Positive emotions, coping strategies and ego-resiliency: A mediation model

Alina Vulpe*, Ion Dafinoiu

Abstract

We conducted the present study in the light of the Broaden-and-Build Model of Positive Emotions (Fredrickson, 2001) which contends that broad-minded coping is the cause and the consequence of positive emotions experiencing and that these affective states build ego-resiliency. The purposes of this research were to test, on a sample of 113 workers, a mediation model in which three adaptive coping strategies were predictor variables, ego-resiliency was the criterion variable and positive emotions the mediator. Mediation modelling revealed indirect effects, in that both approach coping and self-help coping predict positive emotions experiencing which, in turn, foster ego-resiliency. Accommodation coping directly predicts ego-resiliency without the mediation of positive emotions.

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Keywords: positive emotions; coping strategies; ego-resiliency; mediation model;

1. Introduction

Psychologists described ego-resiliency as the “ability to bounce back from negative emotional experiences and by flexible adaptation to the changing demands of stressful experiences” (Tugade & Fredrickson, 2004, p. 320). Coping represents behavioral and cognitive efforts to deal with stressful encounters (Lazarus, 2006). Even psychology described first the stress process mainly in terms of negative emotions, sometimes positive emotions (PE) could co-occur with negative emotions (Folkman, 2008) or sometimes they could dominate (D’Zurilla & Nezu, 2010) when: 1) the stressful event is considered as an opportunity or a challenge; 2) the persons are thinking that they are able to cope with the
problem; 3) the individuals use adaptive coping strategies (Schanowitz & Nicassio, 2006). Also, positive affect was discussed as the effect of using the problem-focused coping (Ben-Zur, 2009).

The Broaden-and-Build Model of PE (Fredrickson, 2001) is the main theoretical approach that explains the relationship between adaptive coping strategies, PE and ego-resiliency. The model advances two hypotheses: (1) the broaden hypothesis, which states that PE expand one’s attention (Gasper & Clore, 2002), cognition (Fredrickson & Joiner, 2002) and behavioral repertoires (Johnson & Fredrickson, 2005), and (2) the build hypothesis, which advocates that even short-lived PE may have long-term effects by enhancing physical, psychological, cognitive, and social resources (Cohn et al., 2009).

According to this theory, PE are the causes and the consequences of broad-minded coping (Fredrickson & Joiner, 2002). Also, they are responsible with building ego-resiliency as a psychological resource. Studies which approached the relationship between PE and ego-resiliency during and after crises found that people scoring high on trait resilience experienced more PE and these ones, in turn, fostered higher resilience (Fredrickson et. al., 2003; Cohn et. al., 2009). These results suggest directly that PE build psychological resilience which emerges not from extraordinary qualities, but rather from the “ordinary magic” (Masten, 2001) of normative human resources. As Masten (2001) states, resilience seems to be the result from the operation of basic human adaptational systems like, for example, using adaptive coping strategies or the capacity to experience PE. For this reason we tested in a pilot study if three adaptive coping strategies (Zuckerman & Gagne, 2003): approach coping (problem solving activities directed at the source of stress), self-help coping (sustaining one’s emotional well-being while under stress) and accommodation coping (the reinterpretation in a positive manner of unsolvable problems) build resilience through the mediation of PE. We advanced the following three hypotheses:

H1: Approach coping predicts ego-resiliency through the mediation of PE; H2. Self – help coping predicts ego-resiliency through the mediation of PE; H3. Accomodation coping predicts ego-resiliency through the mediation of PE.

2. Method

2.1. Participants

Potential participants were approached at their work place, in the lunch break or at the end of their work day. We used a convenience sample of 113 workers. The age range was 20 to 62 years (X=38.72, SD=10.04); 32 (28.3 %) were males, 81 (71.7%) were females. All participants were briefed individually, provided informed consent, and completed a demographic datasheet and a questionnaire pack including the instruments described in the next section.

2.2. Measures

We used the following instruments and for each scale we obtained Alpha Cronbach coefficients greater that the satisfactory standard of 0.70.

Participants completed the scale designated to measure positive affect from Positive and Negative Affect Schedule (PANAS) – Short Form (I-PANAS-SF; Thompson, 2007). This scale consists of a list of five adjectives (e.g., “Attentive”). Participants read the adjectives and rated if they felt those emotions during the last two weeks on a five-point scale ranging from 0 (“None”) to 4 (“Very Much”).

Adaptive coping strategies were measured using three subscales of Revised COPE (R-COPE) (Zuckerman & Gagne, 2003): self-help, approach and accommodation coping. The participants answered what they usually do when they experience stress. Each scale includes 8 items and the possible answers ranged from 1 = “I usually don’t do this at all” to 4 = “I usually do this a lot”. 
Ego-resiliency was measured using Ego Resilience 89 Scale (ER 89) (Block & Kremen, 1996) which taps the ability to flexibly respond in changing and challenging environments. This instrument encompasses 14 items to which participants responded on a 4-point Likert scale.

3. Results

The intercorrelations between the study variables revealed that PE correlated positively and significant with approach coping ($r = 0.23$, $p < 0.05$), with self-help coping ($r = 0.23$, $p < 0.05$), and with ego-resiliency ($r = 0.36$, $p < 0.01$). Ego-resiliency correlated with approach coping ($r = 0.24$, $p < 0.05$), and with accommodation coping ($r = 0.23$, $p < 0.05$). Approach coping correlated with accommodation coping ($r = 0.27$, $p < 0.01$) and with self-help coping ($r = 0.47$, $p < 0.01$). Accommodation coping and self-help coping were significant and positively correlated ($r = 0.31$, $p < 0.01$).

The hypothesized mediation model was estimated using Preacher and Hayes’ (2008) approach to multiple mediation and Hayes’ (n.d.) INDIRECT SPSS macro, which provides bootstrap estimates with bias corrected confidence intervals of the indirect effects of the independent variable on the dependent variable through the proposed mediator (see Table 1).

Table 1. Adjusted coefficient of determination, direct effects, and indirect effects (with bootstrap bias corrected and accelerated 95% confidence intervals) of the multiple mediator model of Ego-Resiliency (dependent variable) as a linear function of Positive Emotions (mediator variable), and Approach Coping and Self-Help Coping (independent variables).

<table>
<thead>
<tr>
<th></th>
<th>Approach coping</th>
<th>Self-help coping</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adjusted R-Square</td>
<td>0.14</td>
<td>0.13</td>
</tr>
<tr>
<td>Outcome Variable</td>
<td>Direct Effects of Independent Variables on Mediator (Path a)</td>
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<tr>
<td>Positive Emotions</td>
<td>0.30*</td>
<td>0.17*</td>
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<tr>
<td>Predictor</td>
<td>Direct Effects of Mediator on Dependent Variable (Path b)</td>
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<tr>
<td>Positive Emotions</td>
<td>0.23*</td>
<td>0.25*</td>
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<tr>
<td>Predictor</td>
<td>Direct Effects of Independent Variables on Dependent Variable (Path $c'$)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.15</td>
<td>0.02</td>
</tr>
<tr>
<td>Mediator</td>
<td>Indirect Effects of Independent Variables on Dependent Variable thorough Mediator (Paths ab)</td>
<td></td>
</tr>
<tr>
<td>Positive Emotions</td>
<td>0.07</td>
<td>0.04</td>
</tr>
<tr>
<td></td>
<td>(0.02 – 0.17)</td>
<td>(0.01 - 0.10)</td>
</tr>
</tbody>
</table>

*p < 0.05

Concerning the first hypothesis which was confirmed, Table 1 shows the estimated standardized regression coefficients of the hypothesized mediation model. Looking at the direct effects of the independent variable on the mediator, approach coping was a significant predictor of PE. Turning attention to the direct effects of the mediator on the dependent variable, PE were a positive and significant predictor of ego-resiliency. Concerning the direct effect of approach coping on the dependent variable, ego-resiliency, this was not significant when the mediator (PE) has been controlled. According to the value of adjusted R-Square, the model explains 14 % from the variance of the variable ego-resiliency. The second hypothesis was confirmed (see Table 1). Self–help coping predicts PE which, in turn predict ego-resiliency. Concerning the direct effect of self-help coping on the dependent variable, this was not significant when the mediator (PE) has been controlled. According to the value of adjusted R-Square, this mediation model explains 13% from the variance of the variable ego-resiliency. The third hypothesis was
disconfirmed. Accommodation coping did not predicted ego-resiliency through the mediation of PE. This coping strategy predicted directly ego-resiliency \( (F(1, 112) = 4.161, p < 0.05) \).

4. Discussion

The purposes of this study were to test if the three adaptive coping strategies predict ego-resiliency through the mediation of PE. Hypothesis 1 – stating an indirect effect such that approach coping predicts PE which in turn foster ego-resiliency – was supported. Results showed that self-help coping predicts ego-resiliency through the mediation of PE, therefore hypothesis 2 was supported. Accommodation coping predicts directly ego-resiliency, without the mediation of PE, therefore the mediation effect stated by Hypothesis 3 was disconfirmed. These results are in accord with the Broaden-and-Build theory (Fredrickson, 2001) which states that PE are the causes and the consequences of broad-minded coping (Fredrickson & Joiner, 2002) and that these affective states build ego-resiliency (Cohn et al 2009). Only accommodation coping, as our study suggest, does not predict PE experiencing but predicts ego-resiliency. In brief, the model obtained shows that PE facilitated by adaptive coping strategies are responsible with building ego-resiliency. More specifically, people who tend to maintain their emotional well-being while facing with stress (self-help coping) or involve themselves in problem solving activities directed at the source of stress (approach coping) are experiencing PE, which, in turn, facilitate ego-resiliency. People who accept the impossibility to solve the problems related with the stressors and who find positive meaning for them (accommodation coping) become resilient, without necessarily experiencing PE.

The data obtained could provide support for more clinical applications. Clients could become more resilient, more adaptive in changing demands of stressful experiences (Tugade & Fredrickson, 2004), after using, in the therapeutic context, problem-solving techniques, reframing or emotion-focused techniques. Also, we suppose that using techniques designated to stimulate directly PE experiencing could be fertile types of interventions for facilitating therapeutic change and positive adaptation of clients.

5. Conclusion

The results of this study supported a mediation model which revealed that the individuals who use approach coping or self-help coping, when faced with major stressors, are experiencing PE. These PE are further responsible for building ego-resiliency. People who accept the impossibility to solve the stressful problems and find positive meaning for them (accommodation coping) become resilient, without necessarily experiencing PE. These results could support several clinical applications.

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References


