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ADOLESCENTS WITH AND WITHOUT PROBLEMS: RATINGS ABOUT PROSOCIAL BEHAVIOR AND EMPATHIC CONCERN

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Abstract

The three-staged cluster sampling included students from four mainstream schools and the self-reported Strengths and Difficulties Questionnaire was completed for 390 13 to 16 years students. A total of 125 of boys and girls were screened as adolescents with different behavior (externalized, internalized, externalized/internalized, prosocial) problems. The prevalence of multiple forms of prosocial behavior was measured with the self-reported Child Social Behavior Questionnaire and multiple components of empathic concern with feelings questionnaire identifying differences between adolescents without and with externalized/internalized/prosocial behavioral problems. Results indicated that the prevalence of three forms (caring, helping, inclusion) of prosocial behaviour was higher among adolescents without problems and adolescents with single externalizing/internalizing problems compared with students with prosocial problems and multiple externalizing/internalizing problems, whereby the poorest prosocial skills in sharing were also characteristic for adolescents with prosocial problems. Additionally, adolescents without problems and with single externalizing/internalizing problems reported more feelings of sympathy (compassionate, moved, sympathetic) and tenderness (softhearted, tender, warm) than other studygroup members, whereby low loadings of sympathy components were characteristic for adolescents with externalized problem.

Keywords: Adolescents, behavioral problems, prosocial behavior, empathic concern

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1. Introduction

During more than five decades there is growing empirical interest to investigate relationship between prosocial (actions intended to benefit others) and antisocial behavior (actions intended to lower the wellbeing of others) among adolescents, whereby these two branches of research have been conceptually/theoretically rather independent from each other (Veenstra, 2006). It is important to examine prosocial behavior during adolescence because it led to a range of positive outcomes, including academic success, healthy social functioning and well-being (e.g. Carlo et al., 2014; Caprara, et al., 2000; Laible et al., 2004; Wentzel, 1993) by fostering adolescents' adaptive outcomes as potential protective factors of antisocial behavior. This growing field of research (Memmott-Elisona et al., 2020) reflects the consistency of associations between prosocial behavior and problematic outcomes for adolescents assessed mainly with self-reports with indication that prosocial behavior was negatively related with general externalizing behaviors (as well as variety of problems as aggression, deviant peer association, risky sexual behavior, substance use, delinquency) and internalizing problems, whereby correlations were more strong with externalizing problems than internalizing problems. Moderators of this relationship includes primary the age and sex of adolescents and the forms of prosocial behavior. Specifically, prosocial behavior was more strongly related to externalizing behaviors than specific forms (volunteering, community service, altruism, or combinations of these forms) of prosocial behaviors were assessed highlighting the methodological framework of multidimensional nature of prosocial behavior and the need to distinguish forms of prosocial behavior in empirical studies.

Adolescents' prosocial behaviors are mainly conceptualized and assessed as a unidimensional construct by self-reports (Martí-Vilar et al., 2019), whereby only few studies have addressed to examine the relations of multiple forms of prosocial behaviors and adolescents' antisocial behaviors showing significant heterogeneity. Boxer et al. (2004) revealed that self-reported proactive (instrumental, self-benefiting) prosocial behavior was positively correlated with aggression and aggression-supporting beliefs, while altruistic (beneficial to others without expectation of personal gain) and reactive (in response to an individual in need) prosocial behavior was negatively correlated with self-reported aggression among adolescents. Nostrand and Ojanen (2018) examined links of these abovementioned three forms of prosocial behavior with social adjustment in terms of peer-reported likeability, rejection, and popularity by using peer-reported measure among adolescents noticing that altruistic prosocial behavior was positively related to likeability and negatively to rejection by peers, whereas proactive prosocial behavior was positively related to popularity among peers. Carlo et al. (2014) findings showed that compliant (when requested) and altruistic (performed without expectation of self-reward) forms of prosocial behaviors showed the strongest links to aggression and delinquency among adolescents, however public (enacted in front of others), anonymous (in front of others and self- interested), emotional (in response to another's emotional cues), and dire (in a crisis) forms of prosocial behavior were not significantly related to adolescents' antisocial behaviors. McGinley and Carlo (2007) showed that physical aggression was negatively related to altruistic and compliant forms of prosocial behavior, while the public prosocial behavior was positively related to physical aggression among young adults.

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It was also revealed that adolescents' engagement in prosocial and antisocial behaviour was associated with their perceptions of the motives underlying peers' prosocial behaviors showing that prosocial group members attributed more moral motives and antisocial group members more personal motives for prosocial behavior (Wardle et al., 2011). The prevalence of different forms of prosocial behavior separate adolescents without schoolbullying experiences from groups of adolescents with bully/victim experiences revealing that pupils who were not involved in school bullying used more frequently cooperation, helping, sharing and trusting behaviours in peer relations compared with adolescents who were involved in school bullying behaviour, whereby the poorest prosocial (cooperation, helping, sharing, trusting) skills were characteristic for victims (Kõiv, 2006).

Thus, prior research had consistently documented that that higher levels of prosocial behavior were associated with lower levels of externalizing/internalizing behaviors from childhood to late adolescence (e.g. Memmott-Elisona et al., 2020) and additional evidence form studies examined multidimensionality of prosocial behaviors among adolescents reveal that not all forms of prosocial behaviors were related to adolescents' (aggressive, delinquent, bullying, victimization) externalized/internalized behaviors. What is lacking in many of the previous studies is the consideration that some adolescents engage in both externalizing and internalizing behavior problems and therefore differentiating subgroups of adolescents with distinct patterns of externalizing/internalizing/prosocial problems can help identify youth that are at risk as probable deficits in specific forms of prosocial behavior.

Empathy is generally defined as an emotional reaction elicited by and congruent with another's emotional state or condition (Eisenberg et al., 2002) and conceptualized and measured as a multidimensional construct consisting dual components – the cognitive component and the affective component. Cognitive empathy (perspective taking) refers to the understanding of what another person is experiencing, to putting oneself in the other person's shoes, and affective empathy (empathic concern) refers to the extent to which a person experiences emotions in response to another person's expression of an emotional state (Davis, 1983; Hogan, 1969). Batson et al. (1987) have proposed six adjectives to measure empathic concern – compassionate, moved, tender, softhearted, sympathetic, warm, however these adjectives do not assess one single emotion, but different components distinguishing sympathy (compassionate, moved, sympathetic) and tenderness (softhearted, tender, warm) as two aspects of empathic concern (Niezink et al., 2012).

At one side, previous studies among adolescents provided empirical support for a positive association between cognitive and affective empathy and global measure of prosocial behavior (Llorca-Mestre et al., 2017; Van der Graaff et al., 2018). Furthermore, operationalizing prosocial behaviors as multidimensional construct helps to clarify this connection revealing that empathic concern was positively related to altruistic, anonymous, emotional, compliant, and dire (but not public) prosocial behaviors; and empathic concern was positively related to anonymous, emotional, compliant, dire, and public prosocial behaviors (except altruistic prosocial behaviors) in adolescent samples (Mestre et al., 2015).

At the other side, empathy, as consisting dual forms, has been used as operational lens to reveal cross-sectional and longitudinal studies to clarify links with adolescents' antisocial behaviors. Meta-review, (Miller & Eisenberg, 1988) found low to modest correlations between (children's and adolescents') low

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cognitive and affective empathy and aggressive and antisocial/externalizing behaviors, whereby only when it was measured through (mainly self-reported) questionnaires.

Studies show that that higher empathy was related to lower levels of different types of aggressive and delinquent behavior in adolescence concurrently and over time: self-reported affective empathy was negatively linked to aggression and delinquency (de Kemp et al., 2007; Van der Graaff et al., 2012; 2018); self-reported affective and cognitive empathy was negatively connected with overt aggression; and peer-reported empathy correlated negatively with different (indirect, physical, verbal) types of aggression (Kaukianen et al., 1999). Also, three aggression groups (reactive, proactive, proactive/reactive) of adolescents had less affective and perspective-taking skills compared with nonaggressive group members (Mayberry & Espelage, 2007). In some studies, the negative association between adolescents' affective empathy and aggression (Carrasco et al., 2006; Loudin et al., 2003; Shechtman, 2002), bullying involvement (Caravita et al., 2009; Jolliffe & Farrington, 2011), and clinically referred externalizing behavior disorders (Wied et al., 2005) were only found for male adolescents.

Of additional interest is the finding that young delinquents had lower levels of empathy (perspective taking and empathic concern) and of (general) prosocial behaviour and higher levels of aggressive behavior, emotional instability, and (state-trait) anger (Llorca-Mestre et al., 2017). Berger et al. (2015) have classified adolescents into three (normative-low aggressive, high prosocial-low aggressive, and high aggressive-high popular status adolescents) profiles by peer nomination indicating that empathic concern and perspective taking were higher in the high prosocial-low aggressive profile members, whereas the high aggressive-high popular status profile had the lowest scores on both empathy components.

Thus, prior research had prevalently documented that lower level of empathic concern was associated with higher level of externalizing/internalizing behaviors in adolescence, whereas this relationship with cognitive empathy is less clear. As such, the findings suggest that it would be beneficial to move beyond assessing empathic concern as unidimensional construct to identify youth that are at risk as probable deficits in specific components of empathic concern.

2. Problem Statement

Traditionally, prosocial behaviors and empathy concern are assessed among adolescents as unidimensional constructs, but the present research suggests they include various distinct forms or components. Differentiating subgroups of adolescents with distinct patterns of externalizing/ internalizing/ prosocial problems can help identify youth that are at risk as probable deficits in specific forms of prosocial behaviors and components of empathic concern.

The methodological focus of the study was twofold: (1) the measure of prosocial behavior divided into four (caring, helping, inclusion, sharing) forms, and (2) the measure of empathic concern divided into six (compassionate, moved, tender, softhearted, sympathetic, warm) components with categorization of adolescents in the target sample.

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3. Research Questions

Whether there is a variation in self-reported forms of prosocial behavior and components of empathy concern across different groups of adolescents with and without behavior problems?

4. Purpose of the Study

The purpose of the study was to compare the frequencies of four forms (caring, helping, inclusion, sharing) of prosocial behaviors and six components (compassionate, moved, tender, softhearted, sympathetic, warm) of empathic concern among five groups of adolescents: pupils without problems; pupils with externalizing problems; pupils with internalizing problems; pupils with externalizing and internalizing problems; and pupils with prosocial behavior problems.

By this rationale, the following two hypotheses were generated. First, adolescents with prosocial behavior problems would report decreased prevalence of prosocial behaviors across four (caring, inclusion, helping, sharing) forms compared with other group members. Secondly, adolescents with multiple externalized/internalized and prosocial problems would show lower levels of empathic concern across six (compassionate, moved, tender, softhearted, sympathetic, warm) components compared with other group members.

5. Research Methods

5.1. Study design

A three-stage stratified cluster design was used for sampling: during stage 1 stratified selection of schools from one region of Estonia with a probability-proportional-to-size method was performed; during stage 2 one class per 7-9 grades in each school was randomly selected; during stage 3 students with and without emotional and behavioural problems were identified.

5.2. Measures

5.2.1. Behavior problems

The presence of internalizing/externalizing/prosocial problem behaviors was assessed using the self-reported version of the Strengths and Difficulties Questionnaire (SDQ, 2012) for 11-17 years olds. The original instrument (Goodman, 1997) consists of 25 items scored on a 3-point Likert scale (0 = not true, 1 = somewhat true or 2 = certainly true) with higher scores indicating greater problems, whereby items are divided into five scales: Conduct Problems, Emotional Problems, Hyperactivity, Peer Problems, and Prosocial Behavior. An “externalizing” subscale (behavioral plus hyperactivity items), “internalizing” subscale (emotional plus peer items), and prosocial subscale was used as screening tool to distinguish problematic and non-problematic groups of adolescents. Comprehensive standardization data are available concerning cut-off scores for each subscale on the Internet at www.sdqinfo.com. These norms are used in the present study to find subjects for different study groups coded them in normal, borderline and abnormal categories. Adolescents achieving the SDQ cut-off scores for the abnormal or borderline range score were

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defined as members of different (adolescents with externalising problems, adolescents with internalising problems, adolescents with prosocial behavior problems) groups of students with behavioral problems. Additionally, a group of adolescents without behavioral problems according to pre-specified SDQ cut-off values for the normal range was identified. The Cronbach's alpha coefficient was acceptable: .80 for the scale of externalization problems; .72 for the internalizing problems; and .77 for the prosocial scale.

5.2.2. Prosocial Behavior

Prosocial behavior was assessed with self-reported version of the Child Social Behavior Questionnaire (CSBQ) (Warden et al., 2003). Participants rated how often (1 = never, 2 = sometimes, 3 = often) they engaged in prosocial behavior with peers, whereby items tapping caring (e.g., being nice to a child who was sad or unhappy), helping (e.g., helping with schoolwork), inclusion (e.g., sticking up for a child who was in trouble), and sharing (e.g., sharing snack with a child who has none) prosocial behaviours as instrument subscales. The measure was translated and back translated independently by bilingual experts. For the present sample of students, the scale's internal consistency was acceptable (Cronbach's $\alpha = .89$).

5.2.3. Emphatic concern

Empathic concern was measured by the self-reported feelings questionnaire that listed six emotion adjectives (compassionate, moved, tender, softhearted, sympathetic, warm) as state of empathic concern that is typically evoked by responses to others in need (Batson et al., 1987). Participants were asked to rate how much each item described them as a person (e.g., "I would describe myself as a compassionate person, when I see someone else is suffering"). The 5-point rating scale ranging from 1 (does not describe me well) to 5 (describes me very well) was used and coded so that higher scores indicate a higher sense of emphatic concern. For the present sample of students, the scale's internal consistency was acceptable – Cronbach's $\alpha = .87$.

6. Findings

Within whole sample (N=390), 125 (32.05%) of adolescents classified as students with behavioral problems achieving SDQ cut-off scores for the abnormal or borderline range score in different SDQ scales – overall, 63 boys and 62 girls with the average age of this sample 14.39 years (SD = 0.83). The final sample consist of adolescents with externalizing problems (N=44), adolescents with internalizing problems (N=29), adolescents with externalizing and internalizing problems (N=27), adolescents with prosocial behavior problems (N=25), and adolescents without behavior problems (N= 265) screened by the SDQ.

Possible differences across five studygroups were analysed in the average scores for different forms of prosocial behavior as well as the components of empathic concern. Using *t*-test, several differences between five study group members were significant comparing prevalence of different forms of prosocial behavior. For these analyses, the significance level was established at $p < .05$ and only statistically significant results are considered (Table 1). The scores of caring, helping and inclusion for the students with prosocial behavior problems and for the students with externalizing/internalizing problems were significantly lower than that for the nonproblematic group members, students with externalizing problems

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and students with internalizing problems, whereby scores of students with externalizing problems in the area of caring, helping and inclusion were significantly lower than that for students without problems and students with internalizing problems. The same tendency revealed connecting with sharing behaviour among study groups: students with prosocial problems had significantly lower scores compared with other participant group (students without problems, students with externalizing problems, students with internalizing problems, students with externalizing/internalizing problems) members.

Table 1. Descriptive statistics (means, standard deviations) and comparison of forms of prosocial behavior among five groups of adolescents

	Students without problems N=265 (A)	**Students with externalising problems N=44 (B)**	**Students with internalising problems N=29 (C)**	**Students with externalising and internalising problems N=27 (D)**	**Students with prosocial behavior problems N=25 (E)**	**Differences between samples (*t*-values)**
	M (SD)	**M (SD)**	**M (SD)**	**M (SD)**	**M (SD)**	
Caring	2.50 (0.57)	2.26 (0.51)	2.87 (0,35)	1.57 (0,59)	1.85 (0.38)	A versus D (3.25**); A versus E (4.19*'); B versus D (3.96**); B versus E (4.53**); C versus D (3.93**); C versus E (6.14**); A versus B (2.21*); B versus C (1.99*).
Helping	2.53 (0.62)	2.27 (0.46)	2.53 (0.49)	1.51 (0.47)	1.77 (0.68)	A versus D (4.03**); A versus E (5.06**); B versus D (3.05**); B versus E (3.41**); C versus D (4.69**); C versus E (3.61**) A versus B (1.88*); B versus C (2.05*).
Inclusion	2.61 (0.58)	2.52 (0.33)	2.82 (0.64)	1.57 (0.36)	1.69 (0.61)	A versus D (4.23**); A versus E (3.71**); B versus D (3.64**); B versus E (4.94**); C versus D (3.27**); C versus E (3.16**); A versus B (2.10*); B versus C (2.14*).
Sharing	2.14 (0.44)	1.48 (0.42)	1.27 (0.43)	1.14 (0.58)	0.38 (0.54)	A versus E (3.41**); B versus E (3.05*'); C versus E (3.01**); D versus E (3.56**).

*p < .05; ** p < .001.

Table 2 shows the descriptive statistics and comparison t-values between five groups of adolescents in terms of frequency scores across six components of empathic concern, whereby only statistically significant results are reported. It was revealed that adolescents with externalized/internalized problems and with prosocial problems evoked stronger self-ratings of being compassionate, moved, softhearted, sympathetic, and warm compared with non-problematic, externalized, internalized group members, whereby students with externalized problems reported less feelings of tender, sympathy and warm compared with nonproblematic and single externalizing/internalizing problem group members.

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Table 2. Descriptive statistics (means, standard deviations) and comparison of components of empathic concern among five groups of adolescents

	Students without problems N=265 (A)	**Students with externalising problems N=44 (B)**	**Students with internalising problems N=29 (C)**	**Students with externalising and internalising problems N=27 (D)**	**Pupils with prosocial behavior problems N=25 (E)**	**Differences between samples (*t*-values)**
	M (SD)	**M (SD)**	**M (SD)**	**M (SD)**	**M (SD)**	
Compassionate	4.71 (0.39)	4.39 (0.65)	4.81 (0.48)	3.57 (0.54)	3.69 (0.40)	A versus D (4.63**); A versus E (4.11**); B versus D (5.29**); B versus E (4.40**); C versus D (2.86*); C versus E (2.41*); A versus B (2.34*); B versus C (1.95*)
Moved	4.05 (0.27)	3.67 (0.42)	3.79 (0.32)	3.36 (0.24)	3.46 (0.34)	A versus D (2.87*); A versus E (2.01*); B versus D (1.95*); B versus E (2.33*); C versus D (2.99*); C versus E (2.17*); A versus B (2.03*); B versus C (1.79*).
Tender	3.19 (0.47)	3.01 (0.45)	3.22 (0.36)	2.87 (0.47)	2.61 (0.38)	A versus D (2.05*); A versus E (3.07**); B versus D (2.01*); B versus E (2.89*); C versus D (1.80*); C versus E (2.33*).
Softhearted	4.15 (0,25)	4.22 (0.32)	4.07 (0.33)	3.43 (0.35)	3.62 (0.63)	A versus D (3.19**); A versus E (2.95*); B versus D (3.23**); B versus E (2.39*); C versus D (2.96*); C versus E (2.67*).
Sympathetic	4.39 (0.22)	3.91 (0.41)	4.33 (0.48)	3.43 (0.24)	3.38 (0.44)	A versus D (3.86**); A versus E (2.74*); B versus D (3.98**); B versus E (3.45**); C versus D (2.55*); C versus E (2.45*); A versus B (2.82*); B versus C (2.77*).
Warm	3.99 (0.21)	3.83 (0.32)	3.87 (0.51)	3.29 (0.30)	3.38 (0.64)	A versus D (2.89*); A versus E (2.69*); B versus D (2.02*); B versus E (1,97*); C versus D (1.78*); C versus E (1.73*).

*p < .05; ** p < .001.

7. Conclusion

The first hypothesis of the present study referred to the difference in the prevalence across four (caring, inclusion, helping, sharing) forms of prosocial behavior comparing adolescents with prosocial behavior problems with adolescents without problems and with externalized/internalized problems profiles. The findings partly confirmed the hypothesis showing that adolescents with prosocial behavior problems had lowest level of prevalence of sharing as a form of prosocial behaviors compared with other group members. Also, results revealed that three forms of prosocial behaviour – caring, helping, and inclusion, clearly separated adolescents with prosocial problems and multiple externalizing/internalizing problems from other group members. Namely, it was revealed that adolescents without problems and adolescents with single externalized/internalized problems used more frequently caring, helping, and inclusion in peer

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relations compared with pupils who had prosocial behavior problems and multiple externalizing/internalizing problems, whereby the poor prosocial skills across helping, caring, and inclusion were also characteristic for adolescents with single externalizing problems compared with other group members.

The results of the present study are in the general line of previous studies (Boxer et al., 2004; Carlo et al, 2014; Kõiv, 2006; McGinley & Carlo, 2007; Nostrand & Ojanen, 2018) documenting that not all forms of prosocial behavior were related with adolescents externalized/internalized problems specifying results across different study group engagement without and with single and multiple externalized/internalized/prosocial problems. Previous studies have revealed negative connections between adolescents' compliant and/or altruistic prosocial behavior and aggression/delinquency (Boxer et al., 2004; Carlo et al., 2014; McGinley & Carlo, 2007) and deficits in some prosocial (cooperation, helping, sharing, trusting) prosocial behaviors among adolescents involved in bullying (Kõiv, 2006). The present study results documented the poorest prosocial skills in caring, helping, inclusion and sharing among adolescents with prosocial problems compared with other study group members suggesting that this group should be the focus of future investigations to identify adolescents that are at risk as probable deficits in specific forms of prosocial behaviour. Additionally, it was revealed that adolescents with externalized problems (group of adolescents with single externalizing problems and multiple externalizing/internalizing problems) reported decreased prevalence of prosocial behaviors across three other-oriented forms – caring, helping, and inclusion, compared with other group members. Following the viewpoint (Dunfield, 2014) that different other-oriented prosocial (helping, sharing, and comforting/helping) prosocial behaviors reflect unmet (e.g. instrumental need, unmet material desire, and emotional distress) needs, this study yield additional evidence that caring, helping and inclusion as three forms of other-oriented prosocial behavior contribute to differentiating externalized/internalized/prosocial study group members with suggesting that fostering this forms of prosocial behavior may be effective in preventing adolescents antisocial behavior, especially externalizing problems.

Based on previous findings revealing that the empathic concern plays a pivotal role in the inhibition of externalized/internalized behavior problems among adolescents (Carrasco et al., 2006; Caravita et al., 2009; de Kemp et al., 2007; Jolliffe & Farrington, 2011; Loudin et al., 2003; Mayberry & Espelage, 2007; Shechtman, 2002; Van der Graaff et al., 2012; 2018; Wied et al., 2005) the second hypothesis of the present study was generated with conceptualization of empathic concern as multidimensional, but not as unidimensional construct. Examining each component of empathy concern separately, two studygroups – adolescents with multiple externalizing/internalized problems and prosocial problems, evoked stronger self-ratings of being compassionate, moved soft-hearted, sympathetic, tender, and warm compared with non-problematic, externalized, internalized groups. Thus, results confirmed and specified the second hypothesis showing that adolescents with multiple externalized/internalized problems and adolescents with prosocial behavior problems showed lower levels of empathic concern in the area of sympathy (compassionate, moved, sympathetic) and tenderness (soft-hearted, tender, warm), whereby adolescents with externalized problems showed lower levels of empathic concern in the area of sympathy (soft-hearted, tender, warm), but not in the area of tenderness.

The present finding that the subgroups with externalizing/internalizing problems and prosocial behavior problems were least empathic across components of empathic concern is parallel with previous findings showing that adolescents who reported high levels of both proactive and reactive aggression reported the lowest levels of (affective and cognitive) empathy compared with other aggressive behavior groups (Mayberry & Espelage, 2007). It was noticed that sympathy, but not tenderness, evoked peoples' current needs and motivates actual helping behavior and both aspects of emphatic concern motivated prosocial behavior (Lishner et al., 2011). By showing that adolescents with multiple externalizing/internalizing problems and with prosocial behavior problems had deficits in tenderness and sympathy, and adolescents with externalizing problems revealed deficits in sympathy components of empathic concern, the present research emphasizes the importance of effective interventions cultivating positive emotions toward oneself and others focusing to special risk-groups of adolescents.

This study is not without its limitations. First, the sample may not be fully representative of adolescents which may limit generalizability of the results and there is a need for future research to include more respondents to reveal gender differences using multiple reporters and methods for deeper concentration to variation in prosocial and empathic concern among adolescents.

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