World Conference on Psychology and Sociology 2012

Cognitive Emotion Regulation Strategies and Social Functioning in Adolescents

Andreea Mihaela Mihalca a, *, Yuliya Tarnavska a,b

*a Institute of Psychology, Jagiellonian University, 24 Golebia st., Krakow 31-007, Poland
b Social Psychology Faculty, Zhytomyr Ivan Franko State University, 40 Velyka Berdychivska st., Zhytomyr 10008, Ukraine

Abstract

The aim of this study was to explore the relationship between cognitive emotion regulation strategies and social functioning in adolescents. Adolescents (N = 378; 56.1% girls) aged between 11 and 16 years (M = 13.87, SD = 1.27) filled in the self-report scales assessing cognitive emotion regulation strategies, social functioning and associated distress. The regression analysis revealed that Catastrophizing and Acceptance significantly predicted social functioning problems, while Catastrophizing, Planning and Self-blame predicted associated distress.

© 2013 The Authors. Published by Elsevier Ltd. Open access under CC BY-NC-ND license.
Selection and peer review under the responsibility of Prof. Dr. Kobus Maree, University of Pretoria, South Africa.

Keywords: Cognitive Emotion Regulation, Social Functioning, Adolescents

1. Introduction

Social functioning refers to a person’s ability to have social contacts (Shumaker & Czajkowski, 1993). In a more comprehensive conceptualization, social functioning includes participation in situations which represent social opportunities (e.g. social clubs) alongside with one’s interest in social relations, ability to perform in social situations and socio-emotional adjustment (Adams, Streisand, Zawacki, & Joseph, 2002). Emotion regulation is a factor that was found to influence social functioning during all stages of development, from infancy (Calkins, Smith, Gill, & Johnson, 1999) to early childhood (Eisenberg, Fabes, Murphy, Maszk, Smith, & Karbon, 1995; Eisenberg et al., 1997; Murphy, Shepard, Eisenberg, & Fabes, 2004) and adulthood (John & Gross, 2004; Lopes et al., 2011). Still, little attention was paid to the relationship between emotion regulation and social functioning during adolescence, although this is a critical developmental stage. Due to the focus on the early age, the studies conducted on children were mainly based on other persons’ reports and conceptualized social functioning in terms of social status, externalizing problems and social behaviors such as prosocial, aggressive or withdrawn. In this study, we aimed to extend the understanding of the relationship between emotion regulation and social functioning by analyzing it during adolescence, using the broader conceptualization of social functioning proposed by Adams et al. (2002). Moreover, we aimed to use exclusively self-assessment instruments, as

* Corresponding author: Mihalca A.M., Tel.: +4-850-335-3728
E-mail address: andreea.mihalca@uj.edu.pl
adolescents are not always willing to share their internal experiences with significant others (Jacob, Thomassin, Morelen, & Suveg, 2011).

Furthermore, previous studies conducted on children (Eisenberg et al., 1995; Murphy et al., 2004) conceptualized emotion regulation as a composite of cognitive and behavioral regulation. Garnefski, Kraaij, and Spinhoven (2001) underlined the importance of focusing on only one dimension of regulation – either cognitive or behavioral - with the recommendation to focus primarily on the former due to the priority in time of cognitions over behaviors. Cognitive emotion regulation refers to the ability to manage one’s own emotional reactions when facing negative events (Thompson, 1991). Garnefski et al. (2001) identified nine types of cognitive emotion regulation strategies, namely positive reappraisal, positive refocusing, putting into perspective, planning, acceptance, rumination, catastrophizing, self-blame and other blame. In this study, we focused exclusively on cognitive emotion regulation and we used the conceptualization proposed by Garnefski et al. (2001).

The use of specific cognitive emotion regulation strategies was associated with different outcomes in social functioning in adults. Namely, adults who used more reappraisal had a better social functioning, while those who used suppression reported poorer social functioning (John & Gross, 2004). In children, the main cognitive strategy which was explored in relation with social functioning was attentional control, understood as shifting and focusing of attention. Results revealed that high levels of attentional control predicted better social functioning outcomes (Eisenberg et al., 1997). The other cognitive strategies were analyzed more in relation with emotional adjustment. While some cognitive emotion regulation strategies were identified to enhance emotional adjustment, others enhanced maladjustment. Specifically, internalizing problems in children and adolescents were positively predicted by rumination, catastrophizing, self-blame and acceptance (Garnefski, Kraaij, & van Etten, 2005; Garnefski, Rieffe, Jellesma, Terwogt, & Kraaij, 2007; Legerstee, Garnefski, Jellesma, Verhulst, & Utens, 2010) and negatively predicted by positive refocusing, positive reappraisal and planning (Bjorck, Cuthbertson, Thurman, & Lee, 2001; Legerstee et al., 2010; Garnefski et al., 2007). We expected to identify similar relationships between specific cognitive emotion regulation strategies and social functioning.

The aim of this study was to analyze the role of cognitive emotion regulation strategies on the adolescents’ social functioning by using the broader conceptualization of both concepts. We hypothesized that cognitive emotion regulation strategies act as predictors of social functioning problems and associated distress. We expected adolescents who use more frequently maladaptive cognitive strategies to report more social functioning problems and higher levels of distress, while adolescents who use more adaptive cognitive strategies were expected to report fewer social functioning problems and lower levels of distress.

2. Method

2.1. Participants

For this study, 391 adolescents were recruited on a voluntary basis from three urban secondary schools in Ukraine. The participants who had incomplete data or yielded outlier results were excluded. Therefore, the analysis was conducted on 378 adolescents (56.1% girls), aged between 11 and 16 years (M = 13.87, SD = 1.27).

2.2. Instruments

The Social Functioning Problems Scale (SFPS) was built based on the adaptation of the Living with Chronic Illness Scale – youth form (LCI-y; Adams et al., 2002). Social functioning was assessed based on the child’s peer relationships, social competences, and socio-emotional adjustment. The instrument was originally built to assess problems which may or may not be caused by the disease, making it adequate for assessing social functioning in the healthy population as well. In fact, only the item 16 made reference to the disease, an item which was rephrased in the current study into “I don’t like others to know about my problems”. SFPS consists of 29 items to which participants give a dichotomous answer (yes/no if they had the specified problem), followed by a four point Likert scale assessing the distress caused by the problem (0 = none to 3 = very high). SFPS showed good internal consistency for both the Total Social Functioning Problems subscale (Total_SFP; \( \alpha = .75 \)) and the
Distress due to Social Functioning Problems subscale (Distress_SFP; $\alpha = .71$). Total scores were computed for each subscale.

The Cognitive Emotion Regulation Questionnaire – kids form (CERQ-k; Garnefski et al., 2007) is a self-report instrument assessing the general cognitive emotion regulation style. The participants rated on a five point Likert scale the frequency with which they used various cognitive strategies when facing negative events (1 = almost never to 5 = almost always). A principal component analysis revealed eight factors accounting for 53.91% of the total variance. Four items of the original 36 were deleted due to lack of loading into any of the factors, namely items 2, 6, 10, 24. The remaining two items of the Positive reappraisal subscale clustered together with the items describing Putting into perspective strategy ($\alpha = .63$). All the other subscales followed the original format, assessing Other blame ($\alpha = .73$), Refocus on positive ($\alpha = .72$), Planning ($\alpha = .67$), Rumination ($\alpha = .66$), Acceptance ($\alpha = .64$), Self-blame ($\alpha = .62$), and Catastrophizing ($\alpha = .61$). Average scores were computed for each subscale.

Both instruments were translated into the Ukrainian language following the forward-backward translation design as recommended by Hambleton, Yu, and Slate (1999).

2.3. Procedure

The participants were recruited from randomly selected classes in three different urban secondary schools located in the central region of Ukraine, specifically in Zhytomyr and Vinnytsia districts. The study was approved by the schools’ authorities. After the parents’ written informed consent, the participants filled in the CERQ-k and SFPS questionnaires during school hours.

3. Results

Preliminary analysis using independent sample t-tests revealed that gender had no significant effect on the Total_SFP or Distress_SFP subscales’ scores. Therefore, gender was not included in further analyses.

For testing the hypotheses, two separate multiple regression analyses were conducted with CERQ-k subscales scores as predictors of Total Social Functioning Problems (Total_SFP), respectively of Distress due to Social Functioning Problems (Distress_SFP) scores. An a priori correlational analysis revealed significant, but small positive associations between Catastrophizing and Acceptance with Total_SFP, and Distress_SFP scores (Table 1).

| Table 1. Means (and standard deviations) and Pearson correlations between CERQ-k and SFP subscales scores |
|-------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|                   | 1                | 2                | 3                | 4                | 5                | 6                | 7                | 8                | 9                | 10               |
| 1. Self-blame     | -                | .21***           | .29***           | -.04             | .29"            | .08             | .26***           | -.17***          | .06              | .15*             |
| 2. Acceptance     | -                | .30***           | .11             | .03              | .21***           | .41***           | .26***           | .18***           | .21***           |
| 3. Rumination     | -                | -.01             | .37***           | .14**            | .43***           | .01             | .02             | .09              |
| 4. Positive refocusing | -        | .21***           | .42***           | -.06             | .12**            | -.04            | -.05             |
| 5. Planning       | -                | .25***           | .14**            | -.20***          | .07              | -.09            |
| 6. Putting into perspective and positive reappraisal | - | .17*** | .25*** | .04 | .09 |
| 7. Catastrophizing | -                | .22***           | .21***           | .28***           |
| 8. Other blame    | -                | -.07             | .12**            |
| 9. Total SFP      | -                | -.84***          |
| 10. Distress_SFP  | -                | -                |
| Means             | 2.77             | 2.69             | 3.05             | 3.32             | 3.8              | 2.92             | 2.54             | 2.01             | 4.8              | 5.01             |
| SD                | .74              | .89              | .78              | .93              | .74              | .67              | .77              | .75              | 3.61             | 4.76             |

Note. Total_SFP = Total Social Functioning Problems; Distress_SFP = Distress due to Social Functioning Problems; * $p < .05$, ** $p < .01$, *** $p < .001$.

The results of regression analyses indicated that CERQ-k scores significantly predicted both Total_SFP and Distress_SFP scores (Table 2). Cognitive emotion regulation strategies explained 7% of the variance in Total_SFP scores, respectively 13% of the variance in Distress_SFP scores. The total number of social functioning problems was positively predicted by Catastrophizing and Acceptance. The level of distress due to
social functioning problems was positively predicted by Catastrophizing and Self-blame and negatively by Planning.

The assumptions of regression were met in both analyses. Still, a slight heteroscedasticity of errors was observed in the regression of Distress_SFP scores. Therefore, even if the linear relationship between the factors was identified by the analysis, a slightly higher predictability of Distress_SFP scores would have been achieved if the homoscedasticity of errors would have been met (Tabachnick & Fidell, 2007, p.85).

Table 2. Regression models predicting social functioning from cognitive emotion regulation strategies

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Total_SFP</th>
<th></th>
<th>Distress_SFP</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>3.65</td>
<td></td>
<td>1.03</td>
<td></td>
</tr>
<tr>
<td>Self-blame</td>
<td>.15</td>
<td>.03</td>
<td>.80</td>
<td>.12*</td>
</tr>
<tr>
<td>Acceptance</td>
<td>.50</td>
<td>.12*</td>
<td>.46</td>
<td>.09</td>
</tr>
<tr>
<td>Rumination</td>
<td>-.37</td>
<td>-.08</td>
<td>-.16</td>
<td>-.03</td>
</tr>
<tr>
<td>Positive refocusing</td>
<td>-.11</td>
<td>-.03</td>
<td>-.23</td>
<td>-.04</td>
</tr>
<tr>
<td>Planning</td>
<td>-.44</td>
<td>-.09</td>
<td>1.0</td>
<td>-.16***</td>
</tr>
<tr>
<td>Persp&amp;Reapp</td>
<td>.17</td>
<td>.03</td>
<td>1.41</td>
<td>.23***</td>
</tr>
<tr>
<td>Catastrophizing</td>
<td>.90</td>
<td>.19***</td>
<td>.15</td>
<td>.02</td>
</tr>
<tr>
<td>Others blame</td>
<td>-.12</td>
<td>-.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$R^2$</td>
<td>.07***</td>
<td></td>
<td>.13***</td>
<td></td>
</tr>
</tbody>
</table>

Note. Persp&Reapp = Putting into perspective and positive reappraisal; Total_SFP = Total Social Functioning Problems; Distress_SFP = Distress due to Social Functioning Problems; * $p < .05$, ** $p < .01$, *** $p < .001$.

4. Discussion

The aim of this study was to explore the role of cognitive emotion regulation strategies on adolescents’ social functioning. The results of multiple regression analyses confirmed our hypothesis: cognitive strategies act as predictors of both social functioning problems and associated distress.

Therefore, the relationship between cognitive emotion regulation and social functioning should also be explored in adolescents, not only in children (Calkins et al., 1999; Eisenberg et al., 1995; 1997; Murphy et al., 2004) or adults (John & Gross, 2004; Lopes et al., 2011). Still, cognitive strategies explained more the variance of distress than the variance of social functioning problems. This result supports previous studies according to which cognitive emotion regulation is more related to internalizing than to externalizing problems (Garnefski et al., 2005).

Our second hypothesis was partially confirmed: adolescents who used more frequently maladaptive cognitive strategies reported more social functioning problems and higher levels of distress, while the effect of adaptive cognitive strategies was identified only in relationship with distress. Significant relationships were identified between social functioning and three of the previously established maladaptive cognitive strategies, namely catastrophizing, acceptance and self-blame. Results revealed that catastrophizing was the most important predictor of social functioning problems and associated distress. These findings confirm previous research which consistently identified catastrophizing as a maladaptive cognitive strategy (Garnefski et al., 2005; 2007; Legerstee et al., 2010). Furthermore, catastrophizing was the only common predictor of both social functioning problems and of associated distress, in accordance with a previous study which found no significant differences in the use of catastrophizing between adolescents with internalizing and externalizing problems (Garnefski et al., 2005).

Acceptance was identified as a maladaptive cognitive strategy only in relation with social functioning problems, not with associated distress. Therefore, adolescents who adopt a resigned acceptance in front of negative life events tend to report more social functioning problems, but they don’t report higher levels of distress associated to these problems. This result is in contradiction with previous studies in which acceptance predicted internalizing problems (Garnefski et al., 2007; Legerstee et al., 2010). Still, the low power of
predictability of distress regression model may have contributed to the lack of finding of a significant relationship between acceptance and distress.

Self-blame was identified as a maladaptive cognitive strategy only in relation with distress, but not with social functioning problems. This is consistent with previous study which found self-blame to be more frequently used by adolescents with internalizing problems than those with externalizing ones (Garnefski et al., 2005).

Planning was the only protective strategy identified in relation with distress associated to social functioning problems. This result confirms previous studies which identified planning as an adaptive cognitive strategy (Bjorck et al., 2001; Legerstee et al., 2010; Garnefski et al., 2007). Still, contrary to previous findings, positive refocusing and positive reappraisal were not identified as protective factors (Bjorck et al., 2001; Legerstee et al., 2010; Garnefski et al., 2007). The latter mentioned cognitive strategies may be more important in predicting depression and anxiety symptoms rather than in predicting distress caused by social functioning problems. Furthermore, the lack of validity of the positive reappraisal subscale in the Ukrainian sample led to the clustering together with the putting into perspective subscale, the latter not being identified in previous studies as having a significant role in predicting internalizing or externalizing problems (Garnefski et al., 2005).

The current study has several strengths. Firstly, this is the first study addressing the relationship between cognitive emotion regulation strategies and social functioning by using the broader conceptualization of both concepts. Secondly, to our knowledge, this is the first study conducted in Ukraine which addressed cognitive emotion regulation strategies in adolescents using the new world widely used CERQ-k instrument. Thirdly, the variables proposed for the study were assessed using self-report questionnaires, by considering that the adolescent himself/herself has the best access to his/her internal experiences (Jacob et al., 2011). However, the latter may also constitute a limitation of the study as children may underestimate or deny the existence of psychosocial functioning problems, therefore reporting fewer problems compared with parents or teachers (Adams et al., 2002).

This study emphasizes that cognitive emotion regulation strategies have an impact on adolescents’ social functioning, with different strategies leading to different outcomes. The identification of adaptive and maladaptive strategies may constitute the basis for preventive or remedial intervention aimed at enhancing adolescents’ social functioning and associated well-being.

References


