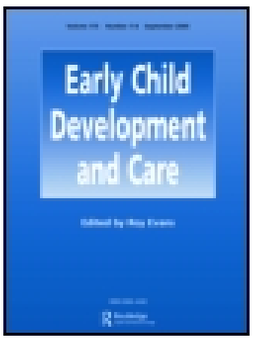

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The impact of children's socioemotional development on parenting styles: the moderating effect of social withdrawal

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ABSTRACT

This study focused on associations between children's socioemotional development (prosocial behaviour, internalizing and externalizing problems) and parenting styles (affection, behavioural control, and psychological control), and the moderating role of children's social withdrawal (as a temperamental characteristic) in these associations. Children's socioemotional development (n = 314) were rated by teachers at three-time points (grades 1–3). Parents completed questionnaires measuring their parenting styles at the same three-time points. The level of social withdrawal was obtained at the end of kindergarten from teachers' reports. Panel analysis showed that prosocial behaviour was associated with a higher level of affection, while externalizing problems were associated with a higher level of behavioural control. Among children with a high level of social withdrawal, prosocial behaviour predicted high maternal psychological control, while internalizing problems predicted high paternal psychological control. However, among children with a low level of social withdrawal, socioemotional development had no impact on parenting styles.

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Prosocial behaviour; internalizing problems; externalizing problems; parenting styles; social withdrawal

Introduction

It is well known that parenting fundamentally influences children's socioemotional development and behavioural adjustment (Bornstein, Putnick, & Suwalsky, 2018). Parenting is always realized through social interaction, which never happens in isolation. Children's behaviour and temperamental characteristics might thus shape or evoke parenting, and parenting may mould children's behaviour. Although it has been suggested that bidirectional relations between parenting and children's behaviours and temperamental characteristics channel developmental pathways (e.g. Klein et al., 2018; Sameroff, 2009), there are important gaps in our knowledge.

First, most studies have focused on parenting effects, viewing children as recipients of parenting (for a review, see Laible et al., 2017; Slagt, Dubas, Deković, & van Aken, 2016; Zarra-Nezhad et al., 2014). Second, much less is known about the impact of child behaviours on parenting, especially from longitudinal studies during middle childhood (e.g. Lansford et al., 2011; Newton, Liable,

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Carlo, Steele, & McGinley, 2014; Pastorelli et al., 2016; Serbin, Kingdon, Ruttle, & Stack, 2015), which is a time of tremendous socioemotional development and changes in the parent–child relationship (Richardson, 2005). Third, to the best of our knowledge, no study has fully considered the impact of children's positive and negative behaviours on both mothers' and fathers' positive and negative parenting. Finally, it has been suggested that temperament characteristics such as social withdrawal, i.e. consistent display of solitary behaviour when encountering familiar and/or unfamiliar peers and adults across situations and over time (Rubin & Coplan, 2004), can moderate bidirectional relations between children's development and parenting (Rubin, Coplan, & Bowker, 2009).

Although a lot is known about the role of social withdrawal and the role of children's socioemotional development, to our knowledge, no studies have examined their joint effects on parenting styles. Evidence shows that parents may use an over-solicitous style of parenting (characterized by over-controlling, intrusive, and insensitive parenting) towards socially withdrawn children (for a review, see Rubin, Root, & Bowker, 2010). Therefore, exploring the moderating role of social withdrawal in middle childhood is an important step in determining how parents react to socially withdrawn children and whether these parents would benefit from ameliorative intervention. In this study, we addressed these limitations by examining how children's socioemotional development is associated with parenting styles, and whether these associations depend on the child's level of social withdrawal.

Children's socioemotional development and parenting styles

The development of socioemotional competences in children can be detected through a variety of positive and negative behaviours. Positive behaviours (e.g. sharing, helping and cooperation) can be described with the concept of prosocial behaviour (Hammond, Waugh, Satlof-Bedrick, & Brownell, 2015). Negative behaviours are typically described in terms of externalizing and internalizing problems. Externalizing problems are defined as a variety of disruptive behaviours (e.g. aggressiveness, conduct problems, and impulsivity), that reflect the person acting negatively on his/her external environment (Moffitt et al., 2011). Internalizing problems (e.g. depressive, anxiety-like symptoms), in turn, are behaviours that are directed to the self rather than the outside world, and are characterized by difficulties in coping with negative emotions (Zahn-Waxler, Klimes-Dougan, & Slattery, 2000).

Current theoretical models of developmental psychopathology include the idea of transactional processes between children and their environment over time. Parents are the most important environmental factors in a child's development. In the literature, the focus has been mainly on the role of three parenting style dimensions on children's socioemotional development (e.g. Aunola & Nurmi, 2005; Barber, 1996; Zarra-Nezhad et al., 2014): (1) affection, i.e. parental warmth, acceptance, support, and responsiveness to the child's needs; (2) behavioural control, i.e. parents' attempts to manage or control children's behaviour through monitoring, demandingness, and setting limitations; and (3) psychological control, i.e. parents' attempts to manipulate and control children's behaviour and emotions through psychological means, such as inducing guilt, invalidating the child's feelings, and love withdrawal (Barber, 1996).

Conceptual models of parenting and developmental psychopathology, in particular, often include the concept of bidirectional reciprocal relations between parenting and children's socioemotional development, suggesting children and their parents tend to alter each other (Sameroff, 2009; see also Serbin et al., 2015). According to control systems theory (Bell, 1968), children and their parents are sensitive to each other's behaviour, suggesting that child behaviours elicit parental reactions, which in turn influence the child's development (Bell, 1968; Belsky, 1984; see also Serbin et al., 2015). Similarly, coercion theory (Patterson, 1982) describes a process of mutual reinforcement during which parents inadvertently reinforce children's behaviour problems, which in turn leads to parental negative reactions, and so on, until the interaction ends when one of the participants 'wins' (see Smith et al., 2014). Since the proposal of the child–parent transactional processes, multiple longitudinal studies have investigated associations between different aspects of parenting and child behaviours. However, child-to-parent effects have mainly focused on mothers and studies including

both parents are still rare, particularly during middle childhood. It has been shown, for example, that third-grade children's prosocial behaviour predicts their mother's sensitivity (i.e. warm and supportive responses to children's needs) at fifth grade (Newton et al., 2014). A cross-cultural study spanning eight countries revealed that higher prosocial behaviour at age nine elicited significantly higher maternal warmth and involvement in the next year (Pastorelli et al., 2016). More recently, Lansford et al. (2018), in a cross-cultural study spanning nine countries, found that, at ages 8–13, externalizing and internalizing problems at a given age generally predicted less parental warmth and more behavioural control at the next age. In another study of seven-, ten-, and 13-year-olds by Serbin et al. (2015), internalizing problems predicted an increase in positive maternal parenting (i.e. parental support and structure) over time, while externalizing problems predicted a decrease. Finally, in a study that followed children aged 6–9, externalizing behaviour in a given year predicted a high level of maternal physical discipline in the next year (Lansford et al., 2011).

The joint effects of social withdrawal and socioemotional development on parenting

Temperament has been defined as constitutionally based individual differences in self-regulation and reactivity, in the domains of affect (i.e. emotional estate), activity, and attention (Rothbart & Bates, 2006). Temperament embarks children on a range of adaptive or maladaptive developmental trajectories, depending on the interplay with the social environment. Social withdrawal, as a temperamental characteristic, has been found to predict negative psychosocial outcomes, including behaviour problems later in childhood and adolescence (e.g. Chronis-Tuscano, Danko, Rubin, Coplan, & Novick, 2018; Hipson & Coplan, 2018; Quinn & Harden, 2013; Rubin et al., 2009). Social withdrawal may arise from social fear as well as internal factors, e.g. anxiety, negative self-esteem, and self-perceived difficulties in social skills and social relationships (Rubin & Asendorpf, 1993), with children choosing to isolate themselves from their peer group via consistent display of solitary behaviour (Rubin et al., 2009). Socially withdrawn children evidence deficiencies in social and emotional competences, have negative self-perception and self-esteem, are more likely to be rejected and victimized by peers, and are at higher risk for subsequently internalizing problems, i.e. showing symptoms of loneliness, depression, and anxiety (Booth-LaForce & Oxford, 2008; Rubin et al., 2009). Social withdrawal appears to be moderately stable from the preschool period through adolescence and early adulthood, and socially withdrawn children (across all developmental periods) show the greatest stability in their behaviour over time (for a review, see Rubin et al., 2009).

Temperamental characteristics can also act as a moderator of socialization experiences (Rothbart & Bates, 2006). Rubin et al. (2009) created a theoretical model of social withdrawal and internalizing problems, which provides a framework for transactional relations between social withdrawal and parenting. In this model, early childhood social withdrawal is reinforced or diminished by children's reciprocal interactions with their parents (Chronis-Tuscano et al., 2018), such that parents may respond differently to children's behaviours when children are socially withdrawn (for reviews, see Chronis-Tuscano et al., 2018; Rubin et al., 2010). For example, parents of socially withdrawn children often view their children as vulnerable and needing protection; these beliefs may contribute to an over-solicitous style of parenting (for a review, see Rubin et al., 2010). Socially withdrawn children may pull for 'parental accommodation' (i.e. parents adjusting their behaviour to help their child minimize distress when facing feared overloading stimuli or situations; Lebowitz et al., 2013), which may lead to more severe child anxiety symptoms and deficiency in socioemotional competencies (for reviews, see Chronis-Tuscano et al., 2018). Therefore, it could be assumed that child's behaviours and social withdrawal may have joint effects on parents' parenting styles.

The current study

The present study was carried out during middle childhood: an important developmental period for a positive parent– child relationship (Newton et al., 2014) as children's ecologies and capacities

change (Richardson, 2005). Middle childhood involves the transition to elementary school, when children begin to experience a wider variety of social contexts, engage in more peer interactions, and become increasingly autonomous (Coplan & Weeks, 2010). Our first research question was whether prosocial behaviour and behaviour problems are associated with mothers' and fathers' parenting styles. Two hypotheses were formulated: First, prosocial behaviour was assumed to be associated with high parental affection and low behavioural and psychological control (e.g. Newton et al., 2014). Second, externalizing and internalizing problems were expected to be associated with lower parental affection, and higher behavioural and psychological control (e.g. Lansford et al., 2018). Our second research question was whether children's level of social withdrawal moderated the associations between children's socioemotional development and parenting styles. Our overall assumption was that parents of more socially withdrawn children would react differently towards their children's socioemotional behaviours (for reviews, see Chronis-Tuscano et al., 2018; Rubin et al., 2010).

Method

Participants and procedure

A total sample of 378 children (48% girls) was drawn from a larger sample (1880 children) that followed children from preschool up to ninth grade in different regions of Finland (The First Step study; Lerkkanen et al., 2006–2016). In order to minimize teachers' workloads, the target sample was determined by randomly selecting around three children from each classroom ($M = 2.53$, SD = 0.84). Comparisons between the larger sample ($N = 1880$) and the random target sample ($N = 378$) revealed no statistically significant difference between them ($p < .05$). Information on the children's socioemotional development and their level of social withdrawal was available for 314 of the 378 children (49% girls). Information on parenting styles was available for 279 mothers and 182 fathers. Consequently, these sample numbers were reflected in the final analysis.

Parental consent was requested and received for all the children involved. Participating children in the sample came from two schools in Central Finland, one in Eastern Finland, and one in Western Finland. Most of the participating children (76%) came from nuclear families, 12% were from single-parent families, and 12% from blended families. The sample of parents was representative of the level of education among the general population in Finland (Statistics Finland, 2007). Teacher and parent measures were obtained at four time points – kindergarten, first, second, and third grade. The children's level of social withdrawal was rated at the end of kindergarten ($M = 73.96$ months, SD = 3.35 months) by their teachers. Their prosocial behaviour and internalizing and externalizing problems were rated by teachers once a year for three years, in grades 1–3. Parents asked to complete the questionnaires concerning their parenting styles, at the same three time points as the teachers filled in questionnaires concerning the children's socio-emotional behaviours.

Measures

Strengths and difficulties questionnaire

Children's socioemotional development was measured by teachers during grades 1–3, using the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997) on a three-point rating scale (1 = does not apply, 2 = applies partly, 3 = certainly applies). Three SDQ subscales were utilized: measuring prosocial behaviour (prosocial behaviour subscale, five items; e.g. *Shares readily with other children*), internalizing problems (emotional symptoms subscale, five items; e.g. *Many fears and easily scared*), and externalizing problems (conduct problems subscale, five items; e.g. *Often fights with other children or bullies them*). Mean scores were then calculated for these subscales at each of the three time points. The Cronbach's alpha at each time point was 0.73–0.75 for internalizing problems and 0.77–0.81 for externalizing problems, and 0.85 for prosocial behaviour.

Block's Child-Rearing Practices Report. Parenting styles were measured at the same three time points using a Finnish version (Aunola & Nurmi, 2004) of Block's Child-Rearing Practices Report (CRPR; Roberts, Block, & Block, 1984), including 19 items rated on a five-point scale (1 = not like me at all; 5 = very much like me). These items were intended to measure three aspects of parenting styles: affection (ten items; e.g. *I often show my child that I love him/her*), behavioural control (five items; *My child should learn how to behave properly toward his/her parents*), and psychological control (four items; e.g. 'I believe my child should be aware of how much I have done for him/her'). Mean scores were then calculated for different parenting style dimensions at each of the three time points. The respective Cronbach's alpha reliabilities regarding each parenting style dimensions at different measurement points were in the ranges of 0.84–0.85 for maternal affection, 0.82–0.84 for paternal affection, 0.62–0.71 for maternal behavioural control, 0.72–0.76 for paternal behavioural control, 0.69–0.76 for maternal psychological control, and 0.72–0.83 for paternal psychological control.

Social withdrawal scale

Level of social withdrawal in children was measured at the end of kindergarten by teachers, using three items. Two of the items were drawn from the Children's Short Social Withdrawal Scale (Kiuru et al., 2012: 'The child is withdrawn from other children'; 'The child avoids working in a group with other children') and were rated on a five-point scale (1 = never to 5 = very often). The third item was drawn from Multisource Assessment of Children's Social Competence (MASCS; Junttila, Voeten, Kaukiainen, & Vauras, 2006; 'Enthusiastically participates in group activities') and was rated on a four-point scale (1 = never; 4 = very frequently). Social withdrawal score was constructed by reversing the third item, and subsequently converting all the three items to the same scale (0 = never; to 4 = very often/very frequently). Mean scores were then calculated for all three items (Zarra-Nezhad et al., 2014). The Cronbach's alpha for the total score was 0.70.

Data analysis

The analyses were conducted using panel data regression techniques (Gujarati, 2003), which combine a time series with cross-sectional analyses. In this study, we took account of the cross-sections (in this case, individuals) and three time points (i.e. grades 1–3) when examining our research questions. The analyses were carried out separately for children's socioemotional development, and for mothers' and fathers' parenting styles. The models included the main effects of prosocial behaviour, internalizing and externalizing problems, and social withdrawal, as well as all interaction terms between social withdrawal and children's characteristics, as independent variables. In all of the models, sociodemographic characteristics (i.e. the child's gender, family's socioeconomic status, parents' education, and being a single parent or non-single parent) were controlled for. The analyses were performed using Gretl software (Gnu Regression, Econometrics, and Time Series Library, Ver. 1.9.4; see Lucchetti, 2011), and the model parameters were estimated using the generalized least squares technique (for more detailed description of the panel analyses see Zarra-Nezhad et al., 2014). To examine the joint effect of children's social withdrawal and socioemotional development on parenting styles, the interaction terms (Social withdrawal × prosocial behaviour; social withdrawal × internalizing problems; and social withdrawal × externalizing problems) that were found to be statistically significant ($p < .05$, two-tailed test), were interpreted using Aiken and West's (1991) procedure. In this procedure, simple slopes for children's characteristic variables in the prediction of parents' parenting styles were calculated and presented using standardized scores separately for children who showed either low (−1 SD) or high (+1 SD) levels of social withdrawal. Then, to test whether the relationship between children's characteristics and parenting styles is significant at low or high level of social withdrawal, simple slope tests were conducted.

Results

Table 1 shows the correlations between the variables across the measurement points. The means and standard deviations of the observed variables appear separately at different measurement points in Table 2. Table 3 shows the results of the panel analyses. Supporting our first and second hypotheses, the results showed that there were two main effects of children's socioemotional development on parenting styles that were not dependent on the level of children's social withdrawal (Table 3). First, prosocial behaviour was positively associated with both mothers' ($\beta = .11$, $p = .006$) and fathers' ($\beta = .09$, $p = .045$) affection: the higher the level of prosocial behaviour, the higher the level of maternal and paternal affection. Second, externalizing problems was positively associated with both mothers' ($\beta = .13$, $p = .021$) and fathers' ($\beta = .14$, $p = .029$) behavioural control: the higher the level of externalizing problems, the higher the level of maternal and paternal behavioural control.

Table 1. Correlations of Study Variables.

	1	2	3	4	5	6	7
1. Social withdrawal	1	−.31***	.28***	.22***	−.10*	−.03	−.03
2. Prosocial behaviour	−.31***	1	−.57***	−.09**	.17***	−.14***	−.07
3. Externalizing problems	.28***	−.57***	1	.13***	−.22***	.21***	.07
4. Internalizing problems	.22***	−.09**	.13***	1	−.13**	.04	.07
5. Affection	−.10**	.19***	−.16***	−.02	−1	−.01	−.04
6. Behavioural control	.01	.02	.06	−.02	.00	1	.37***
7. Psychological control	.07	.01	.02	−.02	−.06	.38***	1

***$p < .001$, **$p < .01$, *$p < .05$; Correlations of study variables for mothers are above and for fathers are below the diagonal.

Table 2. Means (M) and standard deviations (SD) of study variables at different measurement points.

	Time 1 (7 years)		Time 2 (8 years)		Time 3 (9 years)		Time 1, 2, 3	
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Prosocial	2.20	0.53	2.21	0.53	2.15	0.51	2.19	0.52
Internalizing	1.29	0.38	1.26	0.36	1.27	0.36	1.27	0.37
Externalizing	1.47	0.45	1.46	0.47	1.45	0.47	1.46	0.46
Mothers' Affection	4.27	0.45	4.27	0.46	4.28	0.45	4.27	0.45
Mothers' Behavioural control	3.77	0.47	3.78	0.52	3.76	0.52	3.77	0.50
Mothers' Psychological control	2.59	0.65	2.58	0.69	2.56	0.71	2.57	0.68
Fathers' Affection	4.07	0.45	4.07	0.43	4.04	0.45	4.06	0.44
Fathers' Behavioural control	3.72	0.53	3.70	0.51	3.64	0.55	3.69	0.52
Fathers' Psychological control	2.70	0.69	2.76	0.72	2.78	0.78	2.74	0.73
Social withdrawal	0.73	0.72						

Table 3. Random effects regression for children's socioemotional development and parenting styles (standardized beta coefficients).

	Affection		Behavioural control		Psychological control	
	Mothers	Fathers	Mothers	Fathers	Mothers	Fathers
Step 1: Main effects						
Child gender	.08	−.08	.15	.10	.26*	.28*
Parental education	.07	.03	.02	.11	.02	−.09
Marital status	−.12	.25	.07	.27	.06	.49
Socio-economic status	.06	.23*	−.19	.04	−.27*	−.06
Social withdrawal	−.04	−.02	−.04	−.02	.04	−.08
Prosocial behaviour	.11**	.09*	−.05	.08	.03	.02
Internalizing problems	−.02	−.01	.02	−.04	.07	−.06
Externalizing problems	−.07	.00	.13*	.14*	−.01	.03
Step 2: Interaction effects added						
Social withdrawal × Prosocial					.08*	
Social withdrawal × Internalizing						.13***
Social withdrawal × Externalizing						

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

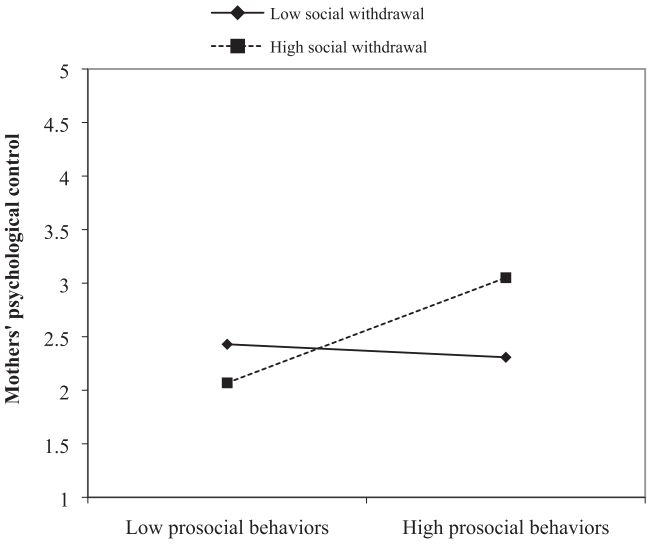

Figure 1. The role of children's prosocial behaviour in relation to their mothers' psychological control, regarding children showing relatively high level of social withdrawal (+1 SD, high) and children showing relatively low signs of social withdrawal (−1 SD, low).

The results showed further that the association between children's socioemotional development and parenting styles were dependent on the level of children's social withdrawal. Two interaction effects were found when examining the moderating effect of social withdrawal in the association between children's socioemotional development and parenting styles. First, a statistically significant ($p = .037$) interaction was found between social withdrawal and prosocial behaviour when predicting maternal psychological control: among children with high level of social withdrawal, prosocial behaviour was associated with high maternal psychological control, whereas low prosocial behaviour was associated with low maternal psychological control (t (312) = 8.965, $p = .000$, Table 3, Figure 1). In comparison, among children with low level of social withdrawal, prosocial behaviour

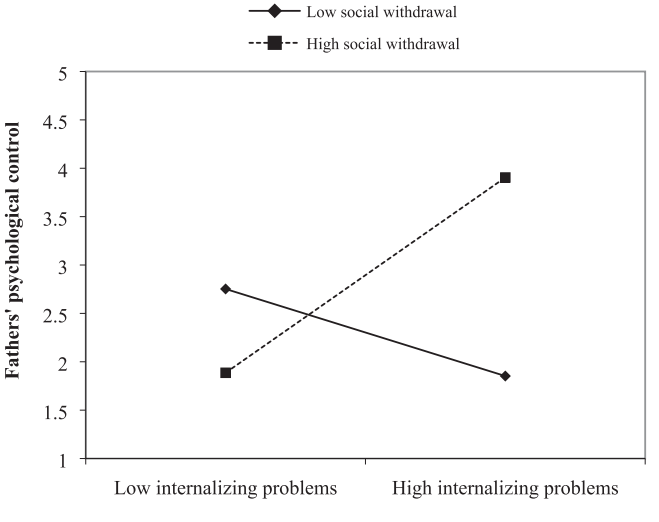

Figure 2. The role of children's internalizing problems in relation to fathers' psychological control, regarding children showing relatively high level of social withdrawal (+1 SD, high) and children showing relatively low signs of social withdrawal (−1 SD, low).

did not impact maternal psychological control (t (312) = −1.109, p = .268). Further, a statistically significant (p = .000) interaction was found between social withdrawal and internalizing problems when predicting fathers' parenting styles: among children with high level of social withdrawal, high internalizing problems was associated with high paternal psychological control, whereas low internalizing problems was associated with low paternal psychological control (t (312) = 3.087, p = .002, Table 3, Figure 2). In comparison, among children with low level of social withdrawal, internalizing problems had no impact on paternal psychological control (t (312) = −1.409, p = .161).

Discussion

It has long been acknowledged that children influence their own development through reciprocal, bidirectional interactions with their parents (Bell, 1968). That is, children's temperamental and socioemotional characteristics may impact the child-rearing they experience (Lerner, 2002). Here, we addressed the less-researched topic of child-to-parent effects during middle childhood and focused on children's positive and negative socioemotional development and three parenting style dimensions. This study also adds to our understanding by examining the joint effects of children's social withdrawal and socioemotional development on parenting styles. Prosocial behaviour was associated with parental affection, while externalizing problems was associated with parental behavioural control. Among children with high level of social withdrawal, prosocial behaviour predicted maternal psychological control and internalizing problems predicted paternal psychological control. But, among children with low levels of social withdrawal, socioemotional development showed no impact on parenting styles.

Several overall insights emerged from our longitudinal study. First, prosocial behaviour was positively associated with both mothers' and fathers' affection. The findings supported our first hypothesis, transactional models of development (e.g. Bell, 1968; Patterson, 1982; Sameroff, 2009), as well as previous findings (e.g. Newton et al., 2014; Pastorelli et al., 2016), by suggesting that prosocial children provoke affection from their parents. That is, growing capacities to consistently display prosocial behaviour (i.e. kindness, compassion, and being helpful) are more likely to elicit responsive and warm parenting (Newton et al., 2014).

Second, our results showed that externalizing problems was associated with a higher level of behavioural control from mothers and fathers. Consistent with our second hypothesis, transactional models of development (e.g. Bell, 1968; Patterson, 1982; Sameroff, 2009), and previous findings (e.g. Lansford et al., 2011; Lansford et al., 2018; Serbin et al., 2015), externalizing problems (e.g. conduct problems, aggressiveness, and antisocial behaviour) were found to elicit parental behavioural control. One explanation for this result is that children with externalizing problem behaviours have underdeveloped self-regulation skills and undercontrolled behaviours (Cole, Zahn-Waxler, Fox, Usher, & Welsh, 1996). Therefore, employing parental behavioural control can foster self-regulation and compliance in these children (Aunola & Nurmi, 2005; Lewis, 1981). That is, when children show externalizing problems, instead of psychologically controlling the child (e.g. love withdrawal, guilt induction), parents try to provide structure and predictable contingencies for self-regulation, in order to inhibit disruptive behaviours and engage them in socially approved behaviours (Barber, Olsen, & Shagle, 1994). A high level of behavioural control has also been related to low levels of externalizing problems in middle childhood and adolescents (for a review, see Aunola & Nurmi, 2005; Zarra-Nezhad et al., 2014), which support the notion that a bidirectional relationship may exists between children's externalizing behaviour and parental behaviour control.

Third, our results revealed that social withdrawal moderates the association between children's socioemotional development and parenting styles. Interestingly, both prosocial behaviour and internalizing problems were found to evoke psychological control from parents, but only when children show high level of social withdrawal. These results were in line with our hypothesis, and the theoretical model from Rubin et al. (2009) of the transactional relations between social withdrawal and parenting, suggesting that socially withdrawn behaviours may contribute to an over-solicitous

style of parenting. One explanation for these results is that parents may view highly socially withdrawn children as vulnerable and dependent and believe that it is their responsibility to protect them from harm (Rubin et al., 2010). These parenting beliefs can contribute to inappropriately intrusive and insensitive parenting, feeling as if they are doing the best for their socially withdrawn child (Rubin et al., 2010). Another possible mechanism to explain these results is the argument that psychological control does not necessarily negatively affect children's independence but may be used by parents to encourage independence (Kins, Soenens, & Beyers, 2012; Stone et al., 2013). That is, parents may employ psychological control to encourage dependence by pressuring children to remain in close physical and emotional proximity, or to encourage independence by pressuring children to make decisions without parental input (Kins et al., 2012; Stone et al., 2013). Consequently, parents of highly socially withdrawn children may feel an intrapsychic need to protect their 'psychological power' in the parent– child relationship, through manipulating emotional and psychological boundaries (Pettit, Laird, Dodge, Bates, & Criss, 2001; see also Aunola, Tolvanen, Viljaranta, & Nurmi, 2013) in an effort to thwart or stunt children's maladaptive social and emotional development. However, applying parental psychological control is detrimental to the development of a secure and stable sense of self and need for autonomy, which might be very harmful (for a review, see Soenens & Vansteenkiste, 2010).

Fourth, our results showed that when children show high level of social withdrawal, their socio-emotional behaviours may differentially affect mothers' and fathers' parenting styles. We found that among children with high social withdrawal, prosocial behaviour may evoke psychological control from mothers, while internalizing problems may evoke psychological control from fathers. Based on some previous studies, mothers and fathers play different parental roles with children in middle childhood (e.g. Newton et al., 2014; Paquette, 2004). Even though mothers spend more time taking care of their children, fathers' participation in child-rearing has increased in today's Western societies, particularly in Finland. However, mothers' and fathers' approaches to interacting with children may be different (Paquette, 2004) in a way that mothers may be the primary caregiver and fathers the primary playmate (Major, Seabra-Santos, & Martin, 2020). Thus, fathers may assess their child's behaviours more positively than mothers (Alakortes et al., 2017), making them less suitable for prosocial behaviour of socially withdrawn children. Possibly, prosocial behaviour in these children is not seen as positive behaviour by mothers, but rather as detrimental. It also can be explained with 'kind child' syndrome. Social withdrawal behaviour is viewed as atypical and contrary to age-related normative expectations for social interaction, relationship, and peer group involvement, so highly socially withdrawal children likely experience rejection and exclusion (Rubin et al., 2009). Consequently, because of their desire for social approval (Assor, Roth, & Deci, 2004) and to maintain self-esteem (Deci, Ryan, & Williams, 1996), they may develop more adaptive behaviours such as sharing, helping and cooperation. However, they do so at the cost of their own autonomy by trying to be more sociable than they otherwise would be (Zarra-Nezhad et al., 2014). This can lead to psychological distress and increase their anxiety and fearfulness in social situations, which may elicit intrusive maternal parenting (e.g. psychological control) to pressure independence and eliminate harm. Previously, Zarra-Nezhad et al. (2014) found that among more socially withdrawn children, maternal psychological control predicted a higher level of prosocial behaviour. Thus, a bidirectional relationship may exist. As no longitudinal studies have been conducted on the joint effects of children's prosocial development and their social withdrawal on parents's psychological control, more research is needed.

Further, our results suggest that fathers may be more susceptible to children's internalizing problems when they show signs of social withdrawal. Perhaps fathers try to impact on children's internalizing problems through psychological means rather than affection or directly setting limits. In middle childhood, mothers may come to expect and accept socially withdrawn children's internalizing behaviours. Fathers, however, may become less tolerant of emotional arousal, expecting children to manage their anxious, depressed or withdrawn behaviours. In attempting to decrease internalizing problems, fathers may feel more helplessness and tell their children that they are ashamed of

their emotional problems. Given that fathers' parenting styles have not been studied as intensely as mothers', future research will need to replicate these findings and examine how fathers react to children's internalizing problems when children show signs of social withdrawal.

The present study has some limitations that are worth mentioning. First, children's behavioural outcomes and social withdrawal have been assessed using teachers' or parents' reports, without direct behavioural observations or self-reports. Second, although the scale used to measure social withdrawal was highly reliable, it was relatively small, making it impossible to distinguish between different subtypes of social withdrawal (e.g. anxious, solitary-active, or solitary-passive). Third, the level of social withdrawal in children was only measured at the end of kindergarten, given that temperamental characteristics, such as social withdrawal, manifest early in life and are relatively stable across time and situations (for a review, see Rubin et al., 2009). However, evidence also suggests that social withdrawal may show changes over time (Booth-LaForce & Oxford, 2008).

Conclusion

To our knowledge, this is the first empirical study of child-to-parent effects, examining the impact of positive and negative behaviours and temperament on mothers' and fathers' parenting styles in middle childhood. Prosocial behaviour was found to be associated with a high level of affection from mothers and fathers. Externalizing problems, on the other hand, was associated with a high level of behavioural control. Further, among children with high social withdrawal, prosocial behaviour predicted higher maternal psychological control, while internalizing problems predicted higher paternal psychological control. These results suggest that socially withdrawn children more probably cause parental psychological control, whereas parents of non-socially withdrawn children may think that they don't need to psychologically control them. These findings are important, as they support the notion that child behaviours and temperamental characteristics can impact parenting, and it may be possible to reduce children's behaviour problems and social withdrawal by increasing positive parenting. Consequently, our findings suggest that interventions should include components that address issues of parental reactivity and help parents learn strategies for responding to behaviours of socially withdrawn children without decreasing warmth or psychologically controlling them.

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References

Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.

Alakortes, J., Fyrstén, J., Bloigu, R., Carter, A. R., Moilanen, I. K., & Ebeling, H. E. (2017). Parental reports of early socioemotional and behavioural problems: Does the father's view make a difference? *Infant Mental Health Journal*, *38*, 363–377.

Assor, A., Roth, G., & Deci, E. L. (2004). The emotional costs of parents' conditional regard: A self-determination theory analysis. *Journal of Personality*, *72*, 47–88.

Aunola, K., & Nurmi, J.-E. (2004). Maternal affection moderates the impact of psychological control on a child's mathematical performance. *Developmental Psychology*, *40*, 965–978.

Aunola, K., & Nurmi, J.-E. (2005). The role of parenting styles in children's problem behaviour. *Child Development*, *76*, 1144–1159.

Aunola, K., Tolvanen, A., Viljaranta, J., & Nurmi, J. E. (2013). Psychological control in daily parent–child interactions increases children's negative emotions. *Family Psychology*, *27*, 453–462.

Barber, B. K. (1996). Parental psychological control: Revisiting a neglected construct. *Child Development*, *67*, 3296–3319.

Barber, B. K., Olsen, J. E., & Shagle, S. C. (1994). Associations between parental psychological and behavioural control and youth internalized and externalized behaviours. *Child Development*, *65*, 1120–1136.

Bell, R. Q. (1968). A reinterpretation of the direction of effects in studies of socialization. *American Psychologist*, *75*, 81–95.

Belsky, J. (1984). The determinants of parenting: A process model. *Child Development*, *55*, 83–96.

Booth-LaForce, C., & Oxford, M. L. (2008). Trajectories of social withdrawal from grades 1 to 6: Prediction from early parenting, attachment, and temperament. *Developmental Psychology*, *44*, 1298–1313.

Bornstein, M. H., Putnick, D. L., & Suwalsky, J. T. (2018). Parenting cognitions → parenting practices → child adjustment? The standard model. *Development and Psychopathology*, *30*, 399–416.

Chronis-Tuscano, A., Danko, C. M., Rubin, K. H., Coplan, R. J., & Novick, D. R. (2018). Future directions for research on early intervention for young children at risk for social anxiety. *Clinical Child & Adolescent Psychology*, *47*, 655–667.

Cole, P. M., Zahn-Waxler, C., Fox, N. A., Usher, B. A., & Welsh, J. D. (1996). Individual differences in emotion regulation and behavior problems in preschool children. *Journal of Abnormal Psychology*, *105*, 518–529.

Coplan, R. J., & Weeks, M. (2010). Unsociability in middle childhood: Conceptualization, assessment, and associations with socioemotional functioning. *Merrill-Palmer Quarterly*, *56*, 105–130.

Deci, E. L., Ryan, R. M., & Williams, G. C. (1996). Need satisfaction and the self-regulation of learning. *Learning and Individual Differences*, *8*, 165–183.

Goodman, R. (1997). The strengths and difficulties questionnaire: A research note. *Child Psychology and Psychiatry*, *38*, 581–586.

Gujarati, D. (2003). *Basic Econometrics* (4th ed.). New York: McGraw Hill.
Hammond, S. I., Waugh, W., Satlof-Bedrick, E., & Brownell, C. A. (2015). Prosocial behaviour during childhood and cultural variations. *International Encyclopedia of the Social & Behavioural Sciences, 19*, 228–232.
Hipson, W. E., & Coplan, R. J. (2018). Social withdrawal in childhood. In T. K. Shackelford & V. A. Weekes-Shackelford (Eds.), *Encyclopedia of evolutionary psychological science* (pp. 1–10). Cham: Springer.
Junttila, N., Voeten, M., Kaukiainen, A., & Vauras, M. (2006). Multisource assessment of children's social competence. *Educational and Psychological Measurement*, *66*, 874–895.
Kins, E., Soenens, B., & Beyers, W. (2012). Parental psychological control and dysfunctional separation-individuation: A tale of two different dynamics. *Adolescence*, *35*, 1099–1109.
Kiuru, N., Poikkeus, A. M., Lerkkanen, M.-K., Pakarinen, E., Siekkinen, M., Ahonen, T., & Nurmi, J.-E. (2012). Teacher-perceived supportive classroom climate protects against detrimental impact of reading disability risk on peer rejection. *Learning and Instruction*, *22*, 331–339.
Klein, M. R., Lengua, L. J., Thompson, S. F., Moran, L., Ruberry, E. J., Kiff, C., & Zalewski, M. (2018). Bidirectional relations between temperament and parenting predicting preschool-age children's adjustment. *Clinical Child & Adolescent Psychology*, *47*(Supp. 1), S113–S126.
Laible, D. J., Kumru, A., Carlo, G., Streit, C., Selcuk, B., & Sayil, M. (2017). The longitudinal associations among temperament, parenting, and Turkish children's prosocial behaviours. *Child Development*, *88*, 1057–1062.
Lansford, J. E., Criss, M. M., Laird, R. D., Shaw, D. S., Pettit, G. S., Bates, J. E., & Dodge, K. A. (2011). Reciprocal relations between parents' physical discipline and children's externalizing behaviour during middle childhood and adolescence. *Development and Psychopathology*, *23*, 225–238.
Lansford, J. E., Rothenberg, W. A., Jensen, T. M., Lippold, M. A., Bacchini, D., Bornstein, M. H., … Al-Hassan, S. M. (2018). Bidirectional relations between parenting and behaviour problems from age 8 to 13 in nine countries. *Research on Adolescence*, *28*, 571–590.
Lebowitz, E. R., Woolston, J., Bar-Haim, Y., Calvocoressi, L., Dauser, C., Warnick, E.…Leckman, J. F. (2013). Family accommodation in pediatric anxiety disorders. *Depression and Anxiety*, *30*, 47–54.
Lerkkanen, M.-K., Niemi, P., Poikkeus, A.-M., Poskiparta, E., Siekkinen, M., & Nurmi, J.-E. (2006–2016). *The first steps study* [Alkuportaat]. Finland: University of Jyväskylä, University of Turku, and University of Eastern Finland.
Lerner, R. M. (2002). Developmental systems theory: The sample case of developmental contextualism. In R. M. Learner (ed.), *Concepts and theories of human development* (3rd ed., pp. 195–217). Mahwah: Lawrence Erlbaum Associates.
Lewis, C. C. (1981). The effects of parental firm control: A reinterpretation of findings. *Psychological Bulletin*, *90*, 547–563.
Lucchetti, R. (2011). State space methods in Gretl. *Statistical Software*, *41*, 1–22. https://www.jstatsoft.org/v41/i11
Major, S. D. O., Seabra-Santos, M. J., & Martin, R. P. (2020). Preschoolers' social skills and behaviour problems at home: Mothers and fathers' (dis)agreement. *Early Child Development and Care*, 1–16. https://doi.org/10.1080/03004430.2020.1737039
Moffitt, T. E., Arseneault, L., Belsky, D., Dickson, N., Hancox, R. J., Harrington, H., … Caspi, A. (2011). A gradient of childhood self-control predicts health, wealth, and public safety. *Proceedings of the National Academy of Sciences*, *108*, 2693–2698.
Newton, E. K., Liable, D., Carlo, G., Steele, J. S., & McGinley, M. (2014). Do sensitive parents foster kind children, or vice versa? Bidirectional influences between children's prosocial behaviour and parental sensitivity. *Developmental Psychology*, *50*, 1808–1816.
Paquette, D. (2004). Theorizing the father-child relationship: Mechanisms and developmental outcomes. *Human Development*, *47*, 193–219.
Pastorelli, C., Lansford, J. E., Luengo Kanacri, B. P., Malone, P. S., Di Giunta, L., Bacchini, D., … Tapanya, S. (2016). Positive parenting and children's prosocial behaviour in eight countries. *Child Psychology and Psychiatry*, *57*, 824–834.
Patterson, G. R. (1982). *Coercive family process*. Eugene, OR: Castalia.
Pettit, G. S., Laird, R. D., Dodge, K. A., Bates, J. E., & Criss, M. M. (2001). Antecedents and behaviour-problem outcomes of parental monitoring and psychological control in early adolescence. *Child Development*, *72*, 583–598.
Quinn, P. D., & Harden, K. P. (2013). Differential changes in impulsivity and sensation seeking and the escalation of substance use from adolescence to early adulthood. *Development and Psychopathology*, *25*, 223–239.
Richardson, R. R. (2005). Developmental contextual considerations of parent-child attachment in later middle childhood years. In K. A. Kerns & R. A. Richardson (Eds.), *Attachment in middle childhood* (pp. 24–45). New York, NY: Guilford Press.
Roberts, G. C., Block, H., & Block, J. (1984). Continuity and change in parents' child-rearing practices. *Child Development*, *55*, 586–597.
Rothbart, M. K., & Bates, J. E. (2006). *Temperament. Handbook of child psychology: Vol. 3, social, emotional, and personality development* (6th ed., pp. 99–166). New York, NY: Wiley.
Rubin, K. H., & Asendorpf, J. (1993). *Social withdrawal, inhibition, and shyness in childhood*. Hillsdale: Erlbaum.
Rubin, K. H., & Coplan, R. J. (2004). Paying attention to and not neglecting social withdrawal and social isolation. *Merrill-Palmer Quarterly*, *50*, 506–534.
Rubin, K. H., Coplan, R. J., & Bowker, J. C. (2009). Social withdrawal in childhood. *Annual Review of Psychology*, *60*, 141–171.

Rubin, K. H., Root, A. K., & Bowker, J. (2010). Parents, peers, and social withdrawal in childhood: A relationship perspective. *New Directions for Child and Adolescent Development*, *2010*, 79–94.

Sameroff, A. J. (2009). *The transactional model of development: How children and contexts shape each other*. Washington, DC: American Psychological Association.

Serbin, L. A., Kingdon, D., Ruttle, P. L., & Stack, D. M. (2015). The impact of children's internalizing and externalizing problems on parenting: Transactional processes and reciprocal change over time. *Development and Psychopathology*, *27* (4pt1), 969–986.

Slagt, M., Dubas, J. S., Deković, M., & van Aken, M. A. G. (2016). Differences in sensitivity to parenting depending on child temperament: A meta-analysis. *Psychological Bulletin*, *142*, 1068–1110.

Smith, J. D., Dishion, T. J., Shaw, D. S., Wilson, M. N., Winter, C. C., & Patterson, G. R. (2014). Coercive family process and early-onset conduct problems from age 2 to school entry. *Development and Psychopathology*, *26*(4pt1), 917–932.

Soenens, B., & Vansteenkiste, M. (2010). A theoretical upgrade of the concept of psychological control: Proposing new insights on the basis of self-determination theory. *Developmental Review*, *30*, 74–99.

Statistics Finland. (2007). Statical databases. Retrieved February 15, 2020 from http://www.stat.fi/tup/tilastotietokannat/index_en.html

Stone, L. L., Otten, R., Janssens, J. M., Soenens, B., Kuntsche, E., & Engels, R. C. (2013). Does parental psychological control relate to internalizing and externalizing problems in early childhood? An examination using the Berkeley puppet interview. *International Journal of Behavioural Development*, *37*, 309–318.

Zahn-Waxler, C., Klimes-Dougan, B., & Slattery, M. J. (2000). Internalizing problems of childhood and adolescence: Prospects, pitfalls, and progress in understanding the development of anxiety and depression. *Development and Psychopathology*, *12*, 443–466.

Zarra-Nezhad, M., Kiuru, N., Aunola, K., Zarra-Nezhad, M., Ahonen, T., Poikkeus, A.-M., … Nurmi, J. (2014). Social withdrawal in children moderates the association between parenting styles and the children's own socioemotional development. *Child Psychology and Psychiatry*, *55*, 1260–1269.