

Parenting Practices and Dysregulation Profile in a Sample of Italian Children.

Abstract

Background: emotional dysregulation is a transdiagnostic factor linked to a heightened risk for psychopathology. A dysregulation profile (DP) derived from the Strength and Difficulties Questionnaire (SDQ) is often used to indirectly assess emotional dysregulation in children and adolescents. Theoretical models account for parenting to be involved as a causal and maintaining factor for emotional dysregulation. Notwithstanding, empirical data are scant.

Methods: 547 students (47.5% males) aged between 9 and 11 years of age (mean age = 9.66, $SD = .64$) were assessed with the SDQ-DP (teacher and parent-reported) and their parents self-reported on their own parenting practices with the Alabama Parenting Questionnaire.

Results: as expected, SDQ-DP teacher-rated was positively associated with maternal and paternal negative parenting practices; SDQ-DP mother and father-rated were both negatively associated with maternal and paternal positive parenting and positively associated with maternal and paternal negative parenting practices.

Limitation: the age range is limited to pre-adolescents. The cross-sectional nature of the study precludes inferences on causality.

Conclusions: youth's emotional dysregulation is linked to parenting practices. These findings support the need to include families in the intervention for emotionally dysregulated youths.

Keywords: Dysregulation profile, Parenting, Strength and Difficulties Questionnaire, SDQ.

1. Introduction

Emotion dysregulation (ED) compromises youths' ability to monitor, evaluate, and modify emotional experiences, preventing them from using effective and flexible coping strategies, especially in the face of challenging situations (Gross, 2014). These impairments can result in a lack of emotional stability, mood instability, temper tantrums, aggression, irritability, impulsivity, and hyper-excitability, leading to a way of behaving that is inappropriate and interferes with one's interests and goals and with the social context (Althoff et al., 2010).

Individuals with this combination of emotional and behavioral dysregulation do not fit into a specific diagnosis. Clinically, the identification of these youths is achieved thanks to the assessment of a Dysregulation Profile (DP). The first developed and widely used DP is the Child-Behavior Checklist Dysregulation Profile (CBCL-DP). It is based on the Anxiety/Depression, Attention Problems, and Aggressive Behavior subscales scores of the CBCL (Achenbach and Rescorla, 2004), and it is considered a valid and stable dimensional measure of the dysregulation phenotype (Nobile et al., 2016). More recently, a DP based on the Strengths and Difficulties Questionnaire (SDQ) by Goodman (1997) has been validated (Holtmann et al., 2011). The SDQ, like the CBCL, is a behavioral screening questionnaire, translated and validated in several languages, available in three versions: parent-, teacher-, and youth self-reports. These features, combined with the fact that it is an open access measure, have ruled its increasing success, especially in the research field. Currently, two methods are available for computing the Strengths and Difficulties Questionnaire Dysregulation Profile (SDQ-DP). The first one, the SDQ-DP 5-item, involves summing scores of five selected items (Holtmann et al., 2011): one from the Hyperactivity-Inattention subscale; two from the Conduct Problems scale; and items from the Emotional Symptoms scale. The second one, the SDQ-DP 15-item, involves summing all the items of the Emotional Symptoms, Conduct Problems, and Hyperactivity-Inattention scales (Deutz et al., 2018).

Emotion dysregulation has garnered so much clinical interest because - be it assessed either with the CBCL-DP or the SDQ-DP - it is associated with both internalizing and externalizing problems, poorer school adjustment and academic performance, and yields a greater risk for psychopathology across the lifespan (Aitken et al., 2019; Caro-Cañizares et al., 2020; Dölitzsch et al., 2016).

Emotion dysregulation is associated with both child's (e.g., Tonacci et al., 2019) and environmental factors. Among the latter, parents' characteristics, socio-economical factors, and parenting seem to play an important role (Caro-Cañizares et al., 2015). Although theoretical models account for the strict relationship between self-regulation processes and parent-child relationship, empirical studies using measures of dysregulation as DP are scant. For instance, Jucksch et al. (2011) found that patients with the CBCL-DP were associated with the highest frequency of abnormal parenting in a large clinical sample of 9024 youths (aged 4-18 years). Similarly, Kim et al. (2012) found that preschoolers with the CBCL-DP were exposed to higher controlling and punitive maternal parenting. Finally, intervention programs addressing positive parenting have been shown to reduce children's ED (Scott and O'Connor, 2012), suggesting a possible relation between positive parenting and the DP levels.

Deeper knowledge about the environmental factors that contribute to ED in children is of particular relevance, as it could inform both prevention and treatment efforts. Therefore, the current study sought to explore the relations between maternal and paternal parenting and the SDQ-DP assessed by different informants (i.e., teachers, mothers, and fathers) in a community sample of Italian children.

Methods

Participants and procedure

The data considered in the current study were drawn from a previous project (Coppola et al., 2020) conducted in Apulia, a Region in the South East of Italy. The data were collected in schools located in five cities reflecting different urban characteristics during the 2018-2019 school years.

The final sample included 547 students (47.5% males) aged between 9 and 11 years of age (mean age = 9.66, $SD = .64$). At the time of data collection, 52.5% of the students attended fourth grade, and the remaining 47.5% were fifth graders. Complete information about the sample is provided in Table 1.

All procedures were in accordance with the ethical standards of the institutional research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. Written consent was obtained from all parents, students, and teachers who took part in the current study. The study was approved by the ethical committee of the University of Bari (ethics reference code: ET-20-06).

[TABLE 1]

Measures

Socio-Demographics. Students were asked to specify their gender and age. Parents were asked to indicate their gender, age, nationality, marital status, and years of schooling.

Strength and Difficulties Questionnaire - Dysregulation Profile (SDQ-DP). Mothers, fathers, and teachers individually completed the Strengths and Difficulties Questionnaire (SDQ) (Kaufman et al., 1997), which assessed children's emotional and behavioral difficulties using 25 items. Answers are provided with a 3-point Likert scale (0 = not true, 1 = somewhat true, 2 = certainly true). The SDQ includes five subscales, each consisting of five items: Prosocial Behavior, Hyperactivity-Inattention, Emotional Symptoms, Conduct Problems, and Peer Problems. Both SDQ-DP 5-item and SDQ-DP 15-item were computed, and their reliability was assessed with Cronbach's alpha and, given the small number of items composing the SDQ-DPs, with mean inter-item correlations (MIC) (Clark and Watson, 1995). The SDQ-DP 5-items Cronbach alphas were .58 for teachers, .47 for mothers, and .48 for fathers, while the MICs were .21 for teachers, .14 for mothers, and .13 for fathers. The SDQ-DP 15-items Cronbach alphas were .87 for teachers, .77 for mothers, and .79 for fathers, while the MICs were .29 for teachers, .18 for mothers, and .19 for

fathers. Since the SDQ-DP 15-items showed greater reliability, we decided to use it to test our hypotheses. Henceforth we will refer to the SDQ-DP 15-items simply as SDQ-DP.

Parenting. Mothers and fathers completed the Alabama Parenting Questionnaire (APQ) (Shelton et al., 1996), a 35-item measure assessing parenting style. Items are scored on a 5-point Likert scale. Following the factor structure of the Italian version of the APQ (Esposito et al., 2016), we used the following two subscales: 1) Positive Parenting (PP), including the parental involvement and positive parenting subscales; 2) Negative Parenting (NP), including the poor monitoring/supervision, inconsistent discipline subscales. The Cronbach's alphas were good for the PP scale (.86 for mothers and .90 for fathers) and adequate for the NP scale (.74 for mothers and .71 for fathers).

Statistical Analysis

All the statistical tests were run on IBM SPSS Statistics for Windows, Version 23.0 (Armonk, NY) unless otherwise stated. The percentage of missing values across all the variables varied between 0% and 15%. Overall, 6.26% of the values were incomplete. Missing data were imputed using multiple imputations ($n = 10$). Incomplete variables were imputed under fully conditional specification, using the default setting "Impute Missing Data Values (Multiple Imputation)" available on SPSS 23.

As preliminary analyses, we examined bivariate associations within the main study variables, as well as potential covariates (i.e., age, gender, mothers' and fathers' age, schooling, and marital status). Then we run a series of linear regression models to test whether maternal and paternal PP and NP were associated with the SDQ-DP teacher-report (SDQ-DP-T), mother-report (SDQ-DP-M), or father-report (SDQ-DP-F). Tests to see if the data met the assumption of collinearity indicated that multicollinearity was not a concern: tolerance values ranged between .50 and .99, and variance inflation factors between 1.01 and 2.00. Bootstrap 95% confidence intervals (C.I.) are provided for significant linear regressions. To adjust for multiple comparisons, false

discovery rate (FDR) correction of the p -values was applied across all regression models with the *p.adjust* function on R Statistics.

Results

Zero-order correlations are shown in Table 2.

[TABLE 2]

In the regression models, the SDQ-DP-T, SDQ-DP-M, and SDQ-DP-F scores were the dependent variables, and maternal or paternal PP and NP were the independent variables. Based on the significant ($p \leq .05$) bivariate correlations (see Table 2), we used child gender, maternal and paternal age and schooling, and marital status as covariates.

Regression models showed that the SDQ-DP-T was associated with maternal NP ($b = .159$, $\beta = .148$, $p < .001$, C.I. [.071, .256]) and paternal NP ($b = .190$, $\beta = .171$, $p < .001$, C.I. [.098, .286]). The SDQ-DP-M was associated with maternal PP ($b = -.090$, $\beta = -.135$, $p = .001$, C.I. [-.157, -.024]) and NP ($b = .327$, $\beta = .361$, $p < .001$, % C.I. [.253, .416]), and paternal PP ($b = -.105$, $\beta = -.200$, $p < .001$, C.I. [-.160, -.053]) and NP ($b = .254$, $\beta = .270$, $p < .001$, C.I. [.182, .323]) . The SDQ-DP-F was associated with maternal NP ($b = .259$, $\beta = .279$, $p < .001$, C.I. [.183, .348]), and paternal PP ($b = -.116$, $\beta = -.216$, $p < .001$, C.I. [-.167, -.064]) and NP ($b = .362$, $\beta = .375$, $p < .001$, C.I. [.294, .437]) .

Discussion

The current study instigated the association between parenting practices and children's emotion dysregulation, assessed with the SDQ-DP, in a community sample of Italian youths.

Our findings suggest that higher maternal and paternal negative parenting levels contribute to children's ED, as captured by the SDQ-DP. It is important to note that these associations persisted even after controlling for possible confounders, such as child gender, maternal and paternal age and schooling, and marital status. This evidence is consistent with prior works showing that children who scored high on ED are more likely to have experienced negative parenting practices (Basten et al., 2013; Kim et al., 2012; McRae and Zarolia, 2020).

Besides, we found a negative association between positive parenting and parent-reported SDQ-DPs. This is a relatively new finding, as prior works either did not explore the role of positive parenting (Jucksch et al., 2011) or found it not to significantly affect growth in ED (McQuillan et al., 2018). However, Scott and O'Connor (2012) reported that children with ED showed greater improvements after an intervention when their parenting environment became more favorable. These findings, along with ours, suggest that warmth and positive parenting can exert beneficial effects on children's ED.

Our findings contribute to a growing body of evidence indicating negative parenting as a risk factor for ED, and importantly, establishes that these relationships persist across informants (parent vs. teacher) and settings (home vs. school) and, at the same time, provide preliminary findings of positive parenting contribution. However, future studies should better explore the mechanisms underpinning these associations. Parents' and children's emotion regulation abilities are highly interconnected, so it is plausible that some parents' characteristics might contribute to determining the relations founded in this sample. Moreover, children with high levels of ED traits could be less sensitive to parents' discipline, making them more prone to use negative parenting practices over time.

Other limitations need to be highlighted. Data were drawn from a community sample that included mostly Italian families and children within a limited age range, limiting the generalizability of the findings. Replication in clinic-referred samples of children is warranted. Likewise, we only explored association with ED, as assessed by the SDQ. Future replication efforts with different measures of ED in children are needed.

Overall, we found empirical support for the impact of parenting on the ED in children. These findings have the potential to contribute to the advances in the research of the development of ED and the improvement of preventive and clinical interventions. By exploring environmental dimensions implicated in the presence of ED in children, we can map more precisely the

mechanisms underpinning ED, which themselves could be targeted through intervention and treatment.

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