

# The role of child negative affect in the relations between parenting styles and play

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*(Received 16 November 2004)*

Interactions between parenting styles and children's negative affect in the prediction of reticent, solitary-active, and rough-and-tumble play behaviours were examined. The present study involved 98 children, their mothers and their preschool teachers. Participants (53 boys and 45 girls) were a mean age of 3.83 years (standard deviation = 0.69). Mothers completed questionnaires pertaining to their disciplinary rearing styles and their child's negative affect. Preschool/daycare teachers completed a measure concerning children's indoor-free play behaviours. Hierarchical multiple regression analyses revealed two significant interactions between parenting styles and children's negative affect in the prediction of play behaviours. For example, it was found that emotion coaching parenting was negatively related to rough-and-tumble play for children low in negative affect but not for children high in negative affect. Implications of these findings, and others, are discussed in terms of goodness of fit, overprotective parenting and their overall importance for children's social development.

**Keywords:** *Negative affect; Non-adaptive play; Parenting styles; Rough-and-tumble play*

## Introduction

Researchers have reported that the type of parenting a child receives plays an important role in their social development (Baumrind, 1971; Putallaz, 1987; Roberts & Strayer, 1987; Carson & Parke, 1996). However, very little empirical data are available on the relationship between negative affect and parenting styles in the prediction of play behaviours in childhood. Therefore, the goal of this research was to explore these relations.

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*Parental emotional styles*

Gottman *et al.* (1996, 1997) outlined the conceptual underpinnings of the theory of parental *meta-emotion*. Meta-emotion refers to an 'organized set of feelings and cognitions about one's own emotions and the emotions of others' (Gottman *et al.*, 1997, p. 7). As such, Gottman *et al.* (1996) proposed that parents who internalize versus those who fail to internalize the 'emotional' knowledge of themselves and their children exhibit at least two distinct parenting characteristics.<sup>1</sup> These characteristics have been defined as an emotion coaching and an emotion dismissing typology, respectively.

The *emotion coaching* parenting style is defined as parents' awareness of emotions within themselves and their children, and the ability to use this awareness to benefit their child's socialization. Parents who espouse this particular parenting style are aware of their own emotions, can talk about these emotions in a differentiated manner, are aware of these emotions in their children, and assist their children with their emotions (particularly negative emotions) (Hooven *et al.*, 1995; Gottman *et al.*, 1996, 1997; Katz *et al.*, 1996, 1999; Gottman & Declaire, 1997; Lagacé-Séguin & Coplan, in press). Emotion coaches value a child's negative emotions as an opportunity for intimacy and can tolerate spending time with a sad, angry or fearful child without becoming impatient with the emotion. Gottman *et al.* (1997) reported that this form of parenting is associated with children's increased trust of their feelings, better emotion regulation and more competent problem-solving. Additionally, as compared with their peers, children of emotional-coaches tend to have higher self-esteem, to perform better academically and to have more positive peer relations (Gottman & Declaire, 1997).

The *emotion dismissing* parenting style refers to a lack of awareness and therefore a diminished ability to deal with children's emotions. Characteristically, such parents lack awareness of emotions within themselves and their children, fear being emotionally out-of-control, are unaware of techniques to address negative emotions, and believe negative emotions to be a reflection of poor parenting skills (Gottman *et al.*, 1997). Furthermore, instead of addressing displays of negative emotions, they ignore or dismiss emotions, attempt to rid the child of the negative emotions immediately, and strive to reassure the child that negative feelings always pass quickly without lasting effects. Children with dismissing parents are more likely to believe that their negative feelings are inappropriate and not valid under any circumstances (Hooven *et al.*, 1995; Katz *et al.*, 1996; Gottman & Declaire, 1997). Parental emotional styles are theoretically distinct from the traditional parental disciplinary styles.

*Parental disciplinary styles*

*Authoritative parenting style.* Authoritative parents offer a relatively equal balance of discipline and nurturing behaviours. These parents are flexible and responsive to their children's needs, make reasonable demands on their children's behaviour, encourage verbal give and take, and frequently explain the reasoning behind their demands in a

supportive and nurturing manner (Baumrind, 1971). A considerable amount of research has linked an authoritative parenting approach to children's cognitive and social competence (for example, Lamborn *et al.*, 1991; Clawson & Robila, 2001).

*Authoritarian parenting style.* Authoritarian parents rely on power assertion, rather than reason, to enforce demands. They display high levels of discipline and low levels of nurturing behaviour. Authoritarian parents value obedience as a virtue, and favour punitive, forceful measures to enforce demands. They do not encourage verbal give and take; instead, they believe that their disciplinary decisions are final (Baumrind, 1971). Lamborn *et al.* (1991) found that adolescents from authoritarian homes scored reasonably well on measures of school achievement; however, they scored relatively low on measures of self-reliance and self-concept.

*Permissive parenting style.* Permissive parents are extremely lax in regards to disciplining their children. These parents are more responsive than authoritarian parents are to their child's needs; however, they do not set appropriate limits on their child's behaviours (Baumrind, 1966). Lamborn *et al.* (1991) found that adolescents from permissive homes scored the lowest on the majority of adjustment indices. Furthermore, Baumrind (1971) found that permissive parents tended to have children who were rebellious, impulsive and low in achievement.

Several researchers have also linked variations in parenting styles to other detrimental and beneficial social outcomes such as anxiety, aggression and helping behaviour (for example, Baumrind, 1966; Putallaz, 1987; Roberts & Strayer, 1987; Carson & Parke, 1996; Lagac e-S equin & Coplan, in press). However, there is a paucity of research to examine the links between parenting styles and children's non-adaptive play behaviours.

### *Play*

Researchers have suggested that socially non-interactive children may be at risk for later adjustment difficulties (Asendorpf, 1990; Coplan & Rubin, 1998). There have been several distinctive subtypes of play behaviours identified (e.g. reticent, solitary-active, and rough-and-tumble play), which differ in terms of their behavioural and emotional consequences (for example, Rubin & Mills, 1988; Coplan *et al.*, 1994, 2001).

*Reticent behaviours.* Reticent behaviours include prolonged on-looking and unoccupied behaviours (Asendorpf, 1991; Coplan & Rubin, 1998). For example, children watching other children play while making no attempts to join in would be considered as engaging in reticent behaviour. In addition, staring off into space or wandering around aimlessly also represent reticent behaviours. In preschool, children display reticent behaviours approximately 15% of the time during free play (Coplan & Rubin,

1998). Several researchers have found that reticent behaviour was a marker variable for social fear, anxiety and internalizing problems in both familiar (for example, Coplan & Rubin, 1998) and unfamiliar settings (for example, Coplan *et al.*, 1994). Asendorpf (1991) suggested that reticent behaviours reflected the child's fear and anxiety in social settings. Moreover, Coplan and Rubin (1998) found that reticent behaviours were related to extreme shyness and negative affect.

*Solitary-active behaviours.* Solitary-active behaviours consist of repetitive, functional, and dramatic behaviours while playing alone (Coplan *et al.*, 1994). For example, a child repeatedly banging two blocks together would be engaging in solitary-active behaviour. Solitary-active behaviour is a relatively rare form of play as it occurs only 3–4% of the time during free play (Coplan & Rubin, 1998). Coplan *et al.* (1994) found that solitary-active behaviours were related to peer rejection, externalizing problems and social immaturity. In addition, Asendorpf (1991) found that solitary-active behaviours were related to teacher ratings of aggressiveness, and Coplan and Rubin (1998) suggested that this form of play reflects social immaturity.

*Rough-and-tumble play.* Rough-and-tumble play behaviours consist of play fighting and rough-and-tumble activities. It includes both contact forms (e.g. play fighting) and non-contact forms (e.g. chasing). Coplan and Rubin (1998) found that rough-and-tumble play was related to high active levels and to externalizing problems. Furthermore, Smith and Boulton (1990) found that rough-and-tumble play was more common in boys, and that it was used primarily to achieve dominance. On the other hand, Pellegrini and Smith (1998) argue that rough-and-tumble play is salient in the development of leadership skills.

*Summary of the findings.* Based on the aforementioned research findings, reticent, solitary-active, and rough-and-tumble play behaviours can be regarded as non-adaptive forms of preschool play as these types of play behaviours have been linked to indices of maladjustment. Results from past research have indicated an association between parenting and child's social development (Baumrind, 1971; Putallaz, 1987; Roberts & Strayer, 1987; Carson & Parke, 1996). Specifically, frequently engaging in reticent, solitary-active, and rough-and-tumble play behaviours is expected to be associated with non-adaptive parenting such as emotion dismissing, authoritarian or permissive styles. However, a 'third' variable may influence the relationship between parenting styles and children's non-adaptive play. It may be possible that negative affect is a moderating variable in this provocative relationship.

#### *Negative affect*

Negative affect represents a general dimension of distress that includes a variety of aversive moods (e.g. anger, sadness, and fear). Individuals high in negative affect tend

to dwell on the negative side of things and experience distress even in the absence of external stressors (Watson & Clark, 1984; Watson *et al.*, 1988). Furthermore, Watson *et al.* (1988) found that individuals high in negative affect were more likely to describe themselves as temperamental or moody compared with individuals low in negative affect. In contrast, individuals low in negative affect tend to be calm and relatively satisfied with themselves (Watson & Clark, 1984).

### *Negative affect as a moderator between parenting styles and social adjustment*

The interactions between negative affect and parenting styles to predict play in preschool remains largely unexplored. However, a few studies have found that similar child characteristics influence the relationship between parenting practices and children's social outcomes. Isely *et al.* (1999) found that the relationship between parent's affect and their children's social competence was moderated by children's positive affect. Specifically, it was found that parents' positive affect was more strongly related to children's social competence than was children's positive affect. Furthermore, Levy (1999) found an interaction between parenting styles and negative affect in the prediction of children's social goals. Also, Lagacé-Séguin (2001) and Lagacé-Séguin and Coplan (*in press*) found that an emotion coaching parenting style was not associated with prosocial behaviour among children with higher behaviour regulation, whereas it was significantly and positively associated with prosocial behaviour among children with lower behaviour regulation. The purpose of the present study is to extend and further investigate the 'goodness of fit' between parenting factors and children's attributes in the prediction of play in childhood.

### *Hypotheses*

Due to the lack of research in this area, hypotheses were primarily exploratory in nature. For example, it is possible that emotion dismissing, authoritarian and/or permissive parenting styles may be positively associated with reticent, solitary-active, and rough-and-tumble play behaviours for children low in negative affect. It may be that non-adaptive forms of parenting interfere with low instances of negative affect to produce the aforementioned play behaviours. In the same regard, emotion coaching and/or authoritative parenting styles may be negatively associated with play behaviours for children high in negative affect. The adaptive forms of parenting may serve as a buffer for children high in negative affect, thereby avoiding the negative outcomes associated with the three forms of play that are the focus in this article.

## **Method**

### *Participants*

The present study consisted of 98 children between the ages of three and five years (and their mothers) who attended daycare or preschool in Eastern Canada. The

participants consisted of 53 boys and 45 girls, and they had a mean age of 3.83 years (standard deviation [SD] = 0.69). Mothers ranged in age from 19 years to 47 years (mean = 36.02 years, SD = 5.64). Almost one-half of the mothers had completed a post-secondary degree (47.9%), and the majority of mothers were married (77.1%).

### *Procedure and measures*

A description of the present study, along with an informed consent sheet for both the mothers and the teachers, were delivered to participating preschools and daycare centres. The supervisor/director of the centre distributed these materials to the children's mothers and to teachers at their centre. Once consent forms were returned, the questionnaire packets for both mothers and teachers were delivered to the centre.

### *Maternal measures*

*Parental emotional styles.* To measure mother's emotional styles, mothers completed the Maternal Emotional Style Questionnaire (MESQ) (Lagacé-Séguin & Coplan, in press). The questionnaire consists of 14 items: seven items characterize an emotion coaching parenting style (e.g. 'Anger is an emotion worth exploring'), and seven items characterize an emotion dismissing parenting style (e.g. 'I try to change my child's angry moods into cheerful ones'). Mothers indicated their degree of agreement or disagreement with each statement. Items were rated on a five-point Likert-type scale that ranged from 1 'strongly disagree' to 5 'strongly agree'. Reliability analysis revealed that the MESQ was reliable for both subscales ( $\alpha = 0.69$  for items assessing an emotion coaching parenting style and  $\alpha = 0.74$  for items assessing an emotion dismissing parenting style). The MESQ has also been related to theoretically consistent parenting constructs, and is the only self-report measure available designed to assess emotion coaching and emotion dismissing parenting styles (Lagacé-Séguin, 2001; Lagacé-Séguin & Coplan, in press).

*Parental disciplinary styles.* To measure mother's behavioural practices towards their children, mothers completed the Parenting Practices Questionnaire (PPQ) (Robinson *et al.*, 1995). The 62-item questionnaire is designed to assess Baumrind's (1971) authoritative, authoritarian and permissive parenting typologies. The PPQ contains 27 items pertaining to an authoritative parenting style (e.g. 'I give praise when my child is good'), 20 items pertaining to an authoritarian parenting style (e.g. 'I guide my child by punishment more than by reason'), and 15 items pertaining to a permissive parenting style (e.g. 'I state punishments to my child and do not actually do them'). For each statement, mothers indicated the frequency in which they engage in the described behaviour. Items were rated on a five-point Likert-type scale, which ranged from 1 'never' to 5 'always'. Reliability analysis revealed that the PPQ was reliable in all subsections (authoritative,  $\alpha = 0.84$ ; authoritarian,  $\alpha = 0.78$ ;

and permissive,  $\alpha = 0.64$ ). Robinson *et al.* (1995) have reported similar reliability alphas.

### *Child characteristics*

*Negative affect.* To measure children's negative affect, mothers completed the negative affect subscale of the Positive and Negative Affect Schedule (PANAS) (Watson *et al.*, 1988). The PANAS was developed as a self-report measure; however, it was slightly modified so mothers could report their child's negative affect. Mothers were asked to report 'to what extent your child generally feels this way, that is, how he or she feels on average'. Several other researchers have used similar methodology (for example, Eisenberg *et al.*, 1995; Lagacé-Séguin & Coplan, 2001; Lagacé-Séguin & d'Entremont, 2005). The negative affect subsection of the PANAS consists of 10 items (e.g. hostile, scared) and the mother rated the extent to which her child displayed each of the given moods on average. Analyses yielded high reliability ( $\alpha > 0.75$ ) for this subset of negative emotions. Items were rated on a five-point Likert-type scale; which ranged from 1 'very slightly or not at all' to 5 'extremely'.

*Play.* To assess children's play behaviours teachers completed the Preschool Play Behaviour Scale (PPBS) (Coplan & Rubin, 1998). The 18-item questionnaire is designed to assess five forms of free play. For the purposes of this study, three forms of play were of interest. Reticent behaviour (e.g. 'Takes on the role of onlooker or spectator'), solitary-active behaviour (e.g. 'Engages in pretend play by himself/herself'), and rough-and-tumble behaviour (e.g. 'Engages in playful/mock fighting with other children') were the focus of this study. Teachers indicated the frequency with which the child engaged in the described behaviours. Items were rated on a five-point Likert-type scale, which ranged from 1 'never' to 5 'very often'. The PPBS has yielded high levels of both construct validity and reliability ( $\alpha > 0.68$ , in all subsections).

## **Results**

### *Preliminary analyses*

Preliminary analyses were run to examine the correlations between variables (see Tables 1–3). Results from correlations computed between parental emotional and behavioural styles and children's play behaviours are presented in Table 1. Results revealed that an emotion coaching parenting style was negatively related to children engaging in rough-and-tumble behaviours ( $r = -0.36$ ,  $p < 0.001$ ). Results from correlations between parental styles and children's negative affect are presented in Table 2. An authoritative parenting style was significantly and negatively related to negative affect ( $r = -0.45$ ,  $p < 0.001$ ). In contrast, an authoritarian parenting style was positively related to children's negative affect ( $r = 0.54$ ,  $p < 0.001$ ). A permissive



Table 1. Correlations between parenting styles and social outcomes

Play behaviour	Parenting style				
	Coaching	Dismissing	Authoritative	Authoritarian	Permissive
Reticent	0.12	-0.14	-0.08	0.01	-0.20
Solitary-active	0.22	-0.05	-0.21	-0.01	-0.19
Rough-and-tumble	-0.36***	0.07	0.03	0.17	.21

\*\*\* $p < 0.001$ .

parenting style was also significantly and positively related to children's negative affect ( $r = 0.34$ ,  $p < 0.001$ ). Correlations between measures of children's negative affect and social outcomes are presented in Table 3. There were no significant correlations.

#### *Moderated regression analyses*

*Overview.* In order to explore the interactions between parental styles and child negative affect in the prediction of play behaviours, a series of regression analyses was computed following Cohen's partialled products technique (Cohen & Cohen, 1983). For each equation, parental emotional style (i.e. coaching or dismissing) or parental disciplinary style (authoritative, authoritarian or permissive) and child negative affect were entered first, followed by the appropriate multiplicative interaction term (parenting style  $\times$  negative affect). Separate equations were computed for each of the three play behaviour outcome variables (i.e. reticent behaviour, solitary-active behaviour, and rough-and-tumble behaviour). Three significant moderated analyses were found.

*Emotion coaching parenting style.* As presented in Table 4, results from regression analyses revealed a significant interaction between an emotion coaching parenting style and children's negative affect to predict rough-and-tumble behaviour ( $R^2_{\text{change}} = 0.07$ ,  $F(1, 94) = 4.06$ ,  $p = 0.05$ ). Interactions were explored by re-computing the

Table 2. Correlations between parenting styles and children's negative affect

Parenting style	Negative affect
Emotion coaching	0.15
Emotion dismissing	0.06
Authoritative	-0.45***
Authoritarian	0.54***
Permissive	0.34***

\*\*\* $p < 0.001$ .



Table 3. Correlations between children's negative affect and social outcomes

Social outcomes	Negative affect
Reticent	0.17
Solitary-active	0.16
Rough-and-tumble	-0.03

regression analyses separately for groups of children scoring above or below the median in terms of negative affect. Similar procedures to examine interactions and simple effects have been outlined by many different researchers (for example, Aiken & West, 1991; Calkins *et al.*, 1999; Rubin *et al.*, 2001). Results from follow-up analyses revealed that an emotion coaching parenting style was not associated with rough-and-tumble behaviour among children with higher negative affect ( $\beta = 0.02$ ,  $t = 0.07$ , not significant), but was negatively associated with rough-and-tumble behaviour among children with lower negative affect ( $\beta = -0.63$ ,  $t = -4.09$ ,  $p < 0.05$ ) (see Figure 1).

*Authoritative parenting style.* Results from regression analyses revealed a significant interaction between an authoritative parenting style and children's negative affect to predict solitary-active behaviours ( $R^2_{\text{change}} = 0.08$ ,  $F(1, 94) = 4.13$ ,  $p < 0.05$ ). Results are presented in Table 5. Interactions were again explored by re-computing the regression analyses separately for groups of children scoring above or below the median in terms of negative affect. Results from follow-up analyses revealed that an authoritative parenting style was significantly and negatively associated with solitary-active behaviour among children with higher negative affect ( $\beta = -0.45$ ,  $t = -2.16$ ,  $p < 0.05$ ), whereas an authoritative parenting style was not associated with solitary-active play behaviours among children with lower negative affect ( $\beta = 0.14$ ,  $t = 0.71$ , not significant) (see Figure 2).

*Permissive parenting style.* As presented in Table 6, results from regression analyses revealed a significant interaction between a permissive parenting style and children's

Table 4. Prediction of rough-and-tumble behaviour from emotion coaching and negative affect (dependent variable: rough-and-tumble behaviour)

	Main effects ( $\beta$ )	Interaction term ( $\Delta R^2$ )
Step 1		
Emotion coaching	-0.29*	
Negative affect	0.01	
Step 2		
Emotion coaching $\times$ negative affect		0.07*

\* $p < 0.05$ .

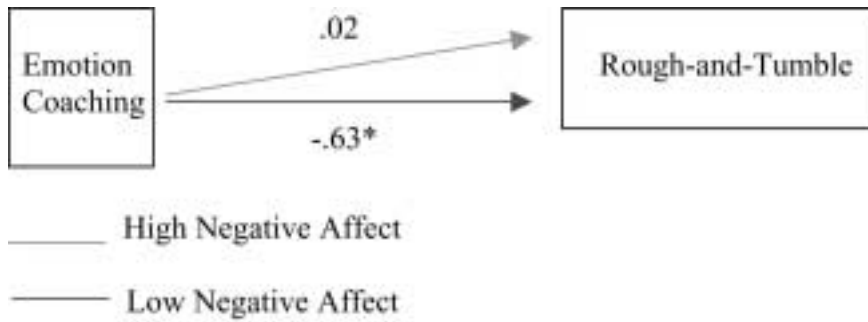


Figure 1. Moderated relation between emotion coaching parenting style and negative affect to predict rough-and-tumble behaviour. \*  $p < 0.05$

negative affect to predict solitary-active behaviours ( $R^2_{\text{change}} = 0.08, F(1, 94) = 4.14, p < 0.05$ ). Interactions were again explored by re-computing the regression analyses separately for groups of children scoring above or below the median in terms of negative affect. Results from follow-up analyses revealed that a permissive parenting style was significantly negatively associated with solitary-active behaviour among children with higher negative affect ( $\beta = -0.47, t = -2.27, p < 0.05$ ), and was not associated with solitary-active play behaviours among children with lower negative affect ( $\beta = -0.06, t = -0.31$ , not significant) (see Figure 3).

### Discussion

The purpose of the present study was to explore the links between parenting styles, negative affect and children’s play behaviours. More specifically, the major goal was to explore the interactions between parenting styles (emotional and disciplinary) and children’s negative affect in the prediction of reticent, solitary-active, and rough-and-tumble play. However, prior to conducting these analyses correlations were conducted between all variables. It was found that an emotion coaching parenting style was negatively related to rough-and-tumble play. Given that a characteristic of a coaching parenting style is to instil the tools that will aid in children’s ability to regulate their behaviours and emotions (Gottman *et al.*, 1997), it is not

Table 5. Prediction of solitary-active behaviour from authoritative and negative affect (dependent variable: solitary-active behaviour)

	Main effects ( $\beta$ )	Interaction term ( $\Delta R^2$ )
Step 1		
Authoritative	-0.13	
Negative affect	-0.03	
Step 2		
Authoritative $\times$ negative affect		0.08*

\* $p < 0.05$ .

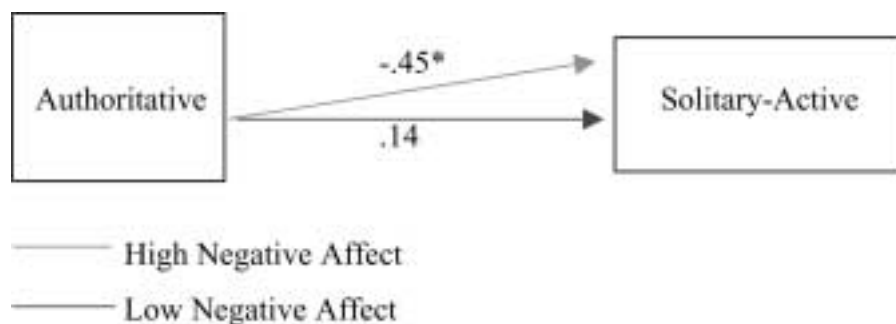


Figure 2. Moderated relation between authoritative parenting style and negative affect to predict solitary-active behaviour. \*  $p < 0.05$

surprising that children of mothers who espouse this particular style would engage in rough-and-tumble play less frequently. Others have found (for example, Mize & Pettit, 1997) that various forms of parental coaching, such as aiding children to attend to specific social cues in stories, are associated with lower levels of child aggression and better social skills and receptive vocabulary.

Significant findings were also directed towards the relationships between negative affect and the traditional disciplinary parenting typologies. Specifically, it was found that children whose parents espoused authoritarian or permissive parenting styles were more likely to exhibit negative affect than children whose parents espoused an authoritative style. These results are keeping with those of Baumrind (1971, 1987), who has found that children of authoritarian and permissive parents tend to be less socially and emotionally inclined in comparison to children of authoritative parents.

### Parenting, negative affect, and play

The interactive (moderated) associations between parental styles and children’s negative affect to predict play behaviours in preschool remains largely unexplored.

Table 6. Prediction of solitary-active behaviour from permissive and negative affect (dependent variable: solitary-active behaviour)

	Main effects ( $\beta$ )	Interaction term ( $\Delta R^2$ )
Step 1		
Permissive	-0.36*	
Negative affect	0.42**	
Step 2		
Permissive $\times$ negative affect		0.08*

\* $p < 0.05$ .

\*\* $p < 0.01$ .

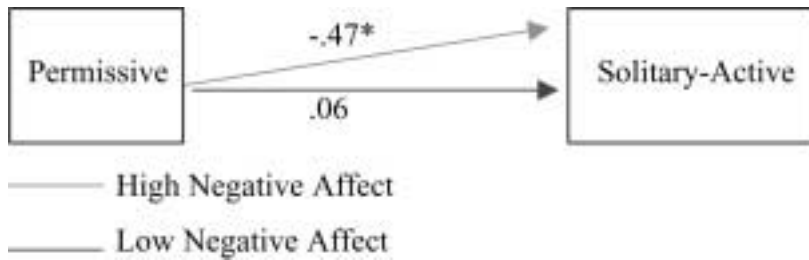


Figure 3. Moderated relation between permissive parenting style and negative affect to predict solitary-active behaviour. \*  $p < 0.05$

Gottman *et al.* (1996) explored some interactive associations between parent's emotional styles and measures of children's temperament, but found no significant relations in the prediction of social outcomes. Results from the present study have provided some of the first evidence to suggest that parent's emotional and disciplinary styles interact with their children's affect to produce varying social outcomes.

*Emotion coaching parenting style.* A significant interaction was found between an emotion coaching parenting style and children's negative affect to predict rough-and-tumble play. Specifically, an emotion coaching parenting style was negatively related to engaging in rough-and-tumble play among children low in negative affect. However, inconsistent with exploratory hypotheses, these variables were not associated among children high in negative affect. These results suggest that an emotion coaching parenting style acts as an extra *protective* factor to ensure that these already well-regulated children refrain from rough-and-tumble play. It is also possible that children low in negative affect are more responsive to parent's emotion coaching and will emulate parental regulation abilities in social settings. For example, a calm disposition may foster children to acquire good listening skills, which in turn allows them to internalize parents' emotion coaching.

These findings are somewhat provocative given the current literature on over-protective parenting. Over-protective parenting may be characterized by displays of warmth, intrusiveness and/or restrictiveness in situations that do not warrant it (Thomasgard & Metz, 1993; Rubin *et al.*, 1999). Although this may seem counterintuitive (i.e. that too much 'positive' parenting can lead to poor development), there is some current research that has supported this claim. Rubin *et al.* (2001) found that maternal over-solicitous behaviour positively predicted four-year-old children's socially reticent, wary, and shy behaviours. In addition, past research by Malatesta *et al.* (1989) has found that maternal over-facial expression (during situations that do not warrant the expression) is associated with poor mother-child attachment in early childhood. The authors speculate that this form of disengagement may signal a protective function for the infant in escaping a potentially anxious, and inescapable, situation.

Again, with respect to the current findings, it would seem that over-protective parenting is not to the detriment of children low in negative affect, especially in situations of rough-and-tumble play. It may be that in situations where overt behavioural aggression is predominant, a coaching style of parenting is necessary to ensure that a child low in negative affect remains in this emotional state. A child high in negative affect may be prone to the lure of the rough-and-tumble behaviour regardless of their parent's coaching attempts.

*Authoritative parenting style.* An interaction was also found between an authoritative parenting style and children's negative affect to predict solitary-active behaviour. Specifically, consistent with hypotheses, an authoritative parenting style was negatively related to engaging in solitary-active behaviour among children high in negative affect, whereas these variables were not significantly associated among children low in negative affect

To speculate on these findings, an authoritative parenting style may be providing an arena for children to be socially adjusted even in the face of higher ratings of negative affect. This notion is consistent with Baumrind's (1971) ideology that supportive parenting, along with reasonable demands, produces socially acceptable behaviour in children. A considerable amount of research has linked an authoritative parenting approach to children's cognitive and social competence (for example, Brenner & Fox, 1999; Clawson & Robila, 2001). Authoritative parenting has been related to psychosocial maturity, cooperation with peers and adults, and academic success (Baumrind, 1966, 1971). However, the results of the present study also suggest that an authoritative parenting style does not provide any extra insurance that children low in negative affect will avoid solitary-active behaviours. It is possible that children low in negative affect may rarely engage in solitary-active behaviours, and therefore positive parenting is not necessary to curv rarely occurring behaviours.

In addition, these findings provide support for the 'Goodness of Fit Theory' (see Thomas & Chess, 1977). Thomas and Chess (1977) proposed that children's development is optimized when parents adapt their rearing practices based on their child's temperamental characteristics. A good fit is present when parents' characteristics are well suited to the child's characteristics. Alternatively, a poor fit occurs when parent's characteristics are not well suited to their child's. It appears that an authoritative parenting style may guard children high in negative affect from engaging in some types of non-adaptive play (i.e. solitary-active). Therefore this combination of parenting style and child affect provides favourable outcomes associated with solitary-active behaviours.

*Permissive parenting style.* A significant interaction was also found between a permissive parenting style and children's negative affect to predict solitary-active behaviour. Specifically, a permissive parenting style was negatively associated with solitary-active behaviours among children high in negative affect, whereas these

variables were not significant among children with low negative affect. These findings are surprising considering the existing literature, which has linked permissive parenting to negative outcomes. For example, Lamborn *et al.* (1991) found that adolescents from permissive homes scored the lowest on the majority of adjustment indices. Furthermore, Baumrind (1971) found that permissive parents tended to have children who were rebellious, impulsive and low in achievement. It is also possible that children high in negative affect benefit from being distanced from permissive parents, given their laissez-faire parenting style. This parenting style may actually promote non-adaptive play in this group of children. Moreover, the positive effects of daycare/preschool may moderate the negative consequences of permissive parenting. The behavioural regulations set by preschool/daycare teachers may be enough to guide children away from negative outcomes that may be linked to permissive parenting.

### **Future research and caveats**

There are several theoretical and methodological issues that have arisen from the present study that merit further clarification and investigation in future studies. For example, interest in the role of fathers has been of increasing interest to researchers. It would be most enlightening to replicate this study with a sample of fathers to determine whether similar relations are produced. In addition, a problem with correlational studies is that the direction of effects cannot be determined. For example, in the current study a negative relation was found between an authoritative parenting style and solitary-active play for children high in negative affect. In terms of causality, it is not clear whether an authoritative parenting style leads to less frequent instances of solitary-active play, or whether fewer instances of solitary-active play evokes an authoritative parenting style. Future longitudinal research using cross-lagged panel correlation would allow conclusions to be made about the lasting influences of parental styles on children's social development. Finally, researchers should examine how various parenting styles impact children's social development at different ages. It may be that moderated influences of parental styles are particularly salient in early childhood, or that these influences are more prevalent in the adolescent years.

### **Conclusion**

The results from the present study have elucidated a relatively new dimension to parenting research. The present study represents one of the first major efforts to untangle the associations between parental emotional and disciplinary styles, children's negative affect and multiple forms of play behaviours. Overall, the results from this study have provided some unique insights into the associations among parenting styles, children's negative affect and various forms of play. In particular, the importance of considering how different parental styles were related to indices of play for different types of children was clearly illustrated.

## Acknowledgements

The authors would like to thank all children, parents and teachers for their participation in this study. They also acknowledge the valuable assistance of Daphne MacWilliams and Emma Smith for the collection and coding of the data.

## Note

1. Several types of emotional parenting styles have been described. For the current research, two types were of primary interest. Disapproving and laissez-faire parenting have also been described by Gottman. However, these styles are beyond the scope of this article.

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