

# Understanding the Role of Dimensions of Perfectionism on Anxiety Sensitivity

Atilgan Erozkun

Faculty of Education, Mugla Sitki Kocman University, Turkey

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**Abstract** This study investigated the relationship between dimensions of perfectionism and anxiety sensitivity. The study group is composed by 398 (211 female; 187 male) students who were studying at the pedagogical formation certificate program at Mugla Sitki Kocman University. The data were collected by using the Frost Multidimensional Perfectionism Scale and Anxiety Sensitivity Index-R. Pearson product-moment correlation analysis was employed to study the relationships between anxiety sensitivity and dimensions of perfectionism; structural equation modeling was also used for explaining the predictive role of dimensions of perfectionism on anxiety sensitivity. Concern over mistakes, personal standards, parental expectations, parental criticism, doubts about actions, and organization dimensions of perfectionism were found to be significantly correlated to anxiety sensitivity. A significant impact of six dimensions of perfectionism on anxiety sensitivity was detected. The theoretical implications of the link between perfectionism and anxiety sensitivity were discussed.

**Keywords** Perfectionistic Tendencies, Fear of Fear, Pedagogical Formation Students

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## 1. Introduction

As a construct perfectionism is complex and this is because it is a reflection of the interaction taking place between cognitive, emotional, motivational, and behavioural factors and processes [1]. So far, there is no definition of perfectionism upon which everybody agrees [2], but there is a general consensus about the fact that it should include setting very high standards and feeling highly concerned with meeting these standards [3, 4, 5]. Through a literature review, it was hypothesized that there are six dimensions making up the construct of multidimensional perfectionism [3] which are: (a) a tendency to react negatively when mistakes occur and to view mistakes as failures (concern over mistakes), (b) a tendency to doubt the quality of one's performance (doubts about actions), (c) a tendency to set very high standards and place excessive importance on these

for self-evaluation (personal standards), (d) a tendency to perceive one's parents as having high expectations (parental expectations), (e) a tendency to perceive one's parents as being overly critical (parental criticism) and (f) a tendency to emphasize the importance of order and organization (organization).

Flett and Hewitt [6] argue that there is a great tendency in the literature to think that there are many negative outcomes directly connected with perfectionism because behaviours performed to be perfect can result in stress as perfectionism-oriented people exhibit a propensity to meticulously evaluate their performance and mostly focus on negative aspects and accordingly experience little satisfaction. Johnson and Slaney [7] reported that perfectionists are usually self-critical and anxious. For a long time, it has been accepted that there is a relationship between perfectionism and anxiety [4, 8]. However, research conducted more recently shows that the connection between specifically maladaptive perfectionism and anxiety is much stronger. Schuler [9] revealed the fact that the level of anxiety experienced by maladaptive perfectionists is higher. Research looking at the role played by perfectionism in psychopathology has revealed that the construct of perfectionism can be conceptualized in different ways [3, 10, 11]. Maladaptive perfectionists usually fail in their efforts due to their unrealistic standards and goals and as a result it becomes inevitable for them to experience anxiety, depression, and sense of inadequacy [11, 12, 13, 14, 15, 21].

Perfectionism is now generally thought to have personal and interpersonal components and these components have differing connections with various phenomena such as depression, anxiety, suicide ideation, personality disorder, and the endorsement of irrational beliefs [16, 17, 18, 19, 20, 22, 23]. Suddarth and Slaney [24] found that maladaptive perfectionism explains 40% of the variance seen in trait anxiety. Kawamura et al. [25] also stated that there is significant correlation between maladaptive perfectionism and higher levels of anxiety. A study was conducted on 223 middle school students and found a significant correlation between the maladaptive style of perfectionism and anxiety [26].

One of the most common emotions experienced by human is anxiety and it usually results from the expectation of a threatening event [27]. The definition of anxiety is “a state of being anxious” and here the term “anxious” means being “worried and tense” [28]. In case of stress, it is normal for anxiety to occur and anxiety has many characteristics being physical, emotional, cognitive, or behavioural in nature [27]. When an evolutionary perspective is adopted, it is normal for anxiety to increase the awareness of potential threats to safety [14]. However, significant amount of stress or lack of capacity to perform even daily routine functions can be result of excessive or chronic anxiety [29, 65].

According to Alden et al. [30] there are two main elements involved in pathological perfectionism which are high performance expectations and high maladaptive self-appraisal. People having high performance expectations are inclined to use high standards to evaluate themselves. These high standards are either generated by one or adopted from the ones already established. Hewitt and Flett [10] argue that within the maladaptive self-appraisal, there is a sense of personal inadequacy and neurotic self-doubt and they are accompanied by a pathological self-appraisal system that serves the function of dramatizing even small behavioural mistakes and feeling of internal anxiety.

Ellis [31] reported that the main characteristic of people tending to have elevated anxiety levels is that they are fearful of their own fear (anxiety sensitivity). Anxiety sensitivity is observed when someone is afraid of experiencing anxiety and this is viewed to be one of the “fundamental fears” or one of the important reasons for people to avoid certain behaviours and situations. Anxiety sensitivity has been more specifically defined as the fear of anxiety-related bodily sensations and believing that devastating somatic, social or psychological outcomes will result from these sensations leads to sense of anxiety [32, 33, 34, 35].

Anxiety sensitivity contributes to the differences observed in the extent to which general fearfulness is experienced by different individuals and in the extent to which tendency for various types of anxiety disorders such as panic disorder, social anxiety disorder, specific phobia, and posttraumatic stress disorder exhibited by different individuals [34, 36, 37, 50, 64, 65]. When people experiencing high anxiety become anxious, they pay greater attention to their arousal-related sensations and this further amplifies their anxiety. This finding is consolidated by the evidence showing that people having various types of anxiety disorders experience more anxiety sensitivity when compared to control participants and the higher the current level of anxiety, the higher the risk for displaying future anxiety symptoms [37, 64].

Recently, Ellis [38] went a step further and suggested that perfectionists are likely to be characterized by high levels of anxiety sensitivity because their all-or-none approach includes the belief that they must be perfectly free from panic, and this belief is activated as the discomfort of panic sensations become more apparent. It is also important to note that neuroticism, maladaptive perfectionism, and self-criticism are necessary in the dynamics of anxiety

sensitivity. Flett et al. [2] also described evidence suggesting that perfectionism is associated with the behavioral inhibition system [39], and perfectionists seem to have a fearful sensitivity to signals of punishment and nonreward [40].

Though there seems to be a connection between anxiety sensitivity and perfectionism, the amount of research looking at this connection is quite little at present. Cox et al. [67] conducted a study on the role of personality variables in major depression and panic disorders and reported that there is a direct connection between perfectionism and anxiety sensitivity. This is in compliance with general evidence indicating the role of social-evaluative concerns in perfectionism [10] and that there is a correlation between anxiety sensitivity and fear of negative evaluation [40, 41, 42].

In light of these important explanations regarding anxiety sensitivity and perfectionism, the present study was to investigate whether there is significant relationship between dimensions of perfectionism and anxiety sensitivity and the present study aims to elicit some evidence to be used to predict anxiety sensitivity among young adults.

## 2. Materials and Methods

### 2.1. Model

This study is a quantitative and relational study aimed at examining the relationship between dimensions of perfectionism and anxiety sensitivity. The data were collected by Frost Multidimensional Perfectionism Scale (Frost, Marten, Lahart, & Rosenblate, 1990) and Anxiety Sensitivity Index-Revised (Taylor & Cox, 1998).

### 2.2. Participants

Since this study was carried out on prospective teachers, the data were collected by randomly selected students who were studying at the pedagogical formation certificate program -Turkish Language and Literature, History, Mathematics, Philosophy, and Contemporary Turkish Dialects and Literatures departments- at Mugla Sitki Kocman University. Instruments used in the context of this research were applied to 403 participants. Prior to analyzing the data, participants' responses on the instruments were reviewed. It was determined that 5 participants had left a significant number of scale items empty (at least 5%) or demonstrated central tendency bias; thus, they were excluded from data the set. The data analyses were conducted on the responses of the remaining 398 participants, 211 females (53%) and 187 males (47%). They were in 23-32 age range and, average age was 26.29 with a standard deviation of 2.73.

### 2.3. Instruments

*Frost Multidimensional Perfectionism Scale (FMPS)* Originally developed by Frost, Marten, Lahart, and Rosenblate (1990), the FMPS assesses the individuals' perfectionistic tendencies. It is an instrument comprising 35 items which was designed to measure perfectionism by means of a 5-point Likert scale (1- disagree strongly, 5- agree strongly). The scale which was originally composed of 67 items was refined to 35 items and assessed the following six factors by means of factor analysis: Concern Over Mistakes (9 items), Personal Standards (7 items), Parental Expectations (5 items), Parental Criticism (4 items), Doubts About Actions (4 items) and Organization (6 items). According to the results provided by Frost, Marten, Lahart, and Rosenblate (1990), the internal consistency reliabilities of the subscales are: .88 for Concern Over Mistakes, .83 for Personal Standards, .84 for Parental Expectations, .84 for Parental Criticism, .77 for Doubts About Actions and .93 for Organization. The scales Cronbach's alpha was .90. The scale was translated into Turkish and studies with regards to reliability and validity were conducted across 489 Turkish students Misirli-Tasdemir (2004). Data obtained from the construct validity study which used the principal component analysis with varimax rotation demonstrated that the scale had six identifiable dimensions with eigenvalues over 1 and a Barlett Sphericity of 4961.42. Data obtained from the reliability study demonstrated that the coefficients of test-retest correlation varied between .63 and .87. Results obtained from the reliability study demonstrated that the coefficients of test-retest correlation varied between .63 and .87. Internal consistency reliabilities for the subscales provided by Misirli-Tasdemir (2004) were .77 for Concern and Over Mistakes, .63 for Personal Standards, .71 for Parental Expectations, .65 for Parental Criticism, .61 for Doubts About Actions and .87 for Organization, where the entire scale's Cronbach's alpha was .80. In this study, Cronbach's alphas calculated were .81, .80, .85, .86, .70, and .85, respectively.

*Anxiety Sensitivity Index-Revised (ASI-R)* The ASI-R (Taylor & Cox, 1998) is a self-report questionnaire comprising 36 items which measures fear of anxiety-related sensations. In the scale which is an expansion of ASI (Reiss, Peterson, Gursky, & McNally, 1986), the samples are required to answer on a 5 point Likert scale from 0 to 4 to what extent they agree with statements measuring their levels of fears with regards to normal anxiety reactions like the inability to concentrate, blushing, sweating, and increased heart rate. By adding up all the items, the scores vary from 0 to 144. A factor analysis by Taylor and Cox (1998) suggested a Total Score and four subscales for the ASI-R, namely: (1) fear of cardiovascular symptoms (11 items, alpha=.90); (2) fear of respiratory symptoms (12 items, alpha=.92); (3) fear of publicly observable anxiety reactions (7 items, alpha=.78); and (4) fear of cognitive dyscontrol (6 items, alpha=.88). While studies conducted by Deacon, Abramowitz, Woods, and Tolin (2003) demonstrated excellent internal consistency for the ASI-R in two college samples (alpha=.95 and .94), Kim et al. (2004) reported

test-retest reliability ( $r=.82$ ) is for a 3-week period). ASI-R's Turkish version was adapted by Cakmak (2006) and found an internal consistency coefficient of .93 and a test-retest reliability coefficient of .83. While ASI-R's parallel form validity was tested with the Beck Depression Inventory (Beck, Rush, Shaw, & Emery, 1979) and State-Trait Anxiety Inventory (Spielberger, Gorsuch, & Lushene, 1970)  $r=.49$  and  $r=.62$ . In this study, Cronbach's alpha for the scale was found .92.

## 2.4. Procedures

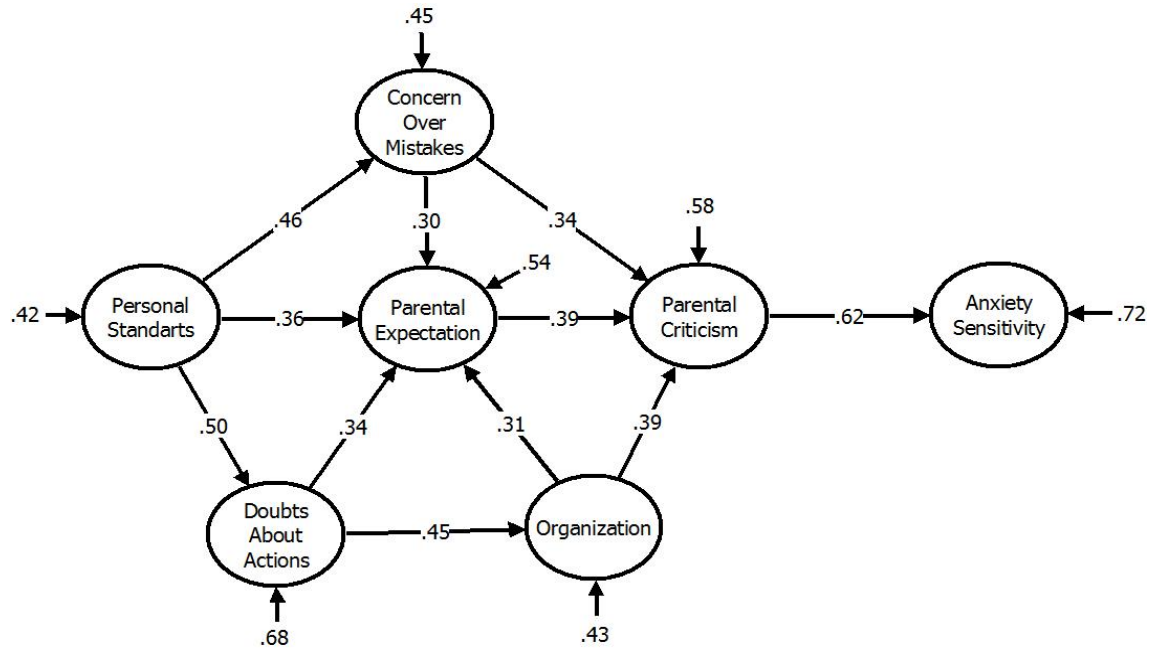
A permit for data collection was obtained from the Dean's Office of Faculty of Education in Mugla Sitki Kocman University, and the data were gathered in the randomly selected departments and classes by researcher. Data collection procedure was carried out by providing prospective teachers with the appropriate environment and sufficient time for answering the questions in groups in the classroom.

## 2.5. Data Analysis

SPSS 18.00 (Statistic Program for Social Sciences) and the LISREL 8.70 package programs were used for the statistical analyses of the data. Within this context, Pearson product-moment correlation analysis and structural equation modeling were used for analysing the connection between anxiety sensitivity and dimensions of perfectionism. Structural equation modeling (SEM) is a statistical technique which uses the combination of statistical data and qualitative causal assumptions in order to test and estimate causal relations. The data analysis model is tested parallel to the measurement data available in order to find out to what extent the model fits the data. The causal assumptions which form the basis of this model may be verified by means of being tested against the data. Among the strengths of SEM, one of the most significant one is its capability to generate latent variables, which may not be directly measured but rather figured out from the previously measured variables, serving to reach the latent variables. This application provides certain benefits to the modeller such as the ability to observe the unreliability of measurement and the structural connections between the latent variables which must be considered accurately. Factor analysis, path analysis, and regression analysis demonstrate special cases of SEM [50, 51, 52]. In this study, the model was created by testing the relationships between the anxiety sensitivity and dimensions of perfectionism variables using SEM.

## 3. Results

According to the results of this research there is a significant relationship between anxiety sensitivity and dimensions of perfectionism, and dimensions of perfectionism important predictors of anxiety sensitivity for prospective teachers.



\*p<.000

Figure 1. Path Diagram of Significant Predictors of Anxiety Sensitivity (Developed Structural Model)

**3.1. The Relationship between Anxiety Sensitivity and Dimensions of Perfectionism**

The relationship between anxiety sensitivity and dimensions of perfectionism was tested by using Pearson product-moment correlation analysis and results are presented in Table 1.

Table 1. The Correlations between Anxiety Sensitivity and Dimensions of Perfectionism

	COM	PS	PE	PC	DAA	O
Anxiety Sensitivity	.32**	.30**	.35**	.38**	.40**	.30**

\*p < .01 (COM concern over mistakes, PS personal standards, PE parental expectations, PC parental criticism, DAA doubts about actions, O organization)

Table 1 shows that anxiety sensitivity is positively related to concern over mistakes, personal standards, parental expectations, parental criticism, doubts about actions, and organization dimensions of perfectionism.

**3.2. The Prediction of Anxiety Sensitivity by Dimensions of Perfectionism**

Structural equation modeling was performed to predict anxiety sensitivity by dimensions of perfectionism and the results are given in Figure 1. Figure 1 illustrates the developed structural model (standardized coefficients).

According to the data obtained the total points of dimensions of perfectionism predict the anxiety sensitivity between .48 and .72. Figure 1 shows whether the variables are consistent or not is analyzed. As can be seen in Figure 1, the data obtained fit well model. The fitness coefficients related to the developed structural model are above the acceptable limits. For example, the value of NFI.95,

NNFI.97, IFI.98, CFI.97, GFI.91, AGFI.86, RMR.06, SRMR.05, RMSEA.05,  $\chi^2=503.64$ ,  $df=199$ , and  $\chi^2/df$  is 2.53. These values indicate that the model is acceptable [51]. Standardized path coefficients were used to explain the effect of the independent variables -dimensions of perfectionism- on anxiety sensitivity. Path coefficients ranged from .48 and .72. Path coefficients with absolute values less than .10 could indicate a “small effect”, values around .30 could suggest a “typical effect” or “medium effect”, and a “large effect” could be indicated by coefficients with absolute values  $\geq .50$  [51]. In this study, all of these values were  $\geq .30$ .

**4. Discussion**

This study investigated whether dimensions of perfectionism were associated with anxiety sensitivity. In this manner, concern over mistakes, personal standards, parental expectations, parental criticism, doubts about actions, and organization dimensions of perfectionism were associated with anxiety sensitivity. These findings suggested that the six dimensions of perfectionism is associated with anxiety sensitivity in young adults. According to this result, it can be said that the dimensions of perfectionism are important factor that impacts anxiety sensitivity level of young adults. This result provided strong support for the observation by [38] that six dimensions of perfectionism and anxiety sensitivity are closely linked. Flett et al. [53]found that a greater frequency of perfectionism cognitions was correlated significantly with the amount of worry associated with the experience of the anxious thought.

As predicted, meaningful connection was found between

the dimensions of perfectionism and anxiety sensitivity. This finding concurs with previous research indicating a connection between perfectionism and many forms of anxiety. Previous researchers have proved the relationship between perfectionism and most measures of anxiety; however, they have not used multiple measures of anxiety and they have not explained the overlap in measures of anxiety. According to Cox et al. [67] there is a significant correlation between anxiety sensitivity and self-oriented perfectionism -is having irrational expectations and standards for oneself that lead to a perfectionistic motivation-. This correlation may be stronger among the individuals experiencing more extreme levels of distress.

McWilliams et al. [42] reported that individuals may be scared of the observation of symptoms of anxiety by public because this may lead to negative evaluation. This may be particularly important for those wishing to obtain social approval and avoid social disapproval. Therefore, some perfectionists may show reluctance to express their emotions and to be involved in social situations where their emotions will be visible because there is a risk of showing symptoms of fear or distress [14]. Yet, it may be inevitable for some individuals to engage in such manifestations because such people may have occupations requiring them to be involved in public performances. Consistent link was proved to be present between socially prescribed perfectionism and anxiety by past research [10] showed that socially prescribed perfectionism is also associated with elevated anxiety sensitivity. Hence, it can be argued that social pressure which is an integral part of socially prescribed perfectionism plays some etiological role in the development of a heightened sense of anxiety sensitivity.

Frost et al. [3] reported a correlation of an anxiety sensitivity measured through a symptom inventory with doubts felt for actions and concerns felt about mistakes. Anxiety sensitivity is closely associated with a fear of experiencing anxiety [50, 54]; hence, it is anticipated that people thinking that their social environment has perfectionistic expectations from them will display propensity to worry about possible mistakes and quality of their behaviour. When individuals are sensitive to criticism of others and they are prone to be excessively critical of themselves, it means that they are showing the fundamental symptoms of anxiety sensitivity and social anxiety. These may indicate that one of the factors affecting the development and maintenance of anxiety related to general or evaluative fears is perfectionism or a person's evaluative style. Such fears are an integral part of trait anxiety, worry and social anxiety but fears of harm that are usually associated with anxiety sensitivity are not affected.

It has been reported in the literature that perfectionists are susceptible to various forms of psychological distress including depression and anxiety [53, 54, 55, 56, 57]. In addition, there is a close relation reported between how often automatic perfectionist thoughts are reported and indices of depression and anxiety [2, 53, 57]. One fundamental guiding

principle of perfectionism research is that perfectionism is a construct of personality associated with the process in which the individual adjust himself/herself to situations and there is a connection between perfectionism and not only distress but also the means of coping with daily life problems.

An association has been reported between maladaptive components of perfectionism and anxiety. In nonclinical samples, a close relationship was found between maladaptive perfectionism and trait anxiety. Furthermore, the relationship between perfectionism and more specific forms of anxiety has also been investigated [11, 17, 58, 59]. In addition, great amount of research has proved that there is a connection between perfectionism and anxiety but it has not been determined clearly whether this relationship is independent of the relationship between perfectionism and other forms of distress. Frost et al. [3] and Hewitt and Flett [10] and many more, have revealed a relationship between maladaptive perfectionistic concerns and not only with anxiety but also with other indices of psychopathology. In the studies conducted with both nonclinical and clinical groups, maladaptive subscales have been associated with negative anxiety and mood outcomes [6, 60].

Links between the components of perfectionism and specific types of anxiety symptoms have also been reported in the literature [11, 14, 61, 62, 63]. The correlations between anxiety and perfectionism can also be alternatively explained as anxiety fosters perfectionism. Horney [8] for instance, tries to explain a "basic anxiety", which comes into being as a profound insecurity and vague apprehensiveness having their roots in childhood and by developing a perfectionistic life style individuals may learn to cope with it. There are some specific dimensions of perfectionism and some of them play role in the development and maintenance of particular types of perfectionistic beliefs. Moreover, there is some empirical support obtained to show the role of various types of perfectionistic beliefs in these disorders. The relationship between anxiety sensitivity and perfectionism may stem from the fact that the fear of failure, worry about behavioural inadequacy and perfectionistic expectations of others contribute to perception of social interaction as something undesirable and source of stress [2].

## 5. Conclusions

In this study, it was found that there was a positive relationship between dimensions of perfectionism and anxiety sensitivity. Concern over mistakes, personal standards, parental expectations, parental criticism, doubts about actions, and organization dimensions of perfectionism were associated with anxiety sensitivity in young adults. This study also revealed that concern over mistakes, personal standards, parental expectations, parental criticism, doubts about actions, and organization dimensions of perfectionism significantly explains anxiety sensitivity.

As a result of the present study, it can be said that maladaptive perfectionism is an important risk factor to

identify in young adults with anxiety sensitivity. It should be noted that within this manner, maladaptive perfectionism tendencies are closely connected with many psychosocial problems such as anxiety disorders, depression, fear of negative evaluation, shame, defensiveness, and self-concealment. And anxiety sensitivity also leads to clinical anxiety disorders, and terrible physical, social, or mental outcome.

## 6. Limitations

Though a link is indicated by the current findings between dimensions of perfectionism and anxiety sensitivity, it should be emphasized that these findings are limited. They are limited because they have been found as a result of the analysis of self-report data. If other measures were included (e.g., interviewer ratings of perfectionism) the current findings would be stronger. They are limited because though there is a connection indicated by the current findings between six dimensions of perfectionism and anxiety sensitivity, no certain conclusions can be drawn from these data. The directions to be flowed by the future research are of course not limited to these. As stated before, though it is necessary to investigate perfectionism and anxiety sensitivity in clinical patients, this should not only be restricted to this population (e.g., children and adolescents).

## 7. Recommendations

There is a little evidence showing an association between the certain dimensions of perfectionism and anxiety sensitivity, yet, the present study revealed an association between anxiety sensitivity and elevated perfectionism cognitions and higher levels of interpersonal dimensions of perfectionism. All of these findings showed that there are meaningful associations between perfectionism and anxiety sensitivity and these associations and their clinical implications deserve further investigation. In this manner, within the context of mental health counselling services, how to deal with problems (e.g., maladaptive perfectionism and anxiety sensitivity) in a healthy manner should be taught in young adulthood. It is thought that these services can be useful for young adults. In addition, counselors who work with these people (e.g., maladaptive perfectionists and people with anxiety sensitivity) can provide preventive psychoeducation about these important issues -maladaptive perfectionism and anxiety sensitivity- and initiate referrals to counselors trained to work with young adulthood problematic interpersonal relationships.

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## REFERENCES

- [1] Flett, G. L., & Hewitt, P. L. (2007). Cognitive and self-regulation aspects of perfectionism and their implications for treatment: Introduction to the special issue. *Journal of Rational-Emotive and Cognitive-Behavior Therapy*, 25, 227-236.
- [2] Flett, G. L., Madorsky, D., Hewitt, P. L., & Heisel, M. J. (2002). Perfectionism cognitions, rumination, and psychological distress. *Journal of Rational-Emotive and Cognitive-Behavior Therapy*, 20, 31-45.
- [3] Frost, R. O., Marten, P., Lahart, C., & Rosenblate, R. (1990). The dimensions of perfectionism. *Cognitive Therapy and Research*, 14, 449-468.
- [4] Hamachek, D. E. (1978). Psychodynamics of normal and neurotic perfectionism. *Psychology*, 15, 27-33.
- [5] Pacht, A. R. (1984). Reflections on perfectionism. *American Psychologist*, 39, 386-390.
- [6] Flett, G. L., & Hewitt, P. L. (2002). Perfectionism and maladjustment: An overview of theoretical, definitional, and treatment issues. In G. L. Flett and P. L. Hewitt (Eds.), *Perfectionism: Theory, research and treatment* (pp. 5-31). Washington, DC: American Psychological Association.
- [7] Johnson, D. P., & Slaney, R. B. (1996). Perfectionism: Scale development and a study of perfectionist clients in counseling. *Journal of College Student Development*, 37, 29-41.
- [8] Horney, K. (1951). *Neurosis and human growth: The struggle toward self-realization*. London: Routledge and Kegan Paul.
- [9] Schuler, P. A. (2000). Perfectionism and gifted adolescents. *Journal of Secondary Gifted Education*, 11, 183-196.
- [10] Hewitt, P. L., & Flett, G. L. (1991). Perfectionism in the self and in social contexts: Conceptualization, assessment and association with psychopathology. *Journal of Personality and Social Psychology*, 60, 456-470.
- [11] Stoeber, J., Schneider, N., Hussain, R., & Matthews, K. (2014). Perfectionism and negative affect after repeated failure: Anxiety, depression, and anger. *Journal of Individual Differences*, 35, 87-97.
- [12] Dittner, A. J., Rimes, K., & Thorpe, S. (2011). Negative perfectionism increases the risk of fatigue following a period of stress. *Psychology and Health*, 26, 253-268.
- [13] Flett, G. L., Besser, A., & Hewitt, P. L. (2014). Perfectionism and interpersonal orientations in depression: An analysis of validation seeking and rejection sensitivity in a community sample of young adults. *Psychiatry*, 77, 67-85.
- [14] Levinson, C. A., Rodebaugh, T. L., Shumaker, E. A., Menatti, ... et al. (2015). Perception matters for clinical perfectionism and social anxiety. *Journal of Anxiety Disorders*, 29, 61-71.
- [15] Mackinnon, S. P., Battista, S., Sherry, S. B., & Stewart, S. H. (2014). Perfectionistic self-presentation predicts social anxiety using daily diary methods. *Personality and Individual Differences*, 56, 143-148.

- [16] Flett, G. L., Hewitt, P. L., Blankstein, K. R., & Koledin, S. (1991). Dimensions of perfectionism and irrational thinking. *Journal of Rational-Emotive and Cognitive Behavior Therapy*, 9, 185-201.
- [17] Flett, G. L., Hewitt, P. L., & DeRosa, T. (1996). Dimensions of perfectionism, psychosocial adjustment, and social skills. *Personality and Individual Differences*, 20, 143-150.
- [18] Handley, A., Egan, S. J., Kane, R. T., & Rees, C. S. (2014). The relationships between perfectionism, pathological worry and generalised anxiety disorder. *BMC Psychiatry*, 14, 1-8.
- [19] Hewitt, P. L., Flett, G. L., & Turnbull-Donovan, W. (1992). Perfectionism and suicide potential. *British Journal of Clinical Psychology*, 31, 181-190.
- [20] Hewitt, P. L., Flett, G. L., & Turnbull-Donovan, W. (1994). Borderline personality disorder: An investigation with the Multidimensional Perfectionism Scale. *European Journal of Psychological Assessment*, 10, 28-33.
- [21] Sherry, S. B., MacKinnon, A. L., Fossum, K., Antony, M. M., Stewart, S. H., Sherry, D. L., ... Mushquash, A. R. (2013). Perfectionism, discrepancies, and depression: Testing the perfectionism social disconnection model in a short-term, four-wave longitudinal study. *Personality and Individual Differences*, 54, 692-697.
- [22] Sherry, S. B., Sherry, D. L., Macneil, M. A., Smith, M. M., Mackinnon, S. P., Stewart, S. H., & Antony, M. M. (2014). Does socially prescribed perfectionism predict daily conflict? A 14-day daily diary study of romantic couples using self- and partner- reports. *Personality and Individual Differences*, 61, 24-27.
- [23] Vargahan, F. A., Gharraee, B., Kazem, M., Vahid, A., & Habibi, M. (2014). The role of perfectionism dimensions and emotion regulation strategies in predicting the severity of depressive and anxiety symptoms of university students. *Iranian Journal of Psychiatry and Clinical Psychology*, 20: 153-161.
- [24] Suddarth, B. H., & Slaney, R. B. (2001). An investigation of the dimensions of perfectionism in college students. *Measurement and Evaluation in Counseling and Development*, 34, 157-165.
- [25] Kawamura, K. Y., Hunt, S. L., Frost, R. O., & DiBartolo, P. M. (2001). Perfectionism, anxiety, and depression: Are the relationships independent? *Cognitive Therapy and Research*, 25, 291-301.
- [26] Stornelli, D., Flett, G., & Hewitt, P. (2009). Perfectionism, achievement, and affect in children: A comparison of students from gifted, arts, and regular programs. *Canadian Journal of School Psychology*, 24, 267-283.
- [27] Rachman, S. (2004). *Anxiety* (2nd ed.). East Sussex: Psychology Press Ltd.
- [28] Anderson, S., & Grandison, A. (2003). *English dictionary*. Glasgow: Harper and Collins Publishers.
- [29] Rosen, J. B., & Schulkin, J. S. (1998). From normal fear to pathological anxiety. *Psychological Review*, 105, 325-350.
- [30] Alden, L. E., Ryder, A.G., & Mellings, T. M. B. (2002). Perfectionism in the context of social fears: Toward a two-component model. In G. L. Flett and P. L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 373-391). Washington, DC: American Psychological Association.
- [31] Ellis, A. (1962). *Reason and emotion in psychotherapy*. New York: Lyle Stuart.
- [32] Reiss, S. (1987). Theoretical perspectives on the fear of anxiety. *Clinical Psychology Review*, 7, 585-596.
- [33] Reiss, S. (1991). Expectancy model of fear, anxiety, and panic. *Clinical Psychology Review*, 11, 141-153.
- [34] Reiss, S., & McNally, R. J. (1985). Expectancy model of fear. In S. Reiss and R.R. Bootzin (Eds.), *Theoretical issues in behavior therapy*, (pp. 107-121) Academic Press: San Diego, CA.
- [35] Reiss, S., Peterson, R. A., Gursky, D. M., & McNally, R. J. (1986). Anxiety sensitivity, anxiety frequency and the prediction of fearfulness. *Behaviour Research and Therapy*, 24, 1-8.
- [36] Waszczuk, M., Zavos, H., Antonova, E., Haworth, C., Plomin, R., & Eley, T. (2015). A multivariate twin study of trait mindfulness, depressive symptoms and anxiety sensitivity. *Depression and Anxiety*, 32, 254-261.
- [37] Zavos, H. M., Wong, C. C., Barclay, N. L., Keers, R., Mill, J., Rijdsdijk, F. V., Gregory, A. M., & Eley, T. C. (2012). Anxiety sensitivity in adolescence and young adulthood: the role of stressful life events, 5HTTLPR and their interaction. *Depression and Anxiety*, 29, 400-408.
- [38] Ellis, A. (2002). The role of irrational beliefs in perfectionism. In G. L. Flett, and P. L. Hewitt (Eds.), *Perfectionism: Theory, research, and treatment* (pp. 217-229). Washington, DC: American Psychological Association.
- [39] Gray, J. A. (1982). *The neuropsychology of anxiety: An inquiry into the functions of the septo-hippocampal system*. New York: Oxford University Press.
- [40] Flett, G. L., Greene, A., & Hewitt, P. L. (2004). Dimensions of perfectionism and anxiety sensitivity. *Journal of Rational-Emotive and Cognitive-Behavior Therapy*, 22, 39-57.
- [41] Greenberg, J., & Burns, J. W. (2003). Pain anxiety among chronic pain patients: Specific phobia or manifestation of anxiety sensitivity? *Behaviour Research and Therapy*, 41, 223-240.
- [42] McWilliams, L. A., Stewart, S. H., & MacPherson, P. S. R. (2000). Does the social concern component of the Anxiety Sensitivity Index belong to the domain of anxiety sensitivity or the domain of negative evaluation sensitivity? *Behaviour Research and Therapy*, 38, 985-992.
- [43] Taylor, S., & Cox, B. J. (1998). An expanded anxiety sensitivity index: Evidence for a hierarchic structure in a clinical sample. *Journal of Anxiety Disorders*, 12, 463-484.
- [44] Misirli-Tasdemir, O. (2004). The relationship among test anxiety, self-esteem, locus of control, self-efficacy, and problem solving skills in gifted children. Unpublished master's thesis, Institute of Social Sciences, Karadeniz Technical University, Trabzon, Turkey.
- [45] Deacon, B. J., Abramowitz, J. S., Woods, C. M., & Tolin, D. F. (2003). The Anxiety Sensitivity Index-Revised: psychometric properties and factor structure in two nonclinical samples. *Behaviour Research and Therapy*, 41, 1427-1449.

- [46] Kim, J. H., Yu, B. H., Oh, K. S., Yang, J. C., Kim, Y., Lee, S. Y., & Lim, Y. J. (2004). A validation study of Korean Anxiety Sensitivity Index-Revised (ASI-R). *Journal of Korean Neuropsychiatry Association*, 43, 54-61.
- [47] Cakmak, S. S. (2006). Psychometric properties of anxiety sensitivity index-revised and the relationship with drinking motives and alcohol use in Turkish university students and patients. Unpublished Master Thesis, Graduate School of Social Sciences, Middle East Technical University, Ankara.
- [48] Beck, A. T., Rush, A. J., Shaw, B. E., & Emery, G. (1979). *Cognitive therapy of depression*. New York: Guilford Press.
- [49] Spielberger, C. D., Gorsuch, R. L., & Lushene, R. E. (1970). *Manual for the State-Trait Anxiety Inventory*. Consulting Psychologists Press: Palo Alto, CA.
- [50] Broman-Fulks, J. J., Urbaniak, A., Bondy, C. L., & Toomey, K. J. (2014). Anxiety sensitivity and risk-taking behavior. *Anxiety Stress Coping*, 27, 619-632.
- [51] Kline, R. B. (2005). *Principle and practice of structural equation modeling*, (2nd Ed.). New York: Guilford Press.
- [52] Sumer, N. (2000). Structural equation modeling: basic concepts and sample practices. *Turkish Psychological Manuscripts*, 3, 49-74.
- [53] Flett, G. L., Hewitt, P. L., Blankstein, K. R., & Gray, L. (1998). Psychological distress and the frequency of perfectionistic thinking. *Journal of Personality and Social Psychology*, 75, 1363-1381.
- [54] Pirbaglou, M., Cribbie, R., Irvine, J., Radhu, N., Vora, K., & Ritvo, P. (2013). Perfectionism, anxiety, and depressive distress: Evidence for the mediating role of negative automatic thoughts and anxiety sensitivity. *Journal of American College Health*, 61, 477-483.
- [55] McGrath, D. S., Sherry, S. B., Stewart, S. H., Graham, A. R., Allen, S. L., Nealis, L. J., & Sherry, D. L. (2012). Reciprocal relations between self-critical perfectionism and depressive symptoms: Evidence from a short-term, fourwave longitudinal study. *Canadian Journal of Behavioural Science*, 44, 169-181.
- [56] Hewitt, P. L., & Flett, G. L. (1993). *The Multidimensional Perfectionism Scale: Manual*. Toronto: Multi-Health Systems Inc.
- [57] 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.
- [58] Gautreau, C. M., Sherry, S. B., Mushquash, A. R., & Stewart, S. H. (2015). Is self-critical perfectionism an antecedent of or a consequence of social anxiety, or both? A 12-month, three-wave longitudinal study. *Personality and Individual Differences*, 82, 125-130.
- [59] Noori, A., & Moonesi, H. (2014). A study of perfectionism, anxiety sensitivity and sleep disturbance in the generalizing anxiety disorder and normal people. *The Neuroscience Journal of Shefaye Khatam*, 2, 75-99.
- [60] Shafraan, R., & Mansell, W. (2001). Perfectionism and psychopathology: A review of research and treatment. *Clinical Psychology Review*, 21, 879-906.
- [61] Bhar, S., & Kyrios, M. (1999). Cognitive personality styles associated with depressive and obsessive compulsive phenomena in a non-clinical sample. *Behavioural and Cognitive Psychotherapy*, 27, 329-343.
- [62] Blankstein, K. R., Flett, G. L., Hewitt, P. L., & Eng, A. (1993). Dimensions of perfectionism and irrational fears: An examination with the Fear Survey Schedule. *Personality and Individual Differences*, 15, 323-328.
- [63] Miloseva, L., & Vukosavljevic-Gvozden, T. (2014). Perfectionism dimensions in children: Association with anxiety and depression. *Procedia - Social and Behavioral Sciences*, 159, 78-81.
- [64] Taylor, S. (1999). *Anxiety sensitivity: Theory, research, and treatment of the fear of anxiety*. Mahwah, NJ: Erlbaum.
- [65] Drenckhan, I., Glöckner-Rist, A., Rist, F., Richter, J., Gloster, A. T., Fehm, L., Lang, T., Alpers, G. W., Hamm, A. O., Fydrich, T., Kircher, T., Arolt, V., Deckert, J., Ströhle, A., Wittchen, H.-U., & Gerlach, A. L. (2015). Dimensional structure of bodily panic attack symptoms and their specific connections to panic cognitions, anxiety sensitivity and claustrophobic fears. *Psychological Medicine*, 45, 1675-1685.
- [66] Cox, B. J., Enns, M. W., Walker, J. R., Kjernisted, K., & Pidlubney, S. R. (2001). Psychological vulnerabilities in patients with major depression vs. panic disorder. *Behaviour Research and Therapy*, 39, 567-573.