

Perfectionism in Major Depressive Disorder Majör Depresif Bozuklukta Mükemmeliyetçilik

Gülen Say 

Abstract

Perfectionism is individuals setting hard-to-reach goals for themselves or others and striving to achieve them. People have difficulties in their lives because of their perfectionist thinking. One of the reasons for major depressive disorder is dysfunctional thinking style. In this context, it can be argued that dysfunctional perfectionist thinking is a risk factor for major depressive disorder. A wide range of research results shows that there is a relationship between perfectionism and major depressive disorder. Consequently, this review investigates the relation of perfectionism and sub-dimensions with major depressive disorder.

Keywords: Perfectionism, major depressive disorder, cognition

Öz

Mükemmeliyetçilik, bireylerin kendileri ya da başkaları için ulaşılmaması zor hedefler belirlemesi ve bu hedefleri gerçekleştirmek için aşırı çaba göstermesidir. Bireyler işlevsiz mükemmeliyetçi düşünceleri nedeniyle yaşamlarında sorunlar yaşayabilmektedir. Majör depresif bozukluğa neden olan faktörlerden biri işlevsel olmayan düşünme biçimidir. Bu bağlamda işlevsel olmayan mükemmeliyetçi düşüncenin majör depresif bozukluk için bir risk faktörü olabileceği söylenebilir. Çok sayıda araştırma sonuçları majör depresif bozukluk ile mükemmeliyetçilik arasındaki ilişkiye dikkat çekmektedir. Bu gözden geçirme çalışmasında mükemmeliyetçilik ve alt boyutlarının majör depresif bozuklukla ilişkisi kapsamlı olarak incelenmiştir.

Anahtar sözcükler: Mükemmeliyetçilik, majör depresif bozukluk, biliş

¹ Hacettepe University, Ankara, Turkey

✉ Gülen Say, Hacettepe University Psychological Counseling Unit, Ankara, Turkey
gulensay87@gmail.com

Received: 03.03.2020 | Accepted: 20.04.2020 | Published online: 07.05.2020

PERFECTIONISM can produce positive results when it exists adaptively in people's lives. But it can also create problems when it exists maladaptively (Enns et al. 2001). Negative perfectionism, which has maladaptive and abnormal characteristics, reduces psychological well-being, and also increases psychological problems (Geranmayepour and Besharat 2010). Especially in major depressive disorder, negative effects of maladaptive perfectionism are often present (Park and Jeong 2016). Therefore, it is considered essential to determine the impact of perfectionism and its sub-dimensions in the evaluation of major depressive disorder and planning of treatment process. From this point of view, in this study, it is aimed to investigate the relationship between perfectionism and major depressive disorder. Depending on the purpose of the study, the relevant literature was reviewed in detail. In this context, perfectionism, depression, psychopathology, maladaptive perfectionism, perfectionist cognitions and rumination keywords were used. Article searches were conducted on Academic Search Complete, Web of Science and Science Direct databases by searching Turkish and English equivalents of these concepts. Besides, Google Scholar and YOK Thesis databases have been used for searching for articles.

Definition of perfectionism

Perfectionism is defined as individuals' expectation to perform at a higher level than they or others should act in a given situation. Perfectionist individuals do not only expect a certain level of performance from them, but they cannot either accept anything except perfection (Hollander, 1965). According to Patch (1984), perfectionism is an individuals' excessive effort for a situation that cannot happen. Perfectionist strives for impossible goals compulsively and consistently and evaluates self-worth entirely through success and productivity. Perfectionism is seen with health deterioration, inadequate self-control, interpersonal problems, and a decrease in self-esteem (Burns 1980), and is predisposed to many psychological disorders (Burns 1980, Pacht 1984).

Relevant literature defines perfectionism under different classifications. For example, Hamachek (1978) distinguished between normal perfectionism and neurotic perfectionism. In normal perfectionism, individuals set high standards for themselves, but feel more accurate and comfortable with these standards. In neurotic perfectionism, individuals set goals that are difficult to reach. They never see themselves sufficient about what they do, and they are not satisfied with their performance. Another classification was made by Slade and Owen (1998). According to this classification based on reinforcement theory, perfectionism is divided into two, as positive and negative perfectionism. Positive perfectionism is the setting of high goals to achieve a positive result. It includes positive reinforcement and a desire for success. Negative perfectionism, on the other hand, is an effort to reach high goals by avoiding negative results. Therefore, it includes negative reinforcement and fear of failure. Adkins (1996), on the other hand, defines active and passive perfectionism by explaining perfectionism through differences in behaviors. Adkins stated that excessive fear of making mistakes prevents individuals from taking action and leads to passive perfectionism, whereas active perfectionism motivates individuals and enables them to act.

On the other hand, the dimensional approach and group-based approaches stand out in defining perfectionism. In the dimensional approach, there are two separate dimensions as perfectionist efforts and perfectionist concerns. In the group-based approach,

two groups are defined as healthy and unhealthy perfectionists. It is stated that perfectionist efforts and healthy perfectionism correspond with positive features, perfectionist concerns, and unhealthy perfectionism correspond with negative features (Stober and Otto 2006).

Measurement of perfectionism

After defining perfectionism, the issue of how to measure this concept comes up. The relevant literature shows that two scales are used frequently to measure the concept of perfectionism, and it consists of a multidimensional structure as opposed to a one-dimensional structure (Frost et al. 1990, Hewitt and Flett 1991b). Frost et al. (1990) stated that this concept consists of a six sub-dimensional structure in their studies, and they defined these sub-dimensions as concern over mistakes, personal standards, parental expectations, parental criticism, doubting, and organization. They also emphasized that perfectionism does not only imply high standards of performance, but concern over mistakes is also the main factor for defining this concept and is the main component for measuring perfectionism. While the concern over mistakes is highly related to psychopathology symptoms, personal standards, and organization sub-dimensions are related to many positive personality traits (Frost et al. 1990).

Another dimensional explanation about perfectionism was made by Hewitt and Flett (1991b). Hewitt and Flett (1991b) stated that perfectionism consists of three components as self-oriented perfectionism, other-oriented perfectionism, and socially prescribed perfectionism. The difference between these components does not depend on the behavioral pattern, but with whom perfectionist behaviors are directed and to whom it is attributed. Self-oriented perfectionism involves setting high standards about one's self, evaluating and criticizing his own behavior strictly. Other-oriented perfectionism includes expectations and beliefs about others' capacities. Socially prescribed perfectionism consists of the need to reach the standards and expectations set by others who are considered essential. It leads to individuals' perceptions and beliefs about the unrealistic standards that others have for them. Individuals with socially prescribed perfectionism are concerned with reaching the standards of others, excessively fear of negative evaluation, and avoid rejection while trying to get the approval of others. (Hewitt and Flett 1991b). According to the researchers, it is crucial to evaluate the factors that contribute to the differences of these sub-components. The type of motivation, level of motivation, and perceived level of control are among the critical factors to distinguish these components.

In different two studies, it is seen that these different sub-dimensions are related to each other. For example, personal standards sub-dimension is closely associated with self-oriented perfectionism sub-dimension. Similarly, it is noteworthy that concern over mistakes, parental expectations, and parental criticism dimensions are strictly related to socially prescribed perfectionism (Frost et al. 1993). When the nine sub-dimensions that appeared in both studies were evaluated together, concern over mistakes, parental criticism, parental expectations, doubt about actions, and socially prescribed perfectionism sub-dimensions was collected under the maladaptive evaluation concerns heading. Maladaptive evaluation concerns include concerns about errors, failures, and evaluation and criticism of others. These sub-dimensions reflect the negative characteristics of perfectionism. Personal standards, organization, self-oriented perfectionism, and other-

oriented perfectionism sub-dimensions were included in the category of positive striving. These sub-dimensions reflect the positive characteristics of perfectionism and include successful personal experiences arising from individuals' expectations and skills (Frost et al. 1993).

Perfectionism and psychopathology

With the beginning of the evaluation of perfectionism, it is emphasized that this concept may be related to various psychopathology (Burns 1980, Pacht 1984). Since perfectionism became notable as a concept, it has started to be the subject of studies investigating which psychopathologies it is associated with, and which sub-dimensions may cause problems in individuals' lives (Shafran and Mansell 2001, Limburg et al. 2016). Perfectionism is a concept associated with different psychopathologies since childhood (Cook and Kearney 2009, Miloseva and Vukosavljevic-Gvozden 2014). In adulthood, the relationship between perfectionism and psychopathology continues to cause problems in individuals' lives. Concerns of maladaptive evaluation in perfectionism lead to an increase in psychopathology and a decrease in the well-being of individuals (DiBartalo et al, 2008). When the relevant literature is examined, it is seen that perfectionism has a relationship with many psychopathologies like social anxiety (Newby et al. 2017), eating disorders (Rivière and Doulliez 2017), bipolar disorder (Corry et al. 2013), obsessive-compulsive disorder (Frost and Steketee 1997, Moretz and McKay 2009). Nevertheless, in psychopathology studies, perfectionism is often researched with depression and anxiety, and the relationship between them has been proven many times (Jensen et al. 2018, Gnilka and Broda 2019).

Perfectionism and major depressive disorder

Major depressive disorder, with general use, depression is one of the most common psychiatric disorders in the community. The lifetime prevalence of depression has reached up to 20% (Öztürk and Uluşahin 2008, Işık 2003). Depression has a recurrent course (Aslan and Demir 2008). Considering the prevalence of depression in the society, the problems it creates, and its recurrent characteristics, evaluating the factors that may be related to depression become important.

Depressive individuals tend to blame themselves, or they have dichotomous thinking over-generalization, selective abstraction (Beck 1979, Beck et al. 1979). Similar ways of thinking are seen to be effective in perfectionism. Perfectionist individuals evaluate their experiences and selves in a dichotomous way: as successful or unsuccessful. The goals of these individuals are strict, the goals are seen as necessary for self-esteem, and there is selective attention towards unattainable goals. Besides, they have certain beliefs that the negative experiences will regularly repeat themselves (Burns 1980, Barrow and Moore 1983). Perfectionism has a relationship with negative automatic thoughts. Fundamentally, it is understandable to want to be perfect to a certain point.

However, in maladaptive perfectionism, the negative evaluation process begins by distorting this request. Demands for perfection begin to increase, and the response to failure becomes negative. Negative automatic thoughts lead to a boundary between adaptive perfectionism, where there is a desire to be perfect, and maladaptive perfectionism, where negative characteristics are effective, and initiate self-punitive behaviors in case of a failure (Pirbaglou et al. 2013). According to Flett et al. (1991), self-oriented, other-

oriented, and socially prescribed perfectionism have relationships with irrational beliefs. Individuals' perfectionist expectations and motivations are an important part of irrational beliefs. The fact that negative thoughts and irrational beliefs are determining factors for both depression and perfectionism draws attention to the relationship of perfectionism with depression. According to Burns (1980), who made a detailed description of perfectionism, there may be a causal relationship between perfectionism and depression, and perfectionism can be considered as one of the important psychological factors that cause mood changes. Considering the definitions on the positive and negative characteristics of perfectionism, maladaptive perfectionism is an important factor for depression (Enns et al. 2002, Bieling et al. 2004). The frequency of perfectionist thoughts causes problems such as dissatisfaction with life, negative affect, and can also cause psychopathologies such as depression and anxiety.

On the other hand, there is a relationship between the frequency of perfectionist thinking and the severity of depression (Flett et al. 1998). Perfectionists who have high standards about themselves encounter negative psychological consequences when they fail to meet these standards. When individuals with strong perfectionist tendencies perceive failure, this can make them feel depressed. As perfectionist concerns increase, the risk of depression increases (Black and Reynolds 2013). Individuals with high perfectionist concerns have difficulties in establishing supportive social relationships because they do not evaluate themselves well enough, and therefore they live isolated from other individuals. This social isolation and self-doubt also increase the risk of depression (Gnilka and Broda 2018). Self-critical perfectionists tend to avoid experiences because they evaluate themselves strictly, and they want to cope with the negative emotions arisen from others' perceived criticism. The avoidance of these experiences is also related to depression (Moroz and Dunkley 2015). On the other hand, another negative evaluation in perfectionism is made about emotions. Emotion suppression behaviors in unhealthy perfectionism are related to beliefs about emotions in which negative beliefs can cause emotion suppression. Emotion suppression behaviors are mediator factors for the relationship between perfectionism and depressive symptoms (Tran and Rimes 2017).

The effect of self-compassion is noteworthy when it comes to maladaptive perfectionism and depression (Ferrari et al. 2018). Self-compassion is the openness to experiencing painful emotions, trying to alleviate pain by caring for oneself, being insightful inadequacies and failures, and accepting these negativities as a part of human nature (Neff, 2003). Perfectionism has opposite characteristics to self-compassion because perfectionism is concerned with strict self-evaluation and self-criticism. (Frost et al. 1990, Hewitt and Flett 1991b). In other words, as maladaptive perfectionism increases, self-compassion decreases (Mehr and Adams 2016). In the relationship between maladaptive perfectionism and depression, hopelessness is an important concept. As maladaptive perfectionism increases, hopelessness and depression increase (Gnilka et al. 2013). On the other hand, hope is a mediator in the relationship between depression and perfectionism. In other words, hopelessness may have a contributing effect on depression in individuals with maladaptive perfectionism (Mathew et al. 2014).

Sub-dimensions of perfectionism and major depressive disorder

Sub-dimensions in perfectionism are important and predisposition factors for depression

(Smith et al. 2016). The first sub-dimension, which has a relationship with depression, is self-oriented perfectionism (Hewitt and Flett 1991a). Success stress in self-oriented perfectionism is essential in evaluating the degree of depression (Hewitt and Flett 1993). The high standards that individuals set for themselves and their overthinking about achieving these standards increase the risk of depression. Here, self-oriented perfectionism predisposes to depression due to rumination (Olson and Kwon 2008). It has been observed that rumination mediates the relationship between depression, which is considered to be related to stress, and self-oriented perfectionism (Xie et al. 2019).

Socially prescribed perfectionism, which involves dealing with reaching the standards of others, is one of the critical dimensions in evaluating depression (Hewitt and Flett 1991a). Socially prescribed perfectionism is a social-cognitive factor that increases depressive symptoms in the process (Hewitt et al. 1996). This dimension has a relationship with cognitive distortions in depression (Enns and Cox 1999). Having high standards for others and feeling the necessity to comply with the standards set by others cause irrational thoughts related to their obligations, frustration, tolerance, and self-worth (Flett et al. 1991). Reactivity to social evaluation, or the stress arising from these situations, is related to socially prescribed perfectionism, and this also increases the risk of depression (Flett et al. 2016). Individuals with high socially prescribed perfectionism are prone to depression because they do not find their life experiences meaningful and satisfying. Strict self-examination, unrealistic expectations, and lack of tolerance for noticeable failures create difficulties in accepting the past (Sherry et al. 2015). Flett et al. (2002) found that there is a relationship between socially prescribed perfectionism and rumination. Individuals with intense perfectionist thoughts have ruminative thinking when confronted with stressful situations, and rumination becomes the mediator in the relationship between stress and perfectionism at this point (Short and Mazmanian 2013). Socially prescribed perfectionism, rumination, and stress factors interact with each other, and it causes an increase in depressive symptoms (Olson and Kwon 2008). External resources that pressure the individual to be perfect are significant in socially prescribed perfectionism.

In here, the perfectionist tendencies of family members stand out. In individuals who have mothers and siblings with other-directed perfectionism, the risk of depression increases with the effect of socially prescribed perfectionism (Smith et al. 2019). At this point, the role of family relations in perfectionism emerges. Socially prescribed perfectionism is related to parental criticism and parental expectations dimensions because these dimensions are about meeting the expectations and standards of others (Frost et al. 1993). According to Burns (1980), perfectionism is partially learned from perfectionist parents. Parents' perfectionism also causes children to be perfectionists. Parents whose families are perfectionists have a more critical attitude towards their children (Frost et al. 1991). In this context, parental standards, expectations, and criticisms become essential points for perfectionism. When perfectionist individuals, who are depressed, fail to achieve their parents' strict and harsh expectations and standards, they feel intense guilt, shame, failure, and worthlessness because they criticize and judge themselves (Blatt 1995). Parents' pressure for being perfect raises perfectionist anxieties in their children. Thus, parents' high standards and critical attitudes cause children to be overly concerned with their mistakes and worry about their behaviors (Domocus and Damian 2018). Harsh practices of parents in childhood create a predisposition for depression, and maladaptive perfectionism has a mediator role in here (Enns et al. 2002).

The concern over mistakes and doubts about actions are closely related to self-critical depression (Frost et al. 1990). These sub-dimensions lead to maladaptive perfectionism so they can cause depression. Also, these sub-dimensions increase the depressive feeling with increases in frequency and intensity of stressful life events (Lynd-Stevenson and Hearne 1999). (Lynd-Stevenson and Hearne 1999). As with other sub-dimensions, ruminative thinking is practical in here. In other words, the sub-dimensions of concern over mistakes and doubt about actions increase the risk of depression with more analytical and more abstract ruminative thinking (Schiena et al. 2012). According to Harris et al. (2008), concern over mistakes and doubt about actions are related to maladaptive perfectionism. The relationship between depression and maladaptive perfectionism can be explained entirely by brooding.

As stated, ruminations mediate the relationship between self-oriented perfectionism, socially prescribed perfectionism, concern over mistakes, doubt about actions, and depression. In this context, it is important to understand the role of rumination in the relationship between perfectionism and depression. Rumination is the individuals' repetitive thinking about themselves and their conditions and the occurrence of negative mood as a result of encountering a problematic situation (Nolen-Hoeksema 1991). Per ruminative thinking, perfectionist individuals often and repeatedly think about their behaviors, defects, and problems. These thoughts explain the relationship between stress and perfectionism (O'Connor et al. 2007). Brooding is the factor that determines perfectionism to be positive or negative. Individuals who have brooding may have less will to achieve high standards and may be more vulnerable to obstacles. As a result, they may become more prone to depression (Olson and Kwon 2008).

The sub-dimensions discussed above have adverse effects on depression and constitute a risk factor for depression. On the other hand, personal standards, organization, and other-oriented perfectionism reflect the positive aspects of perfectionism. They show adaptive aspects of personal motivation. In terms of depression, it is seen that own standards, organization, and other-oriented perfectionism are not related to depression (Frost et al. 1990, Sassaroli et al. 2008, Malinowski et al. 2017).

Discussion

In this study, the relationship between perfectionism and major depressive disorder is examined. In this context, the relationship between negative perfectionism and psychopathology and depression is explained by describing perfectionism in detail. The fact that depression is a common psychiatric disorder in the community (Blazer et al. 1994) brings with it the necessity to evaluate the factors related to depression. In studies relevant to depression, the concept of perfectionism has been frequently assessed. However, in these studies, certain sub-dimensions of perfectionism have been evaluated depending on the measurement instrument. Different sub-dimensions have not been examined together. In this context, in the current study, the relationships between various sub-dimensions of perfectionism and depression are explained in detail.

On the other hand, the fact that depression is a common disorder in the community raises the issue of treating this disorder. Cognitive-behavioral therapy is known to be one of the most commonly used therapy methods in the treatment of depression (Rosmarin et al., 2019). Cognitive-behavioral therapy focuses on automatic thoughts, intermediate beliefs, and core beliefs based on how individuals evaluate events (Beck, 2011). As stated

earlier, perfectionism is related to negative automatic thoughts (Pirbaglou et al., 2013). In this context, it is important to evaluate perfectionist thought errors in the treatment of depression. For this reason, in this review, it is aimed to create a resource for clinical applications by investigating the relationship between perfectionism and depression.

As mentioned above, concerns about perfection seem to be related to maladaptive perfectionist cognitions that lead to catastrophic thinking and rumination, and this negative process eventually causes depression (Macedo et al. 2017). In a review study, the maladaptive perfectionist cognitive structure is found to be associated with schemas, beliefs about the need for perfection, thoughts about self-worth, dichotomous thinking style, perfectionist automatic thoughts, and emotion-oriented coping mechanisms (Chemisquy 2018). It is observed that perfectionist dysfunctional thoughts can be changed, and depression level can decrease significantly with the cognitive-behavioral intervention (Crăciun and Holdevici 2013). With this information, conducting future studies to change these dysfunctional thoughts in perfectionism with various intervention programs are essential for preventing and treating depression.

When the sub-dimensions of perfectionism are analyzed, it is revealed that ruminations that are related to perfectionism affect depression. Especially self-oriented perfectionism, socially prescribed perfectionism, concern over mistakes, and doubt about actions are risk factors for depression through rumination (Olson and Kwon 2008, Schienave ark. 2012). Perfectionist individuals with concerns for assessment often use rumination and avoidance as a form of coping after their experiences of failure (van der Kaap-Deeder, et al. 2016). On the other hand, given the relationship between depression and rumination (Iqbal and Dar 2015), it can be said that using more adaptive coping styles can be effective in preventing depression for perfectionist individuals.

One of the symptoms of major depressive disorder is recurrent death thoughts. (APA 2013). As the severity of depression increases, suicidal thoughts are more severe in adults (Rossom et al. 2019). The relationship between perfectionism and suicidal tendency is not included in this study. When the relevant literature is examined, it is seen that perfectionism increases suicidal ideation. Socially prescribed perfectionism is more common in suicidal ideation (Shahnaz et al. 2018). In a meta-analysis study, the sub-dimensions of perfectionism were found to be positively related to suicidal ideation (Smith et al. 2018). Based on this information, it is thought that perfectionism is a subject that should be examined to prevent suicide, and it is vital to evaluate the relationships between these two variables in future studies.

In the literature, the positive and negative aspects of perfectionism are emphasized (Hamacheck 1978, Adkins 1996, Slade and Owen 1998). In psychopathology, negative aspects of perfectionism draw attention (Wang and Li 2017). In this study, the only major depressive disorder was discussed as psychopathology. However, when studies on perfectionism were examined, it was seen that perfectionism has relationships with several psychopathologies. Especially for eating disorders, the effects of self-oriented perfectionism and socially prescribed perfectionism draw attention (Peixoto-Plácido et al. 2015).

Similarly, maladaptive perfectionism is stated to be a risk factor for anxiety (Bardone-Cone et al. 2017). There is a relationship between social anxiety and personal standards and perfectionist assessment concerns (Levinson et al. 2015). On the other hand, it is noteworthy that other psychological problems such as insomnia, alcohol problems, anger have a relationship with perfectionism (Esfahani and Besharat 2010, Akram et al. 2017,

Mackinnon et al. 2019). From this point of view, it is thought that evaluating the relationships between various psychopathologies or psychological problems and perfectionism in detail will contribute to the relevant literature.

Conclusion

When the studies on perfectionism are examined, it is seen that perfectionism is related to psychopathology, especially major depressive disorder. As discussed in detail in this review study, maladaptive perfectionism is known to be a risk factor for major depressive disorder. The literature is quite broad, and it has been found that different psychological processes mediate the relationship between perfectionism and depression. Remarkably, both individuals' negative self-assessment and their beliefs about being negatively evaluated by others are useful in this relationship. Individuals' thought errors towards themselves and others draw attention in this process. In both perfectionism and major depressive disorder, thought errors such as all-or-nothing thinking and over-generalization are seen intensely. Self-compassion decreases and feelings of hopelessness emerge with the effect of thought errors. Besides, when it comes to perfectionism and major depressive disorder, the mediating effect of rumination is also mentioned. From this point of view, it can be said that changing the cognitive distortions of individuals is important for depression and perfectionism.

On the other hand, relationships with parents, perfectionist attitudes, and expectations are known to be effective in major depressive disorder. In this case, the perfectionist perspective may emerge through learning from parents. Perfectionism through modeling can lead to more negative results, both due to the negative self-evaluation of the individuals and the negative evaluation by their parents.

In the literature, there is not enough study for intervention techniques that reduce the adverse effects of perfectionism for the treatment of depression. From this point of view, it is thought that these findings obtained from various studies can be used to create effective treatment programs and will make important contributions to the field of clinical psychology. On the other hand, in the literature review, very few studies were found on the positive characteristics of perfectionism. In understanding perfectionism, it is necessary to understand not only its negative features but also its positive aspects. Thus, the risks posed to individuals can be better understood. From this point of view, we suggest examining the positive characteristics of perfectionism in future studies.

References

- Akram U, Ellis JG, Myachykov A, Chapman AJ, Barclay NL (2017) Anxiety mediates the relationship between multidimensional perfectionism and insomnia disorder. *Pers Individ Dif*, 104:82–86.
- APA (2013) *Diagnostic and Statistical Manual for Mental Disorders, 5th edition (DSM-5)* Washington DC, American Psychiatric Association.
- Aslan D, Demir EY (2008) Yineleyici ve tek dönem majör depresif bozukluğu olan hastaların kişilik ve affektif mizaç özellikleri. *Klinik Psikiyatri Dergisi*, 11:61-71.
- Bardone-Cone AM, Lin SL, Butler RM (2017) Perfectionism and contingent self-worth in relation to disordered eating and anxiety. *Behav Ther*, 48:380–390.
- Barrow JC, Moore CA (1983) Group interventions with perfectionistic thinking. *Pers Guid J*, 61:612-615.
- Black J, Reynolds WM (2013) Examining the relationship of perfectionism, depression, and optimism: Testing for mediation and moderation. *Pers Individ Dif*, 54:426-431.

- Beck AT (1979) *Cognitive Therapy and Emotional Disorders*, 2nd ed. New York, New American Library.
- Beck AT, Rush AJ, Shaw BF, Emery G (1979) *Cognitive Therapy of Depression*. New York, Guilford Press.
- Beck J (2011) *Cognitive Behavioral Therapy: Basics and Beyonds*, 2nd ed. New York, Guilford Press.
- Bieling PJ, Israeli AL, Antony MM (2004) Is perfectionism good, bad, or both? Examining models of the perfectionism construct. *Pers Individ Dif*, 36:1373–1385.
- Blatt SJ (1995) The destructiveness of perfectionism. Implications for the treatment of depression. *Am Psychol*, 50:1003–1020.
- Blazer DG, Kessler RC, McGonagle KA, Swartz MS (1994) The prevalence and distribution of major depression in national community sample: The national comorbidity survey. *Am J Psychiatry*, 151:979–986.
- Burns DD (1980) The perfectionist's script for self-defeat. *Psychol Today*, 34–52.
- Chemisquy S (2018) Theoretical review on maladaptive perfectionism's cognitive profile. *Apuntes Universitarios*, 8:16–40.
- Cook LC, Kearney CA (2009) Parent and youth perfectionism and internalizing psychopathology. *Pers Individ Dif*, 46:325–330.
- Corry J, Green M, Roberts G, Frankland A, Wright A, Lau P et al. (2013) Anxiety, stress and perfectionism in bipolar disorder. *J Affect Disord*, 151:1016–1024.
- Crăciun B, Holdevici I (2013) Cognitive-behavioural intervention in diminishing perfectionistic self-presentation and depression. *Procedia Soc Behav Sci*, 78:476–480.
- DiBartolo PM, Li CY, Frost RO (2008) How do the dimensions of perfectionism relate to mental health? *Cognit Ther Res*, 32:401–417.
- Domocu IM, Damian LE (2018) The role of parents and teachers in changing adolescents' perfectionism: A short-term longitudinal study. *Pers Individ Dif*, 131:244–248.
- Enns MW, Cox BJ (1999) Perfectionism and depression symptom severity in major depressive disorder. *Behav Res Ther*, 37:783–794.
- Enns MW, Cox BJ, Clara I (2002) Adaptive and maladaptive perfectionism: Developmental origins and association with depression proneness. *Pers Individ Dif*, 33:921–935.
- Enns MW, Cox BJ, Sareen F, Freeman P (2001) Adaptive and maladaptive perfectionism in medical students: a longitudinal investigation. *Med Educ*, 35:1034–1042.
- Esfahani FS, Besharat MA (2010). Perfectionism and anger. *Procedia Soc Behav Sci*, 5:803–807.
- Ferrari M, Yap K, Scott N, Einstein DA, Ciarrocchi J (2018) Self-compassion moderates the perfectionism and depression link in both adolescence and adulthood. *PLoS One*, 13:1–19.
- Flett GL, Madorsky D, Hewitt PL, Helsen M (2002) Perfectionism, cognitions, rumination, psychological distress. *J Ration Emot Cogn Behav Ther*, 20:33–47.
- Flett GL, Nepon T, Hewitt PL, Fitzgerald K (2016) Perfectionism, components of stress reactivity, and depressive symptoms. *J Psychopathol Behav Assess*, 38:645–654.
- Frost RO, Heimberg RG, Holt CS, Mattia JI, Neubauser AL (1993) A comparison two measures of perfectionism. *Pers Individ Dif*, 14:119–126.
- Frost RO, Lahart C, Rosanblate R (1991) The development of perfectionism: A study of daughters and their parents. *Cognit Ther Res*, 15:469–489.
- Frost RO, Marten P, Lahart C, Rosanblate R (1990) The dimension of perfectionism. *Cognit Ther Res*, 14:449–468.
- Frost RO, Steketee G (1997) Perfectionism in obsessive-compulsive disorder patients. *Behav Res Ther*, 35:291–296.
- Geranmayepour S, Besharat MA (2010) Perfectionism and mental health. *Procedia Soc Behav Sci*, 5:643–647.
- Gnilka PB, Broda MD (2019) Multidimensional perfectionism, depression, and anxiety: Tests of a social support mediation model. *Pers Individ Dif*, 139:295–300.
- Gnilka PB, Ashby JS, Noble CM (2013) Adaptive and maladaptive perfectionism as mediators of adult attachment styles and depression, hopelessness, and life satisfaction. *J Couns Dev*, 91:78–86.
- Hamachek DE (1978) Psychodynamics of normal and neurotic perfectionism. *Psychology*, 15:27–33.
- Harris PW, Pepper CM, Maack DJ (2008) The relationship between maladaptive perfectionism and depressive symptoms: The mediating role of rumination. *Pers Individ Dif*, 44:150–160.

- Hewitt PL, Flett GL (1991a) Dimensions of perfectionism in unipolar depression. *J Abnorm Psychol*, 100: 98-101.
- Hewitt PL, Flett GL (1991b) Perfectionism in the self and social contexts: Conceptualization, assessment, and association with psychopathology. *J Pers Soc Psychol*, 60:456-470.
- Hewitt PL, Flett GL (1993) Dimensions of perfectionism, Daily stress, and depression: A test of the specific vulnerability hypothesis. *J Abnorm Psychol*, 102:58-65.
- Hewitt PL, Flett GL, Blainstein KR, Gray L (1998) Psychological distress and the frequency of perfectionistic thinking. *J Pers Soc Psychol*, 75:1363-1381.
- Hewitt PL, Flett GL, Blainstein, KR, Koledin S (1991) Dimensions of perfectionism and irrational thinking. *J Ration Emot Cogn Behav Ther*, 9:185-201.
- Hewitt PL, Flett GL, Ediger E (1996) Perfectionism and depression: Longitudinal assessment of a specific vulnerability hypothesis. *J Abnorm Psychol*, 105:276-280.
- Hollander MH (1965) Perfectionism. *Compr Psychiatry*, 6:94-103.
- Iqbal N, Dar KA (2015) Negative affectivity, depression, and anxiety: Does rumination mediate the links? *J Affect Disord*, 181:18–23.
- İşık E (2003) Duygudurum Bozuklukları Depresyon ve Bipolar Bozukluklar. Ankara, Görsel Sanatlar Matbaacılık.
- Jensen SN, Ivarsson, A, Fallby J, Dankers S, Elbe A (2018) Depression in Danish and Swedish elite football players and its relation to perfectionism and anxiety. *Psychol Sport Exerc*, 36:147–155.
- Levinson CA, Rodebaugh TL, Shumaker EA, Menatti, AR, Weeks JW, White EK (2015) Perception matters for clinical perfectionism and social anxiety. *J Anxiety Disord*, 29:61–71.
- Limburg K, Watson HJ, Hagger MS, Egan SJ (2017) The relationship between perfectionism and psychopathology: A meta-analysis. *J Clin Psychol*, 73:1301-1326.
- Lynd-Stevenson RM, Hearne CM (1999) Perfectionism and depressive affect: The pros and cons of being a perfectionist. *Pers Individ Dif*, 26:549-562.
- Macedo A, Marques C, Quesada V, Soares MJ, Amaral AP, Araújo AI et al. (2017) Are perfectionism cognitions and cognitive emotion regulation strategies mediators between perfectionism and psychological distress? *Pers Individ Dif*, 119:46–51.
- Mackinnon SP, Ray MR, Firth SM, O'Connor RM (2019) Perfectionism, negative motives for drinking, and alcohol-related problems: A 21-day diary study. *J Res Pers*, 78:177–188.
- Malinowski AS, Veselka L, Atkinson BE (2017) An investigation of vulnerability factors for depression. *Pers Individ Dif*, 107:126–130.
- Mandel T, Dunkley DM, Moroz M (2015) Self-critical perfectionism and depressive and anxious symptoms over 4 years: The mediating role of daily stress reactivity. *J Couns Psychol*, 62:703-717.
- Mathew JM, Dunning C, Coats C, Whelan T (2014) The mediating influence of hope on multidimensional perfectionism and depression. *Pers Individ Dif*, 70:66–71.
- Mehr KE, Adams AC (2016) Self-compassion as a mediator of maladaptive perfectionism and depressive symptoms in college students. *J College Stud Psychother*, 30:132-145.
- Miloseva L, Vukosavljevic-Gvozden T (2014) Perfectionism dimensions in children: Association with anxiety and depression. *Procedia Soc Behav Sci*, 159:78-81.
- Moretz MW, McKay D (2009) The role of perfectionism in obsessive-compulsive symptoms: "Not just right" experiences and checking compulsions. *J Anxiety Disord*, 23:640–644.
- Moroz M, Dunkley DM (2015) Self-critical perfectionism and depressive symptoms: Low self-esteem and experiential avoidance as mediators. *Pers Individ Dif*, 87:174-179.
- Neff K (2003) Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self and Identity*, 2:85–101.
- Newby J, Pitura VA, Penney AM, Klein RG, Flett GL, Hewitt PL (2017) Neuroticism and perfectionism as predictors of social anxiety. *Pers Individ Dif*, 106:263–267.
- Nolen-Hoeksema S (1991) Responses to depression and their effects on the duration of depressive episodes. *J Abnorm Psychol*, 100:569–582.

- O'Connor DB, O'Connor RC, Marshall R (2007) Perfectionism and psychological distress: Evidence of the mediating effects of rumination. *Eur J Pers*, 21:429-452.
- Olson ML, Kwon P (2008) Brooding perfectionism: refining the roles of rumination and perfectionism in the etiology of depression. *Cognit Ther Res*, 32:788-802.
- Öztürk O, Uluşahin A (2008) *Ruh Sağlığı ve Bozuklukları I*. Cilt, 11. basım. İstanbul, Nobel Tıp Kitapevleri.
- Park H, Jeong DY (2016) Moderation effects of perfectionism and meaning in life on depression. *Pers Individ Dif*, 98:25-29.
- Pacht AR (1984) Reflection on perfection. *Am Psychol*, 39:386-390.
- Peixoto-Plácido C, Soares MJ, Pereira AT, Macedo A (2015) Perfectionism and disordered eating in overweight woman. *Eat Behav*, 18:76-80.
- 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. *J Am Coll Health*, 61:477-483.
- Rivière J, Douilliez C (2017) Perfectionism, rumination, and gender are related to symptoms of eating disorders: A moderated mediation model. *Pers Individ Dif*, 116:63-68.
- Rosmarin DH, Bocanegra ES, Hoffnung G, Appel M (2019) Effectiveness of cognitive behavioral therapy for anxiety and depression among orthodox jews. *Cogn Behav Pract*, 26:676-687.
- Rossum RC, Simon GE, Coleman KJ, Beck A, Oliver M, Stewart C et al. (2019) Are wishes for death or suicidal ideation symptoms of depression in older adults. *Aging Ment Health*, 23:912-918.
- Sassaroli S, Lauro LJR, Ruggiero GM, Mauri MC, Vinai P, Frost R (2008) Perfectionism in depression, obsessive-compulsive disorder and eating disorders. *Behav Res Ther*, 46:757-765.
- Schiena RD, Luminet O, Phillipot P, Doulliez C (2012) Adaptive and maladaptive perfectionism in depression: Preliminary evidence on the role of adaptive and maladaptive rumination. *Pers Individ Dif*, 53:774-778.
- Shafraan R, Mansell W (2001) Perfectionism and psychopathology: a review of research and treatment. *Clin Psychol Rev*, 21:879-906.
- Shahnaz A, Saffer BY, Klonsky ED (2018) The relationship of perfectionism to suicide ideation and attempts in a large online sample. *Pers Individ Dif*, 130:117-121.
- Sherry DL, Sherry SB, Hewitt PL, Musquash A, Flett GL (2015) The existential model of perfectionism and depressive symptoms: Tests of incremental validity, gender differences, and moderated mediation. *Pers Individ Dif*, 76:104-110.
- Short MM, Mazmanian D (2013) Perfectionism and negative repetitive thoughts: Examining a multiple mediator model in relation to mindfulness. *Pers Individ Dif*, 55:716-721.
- Slade BD, Owen RG (1998) A dual process model of perfectionism based on reinforcement theory. *Behav Modif*, 22:372-390.
- Smith MM, Sherry SB, Chen S, Saklofske DH, Mushquash C, Flett GL et al. (2017) The perniciousness of perfectionism: A meta-analytic review of the perfectionism-suicide relationship. *J Pers*, 86:522-542.
- Smith MM, Sherry SB, Glowacka M, Speth TA, Stewart SH, Saklofske DH et al. (2019) Who is most demanding of them all? A multisource investigation of other-oriented perfectionism, socially prescribed perfectionism, and depressive symptoms. *Pers Individ Dif*, 138:328-332.
- Smith MM, Sherry SB, Rnic K, Saklofske DH, Enns M, Gralnick T (2016) Are perfectionism dimensions vulnerability factors for depressive symptoms after controlling for neuroticism? A Meta-analysis of 10 longitudinal studies. *Eur J Pers*, 30:201-212.
- Stoeberl J, Otto K (2006) Positive conceptions of perfectionism: Approaches, evidence, challenges. *Pers Soc Psychol Rev*, 10:295-319.
- Tran L, Rimes KA (2017) Unhealthy perfectionism, negative beliefs about emotions, emotional suppression, and depression in students: A mediational analysis. *Pers Individ Dif*, 110:144-147.
- van der Kaap-Deeder J, Soenens B, Boone L, Vandekerckhove B, Stengée E, Vansteenkiste M (2016) Evaluative concerns perfectionism and coping with failure: Effects on rumination, avoidance, and acceptance. *Pers Individ Dif*, 101:114-119.
- Wang H, Li J (2017) Positive perfectionism, negative perfectionism, and emotional eating: The mediating role of stress. *Eat Behav*, 26:45-49.
- Xie Y, Kong Y, Yang J, Chen F (2019) Perfectionism, worry, rumination, and distress: A meta-analysis of the evidence for the perfectionism cognition theory. *Pers Individ Dif*, 139:301-312.

Authors Contributions: The author attests that she has made an important scientific contribution to the study and has assisted with the drafting or revising of the manuscript.

Peer-review: Externally peer-reviewed.

Conflict of Interest: No conflict of interest was declared by the author.

Financial Disclosure: The author declared that this study has received no financial support.