

The Relationship between Perfectionism and Obsessive Compulsive Disorder (OCD): Self-Regulation Processes as Moderator

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Abstract

Background: Obsessive compulsive disorder (OCD) can negatively impact human functions and bother the close people around the patients. Perfectionism is among the factors associated with OCD. Investigating this relationship and other concepts such as self-regulation processes influencing this relationship can help us find better approaches to treat OCD. This study aimed to determine the moderating role of self-regulation processes in the relationship between perfectionism and OCD in 2019.

Methods: In this correlational study conducted in Shiraz, Iran, we selected 535 10-to-18-year-old students with an average and SD of 14.15 and 2.75 by multi-stage sampling method. We selected 30 schools and three classes in each of them. Afterwards, six students in each class willingly filled the questionnaires. In order to gather the data, we made use of Tehran Multidimensional Perfectionism Scale, Padua inventory for obsessive-compulsive disorder, integrative self-knowledge questionnaire, self-control scale, and self-compassion scale as research instruments. Data were analyzed by Pearson's correlation coefficient and stepwise regression analysis.

Results: Perfectionism was an important predictor of OCD ($B=0.38$, $\text{Beta}=0.08$, $\text{S.E.}=0.39$, $P=0.001$), self-control was a major predictor of OCD ($B=-0.18$, $\text{Beta}=0.08$, $\text{S.E.}=-0.19$, $P=0.04$), and the interaction between perfectionism and integrative self-knowledge was a significant predictor of OCD ($B=-0.24$, $\text{Beta}=0.09$, $\text{S.E.}=-0.24$, $P=0.03$).

Conclusions: Perfectionism and self-control are predictors of OCD, hence important mental concepts. Furthermore, integrative self-knowledge plays a moderating role in the relationship between perfectionism and OCD.

Keywords: Obsessive compulsive disorder; Perfectionism; Self-regulation; Integrative self-knowledge; Self-compassion

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1. Introduction

Perfectionism has been the subject of many studies over the past decade (1). Scientists have defined perfectionism as a personality trait (2). Perfectionists seek perfection in all aspects of life, which that never happens (3). They set high standards and tend to self-criticize and expect more than they can afford to, hence not feeling satisfied about themselves. The reason for such high standards is the fear of failure (4).

Perfectionism comprises two aspects, namely healthy and pathological (5). The pathological aspect of perfectionism plays an important role in triggering obsessive compulsive disorder (OCD) (5).

In 1978, Hamachek (4) assumed two aspects for perfectionism. The first aspect is positive perfectionism (healthy aspect) where a person strives to become better while accepting their limitations. The other aspect refers to a negative kind of perfectionism (pathological aspect), which ensues concerns about making mistakes,

uncertainty, fear of being judged, suicide ideation, and dissatisfaction with personal performance (6). Positive perfectionism is positively correlated with well-being while negative perfectionism is positively associated with distress (7). Perfectionism has other classifications: In 1991, Hewitt and Flett (7) introduced another classification, dividing perfectionism into three dimensions: 1) self-oriented perfectionism, 2) other-oriented perfectionism, and 3) socially prescribed perfectionism.

Self-oriented perfectionism is defined as the tendency to set unrealistic goals and focusing on failures and weaknesses. This dimension is the most commonly known meaning of perfectionism (8). Other-oriented perfectionists tend to have high expectations from others and assess them in a negative manner. Socially prescribed perfectionism is defined as the attempt to meet the prescribed expectations of society so as to be accepted by important others.

In general, positive perfectionism has relationships

with success, life satisfaction, and educational success; however, negative perfectionism is related to chronic feelings of failures, uncertainty, shame, dilemma, and low self-esteem (9).

Negative perfectionism is highly prevalent among people with OCD. It also plays a major role in triggering and continuity of OCD, preventing treatment process (10). OCD is a disabling disorder, which leads to suffering of all those involved. Perfectionism has direct relationship with some OCD symptoms like checking, cleaning and hoarding (11).

Frost and colleagues (11) considered perfectionism as a risk factor for OCD.

Perfectionism is the main factor for the continuity of OCD; therefore, reducing perfectionistic thoughts can decrease the OCD symptoms (10). Perfectionists always try to avoid failures; but, life experience is full of failures, which make a person feel guilty and cause low self-esteem (7).

In 2012, Dibartolo and Varner (12) showed that children with higher scores in socially prescribed perfectionism had more anxiety and lower functions.

The model proposed by Flett and Hewitt (3) specified three risk factors, namely parents, the person, and environmental factors. Perfectionists react to failures more negatively, and they are more vulnerable than others (13).

Perfectionism further causes anxiety, depression, anorexia, and personality disorders (14).

In 2009, Frost and co-workers (11) showed that perfectionism predicted compulsive handwashing.

Obsessions and compulsions specify OCD. The former are unwanted and disturbing thoughts or images and the latter are behaviors or mental actions as responses to obsessions (15).

Obsessions include unwanted, disturbing, and sudden thoughts, feelings, or images, which cause anxiety and distress. Compulsions are repetitive behaviors or conscious actions as responses to obsessions. OCD patients have compulsions because they believe that they reduce anxiety and distress, which is wrong. Most patients have both obsessions and compulsions, and they usually know that they have obsessions and compulsions problem.

Self-regulation processes have an important role in preventing OCD and perfectionism.

The most definite solution to perfectionism and OCD is strengthening the self-regulation skills. These skills are able to prevent mental disorders and make people more resistant to OCD.

Self-regulation processes include self-control, integrative self-knowledge, and self-compassion (16).

Self-control refers to individuals' ability to refuse or convert inner responses, to interrupt unwanted behavior, and to restrain themselves from reacting to undesirable behavior (17).

Self-control increases adaptation skills and mental health (18). Low anxiety, high well-being, and high satisfaction are other results of self-control (19).

On the other hand, reduced self-control is associated with low educational performance, addiction, and poor interpersonal relationships (20, 21).

Self-control helps people worry less about facing distress and more rapidly return to mental balance (22).

Integrative self-knowledge is the second component of self-regulation processes. It is defined as an adaptive and empowering attempt of the self to understand its experience across time to achieve desired outcomes (23).

Integrative self-knowledge is positively correlated with life satisfaction, well-being, and emotional intelligence and negatively associated with obsession and perceived stress (23).

Integrative self-knowledge includes awareness, attention, processing, and experiencing previous blocked emotions. Studies have shown that integrative self-knowledge is a mental well-being index (24, 25).

The third component of self-regulation is self-compassion. Based on this component, one is kind to oneself even when making mistakes; it is negatively correlated with rumination, avoidance, fear of failure and positively associated with satisfaction and happiness.

In this research, we aimed to investigate the moderating role of self-regulation processes in the relationship between perfectionism and OCD.

2. Methods

In this study, 535 students aged 10 to 18 years, were selected by Cochran formula and multi-stage sampling method. We chose 30 schools and three classes in each of them. Next, six students from each class willingly filled the questionnaires. In this project, perfectionism was a predictive variable, self-control, self-compassion, and integrative self-knowledge were moderators and OCD was a criterion. We checked and analyzed the data by SPSS software version 21 using Pearson's correlation coefficient and multiple regression by at least 0.05 level of significant. We excluded the students younger than 10 or older than 18. Participation was voluntary and volunteers could leave the study at any time.

2.1. Research Instruments

2.1.1. Padua Inventory for Obsessive-Compulsive Disorder

This scale includes 55 questions for measuring the obsessions and compulsions. We used a revised short form of this scale comprised of 39 questions. This inventory is scored from 0 (never) to 4 (always). Van Oppen (26) reported that the internal consistency of this scale for American students was acceptable based on the Cronbach's alpha of about 0.80. He also showed that this scale had appropriate convergent validity. Goodarzi and Firoozabadi confirmed the reliability of this scale in Iran (27).

2.1.2. Tehran Multidimensional Perfectionism Scale

Besharat designed this questionnaire in Persian (28), which is based on previous perfectionism scales (7, 29). It has 30 questions, which include three dimensions: self-oriented perfectionism, other-oriented perfectionism, and socially prescribed perfectionism. This scale is scored from 1 (completely disagree) to 7 (completely agree). Scores vary from 10 to 50. The reliability coefficients for self-oriented, other-oriented, and socially prescribed perfectionism were 0.90, 0.91, and 0.81 in a sample including 500 Tehran university students. Furthermore, test-retest reliability coefficients are 0.85, 0.79, and 0.84, which are significant with $P=0.001$. The convergent validity of this scale is 0.74, which is acceptable (28).

2.1.3. Self-Control Scale

Tangney and co-workers designed this scale in 2004 (17). It comprises 36 questions, and its short version

used in the current study has 13 questions. Items are answered based on a 5-point Likert scale from 1 (never) to 5 (always). The validity and reliability of this scale are appropriate and the internal consistency of the short version is 0.83 and that of the original version is 0.89 (17). The internal validity of this scale is 0.80 in Iran (30).

2.1.4. Integrative Self-Knowledge Questionnaire

Ghorbani and colleagues created this scale in 2008 (25). This questionnaire consists of 12 items answered based on a 5-point Likert scale from 1 (almost true) to 5 (almost false). The internal consistency and convergent validity of this scale are acceptable in Iran and the US (25). In this study, the Cronbach's alpha was 0.74.

2.1.5. Self-Compassion Scale

Self-compassion scale (31) includes 26 sentences. In six subscales, this scale evaluates three two-aspect components: common humanity versus isolation, self-compassion versus self-judgement, mindfulness versus over identification. This inventory is measured from almost never (1) to almost always (5). Research shows the proper test-retest reliability of this instrument. Its internal reliability in Iranian studies is 0.84 (32).

3. Results

The participants of the study were 535 school students aged 10 to 18 years with an average and SD of 14.15 and 2.75. We gathered the data by multi-stage sampling method. We employed the Green's formula to determine the sample size (33). To analyze the data, we utilized Pearson's correlation coefficient and multiple regression analysis. Table 1 shows the descriptive statistics of the research variables.

Table 2 shows the extracted Pearson's correlation coefficients. The finding showed significant correlations ($P=0.01$) between perfectionism and OCD (0.34), self-control and integrative self-knowledge (0.58), integrative self-knowledge and self-compassion (0.29), and self-control and self-compassion (0.24). Moreover, self-compassion and perfectionism had a negative correlation (-0.38); there was a significant negative correlation ($P=0.03$) between perfectionism and self-control (-0.27).

To analyze the studied variables, we applied Pearson's correlation coefficient and multiple regression.

Table 1: The mean, standard deviation, and Cronbach's alpha (internal contingency) of the scores pertaining to the studied variables

Variables	mean	SD	Cronbach's alpha
OCD	65.47	20.54	0.96
Perfectionism	199.82	26.82	0.92
Integrative self-knowledge	38.59	6.53	0.85
Self-control	39.6	10.68	0.82
Self-compassion	35.2	6.24	0.88

Table 2: The correlation matrix of variables

	1	2	3	4	5
OCD	-				
Perfectionism	0.34**	-			
Integrative self-knowledge	-0.15	-0.03	-		
Self-control	-0.27*	0.09	0.58**	-	
Self-compassion	-0.11	-0.38**	0.29**	0.24**	-

**P<0.01; *P<0.05

Table 3: The results of stepwise multiple regression

Dependent variables	Predictive Variables	B	Beta	S.E	P
OCD	Perfectionism	0.38	0.08	0.39***	0.001
	Integrative self-knowledge	-0.07	0.06	-0.08	0.08
	Self-control	-0.18	0.08	-0.19*	0.04
	Self-compassion	0.07	0.08	0.07	0.06
	Perfectionism×Integrative self-knowledge	-0.24	0.09	-0.24*	0.03
	Perfectionism×Self-control	0.05	0.06	0.05	0.09
	Perfectionism×Self-compassion	0.12	0.06	0.12	0.07

***P<0.001; **P<0.01; *P<0.05

Before using multiple regression, we assessed the assumptions. Primarily, we employed the Kolmogorov-Smirnov test to examine the normality. Afterwards, we investigated the linearity of the variables. The third step was to perform regression analysis after omitting the outlier data (16). According to the Durbin-Watson test, the predictor variables were independent with a value of 1.97. We applied multiple regression analysis to check the predictive role of perfectionism and self-regulation processes concerning OCD (Table 3, Adjusted R square=0.16*, $\Delta R^2=0.06^*$, $F=4.09^{***}$). Table 3 shows the positive correlation between perfectionism and OCD; perfectionism predicted 39% of OCD, hence an important predictor ($P=0.001$). Results also showed a negative relationship between self-control and OCD; self-control accounted for 19% of OCD ($P=0.04$); however, there were no relationship between self-compassion, OCD, and integrative self-knowledge. The interaction between perfectionism and integrative self-knowledge was a significant predictor of OCD, moderating 24% of the relationship between perfectionism and OCD ($P=0.03$).

4. Discussion

The findings of this research are consistent with other studies where perfectionism and OCD had a significant positive relationship (10).

Perfectionism also had a positive association with checking, cleaning (11), and hoarding (34).

Studies also showed a positive relationship between perfectionism and the severity of OCD symptoms and depression (11).

We may conclude that perfectionism is an important factor for OCD continuity; therefore, reducing perfectionistic thoughts can lower OCD symptoms and increase the probability of treatment (10).

Perfectionists and OCD patients are inflexible and do not easily change their beliefs. This is why they resist treatment. They tend to do things exactly as they want, otherwise they become anxious.

Perfectionists want to control everything and if they lose control, they become anxious and start self-blaming and self-criticizing.

Self-regulation processes had a negative relationship with OCD, which is consistent with other studies. Many researchers showed that self-control helped adapt to new situations and improve well-being (18).

Meanwhile, some studies showed that certain disorders such as OCD were due to high control (17).

Some researchers hold that self-control is not harmful but can be misused (17).

According to different findings, we may conclude that self-control is a multidimensional concept. It seems that self-control is a positive concept accompanied by well-being and adaptation; however, its misuse may result in disorders.

In this study, there was no relationship between integrative self-knowledge, self-compassion, and OCD, possibly due to uncontrolled factors.

Also, the interaction between perfectionism and integrative self-knowledge predicted OCD.

This finding is consistent with the study of Ghasemipour and colleagues (35). They showed that integrative self-knowledge had a negative relationship with psychological disorders. They also reported that integrative self-knowledge and self-control moderated the influences of childhood traumas.

Ghorbani and co-workers stated that the interaction between self-control and integrative self-knowledge mediated the relationship between perceived stress, anxiety, depression, and physiological symptoms (36). Integrated self-knowledge is one way to control emotional experience, this means that the more integrated one's self-knowledge, the more one can manage and control one's emotions. Inhibition is one of the ways that helps humans reduce their psychological pain. Pains are permanent in lifetime and inhibition could become a destructive habit, which stops people from realizing their talents and emotions (36).

Another objective of this study was to investigate the relationship between OCD and interaction of perfectionism with self-control and self-compassion, which was not significant, probably because integrative self-knowledge is a more general concept compared

with self-control and self-compassion. This means that integrative self-knowledge includes self-control and self-compassion; thus they cannot reveal their effects. Third reason is about self-compassion and self-control concepts, which means self-compassion and self-control cannot moderate between OCD and interaction of perfectionism. It can be stated that self-control is associated with perfectionism because perfectionists want to control everything and it is the meaning of control, so the moderating role is meaningless. In terms of self-compassion, we may conclude that perfectionists have no compassion for themselves and try to reach their goals at any cost; therefore, self-compassion cannot affect perfectionism.

5. Conclusions

Perfectionism and self-control are predictors of OCD, hence important mental concepts. Moreover, integrative self-knowledge plays a moderating role in the relationship between perfectionism and OCD. Perfectionism and integrative self-knowledge are significant predictors of OCD. Composition of perfectionism and integrative self-knowledge can moderate the OCD, meaning integrative self-knowledge is able to moderate the harmful effect of perfectionism. Therefore, high integrative self-knowledge results in individuals making efforts to carry out different tasks in a healthier manner compared to obsessive forms.

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Ethical Approval

This study was approved by Shiraz University, Shiraz, Iran. Also, written informed consent was obtained from all the participants.

Conflicts of Interest

The authors declared no conflict of interest.

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