
Parents' Parenting Awareness and Depressive Symptoms in Treatment-Referred Youth

La conscience du rôle parental chez les parents et les symptômes dépressifs chez les jeunes dirigés vers le traitement

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ABSTRACT

Research links parenting to youth psychopathology, yet scant research has considered the child, parent reports, and observational measures of parenting to elucidate the complex patterns of risk. This study investigates how the interaction of parents' own reports and observations of parenting relate to youth depressive symptoms. Parents whose self-reports were most discrepant from their observed parenting had children with higher depressive symptoms. Awareness or acknowledgement of one's own parenting may be one consideration for the impact of parenting on youth functioning, and contrasting observed parenting with family members' reports may make a valuable contribution to the assessment and treatment of youth.

RÉSUMÉ

Quoique la recherche associe le rôle parental à la psychopathologie chez les jeunes, peu d'études examinent l'enfant, les autodéclarations des parents, et les mesures d'observation de la parentalité pour élucider les motifs complexes du risque. Cette *étude examine* la relation entre les symptômes dépressifs des jeunes et l'interaction des autodéclarations de leurs parents et les observations de parentalité. Les enfants démontraient des symptômes de dépression plus élevés dans les cas où les autodéclarations de leurs parents étaient les plus divergentes de la parentalité observée. La prise de conscience ou la reconnaissance de sa propre façon de parenter pourrait être une considération dans l'impact du rôle des parents sur la fonctionnement des jeunes, et comparant la conduite parentale observée avec les autodéclarations des membres de la famille peut contribuer significativement à *l'évaluation et le traitement des jeunes*.

Current models of risk for internalizing difficulties in youth are complex and multifactorial, implicating genetic, neurobiological, cognitive, and family context factors, among others. Within these complex models, decades of research have convincingly linked parenting experiences to mood psychopathology (e.g., Bayer, Sanson, & Hemphill, 2006; McLeod, Weisz, & Wood, 2007; McLeod, Wood, & Weisz, 2007). Yet this field of research is plagued with methodological inconsistency, and scant research has carefully considered child, parent, and observational

measures of parenting behaviours to elucidate patterns of risk. Understanding how parenting and, more specifically, parents' reports of their own parenting relates to internalizing difficulties such as depressive symptoms is important, given that youth are most often referred to treatment by parents (Stanger & Lewis, 1993). Parents are also typically primary informants and often involved in youth treatment (De Los Reyes & Kazdin, 2005; Stanger & Lewis, 1993).

The current study focuses on parents' awareness and acknowledgement of their observed parenting behaviours, with the goal of better elucidating the role of parenting with youth at risk for depressive symptoms. This research aims to inform how to best utilize multiple perspectives of parenting in assessment, formulation, and intervention with youth.

PARENTING AND YOUTH MOOD DIFFICULTIES

Internalizing difficulties comprise many unobservable symptoms (e.g., sadness, loss of pleasure) and are often overlooked and more difficult to assess than comparatively more observable symptoms of distress (Stanger & Lewis, 1993). Mood disorders can have a much earlier onset than once believed, with onset commonly occurring between 13 and 15 years of age (Lewinsohn, Hops, Roberts, Seely, & Andrews, 1993), and early detection and treatment may improve prognosis considerably (e.g., Le & Boyd, 2006). Depressive symptoms are important harbingers of disorder, particularly amongst treatment-referred youth (e.g. Pine, Cohen, Cohen, & Brook, 1999) and will be the focus of the current investigation. To facilitate early identification and promotion of positive emotional development, understanding patterns of risk contributing to the development of depressive symptoms and disorders is critical. Given the central role parents play throughout the process of referral, assessment, diagnosis, and intervention, understanding the role of family context in the development and maintenance of internalizing difficulties is a key consideration.

Research repeatedly supports associations between parenting and internalizing difficulties in youth (e.g., Bayer et al., 2006; Kiel & Maack, 2012; McLeod, Weisz, et al., 2007; McLeod, Wood, et al., 2007), with parental responsiveness and psychological control consistently emerging as important variables for understanding this relation. Parental responsiveness encompasses feelings of closeness, expression of warmth and acceptance toward the child, and devoting attention to the child's needs (Bogenschneider & Pallock, 2008). Low parental responsiveness is found to undermine a child's self-esteem and ability to regulate emotions, and leads to feelings of helplessness and negative beliefs about the self, thus contributing to increased risk for depression (Hipwell et al., 2008; Marton & Maharaj, 1993; McLeod, Weisz, et al., 2007).

Psychological control refers to harsh discipline, criticism, intrusive behaviour, excessive regulation of the child's activities, and a minimal level of granting of age-appropriate autonomy (Bayer et al., 2006). It is found to reduce perceptions of mastery, self-efficacy, and personal control, and to increase feelings of helplessness.

ness and symptoms of depression (Barber & Harmon, 2002; McLeod, Weisz, et al., 2007). What is less clear is how various perspectives (e.g. child, parent, observer) on these parenting behaviours may be differentially associated with youth depressive symptoms. Better understanding such relations would contribute to theory about the developmental context of depression and would be relevant for decision-making in clinical practice.

ASSESSING PARENTING BEHAVIOURS

Across studies connecting parenting behaviours to child outcomes, parenting may be assessed either through parents' reports of their own behaviour, child reports, observational methods, or a composite score combining more than one source. This variability is of concern, given research highlighting how different reports of parenting relate differentially to child outcomes (McLeod, Weisz, et al., 2007; McLeod, Wood, et al., 2007). Some argue that the child's interpretation of parenting should be the focus, having the greatest influence on child outcomes (e.g., Glasgow, Dornbusch, Troyer, Steinberg, & Ritter, 1997; Schaefer, 1965), and some research suggests that child reports of parenting are more closely related to observer ratings of parenting than parent self-reports, perhaps due to parents' self-serving biases (Bögels & van Melick, 2004; Gonzales, Cauce, & Mason, 1996). Indeed, research suggests that parents may make attributions regarding their own parenting that enhance a positive self-view and protect their self-esteem (Montemayor & Ranganathan, 2012). Yet, in clinical settings, emphasis is typically placed on parent report of the family context and child functioning. Research that is able to inform how these parent reports might be best utilized would be of considerable theoretical and applied value.

Some parents' reports of parenting may more closely align with their child's view of parenting than others. One consideration may be related to parent awareness or acknowledgement of their own behaviour and how this relates to child emotional functioning. Baumeister (1989) suggested that a positive self-bias can contribute to healthy functioning, when that bias is at an optimal level. However, deviations from this optimal level can be associated with a variety of psychosocial risks and difficulties.

Extending this work, it may be that parents who deviate from this optimal level of positive self-bias regarding parenting, and thus lack awareness or are unable to acknowledge the limitations of their own parenting, may have children who evidence increased emotional dysfunction as well. Specifically, parents who evidence low levels of positive, or high levels of negative, parenting *and* are unaware or do not acknowledge these behaviours may have a particularly deleterious effect on the emotional functioning of their children compared to parents who engage in these parenting behaviours but are aware of and acknowledge their parenting limitations.

Indeed, one study found that mothers who reported minimal relationship difficulties, yet were observed to be insensitive toward their infants, had infants who demonstrated the highest levels of avoidant attachment (Bailey, Redden, Pederson,

& Moran, 2016). Parent awareness and acknowledgement of parenting behaviour is a difficult construct to capture. One way to provide a novel glimpse of this phenomenon would be by contrasting parents' reports of parenting behaviours with their child's report of parenting and with observed parenting.

In clinical practice with youth and families, evaluating parenting is a necessary step in treatment planning. The family context is modifiable and, given research suggesting the importance of family cohesion in promoting resilient development (Carbonell et al., 2002), family context may be one important area of focus when considering intervention with youth referred for treatment. Specifically, a better understanding of how various perspectives of parenting contribute to youth emotional functioning may be useful for aiding clinicians in determining how to proceed with an effective treatment plan. It may be that youth's *perception* of parenting versus experience of specific behaviours may have the most impact on emotional functioning (Bögels & van Melick, 2004) and that addressing family members' perceptual accuracy of parenting behaviours may be as important to treatment and clinical outcomes as addressing specific parenting behaviours themselves.

Discrepancies between parents' self-reported and child-reported or observed parenting behaviours may suggest that parents are unaware of or unable to acknowledge their own parenting behaviours. The present study seeks to examine whether these discrepancies help account for the lack of direct association often found between parent report of parenting and youth depressive symptoms.

To confirm this lack of association in the present study, we first examined the bivariate associations between youth- and parent-reported parenting and depressive symptoms, expecting youth-reported parenting to be more strongly associated with youth depressive symptoms than parent report of parent behaviour. Next, to help explain why parent-report may not associate with youth depressive symptoms at a bivariate level, parent self-reported parental responsiveness and psychological control are contrasted with youth-reported, as well as a behavioural indicator of these parenting styles and related to youth-reported depressive symptoms. We hypothesized that both child-reported and observed parenting would moderate the relation between parent report of parenting and youth depressive symptoms, such that when parents perceive their behaviours in a way that is inconsistent with how their children perceive their parenting, or with observations of their parenting, their children report higher levels of depressive symptoms than when parent report was more consistent with child perception or with observed parent behaviour.

METHOD

Participants

Participants were youth aged 9–14, whose parents were seeking mental health intervention for the child either through their school guidance office ($n = 7$) or a community mental health agency ($n = 35$), and their parent. In both cases, these parents were provided information and brochures about the study and were asked

to follow up with the research team if interested in participation. Exclusionary criteria as shared on initial contact with all parents included diagnosis of a pervasive developmental disorder or severe learning disability.

Of the 57 youth whose families expressed interest in participating, 46 youth and their parent participated in the study. Four participants were excluded due to not meeting study criteria (1 developmental disability, 2 guardians who were not parental figures, 1 failed to participate in Session 2 of the study), leaving a final sample of 42 children (25 boys and 17 girls) and 42 parents (37 mothers and 5 fathers; families decided which parent would participate in the study).

Children ranged in age from 9 to 14 ($M = 11.62$, $SD = 1.29$). Consistent with the demographics in this southern Ontario community, the participants were mainly Caucasian ($n = 39$), but also included Black or African Canadian ($n = 1$), First Nations ($n = 1$), and one participant who indicated "Other" ethnicity ($n = 1$). Nineteen parents in the study were married, 11 were separated, 11 were divorced, and 1 was remarried. Educational attainment of the participating and nonparticipating parent included completion of a graduate degree ($n = 5$), at least some postsecondary education ($n = 50$), high school diploma ($n = 13$), some high school ($n = 11$), and elementary school ($n = 1$). Four participants did not provide education information.

Diagnostic status of youth participants was assessed via the K-SADS Interview. Seventy-eight percent ($n = 32$) of youth met DSM-IV criteria for at least one past or current diagnosis. Nineteen percent of youth met criteria for a current major depressive disorder or depressive episode ($n = 8$), and 33% ($n = 14$) met criteria for a previous major depressive disorder or depressive episode. Criteria for a current anxiety disorder were met in 29% of youth ($n = 12$), and 26% ($n = 11$) for a past anxiety disorder. Twenty-one percent ($n = 9$) of youth met criteria for a past or current behaviour disorder (excluding ADHD). Thirty-one percent ($n = 13$) of youth met criteria for multiple diagnoses.

Measures

YOUTH MOOD

Diagnostic status. Diagnostic status of youth was assessed using the Schedule for Affective Disorders and Schizophrenia for School Aged Children – Present and Lifetime (K-SADS-PL; Kaufman et al., 1997). The K-SADS-PL is a well-known and reliable semistructured diagnostic interview assessing current and past episodes of psychopathology in children and adolescents according to DSM-III-R and DSM-IV criteria (Kaufman et al., 1997). Interviewers were trained clinical psychology graduate students. To examine interrater reliability, 20% of the interviews were coded by two raters. Analysis indicated very good consistency among raters, Kappa = .94, $p < .001$. Current diagnosis of a unipolar mood disorder was found to correlate with depression symptoms as measured by the CDI, $r = .42$, $p = .008$.

Depressive symptoms. To assess youth depressive symptomology, youth completed the Child Depression Inventory (CDI; Kovacs, 1981), which is a widely used,

27-item self-report scale designed for youth aged 7–17 to assess behavioural, affective, and cognitive symptoms of depression in children over the preceding 2 weeks. Each item contains three statements scored on a 3-point scale (0 = *absence of symptoms*, 1 = *mild symptom*, 2 = *definite symptom*). The CDI evidences high internal consistency, test-retest reliability and construct validity (Lobovits & Handal, 1985; Saylor, Finch, Spirito, & Bennett, 1984). The Cronbach's alpha was .92 in the present sample.

PARENTAL RESPONSIVENESS AND PSYCHOLOGICAL CONTROL

Parent and youth report. To assess parenting behaviours, subscales from the shortened version of the Child Report of Parent Behaviour Inventory (CRPBI; Schludermann & Schludermann, 1988) related to responsiveness (e.g., “My mother makes me feel better after talking over my worries with her”) and psychological control (e.g., “My father brings up past mistakes when he criticizes me”) were completed by both youth and parents. In this widely used measure, youth were asked to indicate the extent to which they agreed with 14 statements (6 responsiveness, 8 psychological control) separately for both mother and father on a scale ranging from 1 (*disagree*) to 5 (*agree*). Though youth reported on parenting for both parents, youth report was matched to the reporting parent *only* (37 mother, 5 father) for all analyses.

Parents rated the same 14 statements reworded to reflect perceptions of their own behaviour toward their child. The CRPBI has demonstrated good reliability, internal consistency (Schludermann & Schludermann, 1970), and convergent and discriminant validity (Fauber, Forehand, Thomas, & Wierson, 1990). In the present study, the Cronbach's alphas for parent report on the responsiveness and psychological control subscales were both .76. For child report, the Cronbach's alphas for the responsiveness subscale were .87 for ratings of mothers and .91 for ratings of fathers. For the psychological control subscales, the Cronbach's alphas were .78 for ratings of mothers and .76 for ratings of fathers.

Observational measure. Parenting behaviours were coded from the Five Minute Speech Sample (FMSS; Magana, Goldstein, Karno, & Miklowitz, 1986), in which the parent was asked to speak about their child and the parent-child relationship while being audiotaped for an uninterrupted 5-minute period. Speech samples were coded using the Family Affective Attitude Rating Scale (FAARS; Bullock, Schneiger, & Dishion, 2005).

For the present study, samples were coded according to the parental criticism and warmth subscales using a global coding strategy in which 12 items (6 criticism, 6 warmth) were rated on a 9-point Likert scale ranging from 1 (*not present*) to 9 (*multiple examples*). Parental criticism is a facet of psychological control, and psychologically controlling parents tend to manipulate children to adhere to parental standards through negative tactics that include harsh criticism (Bayer et al., 2006). Also, a key factor in the conceptualization of parental responsiveness is the expression of warmth toward the child (Bogenschneider & Pallock, 2008).

Undergraduate coders were trained according to the written training manual (Bullock et al., 2005). To examine interrater reliability, 20% of the speech samples were coded by two raters. Excellent interrater reliability was evidenced between coders (warmth subscale $ICC = .98, p = < .001$; criticism subscale $ICC = .95, p = < .001$). The FAARS evidences good reliability, internal consistency, and construct validity (Pasalich, Dadds, Hawes, & Brennan, 2011; Waller, Gardner, Dishion, Shaw, & Wilson, 2012).

Procedure

Prior to participation in the study, parents and children were given information about involvement. Written informed consent was obtained from a parent or guardian of the youth participating in the study, and assent to participate was provided by the youth.

The study took place over two sessions. In the first session, a clinical psychology graduate-level research assistant met with parents to complete a variety of measures including a brief background interview, the parent version of the CRPBI, and the FMSS, among other study measures, as these data were part of a larger data set. For the FMSS, parents were asked to speak about their child and the parent-child relationship while being audiotaped for a 5-minute period as outlined by Bullock et al. (2005). In contrast to the procedure described by Bullock et al. (2005), parents were asked to speak uninterrupted without the experimenter present to create the most optimal conditions for parents to speak freely and to eliminate variability due to different experimenters being present during the process. This method of delivering the FMSS task has been supported in other studies (e.g. Pasalich et al., 2011).

While parents completed these measures, youth completed a variety of measures, including the CRPBI, on a netbook computer, with an undergraduate-level research assistant available to provide instructions and aid if needed. The total time for the first session was approximately 90 minutes.

During the second session, youth completed the K-SADS interview with a clinical psychology graduate-level research assistant trained to reliability by the academic supervisor and clinical psychologist who supervised diagnostic decisions in regular supervision meetings. Following this, participants completed the CDI. The total time for Session 2 was approximately 90 minutes.

Upon completion, each parent was compensated with \$20, and each youth received a movie pass of the same value. In addition, each family was mailed a clinical research summary and was given the opportunity to discuss the summary with the registered clinical psychologist overseeing the study.

RESULTS

Descriptive Characteristics of Sample

Descriptive statistics and intercorrelations of study variables are presented in Table 1 (descriptive statistics and intercorrelations of demographic variables are

available upon request). Given the limited size and clinical nature of the sample in which outliers would not be unexpected in the data, no outliers were removed. This was further supported when the 5% trimmed means were examined and yielded only minor changes to the means (ranging from no change to 0.8). The effects of referral source, sex, age, and parental marital status in relation to the parenting and depressive symptom measures used in the study were examined. Given the limited diversity of the present sample, ethnicity was not informative and was not examined here.

Table 1
Means, Standard Deviations, and Intercorrelations Among Measures of Parenting Behaviours and Youth Depressive Symptoms

| Variables | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|------------------------------|--------|------|--------|-------|------|------|------|
| 1. Parent Report: Responsive | – | | | | | | |
| 2. Parent Report: Control | -.07 | – | | | | | |
| 3. Youth Report: Responsive | .54*** | -.04 | – | | | | |
| 4. Youth Report: Control | -.06 | .003 | -.36* | – | | | |
| 5. Speech Sample: Warmth | .10 | .04 | -.01 | -.03 | – | | |
| 6. Speech Sample: Criticism | -.48** | -.15 | -.42** | .46** | -.31 | – | |
| 7. CDI | -.08 | -.15 | -.14 | .49** | -.03 | .32 | – |
| <i>M</i> | 4.25 | 2.01 | 4.13 | 1.80 | 4.97 | 2.32 | 8.80 |
| <i>SD</i> | .51 | .60 | .81 | .68 | 1.69 | 1.22 | 8.41 |

* $p < .05$. ** $p < .01$. *** $p < .001$.

Independent-samples *t*-tests showed that participants who were school-referred did not differ significantly from those who were referred from community agencies in age, depressive symptoms on the CDI, or reported parenting (all $ps > .05$), and that child gender was not significantly related to any measures of interest (all $ps > .05$). Using Pearson correlations, child's age was found to relate to parent report of their own responsiveness, $r = -.33$, $p = .03$, with responsiveness lower for older, compared to younger, children. One-way ANOVA analysis revealed significant differences in child-reported parental psychological control, $F(2, 39) = 4.40$, $p = .02$, based on parental marital status. Post-hoc comparisons using Tukey's HSD showed that child-reported parental psychological control was significantly higher for the divorced/remarried families ($M = 2.10$, $SD = .84$) than for the married families ($M = 1.49$, $SD = .50$; $p = .03$). Thus, analyses yielding medium effect sizes were reanalyzed, controlling for child age and parental marital status, to determine whether results held after accounting for this covariance.

Parent versus Youth Perspectives on Parenting and Youth Depressive Symptoms

Preliminary analyses were conducted by examining the bivariate relations among youth- and parent-reported parenting and youth depressive symptoms.

Youth-reported depressive symptoms were significantly correlated with child report of parental psychological control, $r = .49$, $p = .001$, but not with child report of parental responsiveness, $r = -.14$, ns . Consistent with previous research and hypothesis, no parent-reported measures of parenting were found to correlate with youth depressive symptoms (all $ps > .05$; see Table 1).

To further explore these relations, two hierarchical multiple regression analyses were conducted according to the steps outlined by Keith (2006) to determine whether youth-reported parental responsiveness and psychological control would moderate the relation between parent report of these behaviours and youth depressive symptoms. Prior to these analyses, linearity of relations between variables was examined using scatterplots and all parenting measures and control variables were centred to address possible violations of multicollinearity (Aiken & West, 1991). As part of the regression analyses, independence of observations was examined using the Durbin-Watson statistic. For all regression analyses, $1.5 < d < 2.5$, revealing no substantive problems with autocorrelation. Interactions were plotted using procedures outlined by Dawson (2014) and using an online resource (www.jeremydawson.com/slopes.htm).

In the first analysis, parent-reported responsiveness and youth-reported responsiveness were entered into the first block of the regression to predict youth depressive symptoms on the CDI. Overall this model did not significantly predict CDI scores, $R^2 = .02$, $F(2, 37) = 0.34$, ns . The addition of the product term of parent-reported responsiveness by youth-reported responsiveness in the second block of the regression equation also was not statistically significant, $\Delta R^2 = .01$, $\Delta F(1, 36) = 0.41$, ns .

In the second analysis, parent-reported psychological control and youth-reported psychological control were entered into the first block of the regression to predict youth depressive symptoms. Overall this model significantly predicted CDI scores, $R^2 = .26$, $F(2, 37) = 6.51$, $p = .004$. In the second step, addition of the product term of parent-reported psychological control by youth-reported psychological control resulted in a statistically significant change in variance of CDI scores, $\Delta R^2 = .08$, $\Delta F(1, 36) = 4.13$, $p = .05$. Both youth-reported psychological control and the product term emerged as significant predictors of youth depressive symptoms in the model (see Table 2). The overall model accounted for 34% of the variance, $F(3, 36) = 6.08$, $p = .002$.¹ Figure 1 displays the interaction, graphed by centring each variable one standard deviation below and above its mean (Aiken & West, 1991; Dawson, 2014). When parents reported low levels of psychological control, youth depressive symptoms were lowest when the youth report concurred with this parental self-assessment, but were highest when youth reported that parents in fact exerted high psychological control.

Parent Perspective versus Observed Parenting and Youth Depressive Symptoms

Two hierarchical multiple regression analyses were conducted to determine whether parental warmth and criticism, coded from parental descriptions on the FMSS, would moderate the relation between parents' reports of responsiveness

Table 2
Summary of Hierarchical Regression Analyses for Effects of Parent- and Youth-Reported Responsiveness and Psychological Control and Products of These on Youth Depressive Symptoms

| Variable | Model 1 | | | Model 2 | | |
|--------------------------|---------|------|---------|---------|------|---------|
| | B | SE B | β | B | SE B | β |
| 1 Parent: Responsiveness | -.04 | 3.25 | -.002 | -.86 | 3.52 | -.05 |
| Youth: Responsiveness | -1.40 | 2.12 | -.13 | -1.79 | 2.22 | -.17 |
| Parent x Youth | | | | -2.30 | 3.60 | -.13 |
| R^2 | | | .02 | | | .03 |
| F for change in R^2 | | | .34 | | | .41 |
| 2 Parent: Control | -1.88 | 2.04 | -.13 | -.71 | 2.04 | -.05 |
| Youth: Control | 6.08 | 1.76 | .49*** | 4.80 | 1.80 | .39** |
| Parent x Youth | | | | -6.80 | 3.34 | -.31* |
| R^2 | | | .26 | | | .34 |
| F for change in R^2 | | | 6.51** | | | 4.13* |

Note. All variables centered except for product.

* $p < .05$. ** $p < .01$. *** $p < .001$.

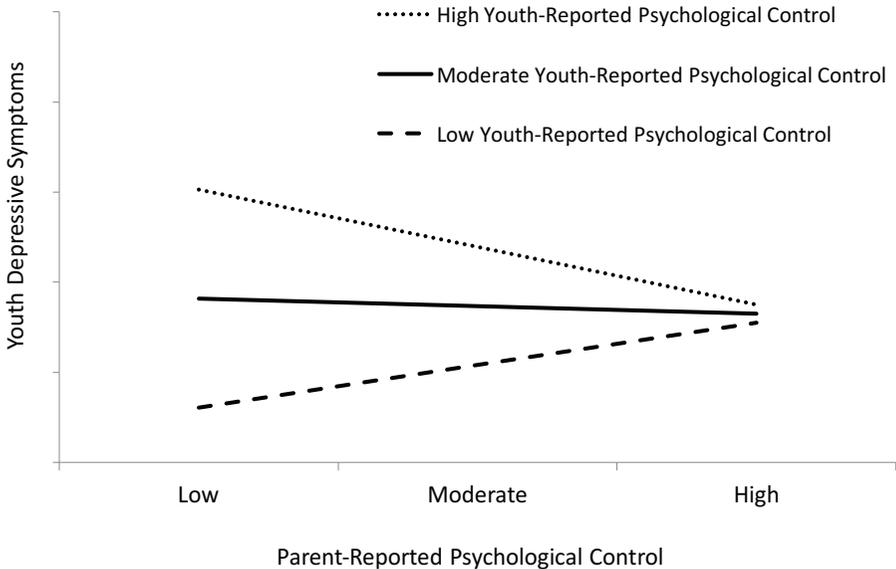


Figure 1. Relation between youth depressive symptoms and parent- and youth-reported psychological control when youth report low, moderate and high levels of psychological control by their parent

and psychological control and youth depressive symptoms. Prior to these analyses, all parent-reported and observational measures of parenting were centred (Aiken & West, 1991). Regression analyses were conducted according to the steps outlined by Keith (2006), and interactions were plotted using procedures outlined by Dawson (2014).

The first analysis involved parent-reported responsiveness and parental warmth coded from the FMSS, predicting youth depressive symptoms on the CDI. Overall this model did not significantly predict CDI scores, $R^2 = .01$, $F(2, 34) = 0.16$, *ns*. Addition of the product term of parent-reported responsiveness by observed warmth in the second step also did not yield a statistically significant increase.

In the second analysis, the interaction between parent-reported psychological control and criticism in the FMSS was examined to predict youth depressive symptoms on the CDI. Parent report of parental psychological control and observed parental criticism were entered into the first block of the regression to predict CDI scores. This model did not significantly predict CDI scores, $R^2 = .14$, $F(2, 34) = 2.68$, $p = .08$. Addition of the product term of parent-reported psychological control and observed criticism in the FMSS in the second step resulted in a statistically significant change in prediction of CDI scores, $\Delta R^2 = .11$, $\Delta F(1, 33) = 4.80$, $p = .04$.

In addition to this product term, observed criticism also emerged as a unique predictor of youth depressive symptoms in the overall model (see Table 3), which accounted for 25% of the variance in youth CDI scores. The interaction is displayed in Figure 2. Similar to the previous interaction, when parents reported low psychological control, the outcome for children depended on whether or not observationally assessed parental criticism concurred with parental self-estimates. When observed criticism was also low, youth reported few depressive symptoms. Conversely, when observed criticism was high, thus contradicting parental report, youth reported more depressive symptoms.

DISCUSSION

The central objective of this study was to examine whether the association between parenting and youth depressive symptoms may be a function of parent awareness/acknowledgement of their own parenting behaviours. Parent-reported parenting was not related to youth depressive symptoms, but child-reported parenting was. These findings are consistent with the view that the child *perspective* on parenting behaviours, as opposed to parent perspective or even observed behaviour, may be most relevant for understanding youth internalizing difficulties, which is not surprising given that the child's views on self, relationships, and the world loom large in the vulnerability to depression in most models (e.g., Abela & Hankin, 2011). Though it should be noted that shared method variance should be taken into consideration, given that children provided the report of both parenting and depressive symptoms, these results support that parenting measures based on various informant perspectives should not be considered interchangeable across

Table 3
Summary of Hierarchical Regression Analyses for Effects of Parent-Reported and Observed Parenting, and Products of These on Youth Depressive Symptoms

| Variable | Model 1 | | | Model 2 | | |
|--------------------------|---------|------|---------|---------|------|---------|
| | B | SE B | β | B | SE B | β |
| 1 Parent: Responsiveness | -1.43 | 2.72 | -.09 | -.87 | 2.97 | -.06 |
| FMSS: Warmth | -.14 | .88 | -.03 | -.10 | .89 | -.02 |
| Responsiveness x Warmth | | | | .71 | 1.43 | .09 |
| R^2 | | | .01 | | | .02 |
| F for change in R^2 | | | .16 | | | .25 |
| 2 Parent: Control | -2.90 | 2.47 | -.19 | -1.42 | 2.43 | -.09 |
| FMSS: Criticism | 2.17 | 1.14 | .30 | 2.56 | 1.10 | .36* |
| Control x Criticism | | | | -2.99 | 1.37 | -.35* |
| R^2 | | | .14 | | | .25 |
| F for change in R^2 | | | 2.68 | | | 4.80* |

Note. All variables centered except for product.

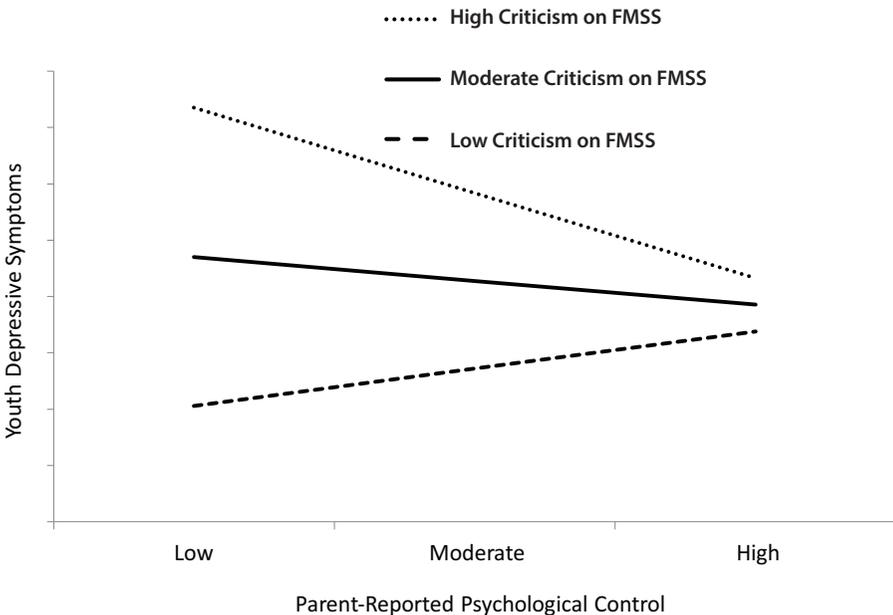


Figure 2. Relation between youth depressive symptoms and parent-reported psychological control in parents evidencing low, moderate and high levels of psychological control in the form of expressed criticism during the 5-minute speech sample

research studies, particularly for examining associations between parenting and youth functioning.

Although parent reports of responsiveness and psychological control were unrelated to child depressive symptoms, we hypothesized that parents' report of parenting behaviour would be a better predictor of youth functioning for some parents versus others. Thus, youth-reported and observed parenting behaviour were examined as potential moderators between parent-reported parenting behaviours and child depressive symptoms. Analyses contrasting parents' self-reported parenting and child-reported or observed parenting behaviours were conducted in an attempt to capture the level of parental awareness or ability to acknowledge their own parenting behaviours.

Although parental awareness of their own level of responsiveness did not emerge as an informative construct, child-reported and observed psychological control were each found to moderate the relation between parent-reported psychological control and youth depressive symptoms. This suggests that parents who reported low levels of psychological control but who were perceived by their children, or were observed during a 5-minute speech sample, to exhibit higher levels of criticism had children who reported higher levels of depressive symptoms compared to parents whose self-reports were more consistent with their observed behaviour.

When parents actively engage in negative parenting behaviours, such as psychological control, it may be that a lack of insight into these behaviours is even more important for predicting depressive symptoms in their children above and beyond the negative behaviours themselves. In addition to suggesting that the relation between parenting and youth functioning is more complex than can be captured in research studies examining direct associations between these constructs, these findings may have important implications in clinical practice with youth and their families. Elucidating the appropriate targets for intervention (i.e., objective behaviours versus subjective experience of parenting versus level of awareness) is critical to effective treatment. This could suggest that interventions that increase parents' awareness of their parenting may be as beneficial to promoting youth well-being as interventions teaching specific parenting techniques.

Parent insight and acknowledgement of their parenting may influence youth outcomes in a variety of complex ways. First, parents aware of their negative parenting behaviours may be more likely to exhibit reparative behaviours following instances of negative parenting, which may help mitigate damage. Failure to exhibit reparative behaviours to better meet the child's needs may increase the child's risk for poor functioning outcomes (e.g., Lyons-Ruth, Bronfman, & Parsons, 1999).

As well, parents who tend to exhibit an overly positively biased self-view may be especially likely to place blame on their child for issues within the parent-child relationship, rather than acknowledge the contribution of their own behaviour (Schütz, 1999). Discrepant child-parent perceptions may prevent children from feeling understood, appreciated, and accepted by their parent, which may impact the development of a secure attachment relationship (Bailey et al., 2016).

Finally, parents who present self-views that are notably discrepant from their behaviours may be highly confusing to children. Such parents may be difficult for children to understand and their behaviour difficult for children to cognitively organize, particularly when these parents actively engage in psychologically controlling behaviours. Thus, beyond the potential harm of negative parenting practices in themselves, it may be that when observed parenting and parent perception of their own parenting misalign, the perception that this creates for the youth regarding their parent is particularly relevant to the experience of depressive symptoms. Further research clarifying *why* parents' discrepant view of their own parenting may be associated with youth depression (e.g., whether parents experience concern in regards to negative parenting practices, or make attempts to decrease or repair instances of negative parenting) would be beneficial in clarifying the link between parenting and youth depression.

Limitations

The difficult-to-recruit treatment-referred sample is a strength of the current study, as it provides a rich glimpse of parenting and child emotional functioning in a sample of youth that would typically be seen in clinical practice, and the rigorous multimethod approach, incorporating child-report, parent-report, and observed parenting and examining their interactive influence on child emotional functioning, was novel. Yet the sample size may have influenced the power to detect significant patterns. While psychological control may be particularly detrimental to youth functioning compared to low levels of responsiveness, it is presently unclear whether limited power may help to account for the failure to find other statistically significant associations. There has been a shift away from the $p < .05$ criterion in favour of replication studies to support research findings (Cummings, 2014; Stanley & Spence, 2014).

Our replication of the finding that child-reported and observed psychological control moderate the relation between parent-reported psychological control and youth depressive symptoms using two different analyses adds strength to the interpretation of these results. However, given that this is a partial replication using the same sample and outcome measure, further replication is necessary to determine the robustness of the associations explored here.

Additionally, only one parent, who was also concerned and seeking treatment for their child, participated in the present study. It is possible that the observed associations may have differed significantly if parenting measures were collected for nonparticipating parents. Indeed, there was a significant difference in youth-reported responsiveness of the participating versus nonparticipating parent, $t(41) = 4.13$, $p < .001$. There was no difference in youth-reported psychological control ($p > .05$). Yet, in real-world treatment settings it is often this very same referring parent from whom clinicians solicit information to help form a case formulation and treatment plan. Finally, the majority of parent participants in the present study were mothers and, as a result, we were unable to examine whether patterns of results differed for mothers versus fathers or, further, wheth-

er mothers and fathers evidence a different pattern of results for sons versus daughters.

Implications for Counselling Practice

The present study is in line with previous research suggesting that different informants may provide disparate perspectives of parenting and that their opinions should not be used interchangeably when working clinically with youth and their families. Rather, understanding the unique family context from which these various perceptions arise is likely to be valuable in implementing effective treatment plans.

These results suggest that working directly with each family member's individual perceptions regarding the parenting context may be warranted above and beyond targeting specific parenting practice. In particular, helping parents to become more aware of and willing to acknowledge limitations in their own parenting practices may be a particularly important target of intervention. This increase in self-awareness may allow parents to better recognize when they need parenting support or improvement in their parenting skills. Parents may also be better able to take responsibility for their actions and engage in more positive reparative behaviours with their children after they become aware of engaging in negative parenting practices. Overall, a clinical focus on each individual's unique view may help decrease discrepant perceptions, increase family cohesion, and promote both individual and family resilience.

CONCLUSION

In conclusion, the results here may help elucidate the inconsistent association between parenting and child depressive symptoms. Parents' awareness and/or acknowledgement of their own negative parenting behaviours may be one consideration for the impact of parenting behaviours on youth emotional functioning. Contrasting observed parenting behaviours with the perspectives reported by various family members may be a valuable contribution to the assessment and treatment of youth by guiding clinicians toward more nuanced and potentially helpful formulations and intervention strategies. Further research examining multiple perspectives of parenting and the complex ways these perspectives may interact to influence youth development is needed to more fully explore the influence of the parenting context on child emotional functioning.

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Note

- 1 Marital status was found to relate to youth-reported psychological control. Entering marital status into the first step of the regression as a control produced no impact on the pattern or level of significance of results.

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