Positive Thoughts Coping Strategy as a Mediator Variable Between Perfectionism and Depression

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This study explores the mediating role of positive thoughts and self-blame coping strategies between dimensions of perfectionism and anxiety. Three hundred and seventy-nine undergraduate students completed the FMPS (Frost Multidimensional Perfectionism Scale), CERQ (Cognitive Emotion Regulation Questionnaire), and DASS-42 (Depression Anxiety Stress Scales). The final path analysis fits the data well (CFI = 0.99, RMSEA = 0.068). Also sex and educational grade significantly predict anxiety. The relationships between dimensions of DA (doubts about action) and CM (concern over mistakes) perfectionism and anxiety are entirely mediated by the positive thoughts dimension. The results suggest that cognitive emotion strategies may be a valuable context of prevention and intervention.

Keywords: perfectionism, cognitive emotion regulation, psychological distress, students

Introduction

Researches of those years have clearly demonstrated that emotions play the important role in many aspects of daily life as well as their influence on adaptation to life stressors and transitions (Garnefski, Van Den Kommer, Kraaij, Teerds, Legerstee, & Onstein, 2002). The regulation of emotions through cognitions is inextricably associated with human life. Cognitions or cognitive processes help people regulate their emotions or feelings and not get overwhelmed by the intensity of these emotions, for example, during or after experiencing a negative or stressful life event (Garnefski, Kraaij, & Spinhoven, 2002). Cognitive processes can be divided into unconscious (e.g., projection or denial) and conscious cognitive processes, such as self-blame, other blame, rumination, and catastrophizing (Garnefski, Legerstee, Kraaij, Van den Kommer, & Teerds, 2002). Empirical research with the CERQ (Cognitive Emotion Regulation Questionnaire) shows that especially the extents of catastrophizing and self-blame are related to reporting symptoms of psychopathology. These apparently non-adaptive types of cognitive coping could therefore be an important line of approach for prevention and/or treatment (Garnefski, Legerstee et al., 2002). Cognitive emotion regulation strategies have been shown to play a vital role in the development of emotional and behavioural problems after the exposure to stressful events (Garnefski, Boon, & Kraaij, 2003; Garnefski, Teerds, Kraaij, Legerstee, & Van den Kommer, 2003; Garnefski, Van den Kommer et al., 2002; Garnefski, Legerstee, Kraaij, Van den Kommer, & Teerds, 2002; Garnefski, Kraaij, & Spinhoven, 2001; Garnefski & Kraaij, 2006; Kraaij et al., 2003). Cognitive emotion regulation strategies can be defined as consciousness, and mental strategies are that individuals use to handle
the intake of emotionally arousing information (Bryant, Moulds, & Guthrie, 2001; Garnefski, Kraaij, & Spinhoven, 2002; Thompson, 1994). Being different from the concept of consciousness, cognitive emotion regulation is narrowly related to the concept of coping. However, while current theory and research on coping rest on the notion that coping involves a mixture of conscious cognitive and behavioral strategies of responding to stressful or negative events (Higgins & Endler, 1995; Lazarus, 1999). In cognitive emotion regulation research, it is assumed that cognitive coping or cognitive emotion regulation strategies should be studied in a conceptually pure way and separate from behavioral strategies (Garnefski et al., 2003; Garnefski & Kraaij, 2006; Garnefski, Legerstee et al., 2002; Garnefski et al., 2003; Garnefski et al., 2001; Kraaij et al., 2003).

Perfectionism is one of the social prevalent values in the modern world. Burns (1980) believed that perfectionistic attitudes have been proposed widespread among the people and as a cultural phenomenon are reinforced by language, media, and religious attitudes. Lee (2008) knew perfectionism as a rigid belief that the person feels should be satisfy, high capacity and successful in all respects. Lee (2008) defined perfectionism as impaired cognitive style that has been obvious by two parts: thinking and extreme generalization. Some researchers have been studied perfectionism as a multifaceted structure. Frost, Marten, Lahart, and Rosenblate (1990) summarized the structure of perfectionism in a major CM (concern over mistakes), and five related smaller faces DA (doubts about action), PS (personal standards), O (organization), PC (parental criticism), and PE (parental expectations). Frost et al.’s (1990) questionnaire with a socially oriented Perfectionism Questionnaire (Hewitt & Flett, 1993) was classified under a component of undetected compromise perfectionism (Whitaker, 2002). Blankstein, Lumley, and Crawford (2007) and O’Connor and Forgan (2007) examined the role of perfectionism in suicide, and they both sought to identify factors that mediate the link between perfectionism and suicide ideation. Blankstein et al. (2007) examined the potential mediating and moderating roles of coping and social support. Rudolph, Flett, and Hewitt (2007) showed that automatic thoughts reflecting perfectionism are both linked with a variety of deficits in cognitive emotion regulation following the experience of stressful events. These deficits include a relative paucity of positive cognitive appraisals and a preponderance of negative form of cognitive coping, including catastrophizing. The concept of catastrophization was first introduced by Ellis (2002) and involves a tendency to exaggerate the magnitude and importance of negative events. Studies have linked perfectionism with catastrophization (Flett & Hewitt, 2007). For example, Allen (2000) detailed a case that expressed catastrophic thoughts in response to her ailments and discomfort but one root of her problems was the dysfunctional attitude that “I need to do my work perfectly to be viewed as competent and to be liked”.

These data suggest that there is a need to assess the manner in which perfectionists evaluate and respond to stressful events in their lives, and attempt to develop more positive forms of cognitive appraisal and cognitive coping skills. This need may extend to how perfectionists perceive their bouts of psychological distress, because it is likely that the catastrophic thinking also applies to their mental and physical functioning. Additional results reported by Rudolph et al. (2007) and Flett and Hewitt (2007) indicated a link between self-blame and various dimensions of perfectionism. The link between perfectionism and positive thinking is particularly interesting in at least two respects. First, it suggests that positive thinking may play an important mediating or moderating role that influences the association between perfectionism and psychological distress. Second, it is important not to lose sight of the fact that positive thinking is a form of self-reinforcement. Flett and Hewitt (2007) reported several other findings indicating that distressed perfectionists who are experiencing frequent automatic thoughts also have low levels of self-reinforcement and low positive self-evaluation, and, in
general, they lack a positive self-focus.

However, we do not yet know whether perfectionists are more depressed because they use inefficient emotion regulation strategies when they experience negative life events. If so, we should find that regulation strategies mediate the link between perfectionism and depression.

**Method**

**Participants**

The participants of present study consisted of 379 students (172 males, 207 females) from Shahid Beheshti University that were selected randomly from different colleges and fields. Their mean age was 23.09 years old ($SD$ (standard deviation) = 2.68). The authors used path analysis to test a hypothesized model of the perfectionism and cognitive emotion regulation predictors of depression. Path analysis is an extension of multiple regression in which hypothesized models can be tested. Pathways between variables are proposed and these are expressed quantitatively as path coefficients. Path coefficients are standardized regression coefficients that show the direct effect of an independent variable on a dependent variable in the path model. Thus, when a model has two or more independent variables, path coefficients are partial regression coefficients that measure the extent of the effect of one variable on another in the path model, controlling for other variables. In the proposed model (see Figure 1), positive thoughts and self-blame and catastrophising were hypothesized to mediate the effects of doubts about actions on depression. Positive thoughts, doubts about actions, and self-blame and catastrophising were hypothesized to have direct effects on depression. The hypothesized model was specified by the following path equation:

$$\text{Depression} = \beta_a + \beta_b \text{positive thoughts} + \beta_c \text{doubts about actions} + \text{error}$$

![Figure 1. Proposed model of depression.](image)

The authors used the Amos 16 program for this analysis. Weighted least squares method was used and the adequacy of model fit was determined by the chi-square test (a significant chi-square implies poor fit) and other fit indexes including RMSEA (root mean square error of approximation) ($< 0.05$ indicates a good fit) and NFI (normed fit index) ($> 0.90$ indicates a good fit).
Instruments

The CERQ. The CERQ (Garnefski, Legerstee et al., 2002) is a 36-item questionnaire with nine conceptually different subscales that are rated on a 5-point Likert scale. Research has shown that the subscales have good internal consistencies, with alphas ranging from 0.67 to 0.81 (Garnefski et al., 2001; 2002).

Amin (2009) translated the questionnaire to Persian and then administered on students and calculated the validity and reliability. After factor analysis, nine factors were reduced to four components. Positive thoughts and self-blame and catastrophising were two of the subscales that had reliability of 0.76 and 0.77.

The FMPS (Frost Multidimensional Perfectionism Scale). The FMPS was used to evaluate perfectionism. This scale consists of 35 items in the form of statements with a Likert-type of 5-point response format, ranging from “Strongly disagree” to “Strongly agree”. The 13 items of all items are divided into two subscales encompassing two aspects of perfectionism: CM and DA. The FMPS was carefully translated without changing the original meaning, as confirmed by back translation and bilingual checking. Preliminary reliability of the questionnaire has been validated, with alpha coefficients ranging from 0.88 to 0.77 (Ochi et al., 2008).

The DASS (Depression Anxiety Stress Scales). The DASS with a 42-item self-report instrument was designed to measure the three related negative emotional states of depression, anxiety, and tension/stress. This scale consists of 42 items in the form of statements with a type of 4-point response format, ranging from “Did not apply to me at all” to “Applied to me very much, or most of the time”. The depression subscale of DASS-42 showed a high correlation (0.849) with the BDI (Beck Depression Inventory). The stress subscale of DASS-42 was also found to have a 0.757 correlation co-efficient with SSS (summed stress score). The reliability scores of the scales in terms of Cronbach’s alpha scores rate the depression scale at 0.91, the anxiety scale at 0.84, and the stress scale at 0.90 in the normative sample (S. H. Lovibond, & P. F. Lovibond, 1995).

Procedure

Participants from different colleges were invited to take part in this study. Those who approved gave verbal consent prior to commencement of the study and completed all of the self-report questionnaires. Participants were debriefed about the study and thanked for taking part.

Statistical Analysis

The data were analyzed employing Pearson’s correlation in order to estimate the associations between variables and path analysis in order to assess the percentage of explained variance by predictor variables.

Results

Pearson’s correlation coefficients show that, depression is negatively correlated with DA, positive thoughts, self-blame and catastrophising, and age. DA is negatively correlated with positive thoughts ($p < 0.001$, $p < 0.005$), whereas positively correlated with self-blame and catastrophising and age. According to the results, self-blame and catastrophising is associated with age.

Three hundred and seventy nine subjects were used in the path analysis. One hundred subjects were not included because of missing data. During the modeling process, the self-blame and catastrophising variable was removed because its effect on depression was not statistically significant. The effect estimates for the remainder of the proposed paths were significant ($p < 0.05$) and were retained in the final model. Table 1 presents the zero-order correlations among the variables in the model.

Depression = (-0.25) positive thoughts + (-0.48) DA + error
Table 1

<table>
<thead>
<tr>
<th>Variable</th>
<th>Depression</th>
<th>DA</th>
<th>Positive thoughts</th>
<th>Self-blame and catastrophising</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DA</td>
<td>-0.055</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive thoughts</td>
<td>-0.125*</td>
<td>-0.271**</td>
<td>-0.125</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-blame and catastrophising</td>
<td>-0.167**</td>
<td>0.324**</td>
<td>-0.050</td>
<td>0.218**</td>
<td>1</td>
</tr>
<tr>
<td>Age</td>
<td>-0.179**</td>
<td>0.128*</td>
<td>0.055</td>
<td>0.218**</td>
<td>1</td>
</tr>
</tbody>
</table>

Notes. * p < 0.01, ** p < 0.005.

The fit indices for this model are excellent. The chi-square statistic divided by the degrees of freedom should be less than three. In this case, the chi-square statistic was 2.394 with one degree of freedom (p = 0.122). The RMSEA was 0.071. The NFI was 0.915. In the final model, positive thoughts (-0.25) had direct effects on depression (see Figure 2). DA had a smaller direct effect on depression (0.15) as well as an indirect effect on health care use, which was mediated through positive thoughts (0.120).

**Conclusions**

The present study found that DA primarily was not associated directly with depression, while positive thoughts were associated with depression. The authors have demonstrated a strong association between perfectionism, cognitive emotion regulation, and depression in a population of students. In the sample, perfectionism characteristics, such as DA, were influential in depression with mediating of positive thoughts. The findings are in consistent with previous studies. The association between attempts to regulation of one’s internal states and psychopathology has been the subject of a great deal of theoretical and empirical work in recent years (e.g., Hayes, Pankey, Gifford, Batten, & Quinones, 2002). Gross (2001) showed that individuals are at elevated risk for undesirable well-being and depression might benefit from targeted emotion-regulation intervention studies. A path analysis indicated that more appropriate and more inappropriate strategies mediated the link between perfectionism traits and depression. It is thus possible that perfection students are more depressed, because they use appropriate strategies less frequently and/or inappropriate strategies more frequently in response to negative events. However, longitudinal studies taking into account the occurrence of
negative events and their impact on emotion regulation are needed to test this causal hypothesis. Reasons other than emotion regulation may also explain why students with a lack of perseverance are depressed. For instance, repeated failures to attain one’s goals due to a lack of perseverance may lead to a negative self-image and increase the risk of depression. It further indicates that emotion regulation mediates the link between perfectionism aspects and depression (d’Acremont & Van der Linden, 2007). d’Acremont and Van der Linden (2007) found that persons who reported more intense and labile emotions and less effective regulation of these emotions also reported more depressive symptoms and problem behavior.

Regulation strategies, as assessed by the CERQ, have been related to the experience of depression in adolescence (Garnefski, Legerstee et al., 2002). Moreover, some of these strategies appear to moderate the impact of stressful events on depression (Kraaij et al., 2003). Based on these studies (Garnefski et al., 2003; Garnefski et al., 2001), the authors hypothesized that cognitive emotion regulation strategies would best predict an increase in depression whereas positive reappraisal would best predict a decrease in depression.

In conclusion, the complex relationship between the perfectionism, cognitive emotion regulation, and depression seems to be an important direction for future research. Perspective elements should be included in the model. However, if the study’s results can be confirmed, they may carry important implications for the focus and content of intervention and prevention of mental health problems.

References


