The Relationship Between Perfectionism and Depression and Social Anxiety in Social Media Users: Emphasizing the Mediating Role of Rumination

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A r t i c l e   I n f o

A B S T R A C T

Objective: This study aimed to examine the relationship between perfectionism and depression and social anxiety among social media users, with an emphasis on the mediating role of rumination.

Methods and Materials: The population included social media users with a Bachelor's degree or higher in 2020. A total of 430 individuals (312 women, 118 men) were selected through voluntary sampling and responded to the Multidimensional Perfectionism Scale of Tehran (Besharat, 2007), the Ruminative Response Style Scale (Nolen-Hoeksema & Morrow, 1991), the Beck Depression Inventory – Second Edition (Beck et al., 1996), and the Social Phobia Inventory (Connor et al., 2000).

Findings: According to Pearson's correlation test results, there is a positive relationship between dimensions of perfectionism and rumination, and between rumination and both depression and social anxiety. There is a positive relationship between dimensions of perfectionism (self-oriented, other-oriented, and socially prescribed) and depression, and two dimensions of perfectionism (other-oriented and socially prescribed) have a positive relationship with social anxiety. Path analysis results showed that perfectionism explains 16% of the variance in rumination, and both perfectionism and rumination explain 43% of the variance in depression, and finally, perfectionism and rumination explain 31% of the variance in social anxiety.

Conclusion: Therefore, rumination plays a mediating role in the relationship between dimensions of perfectionism and both depression and social anxiety.

Keywords: Perfectionism, Rumination, Depression, Social Anxiety.

1. Introduction

Today, social networks are increasingly used for relationships, accessing news content, and sharing information by people of all ages worldwide (Jiang & Ngien, 2020). Individuals with social anxiety are at a higher risk of becoming more engaged in social networks (O'Day & Heimberg, 2021; She et al., 2023). Social anxiety is defined

as significant fear or anxiety about one or more social situations where the individual is likely to be exposed to scrutiny by others (American Psychiatric Association, 2022) and can negatively impact interpersonal relationships, work, and academic performance, such as increasing the risk of dropping out, reducing work productivity, and quality of life, and increasing suicidal thoughts (Demir et al., 2023; Gan et al., 2023; Himle et al., 2020; Lu et al., 2021; Yang & Lu, 2022). Furthermore, research by Wang et al. (2024) and Li et al. (2023) also showed that anxiety disorders, especially social anxiety disorder, have a significant comorbidity with depression, and there seems to be a complex relationship between depression and anxiety (Li et al., 2023; Wang et al., 2024). Depression is a recurrent disorder with recurring episodes characterized by pervasive and persistent sadness, loss of pleasure in daily activities, restlessness, and symptoms related to some negative thoughts, lack of energy, difficulty concentrating, and disturbances in sleep and appetite (American Psychiatric Association, 2022).

Perfectionism is associated with depressive and anxiety disorders (Patston & Osborne, 2016). Individuals who score high on the socially prescribed dimension of perfectionism become depressed due to conflict with consolidating their life experiences as a meaningful personal narrative (Graham et al., 2010). Research results indicate that perfectionism, combined with daily stressors, predicts anxiety and social anxiety (O'Connor et al., 2010). The response style theory considers rumination a cognitive vulnerability factor for developing depression and anxiety (McLaughlin & Nolen-Hoeksema, 2011). Rumination is a term used to describe uncontrollable, repetitive, and intrusive thoughts (Segerstrom et al., 2003). Individuals who tend to ruminate in response to depression and anxiety are at higher risk for disorders compared to individuals who use distraction or problem-solving styles (Aldao et al., 2010). In other words, during rumination, individuals tend to get stuck in their negative feelings because they pay more attention to their negative emotions (Liu et al., 2019). Research by Nepon et al. (2011) shows that rumination in the socially prescribed and other-oriented dimensions of perfectionism causes social anxiety (Nepon et al., 2011). Given research on the relationship between depression and anxiety with rumination (Aldao et al., 2010; Ji, 2024), dimensions of perfectionism and anxiety (Akram et al., 2017), depression and perfectionism (Hewitt et al., 2022; Stoeber, 2014), rumination with perfectionism and depression (De Rosa et al., 2023; Senra et al., 2018), rumination with perfectionism and anxiety (Nepon et al., 2011), and the relationship

between social anxiety and depression (Li et al., 2023), the researcher seeks to examine the mediating role of rumination in the relationship between dimensions of perfectionism and depression and social anxiety.

2. Methods and Materials

2.1. Study Design and Participants

The research method is descriptive and correlational. The study population consisted of online social network users with a Bachelor's degree or higher in 2020. According to Kline's theory (2023), the sample size can be estimated by multiplying the number of items in all tools by 5 to 15 times (Kline, 2023). Accordingly, the sample size was estimated to be 440 individuals. A call for participation in the study was made on a social network, and those interested in participating and who had a Bachelor's degree or higher were selected as the sample. After discarding damaged questionnaires, 430 questionnaires were analyzed. The sample was selected using a voluntary accessible online sampling method.

2.2. Measures

2.2.1. Depression

Beck Depression Inventory - Second Edition (BDI-II): The revised form of the Beck Depression Inventory consists of 21 items (Beck et al., 1996). The 21 items of this inventory are classified into three groups: affective symptoms (items 14, 13, 8, 7, 6, 5, 3), cognitive symptoms (items 12, 9, 4, 2, 1), and physical symptoms (items 21, 20, 19, 18, 17, 16, 15, 11, 10). Each item is scored based on severity, with scores ranging from zero to three, making the total possible score range from zero to 63. Beck et al. (1996) reported a convergent validity of this tool with the Suicide Thoughts Scale (Beck, 1996) as 0.37, and a Cronbach's alpha coefficient of 0.93. Rahimi (2014) obtained a convergent validity of this tool with the depression and anxiety subscales of the 21-item Depression, Anxiety, and Stress Scale (as 0.60, and a Cronbach's alpha of 0.89 (Rahimi, 2014). In this study, the reliability of this scale was found to be 0.90.

2.2.2. Social Anxiety

The Social Phobia Inventory, created by Connor et al. (2000), is designed to assess social anxiety. This self-report tool with 17 items measures three factors: fear (items 1, 3, 5,

10, 14, 15), avoidance (items 4, 6, 8, 9, 11, 12, 16), and physical symptoms (items 2, 7, 13, 17). It is scored on a 5-point Likert scale from 0=not at all to 4=very much. The convergent validity of the Social Phobia Inventory by Connor et al. (2000) was 0.53, and its reliability through test-retest method was 0.89. The internal consistency coefficient was 0.94, with fear subscales at 0.89, avoidance at 0.91, and physiological at 0.80 (Connor et al., 2000). In the research by Antony et al. (2006), the convergent validity with the phobic fear of the Revised Clinical Symptoms Checklist was 0.80, and the Cronbach's alpha coefficient was 0.92 (Antony et al., 2006). In Iran, Saffarinia and Shahandeh (2014) reported its convergent validity with the phobic fear subscale of the Revised Clinical Symptoms Checklist as 0.83 and a Cronbach's alpha of 0.87 (Saffarinia & Shahandeh 2014). In this study, the reliability of this scale was found to be 0.94.

2.2.3. Rumination

Ruminative Response Scale (RRS) (Nolen-Hoeksema & Morrow, 1991) consists of two subscales: ruminative responses and distracting responses. In this study, the Ruminative Responses Scale (Nolen-Hoeksema & Morrow, 1991) was used, which contains 22 items. Each item is rated on a scale from one (never) to four (always) and measures three factors: brooding (reflection) (items 7, 11, 12, 20, 21), pondering (items 5, 10, 13, 15, and 16), and depression (items 1, 2, 3, 4, 6, 8, 9, 14, 17, 18, 19, 22). Nolen-Hoeksema & Morrow (1991) reported a convergent validity of the Ruminative Responses Scale with the Beck Depression Inventory as 0.67 and a Cronbach's alpha of 0.92. In Iran, Bagheri Nejad et al. (2009) found its convergent validity with the Beck Depression Inventory as 0.56. Cronbach's alpha in the research by Mansouri (2010) was reported as 0.90 (Bagherinezhad et al., 2010). In this study, the reliability of this scale was found to be 0.92.

2.2.4. Perfectionism

Tehran Multidimensional Perfectionism Scale (TMPS): The Tehran Multidimensional Perfectionism Scale by Besharat (2007) is a 30-item tool that measures three dimensions of perfectionism: self-oriented perfectionism (items 1, 3, 5, 7, 9, 11, 13, 15, 21, 23, 25, 26, 28, and 30), other-oriented perfectionism (items 4, 8, 10, 12, 16, 17, 18, 19, 20, 27, 29), and socially prescribed perfectionism (items 2, 9, 22, and 24). It uses a 5-point Likert scale ranging from 1 to 5. In Iran, the concurrent validity of the Multidimensional Perfectionism Scale was obtained through simultaneous administration with a mental health questionnaire as 0.62, and the Cronbach's alpha coefficient was reported as 0.85. Liaghat and Ghasemi (2014) reported the convergent validity of the scale with an anxiety test questionnaire as 0.30, and the Cronbach's alpha coefficient as 0.81 (Besharat 2010; Besharat et al., 2020). In this research, the reliability of the subscales for self-oriented perfectionism, other-oriented perfectionism, and socially prescribed perfectionism were found to be 0.78, 0.77, and 0.68, respectively.

2.3. Data analysis

The data were analyzed using SPSS and Amos software through path analysis.

3. Findings and Results

Based on the results, the mean age of the sample was 34.86 with a standard deviation of 9.46, ranging from 22 to 59 years. The results, including mean, standard deviation, minimum, maximum, skewness, and kurtosis, are reported in Table 1.

Table 1

Descriptive Findings Summary for Perfectionism, Rumination, Depression, and Social Anxiety

Variables	Mean	SD	Min	Max	Skewness	Kurtosis
Self-Oriented Perfectionism	53.00	7.95	28	73	-0.229	-0.219
Other-Oriented Perfectionism	34.47	4.92	22	49	0.100	-0.184
Socially Prescribed Perfectionism	11.46	2.32	5	19	-0.219	-0.110
Rumination	45.61	10.88	23	77	-0.252	-0.272
Depression	12.04	9.71	0	43	0.805	0.073
Social Anxiety	35.39	12.09	17	77	0.648	0.023

Table 1 results show that the mean scores for self-oriented, other-oriented, and socially prescribed perfectionism in the sample group are respectively 53.00, 34.47, and 11.46, indicating that self-oriented perfectionism

has the highest mean, while socially prescribed perfectionism has the lowest. The mean score for rumination in the sample group is 45.61. Additionally, the mean depression score among these individuals is 12.03, and the mean social anxiety score is 35.39. Table 1 results also indicate that none of the research variables deviate significantly from a normal distribution. According to many sources, skewness of score distributions within the range of (-2 to 2) and kurtosis within the range of (-3 to 3) can be considered normal; none of the research variables' data distributions exceed these ranges, thus the data distribution can be assumed to be normal.

To examine the relationship between variables of perfectionism (self-oriented, other-oriented, and socially prescribed), rumination, depression, and social anxiety in the sample group, Pearson's correlation test was conducted, and the results are presented in Table 2.

Table 2

Correlation Coefficients for Perfectionism, Rumination, Depression, and Social Anxiety

| Variables	1	2	3	4	5
1 - Self-Oriented Perfectionism	-				
2 - Other-Oriented Perfectionism	0.27**	-			
3 - Socially Prescribed Perfectionism	0.14**	0.60**	-		
4 - Rumination	0.21**	0.46**	0.37**	-	
5 - Depression	0.12*	0.39**	0.35**	0.67**	-
6 - Social Anxiety	0.08	0.48**	0.41**	0.53**	0.40**

**p < 0.01, *p < 0.05

Pearson correlation test results shown in Table 2 indicate a significant positive relationship between self-oriented perfectionism and rumination (r=0.21, p<0.001) and depression (r=0.12, p<0.05). However, self-oriented perfectionism does not have a significant relationship with social anxiety (r=0.08, p>0.05). A significant positive relationship exists between other-oriented perfectionism and rumination (r=0.46, p<0.001), depression (r=0.39, p<0.001), and social anxiety (r=0.48, p<0.001). Furthermore, socially prescribed perfectionism also has a significant positive relationship with rumination (r=0.37, p<0.001), depression (r=0.35, p<0.001), and social anxiety (r=0.41, p<0.001). Additionally, a significant positive relationship exists between rumination and both depression (r=0.67, p<0.001) and social anxiety (r=0.53, p<0.001).Path analysis results using the maximum likelihood method to determine the mediating role of rumination in the relationship between depression and social anxiety with dimensions of perfectionism are illustrated in Figure 1 with standardized coefficients and significance of the paths.

Figure 1

A Summary of the Model with Standard (Beta) Coefficients
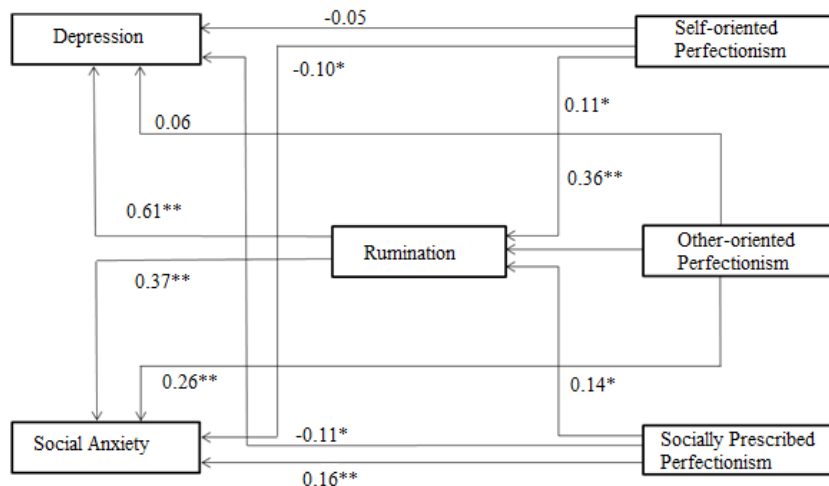
*p<0.05; **p<0.01

To determine the model fit indices, researchers consider a chi-square to degrees of freedom ratio less than 3, Comparative Fit Index (CFI), Goodness of Fit Index (GFI), and Adjusted Goodness of Fit Index (AGFI) greater than or equal to 0.90, Root Mean Square Error of Approximation (RMSEA) less than 0.08, and Non-Normed Fit Index (NFI) greater than 0.90 as indicators of a good fit and desirable indices for evaluating the model. Consequently, the obtained indices in the presented model (χ^2/df=2.893, CFI=0.920, GFI=0.970, AGFI=0.919, RMSEA=0.075, NFI=0.923) indicate a good model fit. The standard and unstandardized path coefficients of the presented model are reflected in Table 3 according to the bootstrap method.

Table 3

Total, Direct, and Indirect Standardized Coefficients in the Model

Paths	Total Effect	Direct Effect	Indirect Effect	Explained Variance
On Rumination from				0.16
Self-Oriented Perfectionism	0.11	0.11	-	
Other-Oriented Perfectionism	0.36	0.36	-	
Socially Prescribed Perfectionism	0.14	0.14	-	
On Depression from				0.43
Self-Oriented Perfectionism	0.02	-0.05	0.07**	
Other-Oriented Perfectionism	0.28	0.06	0.22**	
Socially Prescribed Perfectionism	0.20	0.11	0.09**	
Rumination	0.61	0.61	-	
On Social Anxiety from				0.31
Self-Oriented Perfectionism	-0.06	-0.10	0.04*	
Other-Oriented Perfectionism	0.39	0.26	0.13**	
Socially Prescribed Perfectionism	0.21	0.16	0.05**	
Rumination	0.37	0.37	-	

*$p<0.01$; **$p<0.001$

Based on the paths tested in the model and the results in **Error! Reference source not found.**, the direct effects of self-oriented (ß=0.110), other-oriented (ß=0.36), and socially prescribed (ß=0.14) perfectionism on rumination are significant. Results in **Error! Reference source not found.** show the direct effect of socially prescribed perfectionism (ß=0.11) on depression is significant, but the direct effects of self-oriented (ß=-0.05) and other-oriented (ß=0.06) perfectionism on depression are not significant. Moreover, the direct effects of self-oriented (ß=-0.10), other-oriented (ß=0.26), and socially prescribed (ß=0.16) perfectionism on social anxiety are significant. According to **Error! Reference source not found.** results, the direct effect of rumination on depression (ß=0.61) and social anxiety (ß=0.37) is significant. Furthermore, Table 3 results indicate the indirect effects of self-oriented (ß=0.07), other-oriented (ß=0.22), and socially prescribed (ß=0.09) perfectionism on depression through rumination are significant. The indirect effects of self-oriented (ß=0.04), other-oriented (ß=0.13), and socially prescribed (ß=0.05) perfectionism on social anxiety through rumination are also significant. These findings demonstrate that perfectionism (self-oriented, other-oriented, and socially prescribed).

4. Discussion and Conclusion

The present study aimed to examine the mediating role of rumination in the relationship between dimensions of perfectionism and depression and social anxiety. The findings indicated that there is a positive relationship between the three dimensions of perfectionism and depression. This result is consistent with the prior research (Flett & Hewitt, 2015; Hewitt et al., 2022; Patston & Osborne, 2016; Sherry et al., 2015). It can be explained that, considering the positive and negative dimensions of self-oriented perfectionism (Flett & Hewitt, 2015), the negative dimension of self-oriented perfectionism may expose individuals to negative feelings such as guilt, self-blame, and self-criticism, and the consequence of these negative feelings is low mood and depression (Flett & Hewitt, 2015; O'Connor et al., 2010). Moreover, the existence of stringent criteria and having high and unrealistic standards in self-oriented perfectionists places them more at risk of failure and disappointment compared to others (Flett & Hewitt, 2015), and since these individuals evaluate themselves based

on their performance, intolerance of any failure or disappointment can lead to their depression (Frost et al., 1990). Other-oriented perfectionists set high and unrealistic standards both for themselves and for significant others in their lives (Flett & Hewitt, 2015). Thus, on one hand, like self-oriented perfectionists, they are continuously evaluating their performance and consider any failure as an indication of their incapacity, blaming and criticizing themselves (O'Connor et al., 2010) and due to their lack of interest in understanding and empathizing with the feelings of others, they cannot adjust their expectations from significant others based on reality and their capabilities, assessing any performance flaw as more disastrous than usual (Stoeber, 2014), and this unrealistic expectation of others leads to other-blaming, rejection, and ultimately depression in them (Hill et al., 2010). Socially prescribed perfectionists, due to not having realistic and reliable personal standards, seek to fulfill standards prescribed by significant others in their lives and gain their approval (Flett & Hewitt, 2015; Stoeber, 2014). These individuals, due to the conflict with their life experiences as a meaningful personal narrative, become depressed (Graham et al., 2010).

The research also showed a positive relationship between other-oriented and socially prescribed dimensions of perfectionism with social anxiety. This finding is in line with prior research (Akram et al., 2017; Patston & Osborne, 2016; Stoeber, 2014). It can be explained that other-oriented perfectionists, possessing a sense of entitlement and narcissistic traits, demand excessive admiration from others (Stoeber, 2014) and since they wish to appear perfect and flawless in the eyes of others, it is natural for them to experience fear and anxiety in one or more social situations. Not only do they wish to present themselves as perfect, but they also have this expectation of perfection from significant others in their lives. Consequently, they experience a great deal of fear in various social situations, which leads to social anxiety (Patston & Osborne, 2016). Socially prescribed perfectionists, out of fear of blame and disapproval from others, experience uncertainty, dread, and heightened arousal in various social situations, thereby experiencing intense social anxiety (Akram et al., 2017; Stoeber, 2014).

The positive relationship between all three dimensions of perfectionism and rumination aligns with prior research by (Akram et al., 2017; De Rosa et al., 2023; Hill et al., 2010; Senra et al., 2018). Considering the goal progression theory by Martin and Tesser (2006), which attributes the occurrence of rumination to failure in progressing towards a goal, and since perfectionists have a set of high and unrealistic

standards that they adhere to despite difficulties, obliging themselves to achieve these standards, it can be said that perfectionists experience more failure and disappointment in achieving their goals compared to others (Frost et al., 1990; Martin & Tesser, 2006). Moreover, according to the metacognitive theory of rumination by Wells and Matthews (1996), rumination is supported by the automatic processing of information and the dynamic interaction of repetitive thoughts with the environment and external factors (Wells & Matthews, 1996). It seems that failure and disappointment as external factors play a significant role in the occurrence of rumination in perfectionists. In essence, perfectionists, due to their desire for everything to be perfect and flawless, experience severe stress and constantly have repetitive thoughts in this area, naturally leading to high levels of rumination.

Consistent with the prior research (Aldao et al., 2010; Nolen-Hoeksema, 1991; Nolen-Hoeksema & Morrow, 1991), the results of this study also showed that rumination has a positive relationship with depression. In explaining this finding, one can refer to the response style theory of rumination, which considers rumination a cognitive vulnerability factor for the development of depression and anxiety (McLaughlin & Nolen-Hoeksema, 2011). Nolen-Hoeksema (1991), in elucidating the concept of rumination in depression, emphasized that rumination can be defined as repetitive thoughts and behaviors that focus the depressed individual's attention on the symptoms of depression, its causes, and consequences (Nolen-Hoeksema, 1991). Since these types of responses are the opposite of effective and structured problem-solving, avoidance of effective behaviors leads to the continuation of depression.

The positive relationship between rumination and social anxiety is supported by prior research findings (Aldao et al., 2010; McLaughlin & Nolen-Hoeksema, 2011). Social anxiety is a significant fear or anxiety regarding one or more social situations where the individual is likely to be scrutinized by others, often accompanied by physical arousal. According to the metacognitive theory of rumination (Wells & Matthews, 1996), physical arousal triggered by an external stimulus, coupled with fear of the situation, activates automatic negative thoughts. These repetitive thoughts, by resorting to emotion-focused coping strategies, prevent the individual from confronting reality. Consequently, individuals with social anxiety, due to rumination, avoid social activities (Wells & Matthews, 1996), and avoidance of social activities, in turn, leads to negative self-evaluation and the perpetuation of rumination.

Overall, the obligation to meet high and unrealistic standards in perfectionists and the continuous failures and disappointments in achieving these standards (Flett & Hewitt, 2015), based on the goal progression theory by Martin and Tesser (2006), plays a significant role in the occurrence of rumination (Martin & Tesser, 2006). The response style theory considers rumination a cognitive vulnerability factor for developing depression and anxiety, which is the opposite of problem-solving and avoidance of effective behavior and focusing on negative thoughts increases individuals' vulnerability to depression (McLaughlin & Nolen-Hoeksema, 2011). The presence of automatic negative thoughts leads to negative self-evaluation and, ultimately, significant fear and anxiety from being in one or more social situations (Nepon et al., 2011). Sherry et al. (2015), based on the multidimensional model of perfectionism and depression symptoms, revealed that difficulty in accepting the past determines how socially prescribed perfectionism relates to depression. Moreover, perfectionists, because they want to appear perfect and flawless in the eyes of others to gain their approval, experience fear, heightened arousal, and ultimately social anxiety in various situations (Patston & Osborne, 2016; Sherry et al., 2015). Ultimately, it can be concluded that rumination plays a mediating role in the relationship between dimensions of perfectionism and depression and social anxiety.

5. Limitations & Suggestions

One limitation of this study was that due to the COVID-19 pandemic, it was not possible to complete the questionnaires in person, and responses were collected online. Furthermore, this study was conducted among social media users with at least a Bachelor's degree. Therefore, the results of this study cannot be generalized to other populations, such as adolescents. Additionally, the tools used in this study were self-report measures. It is recommended that future research explores the relationship between perfectionism and social anxiety among adolescents, as well as separately among men and women. Additionally, research should be organized to allow for the comparison of rumination in male and female perfectionists.

Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants.

Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

Authors' Contributions

All authors equally contributed in this article.

References

Akram, U., Ellis, J. G., Myachykov, A., Chapman, A. J., & Barclay, N. L. (2017). Anxiety mediates the relationship between multidimensional perfectionism and insomnia disorder. *Personality and individual differences*, *104*, 82-86. https://doi.org/10.1016/j.paid.2016.07.042

Aldao, A., Nolen-Hoeksema, S., & Schweizer, S. (2010). Emotion-regulation strategies across psychopathology: A meta-analytic review. *Clinical psychology review*, *30*(2), 217-237. https://doi.org/10.1016/j.cpr.2009.11.004

American Psychiatric Association, A. (2022). *Diagnostic and statistical manual of mental disorders: DSM-5-TR*. Washington, DC: American psychiatric association. https://doi.org/10.1176/appi.books.9780890425787

Antony, M. M., Coons, M. J., McCabe, R. E., Ashbaugh, A., & Swinson, R. P. (2006). Psychometric properties of the social phobia inventory: Further evaluation. *Behaviour Research and Therapy*, *44*(8), 1177-1185. https://doi.org/10.1016/j.brat.2005.08.013

Bagherinezhad, M., Salehi Fadardi, J., & Tabatabayi, S. M. (2010). The relationship between rumination and depression in a sample of Iranian student. *Research in Clinical Psychology and Counseling*, *011*(1), -. https://doi.org/10.22067/ijap.v11i1.6910

Beck, A. T. (1996). Manual for the beck depression inventory-II. *(No Title)*. https://cir.nii.ac.jp/crid/1370564063990947215

Besharat , M. A. (2010). Perfectionism and Physical Ill-Health. *Clinical Psychology Studies*, *1*(1), 42-62. https://jcps.atu.ac.ir/article_2092_75b309b43b1286c8d5babe534be29623.pdf

Besharat, M. A., Farahmand, H., & Ebrahimi, F. (2020). The association of perfectionism dimensions with depression and anxiety symptoms: The mediating role of difficulties in emotion regulation. *Rooyesh-e-Ravanshenasi*, *9*(7), 1-14. https://www.magiran.com/paper/2190817

Connor, K. M., Davidson, J. R. T., Churchill, L. E., Sherwood, A., Weisler, R. H., & Foa, E. (2000). Psychometric properties of the Social Phobia Inventory (SPIN): New self-rating scale. *British Journal of Psychiatry*, *176*(4), 379-386. https://doi.org/10.1192/bjp.176.4.379

De Rosa, L., Miracco, M. C., Galarregui, M. S., & Keegan, E. G. (2023). Perfectionism and rumination in depression. *Current Psychology*, *42*(6), 4851-4861. https://doi.org/10.1007/s12144-021-01834-0

Demir, Ö., Cinar, M., & Keskin, S. (2023). Participation style and social anxiety as predictors of active participation in asynchronous discussion forums and academic achievement. *Education and Information Technologies*, *28*(9), 11313-11334. https://doi.org/10.1007/s10639-022-11517-3

Flett, G. L., & Hewitt, P. L. (2015). Chapter 21 - Measures of Perfectionism. In G. J. Boyle, D. H. Saklofske, & G. Matthews (Eds.), *Measures of Personality and Social Psychological Constructs* (pp. 595-618). Academic Press. https://doi.org/10.1016/B978-0-12-386915-9.00021-8

Frost, R. O., Marten, P., Lahart, C., & Rosenblate, R. (1990). The dimensions of perfectionism. *Cognitive therapy and research*, *14*(5), 449-468. https://doi.org/10.1007/BF01172967

Gan, S. K.-E., Zeng, Y., & Wang, Z. (2023). Social anxiety mediates workplace incivility and work engagement. *Frontiers in psychology*, *14*, 1320703. https://www.frontiersin.org/journals/psychology/articles/10.3389/fpsyg.2023.1320703

Graham, A. R., Sherry, S. B., Stewart, S. H., Sherry, D. L., McGrath, D. S., Fossum, K. M., & Allen, S. L. (2010). The existential model of perfectionism and depressive symptoms: A short-term, four-wave longitudinal study. *Journal of counseling psychology*, *57*(4), 423-438. https://doi.org/10.1037/a0020667

Hewitt, P. L., Smith, M. M., Ge, S. Y. J., 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), 121-131. https://doi.org/10.1037/cbs0000306

Hill, A. P., Hall, H. K., & Appleton, P. R. (2010). A comparative examination of the correlates of self-oriented perfectionism and conscientious achievement striving in male cricket academy players. *Psychology of Sport and Exercise*, *11*(2), 162-168. https://doi.org/10.1016/j.psychsport.2009.11.001

Himle, J. A., Weaver, A., Levine, D. S., Steinberger, E., Bybee, D., Vlnka, S., Miller, R., Laviolette, W. T., & Nicoll, K. L. (2020). Social anxiety and work: a qualitative investigation in a low-income, minority sample. *Social Work in Mental Health*, *18*(3), 302-330. https://doi.org/10.1080/15332985.2020.1742850

Ji, L. (2024). Childhood emotional abuse and depression among Chinese adolescent sample: A mediating and moderating dual role model of rumination and resilience. *Child abuse & neglect*, *149*, 106607. https://doi.org/10.1016/j.chiabu.2023.106607

Jiang, S., & Ngien, A. (2020). The Effects of Instagram Use, Social Comparison, and Self-Esteem on Social Anxiety: A Survey Study in Singapore. *Social Media + Society*, *6*(2), 2056305120912488. https://doi.org/10.1177/2056305120912488

Kline, R. B. (2023). *Principles and practice of structural equation modeling*. Guilford publications.

https://books.google.com/books?hl=en&lr=&id=t2CvEAAAQBAJ&oi=fnd&pg=PP1&dq=26.+Kline,+R.B.+(2023).+Principles+and+practice+of+structural+equation+modeling.+New+York:+Guilferd+press.+https://www.routledge.com/Principles-and-Practice-of-Structural-Equation-Modeling-Fifth-Edition/Kline/p/book/9781462551910&ots=sWSAW68ZcI&sig=TLBlpsrfEJQeP__HNsxS9eWGfLQ

Li, K., Ren, L., Zhang, L., Liu, C., Zhao, M., Zhan, X., Li, L., Luo, X., & Feng, Z. (2023). Social anxiety and depression symptoms in Chinese left-behind children after the lifting of COVID-19 lockdown: A network analysis. *International Journal of Social Psychiatry*, *69*(4), 916-927. https://doi.org/10.1177/00207640221141784

Liu, P., He, J., & Li, A. (2019). Upward social comparison on social network sites and impulse buying: A moderated mediation model of negative affect and rumination. *Computers in human Behavior*, *96*, 133-140. https://doi.org/10.1016/j.chb.2019.02.003

Lu, Y., Zhong, R., Li, M., Zhao, Q., Zhang, X., Hu, B., & Lin, W. (2021). Social anxiety is associated with poor quality of life in adults with epilepsy in Northeast China: A cross-sectional study. *Epilepsy & Behavior*, *117*. https://doi.org/10.1016/j.yebeh.2021.107866

Martin, L. L., & Tesser, A. (2006). 145Extending the Goal Progress Theory of Rumination: Goal Reevaluation and Growth. In L. J. Sanna & E. C. Chang (Eds.), *Judgments Over Time: The Interplay of Thoughts, Feelings, and Behaviors* (pp. 0). Oxford University Press. https://doi.org/10.1093/acprof:oso/9780195177664.003.0009

McLaughlin, K. A., & Nolen-Hoeksema, S. (2011). Rumination as a transdiagnostic factor in depression and anxiety. *Behaviour Research and Therapy*, *49*(3), 186-193. https://doi.org/10.1016/j.brat.2010.12.006

Nepon, T., Flett, G. L., Hewitt, P. L., & Molnar, D. S. (2011). Perfectionism, negative social feedback, and interpersonal rumination in depression and social anxiety. *Canadian Journal of Behavioural Science / Revue canadienne des sciences du comportement*, *43*(4), 297-308. https://doi.org/10.1037/a0025032

Nolen-Hoeksema, S. (1991). Responses to depression and their effects on the duration of depressive episodes. *Journal of abnormal psychology*, *100*(4), 569-582. https://doi.org/10.1037/0021-843X.100.4.569

Nolen-Hoeksema, S., & Morrow, J. (1991). A prospective study of depression and posttraumatic stress symptoms after a natural disaster: The 1989 Loma Prieta earthquake. *Journal of personality and social psychology*, *61*(1), 115-121. https://doi.org/10.1037/0022-3514.61.1.115

O'Connor, R. C., Rasmussen, S., & Hawton, K. (2010). Predicting depression, anxiety and self-harm in adolescents: The role of perfectionism and acute life stress. *Behaviour Research and Therapy*, *48*(1), 52-59. https://doi.org/10.1016/j.brat.2009.09.008

O'Day, E. B., & Heimberg, R. G. (2021). Social media use, social anxiety, and loneliness: A systematic review. *Computers in Human Behavior Reports*, *3*, 100070. https://doi.org/10.1016/j.chbr.2021.100070

Patston, T., & Osborne, M. S. (2016). The developmental features of music performance anxiety and perfectionism in school age music students. *Performance Enhancement & Health*, *4*(1), 42-49. https://doi.org/10.1016/j.peh.2015.09.003

Rahimi, C. (2014). Application of the Beck Depression Inventory-II in Iranian University Students. *Clinical Psychology and Personality*, *12*(1), 173-188. https://cpap.shahed.ac.ir/article_2711_b41def8f0db5528b7f18c862b8998b51.pdf

Saffarinia , M., & Shahandeh , M. (2014). Reliability and Validity Assessment of Social Phobia Inventory among Ahvaz Universitie's Students. *Iraninan Psychiatry and Clinical Psychology*, *20*(2), 170-178. https://www.magiran.com/paper/1324044

Senra, C., Merino, H., & Ferreiro, F. (2018). Exploring the link between perfectionism and depressive symptoms: Contribution of rumination and defense styles. *Journal of Clinical Psychology*, *74*(6), 1053-1066. https://doi.org/10.1002/jclp.22571

She, R., Kit han Mo, P., Li, J., Liu, X., Jiang, H., Chen, Y., Ma, L., & Tak fai Lau, J. (2023). The double-edged sword effect of social networking use intensity on problematic social networking use among college students: The role of social skills and social anxiety. *Computers in human Behavior*, *140*, 107555. https://doi.org/10.1016/j.chb.2022.107555

Sherry, D. L., Sherry, S. B., Hewitt, P. L., Mushquash, A., & Flett, G. L. (2015). The existential model of perfectionism and depressive symptoms: Tests of incremental validity, gender differences, and moderated mediation. *Personality and individual differences*, *76*, 104-110. https://doi.org/10.1016/j.paid.2014.12.002

Stoeber, J. (2014). How Other-Oriented Perfectionism Differs from Self-Oriented and Socially Prescribed Perfectionism. *Journal of psychopathology and behavioral assessment*, *36*(2), 329-338. https://doi.org/10.1007/s10862-013-9397-7

Wang, Z.-J., Liu, C.-Y., Wang, Y.-M., & Wang, Y. (2024). Childhood psychological maltreatment and adolescent depressive symptoms: Exploring the role of social anxiety and maladaptive emotion regulation strategies. *Journal of affective disorders*, *344*, 365-372. https://doi.org/10.1016/j.jad.2023.10.046

Wells, A., & Matthews, G. (1996). Modelling cognition in emotional disorder: The S-REF model. *Behaviour Research and Therapy*, *34*(11), 881-888. https://doi.org/10.1016/S0005-7967(96)00050-2

Yang, Y., & Lu, X. (2022). Social Anxiety and Subjective Quality of Life Among Chinese Left-Behind Children: The Mediating Role of Social Support [Original Research]. *Frontiers in psychology*, *13*. https://doi.org/10.3389/fpsyg.2022.836461