58	Confirmed
2	Progressive perfectionism has a positive and significant impact on students' critical thinking.	9.22	0.48	Confirmed

According to Charts 1 and 2 and Table 4, at a 95% confidence level and a measurement error of  $\alpha = 0.05$ , the t-values for all cases were calculated to be greater than 1.96 ( $t > 1.96$ ). Therefore, the null hypothesis is rejected, and the research hypothesis is confirmed. It is concluded that: Progressive perfectionism has a positive and significant impact on self-efficacy (with a standardized coefficient of 0.58); and progressive perfectionism has a positive and significant impact on critical thinking (with a standardized coefficient of 0.48). Thus, it can be stated that: "Progressive perfectionism has a positive and significant impact on the self-efficacy and critical thinking of students at Islamic Azad University, Gorgan Branch." Furthermore, progressive perfectionism has a greater impact on students' self-efficacy. The final fit indices of the structural model, based on the LISREL output, are presented in Table 5.

**Table 5.**

Results of Measurement Model Findings at a Significance Level of 0.05

Fit Index	Desirable Value	Calculated Value	Test Result
Chi-square to Degrees of Freedom Ratio ( $X^2/DF$ )	< 3.00	2.87	Confirmed
Root Mean Square Error of Approximation (RMSEA)	< 0.08	0.071	Confirmed
Goodness of Fit Index (GFI)	> 0.90	0.91	Confirmed
Normed Fit Index (NFI)	> 0.90	0.91	Confirmed
Comparative Fit Index (CFI)	> 0.90	0.92	Confirmed
Adjusted Goodness of Fit Index (AGFI)	> 0.90	0.95	Confirmed
Incremental Fit Index (IFI)	> 0.90	0.91	Confirmed
Relative Fit Index (RFI)	> 0.90	0.93	Confirmed

The test results indicate that the chi-square statistic is 94.87 with 33 degrees of freedom, and the chi-square to degrees of freedom ratio is 2.87. Since, for this index, a value less than 3 indicates a suitable model, the proposed model demonstrates a good fit.

Furthermore, the Root Mean Square Error of Approximation (RMSEA) is 0.071. For this index, values less than 0.08 indicate a suitable model. Other model goodness-of-fit indices include: Goodness of Fit Index (GFI) = 0.91, Normed Fit Index (NFI) = 0.91, Comparative Fit Index (CFI) = 0.92, Adjusted Goodness of Fit Index (AGFI) = 0.95, Incremental Fit Index (IFI) = 0.91, and Relative Fit Index (RFI) = 0.93. For all mentioned indices, values above 0.90 indicate a good model fit. Therefore, the proposed model is suitable, and the relationships between the variables are significant.

## Discussion and Conclusion

The results of structural equation modeling showed that progressive perfectionism has a positive and significant impact on self-efficacy (with a standardized coefficient of 0.58) and a positive and significant impact on critical thinking (with a standardized coefficient of 0.48). Therefore, it can be said that: "Progressive perfectionism has a positive and significant impact on the self-efficacy and critical thinking of students at Islamic Azad University, Gorgan

Branch." Furthermore, progressive perfectionism has a greater impact on students' self-efficacy.

The research findings revealed that progressive perfectionism has a positive and significant impact on the self-efficacy and critical thinking of students at Islamic Azad University, Gorgan Branch, and the proposed model has a good fit. Additionally, progressive perfectionism has a greater impact on students' self-efficacy. This finding aligns with the results of studies by: Sadeghian et al. (2012), which showed that an educational program based on the lived experiences of perfectionist students had a significant effect on self-efficacy; Vakilian and Khalatbari (2019), which indicated a significant relationship between perfectionism and self-efficacy; Khatib Zanjani and Hamzehzadeh (2019), which found a positive and significant relationship between positive perfectionism and critical thinking among female student teachers in Khoy city; Mirshekari and Saadatmand (2015), which showed a significant relationship between perfectionism and students' self-efficacy; and Ford et al. (2023), which reported a significant relationship between perfectionism and self-efficacy.

In explaining this finding, it can be said that characteristics of perfectionists include goal-directedness, striving for excellence, and a desire for order and organization. They plan before undertaking any task, deeply desire to achieve complete results with high standards, and seek attention and approval from others. Individuals with these characteristics tend to have higher self-efficacy because they trust their own abilities and standards, are self-reliant, strive to complete tasks, and do not give up before finishing them. Therefore, the greater impact of progressive perfectionism on students' self-efficacy seems logical.

Based on the finding of the main research hypothesis—that progressive perfectionism has a positive and significant impact on the self-efficacy and critical thinking of students at Islamic Azad University, Gorgan Branch—it is suggested that university administrators and officials welcome students' constructive criticism to thereby improve students' self-efficacy and critical thinking.

Since progressive perfectionism has a positive and significant impact on the self-efficacy of students at Islamic Azad University, Gorgan Branch, it is suggested that university administrators and officials organize workshops for students to enhance their positive perfectionism.

Since progressive perfectionism has a positive and significant impact on the critical thinking of students at Islamic Azad University, Gorgan Branch, it is suggested that students engage in detailed planning before undertaking any academic task and contemplate the purpose of that task.

Since the dimensions of progressive perfectionism (goal-directedness and striving for excellence) have a positive and significant impact on the self-efficacy of students at Islamic Azad University, Gorgan Branch—with goal-directedness having the greatest impact—it is suggested that students focus all their efforts on achieving the goal, which is academic success.

Since the dimensions of progressive perfectionism (goal-directedness and striving for excellence) have a positive and significant impact on the critical thinking of students at Islamic Azad University, Gorgan Branch—with goal-directedness having the greatest impact—it is suggested that students set logical and realistic goals and standards for themselves. University administrators and officials should enhance students' self-efficacy and critical thinking by providing successful experiences and achievable goals tailored to students' abilities and aligning these with educational objectives.

### **Acknowledgments**

Gratitude and appreciation are extended to all the officials, administrators, and participants in the study whose sincere cooperation made the execution of this research possible.

### **Conflict of Interest**

No financial, scientific, or personal conflicts of interest were involved in the conduct of the present research.

### **Ethical Considerations**

This research was conducted in accordance with the ethical principles of scientific research. Participants took part in the study with full awareness, and their information was considered confidential. The results were used solely within the framework of the research's scientific objectives, and the names or personal details of participants were omitted.

## References:

- Aghamirzaie Mahalli, T., Taghvaei Yazdi, M.; Aghatabar-Roudbari, J. (2020). The effect of progressive perfectionism on organizational learning and organizational ethics in the University of Medical Sciences (case study of Mazandaran University of Medical Sciences). *Journal of Medicine and Spritual Cultivation*, 29 (3), 245-255.
- Asadpour, P., Esmaili, N., Golafshani, A. (2021) Identifying and ranking the dimensions and components of perfectionism and their effect on the performance of education managers in Mazandaran province. *MEO*; 10 (1) :109-123  
<http://dx.doi.org/10.52547/meo.10.1.109>
- Dekker, T.J. (2020). Teaching critical thinking through engagement with multiplicity. *Thinking Skills and Creativity*, 37 (2020), 100701.  
<https://doi.org/10.1016/j.tsc.2020.100701>
- Endleman, S., Brittain, H., & Vaillancourt, T. (2022). The longitudinal associations between perfectionism and academic achievement across adolescence. *International Journal of Behavioral Development*, 46(2), 91-100.  
<https://doi.org/10.1177/01650254211037400>
- Ford, C. J., Usher, E. L., Scott, V. L., & Chen, X. Y. (2023). The ‘perfect’ lens: Perfectionism and early adolescents' math self-efficacy development. *British Journal of Educational Psychology*, 93(1), 211-228.
- Golestani, H. , Aminbeidokhti, A. and Jafari, S. (2018). Relationship of self-oriented and society-oriented perfectionism with academic burn-out regarding mediating role of the internal and external motivation. *Clinical Psychology: Research and Practice Innovations*", 10(1), 79-89. <https://doi.org/10.22075/jcp.2018.10752.1038>
- Hamachek, D. E. (1978). Psychodynamics of normal and neurotic perfectionism. *Psychology: A Journal of Human Behavior*, 15(1), 27–33.
- Han, C., Li, F., Lian, B., Vencúrik, T., & Liang, W. (2022). Relationships between Perfectionism, Extra Training and Academic Performance in Chinese Collegiate Athletes: Mediating Role of Achievement Motivation. *International Journal of Environmental Research and Public Health*, 19(17), 10764.  
<https://doi.org/10.3390/ijerph191710764>
- Hewitt, P. L., Smith, M. M., Ge, S. Y., Mössler, M., & Flett, G. L. (2022). Perfectionism and its role in depressive disorders. *Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement*, 54(2), 121.
- Khalatbari, J., Ghorban Shiroudi, S. Hosseini, I. (2011). Investigating the relationship between perfectionism and loneliness with the quality of life of medical students in

- Guilan province. *Quarterly Journal of Educational Psychology, Islamic Azad University, Tonekabon Branch*, 2 (1), 117-131.
- Khatib Zanjani, N., Hamzehzadeh, H. (2019). Investigating the relationship between perfectionism and academic procrastination with critical thinking among female student teachers in Khoy city. *Quarterly Journal of Psychological Studies and Educational Sciences*, 5 (4), 100-88.
- Khodadadi, M. (2011). Investigating the relationship between perfectionism and emotional intelligence with academic achievement of second-year high school students in Sirik County. *Studies in Psychology and Educational Sciences (Takestan University)*, 7 (3), 12-1.
- Khosropour, F., & Nikoie, M. (2015). The Relationship between Perfectionism Achievement Motivation SelfEsteem and Academic Performance among Nursing Students. *Strides in Development of Medical Education*, 11(4), 542-549.
- Kilmen, S. (2022). Prospective teachers' professional achievement goal orientations, their self-efficacy beliefs, and perfectionism: A mediation analysis. *Studies in Educational Evaluation*, 74, 101165. <https://doi.org/10.1016/j.stueduc.2022.101165>
- Mirshekari, Z., Saadatmand, Z. (2015). Investigating the relationship between perfectionism, self-efficacy and self-esteem of students in Shahrabadeh Tashk Neyriz elementary schools. The first scientific research conference on strategies for developing and promoting science education in Iran.
- Negru-Subtirica, O., Damian, L. E., Pop, E. I., & Crocetti, E. (2023). The complex story of educational identity in adolescence: Longitudinal relations with academic achievement and perfectionism. *Journal of Personality*, 91(2), 299-313.
- Nejad-Irani, Farhad (2017). The effect of employees' perfectionism on organizational effectiveness by studying the mediating role of improving employees' job performance (case study: Agricultural Jihad Organization of West Azerbaijan Province). *Modern Management Engineering Quarterly*, 5 (3 and 4), 114-97.
- Nikoogoftar, M., & Hajkazemi, Z. (2022). The relationship between anxiety and selfefficacy with academic procrastination in Tehran students: the mediating role of perfectionism. *Journal of Educational Psychology Studies*, 19(45), 123-141. DOI: 10.22111/JEPS.2022.6722
- Olsson, L. F., Madigan, D. J., Hill, A. P., & Grugan, M. C. (2022). Do athlete and coach performance perfectionism predict athlete burnout?. *European Journal of Sport Science*, 22(7), 1073-1084.
- Orujlu S, Hemmati Maslakkpak M. Assessing the Relationship between Critical Thinking and Self-Efficacy of Nursing Student. 3 *JNE* 2017; 5 (6) :11-17 <http://dx.doi.org/10.21859/jne-05062>

- Sadeghian, A., Vaziri, S., Fallah, M. (2012). The effectiveness of teaching perfectionism dimensions on the development of self-efficacy in students of special schools. *Quarterly Journal of Psychological Methods and Models*, 13 (48), 115-130.
- Stoeber, J., & Corr, P.J. (2017). Perfectionism, personality, and future-directed thinking: Further insights from revised Reinforcement Sensitivity Theory. *Personality and Individual Differences*, 105 (15), 78-83. <https://doi.org/10.1016/j.paid.2016.09.041>
- Vakilian, L. & Khalatbari, J. (2019). The Relationship of Perfectionism and Organizational Commitment with Self-Efficacy. *Industrial and Organizational Psychology Studies*, 6(1), 61-80. doi: 10.22055/jiops.2019.30087.1137
- Warren, L., Reilly, D., Herdan, A., & Lin, Y. (2021). Self-efficacy, performance and the role of blended learning. *Journal of Applied Research in Higher Education*, 13(1), 98-111. <https://doi.org/10.1108/JARHE-08-2019-0210>
- Yekta Koushali, M., Ramezani, A., Pournajafi, S., Esmail-Pourbandpi, M. (2017). Investigating the relationship between information literacy and critical thinking in students: A cross-sectional study. *Journal of Nursing Education*, 6 (5), 8-1.