

Impact of Perfectionism on Self-Efficacy and Academic Achievement among Young Adults: Moderating Role of Social Support

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ABSTRACT: The current research paper has investigated the connection between perfectionism, self-efficacy, and academic performance in young adults. Positive and negative aspects of perfectionism were taken into consideration to investigate the different effects they have on the psychological resources and performance of students. The study design was a quantitative, cross-sectional study, and the data were gathered using a sample of young adults which comprised of standardized self-report measure of perfectionism and self-efficacy and academic achievement was measured using cumulative grades. The hypotheses were tested by use of descriptive statistics, correlation analysis, regression and independent sample t-tests. Findings showed that positive perfectionism had a strong correlation with the self-efficacy and academic performance, and negative perfectionism had an inverse relationship with these variables. Moreover, self-efficacy partially mediated the correlation between perfectionism and academic performance, which is essential to indicate the significance of self-efficacy in the transformation of perfectionistic dispositions into performance results. There were also gender variations whereby females scored higher in negative perfectionism and had a relatively lower academic self-efficacy compared to males. These results imply that the academic performance of young adults can be enhanced by means of interventions that enhance self-efficacy and adaptive perfectionistic characteristics. The research paper adds to the literature on perfectionism in the academic world and supports the significance of psychological strengths in academic success.

KEYWORDS: Perfectionism, Self-efficacy, Academic Achievement, Young Adults, Gender Differences

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Introduction

Background

Perfectionism is a multidimensional personality trait, which implies that it is comprised of striving to achieve high standards and self-criticism. It is generally categorized into two, which are positive and negative. The method of setting high and yet realistic goals, having a motivation to achieve them and enjoying the process and the development is positive perfectionism. It is associated with perseverance, self-control and positive use of feedback, which is likely to lead to self-development and better performance outcomes. Negative

perfectionism, in its turn, is that, which is characterized by being too afraid of making a mistake, self-criticism, and the feeling that one does not do enough. It can often lead to chronic stress, anxiety, and avoidance behavior which can worsen psychological wellbeing and academic performance (Flett and Hewitt, 2022). Positive perfectionism may help to achieve success and resilience, whereas negative perfectionism is more prone to inhibit adaptation and put a person at risk of both academic and emotional problems (Madigan, 2019).

Self-efficacy refers to a personal conviction about the capacity to arrange and perform tasks that are necessary to achieve certain objectives (Bandura, 1997). In the academic circle, it represents the level of trust students have in their capacity to learn, do assignments and pass exams. High self-efficacy positively affects motivation, persistence during the challenge situation, and the adoption of effective learning strategies, all of which increase achievement (Honcik and Broadbent, 2016). Perfectionism and self-efficacy are bidirectional, positive perfectionism supports self-efficacy by building confidence and effort, and negative perfectionism undermines self-efficacy by developing self-doubt and anxiety of failure (Wang & MacIntyre, 2021).

Academic achievement may be described as the quantifiable level of success that a student achieves in his/her academic activities, which is usually determined by grades, overall GPA, and other standardized indicators of student performance (Richardson et al., 2012). Cognitive skills, motivation and learning strategies determine achievement, yet personality traits like perfectionism also contribute to achievement. Positive perfectionism is usually associated with high academic achievement as the high standards of students are accompanied by good effort and endurance. Conversely, negative perfectionism can make students poor learners because they procrastinate, experience more anxiety, and evade difficult tasks (Madigan, 2019). Self-efficacy is an important factor in this process and mediates the degree to which perfectionism is converted to achievement.

Social support is the perception or the actuality of being taken care of, encouraged and assisted by the social network of the individual such as family, peers and educators (Cohen & Wills, 1985). It offers them emotional support and practical materials, which assist students in coping with academic pressures. The negative perfectionism could be alleviated by the support of positive social support where the adverse effects of negative perfectionism on self-efficacy and academic performance might be minimized, and positive relationships mitigates stress and facilitates adaptive coping. Simultaneously, positive perfectionism can be transformed into a more advantageous state when it is supported by the positive environment that confirms the worth of effort and encourages.

Combined, both positive and negative perfectionism are highly important in influencing the academic experiences of students. Self-efficacy is a process by which perfectionism affects achievement, whereas social support is a moderator that can dilute the negative effects and boost the positive ones. This renders the interplay of these variables to be of special significance to the academic adjustment and performance of young adults.

Theoretical Framework

The self-determination theory (SDT) is a strong and comprehensive theoretical framework, which supports this study. Deci and Ryan (2000) identified human motivation, development, and well-being as the core of SDT.

To start with, SDT and the research of perfectionism relate to each other in this study. Positive perfectionism is a characteristic of SDT as an embodiment of this inner motivation and commitment to personal growth; as an embodiment of this desire, one pursues high standards that are achievable. The paradigm of SDT positive perfectionists can have a high sense of autonomy, consider their goals to have significance to the individual and provide standards that are aligned to their values (Deci & Ryan, 2000).

Second, SDT provides valuable information regarding self-efficacy. This approach entails the authority to inspire behavior. When applied within the framework of this paper, individuals with an intrinsic motivation, which is also a characteristic of active perfectionists, have a higher chance of believing in their own capabilities and are capable of achieving their goals. One of the ways in which SDT shows the relationship between autonomy and relevance is that they are inherently connected with a sense of competence that consequently reinforces a sense of self-efficacy. According to the SDT paradigm, individuals with a high sense of self-efficacy are more likely to engage in challenging tasks with optimism and see failures as a chance to become better people (White et al., 2021).

Moreover, SDT supports the analysis of academic success in the study. The hypothesis suggests that naturally motivated people have higher chances of performing tasks and activities and performing better. In the context of this paper, this is in line with the theory that individuals who are highly motivated and are eager to be perfect are more likely to achieve outstanding results in their academics through self-enhancement and self-motivation. Their performance in school has improved since they tend to persevere in their studies, are actually keen in learning and have a motivation to achieve high standards. This view aligns with the SDT framework, which puts a high priority on intrinsic motivation and autonomy as the means of promoting academic success (Howard et al., 2021).

Finally, SDT recognizes the importance of relevance, or the need to have a sense of connectedness and belonging. Social support may be regarded as a vital component of the SDT framework because it creates a feeling of connectedness. The research question examined the role of social support that is unquestionably connected with the SDT focus on autonomy and relevance in modulating the association between perfectionism, self-efficacy, and academic achievement. Social support within SDT, according to Deci and Ryan (2000), provides individuals with a feeling of autonomy and belonging which can lead to an internal drive, sense of self-efficacy and overall well-being.

The theory of self-determination (SDT) as a comprehensive and unified theoretical framework is in line with and justifies the various aspects of the research topic. Besides offering an extensive model of further research on the intricate relations, it presents a wide perspective that relates the role of internal motivation, self-efficacy, academic achievement, and social support in the lives of the youth.

Rationale

The study explores the complex relationships among perfectionism, self-efficacy, academic performance, and the regulation influence of social support of young people and acknowledges the far-reaching consequences of such relationships on their general development and future course. The basis of the development of the young population is academic performance, which not only influences the level of education, but also their

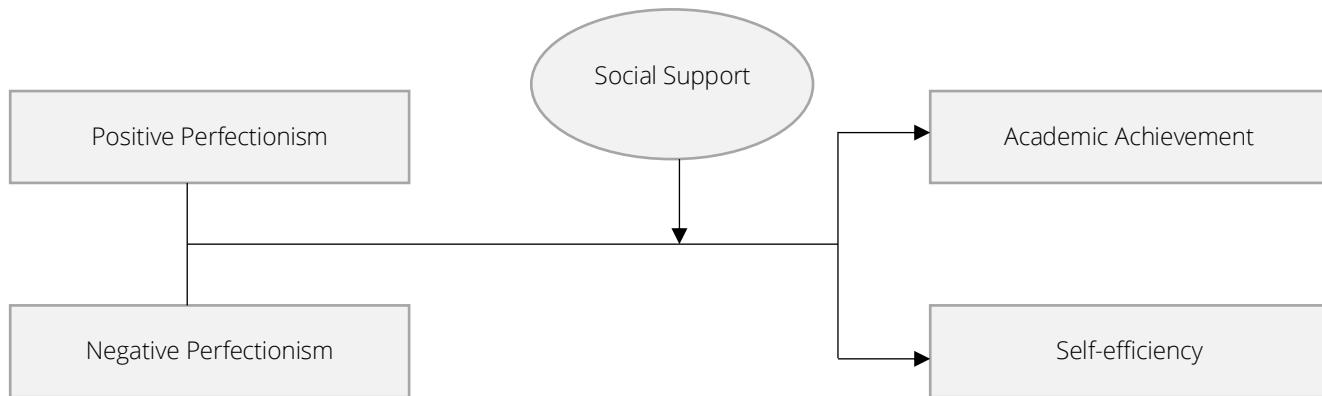
mental state and career opportunities. Nevertheless, the path to academic achievement is usually influenced by the personal variations in perfectionist behaviors, which may be expressed in the desire to achieve excellence, and the origin of distress and suppression (Endleman et al., 2022).

In the light of the complex character of perfectionism, the present research attempts to examine its positive and negative aspects and their subsequent impacts on self-efficacy and academic performance. Through the examination of these dimensions, the study will be able to explain the finer details through which perfectionism influences the beliefs that individuals have in their capabilities and the resultant performance in their academic work, thus adding to the body of literature. Also, the research acknowledges the important role of social support as a possible buffer that can be used to avoid the negative impact of perfectionism on self-efficacy and academic performance. Past studies have highlighted the safeguarding role of social support networks in alleviating the negative effects of perfectionism (Lee et al., 2020) and the importance of investigating the manner of leveraging these networks to develop the adaptability and academic achievements of young people (Doyle and Catling, 2022). Exploring the regulatory implications of social support, the study will unveil possible intervention and support mechanisms that can help young individuals to manage the problem of perfectionism and develop effective self-efficacy beliefs. With the help of the personalized work according to the empirical findings, educators, counselors, and policymakers may develop strategies that would help to provide students with a favorable and supportive academic atmosphere that would support their academic and mental well-being.

In the end, the study will help fill the gap between theory and practice and offer evidence-based information to the stakeholders to create specific interventions to manage the multifaceted relationships between perfectionism, self-efficacy, and social support to encourage young people to attain positive academic outcomes.

Figure 1

Impact of positive and negative perfectionism on self-efficacy and academic achievement, moderating role of social support



According to the conceptual model of this study, perfectionism is independent variable which is a strong predictor of self-efficacy and academic achievement. The social support will play the moderating role in this relationship of perfectionism, academic achievement and self-efficacy.

Objectives of the Study

The following are the objectives of this study:

- ▶ To investigate the relationship between perfectionism, self-efficacy and academic achievement among young adults
- ▶ To examine the impact of perfectionism on self-efficacy and academic achievement among young adults
- ▶ To study the moderating role of social support in relationship between perfectionism, self-efficacy and academic achievement among young adults
- ▶ To study the age and gender differences in the relationship between perfectionism, self-efficacy and academic achievement among young adults

Hypotheses of the study

1. There will be a positive relationship between positive perfectionism and self-efficacy among young adults
2. There will be a negative relationship between negative (maladaptive) perfectionism and self-efficacy among young adults
3. There will be a positive relationship between self-efficacy and academic achievement among young adults
4. There will be a positive relationship between positive perfectionism and academic achievement among young adults
5. Social support will moderate the relationship between positive, negative perfectionism, self-efficacy and academic achievement among young adults
6. Females will score high in perfectionism, self-efficacy and academic achievement as compare to male young adults
7. Older young adults will score higher in perfectionism, self-efficacy and academic achievement as compare to younger adults

Method

Research Design

In this study, a correlational cross-sectional research design was implied to investigate the relationships between key variables. The primary aim was to predict the associations between the predictor variable, perfectionism (comprising both positive and negative dimensions), and the outcome variables, self-efficacy and academic achievement, among young adults.

Sample and Sampling Method

The sample of this study included young adults, primarily from education sectors i.e. colleges or universities. The target population included individuals between the ages of 18 and 27. Convenient sampling method was used in this study. To ensure diversity, participants from different disciplines and socio-demographic backgrounds were included. The study aimed to obtain a sample size of ($N = 400$) participants to achieve statistical efficacy and representativeness. The study used convenient sampling to target young people in various disciplines in randomly selected educational institutions to ensure the representativeness and diversity of the sample.

Inclusion Criteria

The following was the inclusion criteria of this study:

- ▶ Individual having age 18 to 27
- ▶ Both gender (male and female)
- ▶ Participant must be enrolled in any university
- ▶ Students having results in GPA form

Exclusion Criteria

The following was the exclusion criteria of this study:

- ▶ Students other than bachelors and masters
- ▶ Students who get scores in percentage form or others rather than in GPA

Instruments

Informed Consent

An informed consent consisting of the ethical guidelines which was followed in the whole study were given to participants and to ensure their voluntary participation, they asked to sign that form.

Demographic Sheet

The demographic sheet included the information including age, gender, socio-economic status, family system, name of university and department.

Positive and Negative Perfectionism Scale (PANPS)

This scale was developed by Terry-Short (1995), to measure perfectionism in two dimensions, negative and positive. This is a 5-point Likert scale ranging from strongly disagree (1) to strongly agree (5). This scale is consisted of 40 items, among which 20 items measure negative perfectionism (e.g. I know the kind of person I ought or want to be, but feel I always fall short of this), and the rest aims to measure the positive dimension of perfectionism. Items are summed up in order to obtain the scores on each scale, higher and low values demonstrate the level of perfectionism on negative dimension. This is considered one of the most valid and reliable scale to measure positive or negative aspect of perfectionism. The negative perfectionism subscale is used in this research. The negative perfectionism subscale shows good internal consistency ranging from 0.81 to 0.88 (Egan et al., 2011).

Interpersonal Support Evaluation List (shortened version-12 item)

Interpersonal Support Evaluation List, a 12-item questionnaire, is designed to assess perceptions of social support. It is a shortened version of the original ISEL, which comprised 40 items (Cohen & Hoberman, 1983). This questionnaire measures three dimensions of perceived social support: Appraisal Support, Belonging Support, and Tangible Support. Respondents provide their ratings on a 4-point scale, ranging from "Definitely True" to "Definitely False." Notably, Items 1, 2, 7, 8, 11, and 12 are reverse-scored. The Appraisal Support subscale is constructed from Items 2, 4, 6, and 11, the Belonging Support subscale from Items 1, 5, 7, and 9, and the Tangible Support subscale from Items 3, 8, 10, and 12. All scores will be summed up to get a whole score of perceived social support. High score indicates higher level of social support. This scale is highly valid to assess social support in students with Cronbach alpha reliability of 0.92 (Bello et al., 2022).

General Self-Efficacy Scale (GSE)

This scale was developed by Schwarzer & Jerusalem (1995). The scale is usually self-administered, as part of a more comprehensive questionnaire. Preferably, the 10 items are mixed at random into a larger pool of items that have the same response format. Responses are made on a 4-point scale range from 'not at all true' to 'exactly true'. Sum up the responses to all 10 items to yield the final composite score with a range from 10 to 40. No recoding or reverse coded items. This scale showed good alpha reliability of .87 (Lazić et al., 2021).

Operational Definitions

Perfectionism

According to the Positive and Negative Perfectionism Syndrome Scale (PANPS), the positive perfectionism (PANPS-Positive) in this research is characterized by a high level of motivation, resilience, and an adaptive perfectionism approach and is defined as better commitment to uphold reasonable and constructive norms, which in turn fosters a positive and inspiring perspective on the pursuit of excellence. Conversely, negative perfectionism (PANPS-Negative) is the propensity to set unreasonably high standards, along with persistent self-criticism, procrastination due to failure-related dread, and a high level of stress and anxiety related to perfectionism. Positive and Negative Perfectionism scale (Terry Short, 1995) was used to assess the perfectionism and higher scores on this indicates higher level of perfectionism.

Self-efficacy

The term "self-efficacy" describes a person's confidence in their capacity to carry out particular activities or actions in a variety of circumstances. This is an assessment of an individual's capacity to organize and carry out tasks in a way that will lead to the desired outcomes. This phenomenon and the higher scores on this were measured with the help of General Self-Efficacy Scale (GSE) (Schwarzer and Jerusalem, 1995) and higher scores on this are the evidence of the higher level of confidence or level of self-efficacy.

Social Support

Social support is the support, emotional support, motivation and resources that individuals receive through their social networks which are their family, friends, and companions. It involves comforting and supporting each other in many ways such as giving advice, empathy, helpfulness and creating a sense of belonging. Social Support Interpersonal Support Evaluation List is a 12-question test that was utilized to evaluate the social support, and high score means more social support.

Academic Achievement

Academic achievement is used to refer to attaining educational goals as well as the personal academic success. It is also usually measured by various measures such as grades, performance in standardized tests, academic awards and the attainment of degrees or courses in education. Academic achievement reflects the level of knowledge, skills and abilities of a person as they apply to education (Pannhausen et al., 2021). Good academic achievement is evidenced by higher GPA.

Ethical Consideration

To protect participants' privacy, confidentiality, and minimize harm, ethical considerations and a commitment to obtain written informed consent from each participant was critical in this project. The research ensured the privacy of the participant's data and also gives the option to withdraw. Participants were given clear and open communication throughout the research process, and any deception was minimized and justified if needed. The institutional review committee granted ethical permission, and the research findings were shared with participants who express interest in them.

Procedure

Several participant groups were recruited from various educational institutions including different private and public sector universities at the beginning of the research procedure, which is subject to institutional approval. The organizations' consent was requested before we begin data collection. Once authorized, the participants' informed consent was sought out, with a focus on highlighting their freedom to take part and to withdraw at any time without facing repercussions. After this, a consent form, demographic sheet, along with other questionnaires was distributed among the participants. All the ethical considerations were strictly followed throughout the study. The data was then analyzed statistically to get the results.

Statistical Analysis

The analysis was conducted using SPSS version 21. The analysis included the frequency, descriptive, correlation, independent sample *t*-test, One-way ANOVA, and linear regression. Moderation analysis was conducted using Preacher and Hayes model in Process Micro.

Results

Table 1

Frequency and percentage of demographic characteristics of the main study (N=400)

Measures	f	%
Gender		
Male	200	50.0
Female	200	50.0
Age		
Early Young Adults (18-20)	100	25.0
Middle Young Adults (21-24)	222	55.5
Late Young Adults (25-27)	78	19.5
Area of residence		
Rural	230	57.5
Urban	170	42.5
Family system		
Nuclear	230	57.5
Joint	170	42.5
Education		
Bachelors	279	69.8
Masters	121	30.3

Note: *f* = frequency, % = percentage

Table 01 shows the result of the frequency analysis of the demographic and academic characteristics of a group of individuals, balanced in gender with equal representation of males and females. The majority are young adults aged 21-24 years (55.5%), with a significant portion residing in rural areas (57.5%) and living in nuclear family systems (57.5%). Education levels are high, with 69.8% holding bachelor's degrees and 30.3% possessing master's degrees.

Table 2

Psychometric Properties for PANPS, SES and SSS Scales and Subscales (N=400)

Variables	k	M	SD	α	Range	
					Actual	Potential
Perfectionism	40	139.87	16.29	.81	85 – 178	40 – 200
Negative perfectionism	20	67.46	9.79	.75	32 – 92	20 – 100
Positive perfectionism	20	72.39	9.61	.72	41 – 98	20 – 100
Self-efficacy	10	28.24	5.24	.74	14 – 39	10 – 40
Social support	12	32.60	5.97	.67	13 – 48	12 – 48

Note: α = Cronbach alpha reliability, k = number of items, M = Mean, SD = Standard Deviation

Table 02 is showing the psychometric characteristics of the scale and sub scales. Positive and negative perfectionism scale showed higher internal consistency of $\alpha = .81$, and its subscale also showed good reliability coefficient ($\alpha = .75$ and $\alpha = .72$). Self- efficacy scale showed good internal consistency of .74 and social support scale moderate level of internal reliability $\alpha = .67$.

Table 3

Correlation of Perfectionism (Positive and Negative), Self-Efficacy, Academic Achievement, and Social Support (N=400)

Variables	1	2	3	4	5	6
Academic achievement	-	.04	.01	.05	.05	.13**
Perfectionism		-	.84**	.83**	-.01*	-.19**
Negative perfectionism			-	.41**	-.15**	-.30**
Positive perfectionism				-	.13*	-.01*
Self-efficacy					-	.26**
Social support						-

Note. * $p < 0.05$, ** $p < 0.01$

The correlation analysis showed that academic achievement is significantly positively correlated with Social Support Scale ($r = .13, p < .01$), but no significant correlations with the other variables. The Positive & Negative Perfectionism Scale is highly positively correlated with Negative Perfectionism ($r = .84, p < .01$) and Positive Perfectionism ($r = .83, p < .01$), while showing a weak negative correlation with Self-Efficacy Scale ($r = -.01, p < .05$) and a moderate negative correlation with Social Support Scale ($r = -.19, p < .01$). Negative Perfectionism also has a moderate positive correlation with Positive Perfectionism ($r = .41, p < .01$), but negative correlations with Self-Efficacy Scale ($r = -.15, p < .01$) and Social Support Scale ($r = -.30, p < .01$). Positive Perfectionism shows a weak positive correlation with Self-Efficacy Scale ($r = .13, p < .05$) and a weak negative correlation with

Social Support Scale ($r = -.01$, $p < .05$). Lastly, the Self-Efficacy Scale positively correlates with Social Support Scale ($r = .26$, $p < .01$).

Table 4

Linear regression analysis of the effects of positive and negative perfectionism on self-efficacy (N=400)

Predictor	<i>B</i>	<i>SE</i>	β	95% CI		<i>p</i>
				<i>LL</i>	<i>UL</i>	
(constant)	2.80	.22		2.37	3.24	.00
Positive Perfectionism	.24	.06	.22	.13	.36	.00
Negative Perfectionism	-.25	.06	-.24	-.37	-.14	.00
R	.25					
R^2	.63					
<i>f</i>	13.34					

Note. * $p < 0.05$, ** $p < 0.01$; DV: Self Efficacy

The linear regression analysis examining the effects of positive and negative perfectionism on self-efficacy indicates statistically significant results for both predictors. Positive perfectionism shows a positive effect on self-efficacy ($p = .00$), suggesting that as positive perfectionism increases by one unit, self-efficacy is expected to increase by .24 units, holding other variables constant. On the other hand, negative perfectionism impacts negatively on self-efficacy ($p = .00$) meaning that when one unit of negative perfectionism is added, the self-efficacy is predicted to be reduced by .25 units, other factors being held constant.

Table 5

Regression analysis of association between positive, negative perfectionism and academic achievement (N=400)

Predictor	<i>B</i>	<i>SE</i>	β	95% CI		<i>p</i>
				<i>LL</i>	<i>UL</i>	
(constant)	3.23	.16		2.91	3.55	.00
Positive Perfectionism	.04	.04	.06	-.04	.12	.31
Negative Perfectionism	-.01	.04	-.01	-.09	.07	.85
R	.05					
R^2	.003					
<i>f</i>	.55					

Note. * $p < 0.05$, ** $p < 0.01$; DV: Self Efficacy

The linear regression analysis of the influence of positive and negative perfectionism on academic achievement shows no significant results of both predictors. Positive perfectionism shows a non-significant positive effect on academic achievement ($p = .31$), suggesting that as positive perfectionism increases by one unit, academic achievement is expected to increase by .04 units, holding other variables constant. Similarly, negative perfectionism demonstrates a non-significant effect on academic achievement ($p = .85$), indicating that as negative perfectionism increases by one unit, academic achievement is expected to decrease by .01 units, holding other variables constant.

Table 6

Moderation analysis of social support in relationship between negative and positive perfectionism (IV), and Self Efficacy (DV) (N = 400)

Variables		Self-efficacy			
		B	SE	CL 95% LL	UL
1	Const	2.03	.94	.17	3.88
	Negative perfectionism	.04	.27	-.50	.58
	Social support	.39	.32	-.24	1.02
	Interaction effect	-.04	.10	-.23	.14
	R ²	.07			
2	F	10.24**			
	Const	2.48	1.02	.48	4.49
	Positive perfectionism	-.11	.27	-.65	.43
	Social support	-.04	.35	-.72	.64
	Interaction effect	.09	.09	-.10	.27
	R ²	.08			
	F	12.16**			

Note. * $p < 0.05$, ** $p < 0.01$; DV= Self-Efficacy

Figure 2

Graphical Representation Moderation analysis of social support in relationship between negative perfectionism (IV), and Self Efficacy (DV)

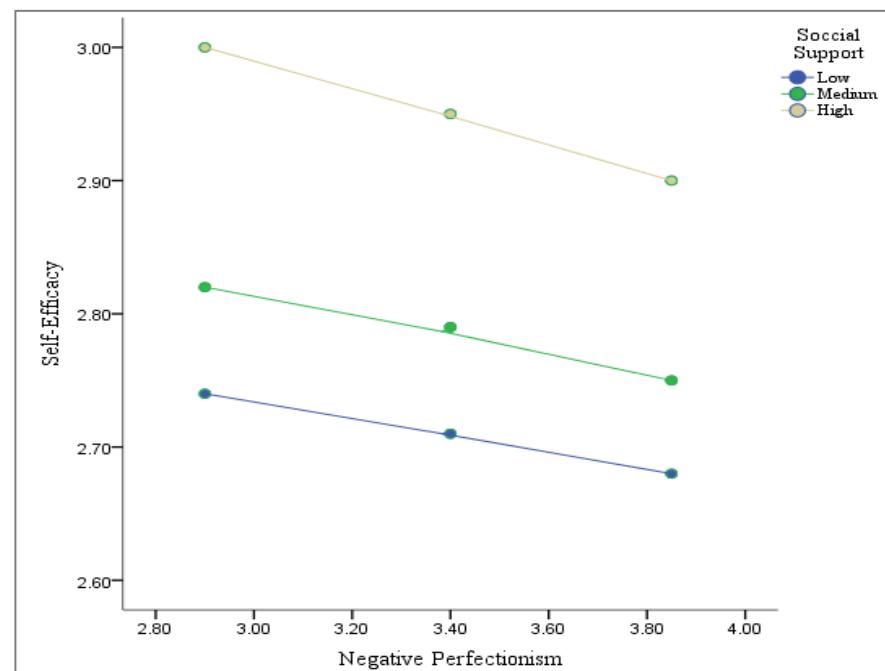
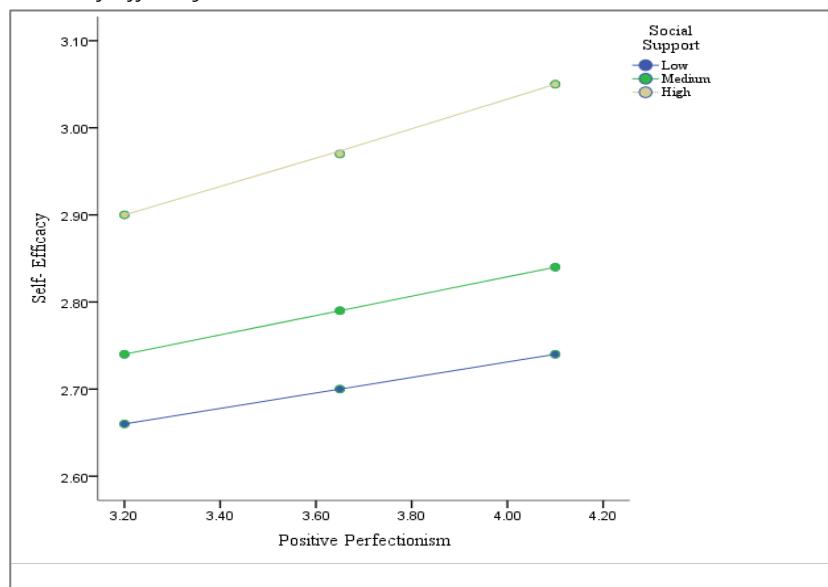


Figure 3

Graphical Representation Moderation analysis of social support in relationship between positive perfectionism (IV), and Self Efficacy (DV)



In the moderation analysis examining the relationship between positive and Negative Perfectionism (IV) and Self-Efficacy (DV), with Social Support Scale as the moderator, the results indicate that Negative Perfectionism does not significantly predict Self-Efficacy. In case of positive perfectionism, the results indicate that neither Positive Perfectionism nor Social Support Scale significantly predict Self-Efficacy. Results also indicates that Positive Perfectionism and Social Support Scale show non-significant effects on Self-Efficacy, suggesting no meaningful relationship or moderation effect in this analysis.

Table 7

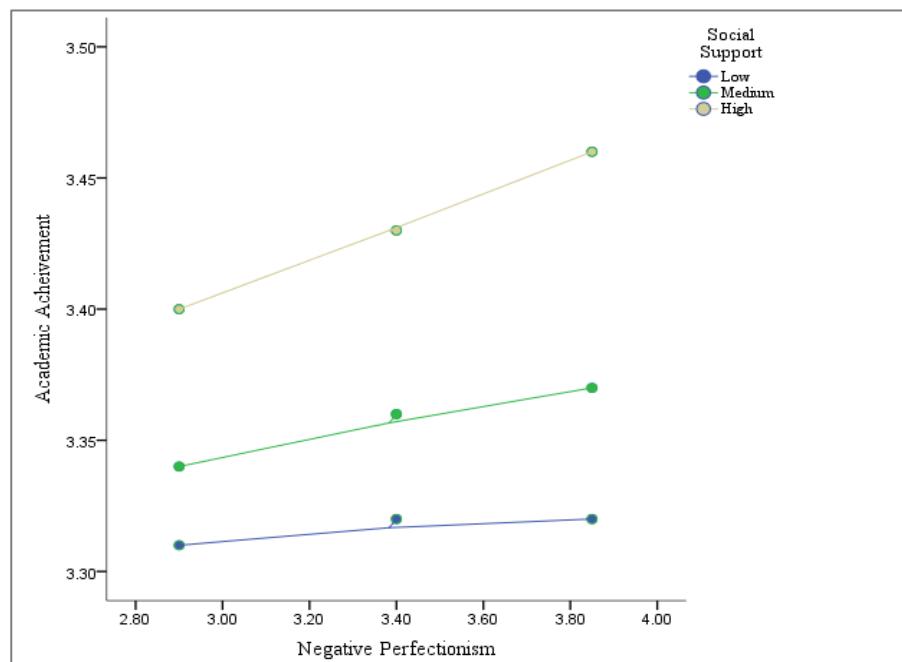
Moderation analysis of social support in relationship between positive and negative perfectionism (IVs) and academic achievement (DV)

	Variables	Academic achievement			
		B	SE	LL	UL
1	Const	3.58	.75	2.09	5.07
	Positive perfectionism	-.13	.20	-.53	.26
	Social support	-.12	.25	-.62	.38
	Interaction effect	.06	.06	-.07	.19
	R ²	.02			
2	F	2.91			
	Const	3.53	.69	2.17	4.89
	Negative perfectionism	-.14	.20	-.53	.25
	Social support	-.10	.23	-.56	.36
	Interaction effect	.06	.07	-.07	.20
	R ²	.02			
	F	2.90			

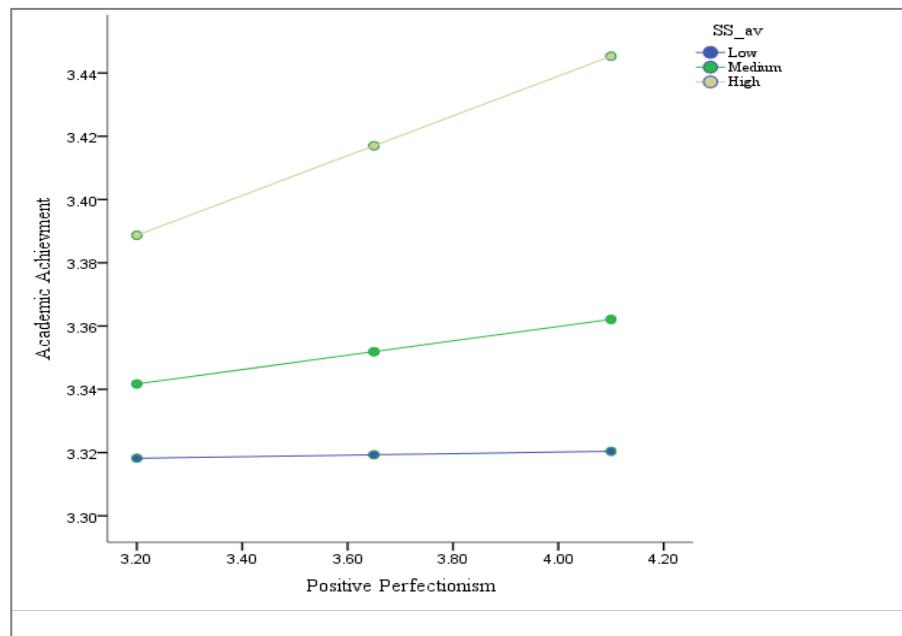
Note. * $p < 0.05$, ** $p < 0.01$; DV: Self-Efficacy,

Figure 4

Graphical Representation Moderation analysis of social support in relationship between positive perfectionism (IV), and Academic Achievement (DV)

**Figure 5**

Graphical Representation Moderation analysis of social support in relationship between negative perfectionism (IV), and Academic Achievement (DV)



In the moderation analysis examining the relationship between Positive Perfectionism and academic achievement. The results showed that Positive Perfectionism and Social Support Scale show no significant effect on Academic Achievement, indicating a lack of significant relationships or moderation effects in this

analysis. In the moderation analysis of the relationship between Negative Perfectionism (*IV*) and Academic Achievement (*DV*), with Social Support Scale as the moderator, Negative Perfectionism or Social Support Scale does not significantly predict Academic Achievement.

Table 8

Independent sample t-test on gender differences on Academic Achievement, Perfectionism, Self-Efficacy and Social Support (N=400)

Variables	Male		Female		<i>t</i> (398)	<i>p</i>	Cohen's <i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Academic achievement	3.34	.38	3.39	.37	1.36	.17	-
Perfectionism	139.89	15.48	139.85	17.09	.02	.18	-
Negative perfectionism	68.02	9.08	66.91	10.45	1.13	.09	-
Positive perfectionism	71.88	9.40	72.91	9.82	1.07	.65	-
Self-efficacy	27.63	5.49	28.85	4.88	2.35	.01	.23
Social support	31.37	5.03	33.82	6.57	4.17	.00	.41

Note. **p* < 0.05, ***p* < 0.01

The independent sample *t*-test analysis reveals significant gender differences in self-efficacy and Social support among the 400 individuals studied. Females scored significantly higher than males on the Self-Efficacy Scale (*p* = .01) and on the Social Support Scale (*p* = .00). However, no significant gender differences were observed in other variables.

Table 9

Age Group differences on Academic Achievement, Perfectionism, Self-Efficacy and Social Support (N=400)

Variables	Early young adults (N = 100)		Middle young adults (N = 222)		Late young adults (N = 78)		<i>f</i>	<i>p</i>	<i>μ2</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Academic Achievement	3.37	.39	3.36	.37	3.37	.36	.02	.98	-
Perfectionism	137.98	16.01	140.36	16.22	140.91	16.82	.93	.39	-
Negative Perfectionism	65.99	10.02	67.94	9.55	68.00	10.10	1.52	.22	-
Positive Perfectionism	71.99	9.48	72.39	9.63	72.92	9.84	.20	.82	-
Self-efficacy	28.05	4.79	27.86	5.39	29.58	5.12	3.22	.04	.29
Social Support	33.66	6.95	31.84	5.18	33.41	6.46	4.15	.02	.34

Note. **p* < 0.05, ***p* < 0.01

Table 09 is showing the results of one-way ANOVA analysis examining age group differences in self-efficacy scores among 400 individuals yielded a statistically significant result (*F*= 3.22, *p* = .04). This suggests that there are variations in self-efficacy levels across different age groups. Social support scale also showed significant differences based on age groups (*F*=4.15, *p* = .02). However, no other significant difference was observed.

Table 10*Post hoc analysis of significant results of ANOVA (N=400)*

Dependent Variable	Groups		MD (I - J)	SE	95% CI	
	I	J			LB	UB
Self-efficacy	21 – 24	25 – 27	-1.71*	.68	-3.32	-.10
	25 – 27	21 – 24	1.71*	.68	.10	3.32
Social Support	18 – 20	21 – 24	1.82*	.71	.14	3.50
	21 – 24	18 – 20	-1.82*	.71	-3.50	-.14

Note. * $p < 0.05$, ** $p < 0.01$

Table 10 is showing the Subsequent post hoc comparisons revealed that individuals aged 25-27 exhibit significantly higher self-efficacy compared to those aged 21-24 ($p < .05$). These findings imply that self-efficacy may increase as individuals transition from the early to the later stages of young adulthood, with individuals in the 25-27 age group reporting the highest levels of self-efficacy. Results also shows that social support scale also showed that there is a significant difference exists between the age groups 18 – 20 vs 21 – 24 ($MD = -1.82^*$), and also 21 – 24 vs 18 – 20 ($MD = -1.82^*$).

Discussion

The primary objective of this study was to examine the correlation between positive and negative perfectionism, self-efficacy, social support, and academic success in young individuals. The study's specific objective was to investigate the relationship between positive and negative perfectionism, self-efficacy, and academic accomplishment. It also tries to analyze the role of social support in such interactions and whether there are any differences in terms of gender and age groups. This paper provided an in-depth analysis of ($N = 400$) young adults, which provides a complex insight into the intricate association between these psychological structures. It also provides useful concepts of educational and psychological intervention that will help to improve the well-being and performance of students.

The hypothesis of the first one is that positive perfectionism is positively related to self-efficacy. The study findings indicate that these factors are significantly positively related to each other which in turn approves this hypothesis. Those who demonstrate a strong tendency to positive perfectionism, i.e. setting high individual standards and aiming at excellence, tend to have a stronger sense of self-efficacy. This result is consistent with the previous studies and shows that adaptive perfectionism may lead to a sense of ability and confidence in personal abilities, which is one of the core components of self-efficacy (Stoeber and Otto, 2006). According to another study, the association emphasizes the potential benefits of promoting positive perfectionism in the sphere of learning and self-development. Achieving self-efficacy and improving the overall academic performance of students can be done by encouraging them to set realistic but challenging goals and by instilling a mindset that treats failures as a way to grow personally (Zysberg and Schwabsky, 2020).

The second hypothesis implies that negative perfectionism and self-efficacy have a negative correlation. This hypothesis is also accepted due to running correlation analysis and the results show that there is significant negative correlation exists between perfectionism and self-efficacy ($r = -.15$, $p > 0.01$). The given finding is consistent with existing literature that creates a relationship between maladaptive perfectionism

and a lack of self-confidence and increased anxiety. These aspects may destroy the self-belief of a person. The identification of this negative relationship points to the necessity of addressing maladaptive perfectionism during the therapeutic intervention aimed at a positive change in self-efficacy. Applying cognitive behavioral interventions to rebuild perfectionist patterns of thoughts and reduce self-critical behaviors could be extremely beneficial to people.

The third hypothesis is that there is a positive and direct correlation between self-efficacy and academic achievement. It is also a hypothesis that is accepted due to running person moment correlation, the findings reveal that positive relationship is present between self-efficacy and academic achievement. Students with a stronger self-efficacy belief are better placed to achieve high academic success. This paper confirms the large amount of literature that self-efficacy is a strong predictor of academic success, which affects students motivation, endurance, and ability to overcome challenges (Abyadh & Azeem, 2022). These results show the paramount role of self-efficacy in the academic environment and prove that interventions aimed at improving student self-efficacy can help improve academic performance.

The fourth hypothesis assumes that there is a positive relationship between positive perfectionism and academic success. Pearson correlation analysis was done and the results did not accept this hypothesis, since the results show positive yet insignificant relationship. The study results show that positive perfectionism has no significant direct relationship with academic success. Research in the past presents the reverse of this finding and suggests that there is positive relationship between positive perfectionism and academic performance. The researchers claimed that the individuals who will achieve academic success will have a better positive perfectionism or the standards, and the opposite will be true (Endleman et al., 2022). This outcome may be justified by a number of factors: the differences in the characteristics of the sample, including socio-economic status and personal conditions, may undermine the expected correlation; the measurement tools may have certain limitations; the significant influence of the background variables, including the quality of teaching and institutional support; the differences in the perception of perfectionism; and the complexity of perfectionism as such, in which case high standards may lead to stress and poor performance.

According to the fifth hypothesis, Social support will mediate the relationship between positive and negative perfectionism, self-efficacy and academic achievement. This hypothesis is disapproved because of the running moderation analysis according to model of Preacher and Hayes. The findings show that one can observe the non-significant moderating effect in the relationship between the study variables. This finding can be explained using numerous views that have been found in the available literature. The inherent qualities of perfectionism, whether good or bad, can have a greater effect on self-efficacy and academic achievement than extrinsic factors such as social support. Often, perfectionism is an outcome of personal and psychological problems that cannot be easily transformed by the external social support (Song et al., 2015).

The studies have shown that although social support tends to positively influence the psychological outcomes, it may vary depending on the context and personal traits (Cohen and McKay, 2020). To illustrate, Kahn and Nauta (2001) found out that the effectiveness of social support may be reduced in a challenging educational environment. Moreover, the motivation to achieve goals can be more prominent than the benefits of social support in such an environment. Moreover, the types and sources of social support could also play

a major role. Social support might not have the same results as family member or mentor help. Indeed, the perceived social support could even tend to increase the level of stress especially to those with high degree of perfectionism (Saddler and Sacks, 1993). The low-moderate effect is also explained by the complexity of the interaction between these factors. The associations among perfectionism, self-efficacy, and academic performance are affected by various factors including individual, situational and background factors. This is complicated such that individual variable such as social support cannot play a significant role in moderating these interactions. This points to the fact that there is a need to better understand the interactions between different forms of assistance and individual personality characteristics and have different results in different environments.

The sixth hypothesis is the Females will rate high in perfectionism, self-efficacy and academic achievement as compared to male young adults. The independent sample t-test was also done and the result of running analysis is that this hypothesis is accepted partially. The results revealed some major disparities between the sexes. The women have higher self-efficacy and perceived social support compared to men. Moreover, positive perfectionism is closely related to the perception of women that they are effective, and negative perfectionism is more harmful to the perception of men that they are effective and their academic performance. The findings are consistent with the previous research, indicating that women are more likely to actively build and gain benefits of social support. This, in its turn, increases their self-efficacy and alleviates the effects of negative perfectionism (Visvalingam et al., 2023). This highlights the importance of using a gender sensitive approach to education and psychological intervention to effectively address these differences.

The seventh hypothesis is the exploration of the differences in the relationship between perfectionism, self-efficacy, and academic achievement between age groups. It postulates that the age group of older ages will have high levels of self-efficacy and academic success. To some extent, the results of the research support this concept. The level of self-efficacy in older people (25-27 years old) was higher than in younger respondents (21-24 years old), but there was no significant difference in the academic performance of the two age groups. The results show that the more a person progresses in the early adulthood, the more confident they become about their abilities, perhaps due to the increased experience in life and becoming less dependent. However, the academic performance may be determined by some factors which are quite similar in individuals of the same age group.

Research into self efficacy and academic performance has revealed a complex relationship between a number of age groups. Although Witt-Rose (2003) found out that the age of the scientific students in the university and self-efficacy are not significantly correlated, Berry and West (1993) claim that self-efficacy is a determinant of various factors that influence the input in the task, thus regulating performance over the lifespan. Chanana (2016) found that there is an interesting relationship between self-confidence among undergraduate students and their performance in school. However, no notable distinction was observed in connection to age. Witt-Rose (2003) found that there is a direct relationship between self-efficacy and the number of college semesters completed. This suggests that experience may contribute to the development of self-efficacy. Also, this study suggested that instructors can enhance students' self-efficacy by offering

ongoing guidance and implementing strategies to alleviate anxiety and tension. These interventions have the potential to enhance academic performance across various age groups.

The other findings of this study was that, linear regression analysis was conducted through IBM SPSS. The results of the study indicates that positive and negative perfectionism are highly significant predictors of self-efficacy ($p > 0.01$). However, the results indicated insignificant prediction with academic achievement. The study results align with the previous literature, where a study was conducted to see the impact of dimensions of perfectionism on self-efficacy, and the study demonstrates that there is a significant association exists between perfectionism and self-efficacy (Kurtovic et al., 2019).

Another study give contradictory results from this study. One of a research was conducted in the past to see the impact of perfectionism on academic achievement and academic efficacy. This was a longitudinal study and was conducted on a sample of 487 adolescents. The results of the study indicates a strong and well defined relation and impact of perfectionism on academic achievement (Damian et al., 2017). The complex nature of perfectionism (either positive or negative), that is, high standards can lead to stress and decreased performance, may explain the insignificant prediction of academic achievement. This complexity shows that although perfectionism may enhance self-efficacy, it does not directly translate into academic success.

Conclusion

This research reveals the intricate relationship between perfectionism, self-efficacy, social support and academic achievement of the youth. According to our research results, positive and negative perfectionism significantly affect self-efficacy. Positive perfectionism increases self-efficacy, but negative perfectionism decreases self-efficacy. Moreover, the role of social support as a controlling element is also important. It increases the beneficial effects of positive perfectionism and minimizes negative perfectionism adverse effects on self-confidence. The gender differences are easily observable, as women have a higher degree of self-efficacy and perceived social support than males. This highlights the need to have gender sensitive methods of intervention in education and psychological interventions. Age differences have also emerged and it has been seen that older people (25-27 years old) are more self-efficacious, which means that confidence and expertise increases with time. The results presented above indicate the importance of creating a supportive environment and promoting positive perfectionism to boost self-esteem and academic success, thus helping students to achieve their educational and personal goals.

Implications

The results of the study are of very great significance to the sphere of educational and developmental psychology. The study illuminates the complex relationship between perfectionism, self-efficacy, social support, and academic achievement and provides useful information that could inform evidence-based interventions. It is possible to promote the academic performance and mental health of students through the implementation of educational programs that promote positive perfectionism, self-efficacy, and social support networks. Such treatments must also comprise strategies that are specific to the needs of different groups of students according to their gender and age.

Limitations and Future Directions

Even though this study has contributed, its limitations should be noted. The cross-sectional design used limits the capability to make causal conclusions about the observed relationship. Future research using a vertical design can provide more solid evidence on the development and interaction of these structures over time. Moreover, the fact that the research sample is not diversified limits the extrapolation of the research results. To enhance the external validity, the future studies should aim at involving more diverse and representative groups. A deeper understanding of the complexity behind perfectionism, self-confidence, and academic achievement can be achieved by looking at other factors, including personal attributes, mental activities, and external factors.

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