



INVESTIGATING THE RELATIONSHIP BETWEEN THE DIMENSIONS OF PERFECTIONISM AND SELF-EFFICACY IN UNDERGRADUATE STUDENTS

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Abstract:

The main purpose of this study is to investigate the relationship between self-efficacy and perfectionism and the predictive role of perfectionism on self-efficacy. The sample consisted of 173 (104 females; 69 males) pre-service teachers who study at the Fine Arts Education Department, Music Education Program of the Faculties of Education in Mugla Sıtkı Kocman and Pamukkale Universities. The data were collected by using the Frost Multidimensional Perfectionism Scale and General Self-Efficacy Scale-Turkish Form. Pearson product-moment correlation analysis was employed to search for relationships between self-efficacy and dimensions of perfectionism; multiple hierarchical regression analysis was also used for explaining self-efficacy. Concern over mistakes, personal standards, parental expectations, parental criticism, and doubts about actions, and organization dimensions of perfectionism were found to be significantly correlated to self-efficacy. A significant impact of concern over mistakes, personal standards, parental expectations, parental criticism, doubts about actions, and organization dimensions of perfectionism on self-efficacy was detected. The theoretical implications of the link between self-efficacy and perfectionism are discussed.

Keywords: self-efficacy, perfectionism, undergraduate students

1. Introduction

Music is believed to be a way of making mind more relaxed. Music is usually said to be an art that combines sounds produced by objects or instruments or both of them in such

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a way as to generate a beauty of form and harmony and expression of emotion. As a form of an art, music is a means of exploration conducted on the emotional being of a human-being, in this way, creates a link between the emotional impulses or desires, and then presents them in such a way as to reveal this person's psycho epistemological processes. Since its beginning, it has always been a point of interest for esthetics.

Among the arts, it is only the music that can thoroughly demonstrate the vehemence of a particular situation. Music is also believed to be conducive to human health. It is used in the treatment of many diseases and mental disorders (for example, stress, anxiety, depression, perfectionism, etc.) (Bradt & Dileo, 2009).

The perfectionists have a tendency to set excessively high standards to accomplish (Gilman & Ashby, 2003) and hence, they experience extreme self-scrutiny, self-doubt, and self-criticism (Blatt, 1995). The construct of perfectionism can be defined as setting goals requiring the execution of high performances and superior achievements (Flett & Hewitt, 2002).

In general, humans find the concept of perfectionism very attractive and may see it as a means of compensation for their recognized deficiencies (Flett & Hewitt, 2002). Adler (1956) argues that longing for perfectionism is an innate part of humans and it has been so since the beginning of the history. In today's world, this longing has been made an important part of marketing efforts so that perfectionism is associated with buying a certain product (Flett and Hewitt, 2002; 2006).

Over time, the construct of perfectionism has been attributed many different dimensions. Frost, Marten, Lahart, and Rosenblate (1990) highlighted that it is not possible to explain the construct of perfectionisms through a longing for achieving high standards alone. There are some other characteristics of perfectionism that are high standards' resulting in extremely self-critical behavior, fear of making mistakes, feeling suspicious of the quality of one's performance, significance attached to expectations and criticism from parents and extreme emphasis put on organization (Harvey, Pallant, & Harvey, 2004). Moreover, dimensions of perfectionism can be divided into two main categories as intrapersonal and interpersonal (Flett & Hewitt, 1995; Purdon, Antony, & Swinson, 1999).

There are some psychologists claiming that feeling of personal inadequacy may lead to striving for perfectionism (Flett & Hewitt, 2002; 2006). For instance, Horney (1964) states that search for perfectionism can be an indication of some kind of psychological disorders, which may result in maladjustment; on the other hand, Ellis (2002) argues that some people may become perfectionist as they may have some irrational beliefs resulting from poor self-worth. In the last few decades, there has been a great deal of research reporting a close connection between the importance of

perfectionism and psychopathology. There are many factors associated with desire to be perfect such as self-esteem issues, eating disorders, obsessive compulsive disorders, depression, suicide ideation, including various forms of anxieties, such as test anxiety, social anxiety and performance anxiety, etc. (Burns, 1980; Flett & Hewitt, 2002; Hamachek, 1978; Horney, 1964; Pacht, 1984).

The higher the maladaptive perfectionism, the higher the tendency for procrastination is, the greater the fear of failure is and the greater the task aversiveness is when compared to those low in maladaptive perfectionism. Brown et al. (1999) conducted a study on female university students and reported that there is a close connection between adaptive perfectionism and more frequent study behavior and higher academic achievement. Though maladaptive perfectionism was also found to be associated with the demonstration of study behavior more frequently, it was also found to be related to higher levels of anxiety and perception of a course more difficult. Likewise, it was reported by Braver (1996) that while there is a close relation between adaptive perfectionism and academic achievement among university students, maladaptive perfectionism was found to be positively associated with self-criticism and distress.

The main characteristics of perfectionism are setting high standards and negative self-deprecation (Flett & Hewitt, 2002). When a person set high standards and has negative self-deprecation, he/she will probably be overly concerned about making mistakes (Flett & Hewitt, 2002; Hewitt et al., 2003). Szanto (1996) argues that perfectionism and low levels of self-efficacy are the main indicators of depression and somatic symptoms. Or, some of the discomfort created by perfectionism can be eliminated with the mediating role of factors such as self-efficacy. This is well illustrated by Mor, Day, Flett, and Hewitt (1995) showing that self-efficacy serves a mediating function between perfectionism and performance-related concerns and anxiety reducing function in professional performers.

Bandura (1977) defined the concept of self-efficacy as one's believing in his/her abilities to perform a specific task. Its generative mechanism of personal agency is thought to be influential on cognitive functioning in self-regulation as well as performance outcome (Alden et al., 1994; Bandura, 1977, 1991, 1993; Dozois & Westra, 2005; Martin et al., 1996; Mor et al., 1995). Self-efficacy may change from one situation to another; hence, it is a situation-specific construct but it has only drawn its highly deserved attention only in recent years (Scherbaum, Cohen-Charash, & Kern, 2006). Though it is a situation specific construct, in general it can be defined as having confidence in one's ability to handle wide range of problematic and stressful situations (Luszczynska, Scholz, & Schwarzer, 2005).

In general, having self-efficacy leads to better performance and well-being; on the other hand, as it is closely related to feelings of personal inadequacy, low-self efficacy may result in various psychological maladjustments such as depression, helplessness, social anxiety and poor performance, etc. (Dozois & Westra, 2005; Flett et al., 1996; Martin et al., 1996; Mor et al., 1995). Though it can sometimes be used to define a general coping efficacy, in general self-efficacy is considered to be situation-specific characteristic because having self-efficacy in one area does not guarantee its extension to other areas (Schwarzer, 1993; Schwarzer & Taubert, 2002).

There are two main components of self-efficacy which are efficacy expectancy and efficacy outcome. Efficacy expectancy is connected to skill building and goal acquisition on the other hand efficacy outcome is related to skill and goal implementation (Bandura, 1977, 1991, 1993; Dozois & Westra, 2005). In order to be able achieve a qualified performance; there is a need for high levels of efficacy expectancy and efficacy outcome (Bandura, 1977, 1991, 1993). There is a great influence of self-efficacy on motivational process and accordingly performance of a person (Bandura, 1991, 1993). When people have low efficacy expectancy, they have greater doubt about themselves and they believe that they are unsuccessful because of the inborn incapability not possible to change. As a result, these people give up pursuing their goals in a short time and they have great difficulty in mastering skills. On the contrary, people with high efficacy expectancy assume responsibility for the outcome of the performance and believe that failure is the result of lack of skills or inadequate or improper preparation. People with higher self-efficacy expectancy recognize the fact that skills can be mastered through education and training and resource building and shortcomings can be eliminated (Dozois & Westra, 2005).

High self-efficacy is believed to be closely associated with effective behavioral strategies; hence, it can be conducive to the improvement of performance in various situations. There is a common belief prevalent among the self-efficacy theorists stating that individuals can determine the level of self-efficacy when they are confronted with environmental demands and based on this judgment, they can decide which behavioral strategies to use and be persistent on to attain desired outcomes (Bandura, 1997). Techniques such as goal setting rules development to effect the environment, and monitoring self-performance make up these behavioral strategies (Maddux, 1995).

As they believe that perfectionism is something to be attained, perfectionists believe that they must carry out a task better than anyone else (Basco, 1999). But this belief goes beyond the Bandura's (1986) concept of self-efficacy. According to the viewpoint of perfectionists, even if people do not accept you for what you are, they can for what you can do. Hence, they believe that they must do everything perfectly to

increase the likelihood of being accepted (Mallinger & DeWyze, 1992; Curnan, 1999). Not understanding what you can do is believed to have an important role in the emergence of the concept of perfectionism and as people having low self-efficacy may not fully know what their capabilities are, they are likely to have a desire to be perfectionist so that they can tackle societal events. Therefore, when people do not know what they are capable of doing and not capable of doing, both they themselves and people around themselves may suffer (Curnan, 1999).

Thus, the aim of the study was to inquire about the relation between self-efficacy and dimensions of perfectionism. The purpose was also to study how these different patterns of perfectionistic dimensions are related to self-efficacy.

2. Method

2.1 Model

This study is a quantitative and relational study aimed at examining the relationship between self-efficacy and perfectionism. The data were collected by Frost Multidimensional Perfectionism Scale (Frost et al., 1990) and General Self-Efficacy Scale-Turkish Form (Yildirim & Ilhan, 2010).

2.2 Participants

The participants in the study were 173 (104 females; 69 males; $M= 21.44$ years, $SD= 1.71$) pre-service teachers who study at the Fine Arts Education Department, Music Education Program of the Faculties of Education in Mugla Sıtkı Kocman and Pamukkale Universities.

2.3 Instruments

Frost Multidimensional Perfectionism Scale (FMPS): The FMPS that was originally developed by Frost et al. (1990) was used to evaluate the perfectionistic propensities of the individuals. The FMPS is a 35-item instrument designed to measure perfectionism. Each item uses a 5-point Likert-type scale (1- disagree strongly, 5- agree strongly). Initially 67 items, the scale was refined to 35 items and factor analysis used to define six factors: 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). Frost et al. (1990) reported internal consistency reliabilities for the subscales as Concern Over Mistakes, .88; Personal Standards, .83; Parental Expectations, .84; Parental Criticism, .84; Doubts About Actions, .77; and Organization, .93. Cronbach's alpha for the total scale was .90. The FMPS was translated to Turkish,

and reliability, and validity studies of the scale were carried out with a Turkish sample of 489 students (Misirli-Tasdemir, 2004). The results of the construct validity study, using principal component analysis with varimax rotation showed that the instrument had six identifiable dimensions with eigenvalues over 1. Barlett Sphericity is 4961.42. The results of the reliability study showed that the test-retest correlation coefficients ranged between .63 and .87. Misirli-Tasdemir (2004) reported internal consistency reliabilities for the subscales as Concern Over Mistakes, .77; Personal Standards, .63; Parental Expectations, .71; Parental Criticism, .65; Doubts About Actions, .61; and Organization, .87. Cronbach's alpha for the total scale was .80. In this study, Cronbach's alphas were calculated .82; .79; .84; .84; .72; .83.

General Self-Efficacy Scale-Turkish Form: The self-efficacy level of pre-service teachers was measured by a 17-item scale which is originally developed by Sherer and Adams (1983) and adapted to Turkish by Yildirim and Ilhan (2010). Participants were asked to answer the question of 'how much do the following statements describe you?' based on a five-point Likert scale ranging from 1 'strongly not describe' to 5 'strongly describe'. The scale has a three-factor structure measuring the various aspects of self-efficacy including initiation, effort, and persistence. Sample questions include: 'When I make plans, I am certain I can make them work', 'I give up easily', 'I am a self-reliant person', and 'I avoid facing difficulties'. The total score reflects the level of self-perceived general self-efficacy. 11 out of 17 items in the scale are reverse coded. The total scale score ranges from 17 to 85. Any increase in the participant's total score indicates the increase in his or her general self-efficacy level (Sherer & Adams, 1983). This scale was preferred because it has been the most widely used self-efficacy measure so far. Although it was primarily developed for clinical and personality research, later it has also been used in organizational and educational settings (Imam, 2007). In the adaptation study of the scale into Turkish, the Cronbach's alpha internal consistency coefficient, Guttman split-half coefficient, and test-retest Pearson correlation coefficients were found to be 0.80, 0,77 and 0.69 respectively (Yildirim & Ilhan, 2010) indicating high reliabilities. In this study, Cronbach's alpha was calculated .81.

3. Results

In this study, the analysis of relationships between self-efficacy and perfectionism was performed by Pearson product-moment correlation analysis and multiple regression analysis. The data were investigated from the point of erroneous or missing values, outlier values, and multicollinearity in data analysis. The values considered to be entered erroneously were corrected in the erroneous values analysis. In the missing

values analysis, randomly remaining few blank items were assigned values by Expectation-Maximization algorithm. In the outlier analysis, 4 observations, which have Mahalanobis (1936) distance value greater than the $_{10;.001}=23.21$ table value, were excluded from the data set. The low level bivariate correlation values show that there is no multicollinearity among the independent variables. It has been seen that Variance Inflation Factor value is less than 5, the tolerance value is greater than .20, the condition index is less than 30, and consequently 173 observations remain in the data set. Results are given below.

3.1 The Correlations among Self-efficacy and Dimensions of Perfectionism

The relationship among self-efficacy and dimensions of perfectionism was tested by using Pearson product-moment correlation analysis and results are presented in Table 1.

Table 1: The Correlations among Self-efficacy and Dimensions of Perfectionism

	COM	PS	PE	PC	DAA	O
Self-efficacy	.30**	.29**	.33**	.34**	.35**	.31**

**p< .01

Table 1 shows that self-efficacy 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 Self-efficacy by Dimensions of Perfectionism

A multiple regression analysis was performed to predict self-efficacy by dimensions of perfectionism and the results are given in Table 2.

Table 2: The Prediction of Self-efficacy by Dimensions of Perfectionism

	R	R ²	F	t
Self-efficacy	.49	0.240	34.403***	
Concern Over Mistakes				3.789***
Personal Standards				3.698***
Parental Expectations				4.006***
Parental Criticism				4.101***
Doubts About Actions				4.208***
Organization				3.888***

***p< .001

Table 2 shows that self-efficacy is significantly explained by the dimensions of perfectionism ($R=.49$, $R^2=.24$, $F=34.403$, $p<.001$). All dimensions of perfectionism significantly explained 24.0% of the total variance in self-efficacy. According to results of a t test that was intended to determine which all dimensions of perfectionism predict self-efficacy, it was found that concern over mistakes ($t=3.789$, $p<.001$), personal standards ($t=3.698$, $p<.001$), parental expectations ($t=4.006$, $p<.001$), parental criticism ($t=4.101$, $p<.001$), doubts about actions ($t=4.208$, $p<.001$), and organization ($t=3.888$, $p<.001$) were significant predictors of self-efficacy.

4. Discussion

At the end of this study, it was found that there is a significant relationship between perfectionism and self-efficacy. According to this result, it can be said that the concern over mistakes, personal standards, parental expectations, parental criticism, doubts about actions, and organization dimensions of perfectionism are important factors that affect self-efficacy level of adolescents. The results also indicated that the personal standards subdimension of perfectionism was the most important predictor of the self-efficacy for late adolescents.

Sometimes perfectionism may have positive impacts on performance (Hamachek, 1978); yet, positive effects have been less proved than negative effects. However, mechanisms through which perfectionisms weaken or strengthen the performance are closely related to the person's expectations of the extent to which they can be successful (Frost & Henderson, 1991).

Self-efficacy is one of the variables determining the effects of perfectionism on performance by means of assessing the expectations for performance. Self-efficacy refers to "*beliefs concerning one's ability to perform behaviors that will yield expected outcomes*" (Allen, 1990). There is some kind of parallelism between the development of self-efficacy and that of perfectionism. While discussing the factors leading to the development of self-efficacy, Gecas (1989) explains that "*high achievement demands are significantly related to the development of children's self-efficacy*". These demands and the demands of perfectionistic parents are similar to each other (Frost, Marten, Lahart & Rosenblate, 1990).

There is some informal evidence supporting the relationship between self-efficacy and perfectionism. Lazarsfeld (1991) claims that some disabled people may lose their confidence in some of their physical capabilities and they may think that it is not possible to achieve some goals so that they prefer to substitute fictional achievement for real achievement and as a result may take refuge in a false world of perfectionism. Frost

and Henderson (1991) found that there is a greater tendency to exhibit a failure orientation for athletes having a high concern for mistakes (a dimension of perfectionism). There are many areas on which self-efficacy may have great influences such as career-decision making, problem-solving, goal setting, determination in reaching one's goals, cognitive appraisal of stressful situations, and academic achievement (Luszczynska, Gutierrez-Dona, et al., 2005).

While high self-efficacy is associated with some positive attributes such as adaptive coping skills, health-promoting behavior, and better psychological adjustment to stressful situations, low self-efficacy is associated some negative attributes such as depression, anxiety, and helplessness (Langendorfer et al., 2006; Luszczynska, Gutierrez-Dona, et al.; Scholz et al., 2002). Research shows that anxiety is inversely related to two types of anxiety, trait and state anxiety; yet, the data about the interaction between self-efficacy and actual performance are not clear. Positive correlations have been reported between self-efficacy and work related performance, sports performance, public-speaking, and academic performance in secondary and postsecondary school (Smith, Kass, Rotunda, & Schneider, 2006).

There is another concept related to perfectionism that is called self-critical perfectionism. This concept is defined in relation to critical self-evaluations of one's performance, perception of difference between expectations and outcomes, perfectionism-induced extreme concern about mistakes, high expectations stated by others, and belief that acceptance will come as a result of perfect performance (Dunkley, Zuroff, & Blankstein, 2003). There are some positive correlations between this dimension and indicators of maladjustment such as negative affect low self-esteem, and low self-efficacy (e.g., Dunkley et al., 2003; Frost et al., 1993; Stumpf & Parker, 2000; Stoeber & Otto, 2006). Though there is some verified evidence indicating a correlation between neurotic perfectionism and lower self-esteem (Hamachek, 1978, Burns, 1980, Blatt, 1995, Rice, Ashby, & Slaney, 1998), there is no such correlation between normal perfectionism and self-esteem (Accordino, Accordino, & Slaney, 2002).

Music performance requires mastering broad range of skills such as fine motor dexterity and co-ordination, attention and memory, aesthetic, and interpretative. To attain these skills requires long years of training and practice to reach perfectionism. Not much attention has been paid to the evaluation of perfectionism as a personality trait in elite musicians. In this regard, there are two studies published so far (Kenny et al., 2004; Mor et al., 1995). In short, the findings of these two studies show that desire for perfectionism is associated with higher levels of distress and performance-induced anxiety in musicians and accordingly debilitating anxiety. Desire to be perfect in a

musical performance may have some negative impacts on anxiety and self-efficacy (Bradt & Dileo, 2009).

A study was conducted on perfectionism and performance anxiety among musicians and this study revealed that various indicators of perfectionism such as high concern about mistakes, high doubts about actions and low personal standards compounded with low self-esteem lead to performance anxiety (Sinden, 1999). There are also some connections found between certain aspects of perfectionism and broad range of psychosocial problems and psychopathological symptoms ranging from loneliness and low self-efficacy to depression and suicidal tendencies (Enns & Cox, 2002). As a conclusion, it is of great importance to understand the cognitive, affective, and behavioral implications of perfectionist orientations in performance settings (Flett & Hewitt, 2002).

Despite some limitations -for example, sample size, self-report nature of the instruments etc.- this study identified significant associations between the subdimensions of perfectionism and self-efficacy. And this study extends and enhances previous research and provides useful data on perfectionism and self-efficacy, and the results of the study are thought to give important information about the formation of self-efficacy in adolescence period. Thus the results may be used to inform future research and intervention strategies as to what aspects of perfectionism may be of particular importance. In a healthy manner, the prevention of behavior problems of adolescents is required.

Finally, the other cognitive, physiological, and personality factors may contribute along with perfectionism. Therefore, future research may wish to identify these factors and examine the role that they play in addition to perfectionism in the prediction of self-efficacy.

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