Revue européenne de psychologie appliquée 63 (2013) 15–23

Disponible en ligne sur
SciVerse ScienceDirect
www.sciencedirect.com

Elsevier Masson France
EM|consulte
www.em-consulte.com/en

Original article

Parental socialization of emotion and depression in adulthood: The role of attitudes toward sadness

La socialisation parentale des émotions et la dépression à l'âge adulte : le rôle des attitudes envers la tristesse

M.E. Boucher[a,*], S. Lecours[a], F.L. Philippe[b], S. Arseneault[a]

[a] *Department of Psychology, Université de Montréal, C.P. 6128, succursale Centre-Ville, Montreal, Quebec H3C 3J7, Canada*
[b] *Department of Psychology, Université du Québec à Montréal, C.P. 8888, succursale Centre-Ville, Montreal, Quebec H3C 3P8, Canada*

ARTICLE INFO

Article history:
Received 14 November 2011
Received in revised form
18 November 2012
Accepted 20 November 2012

Keywords:
Parental socialization of emotion
Depression
Attitudes toward sadness
Anger against the self
Sadness as a complaint
Fear of rejection
Fear of sadness

ABSTRACT

Introduction. – Lack of parental care and high parental control have systematically been linked to depression. Dysfunctional schemas explain this relationship.
Objective. – We propose that a retrospective evaluation of unsupportive parental socialization of emotion should predict depression in adulthood and that this relationship should be mediated by negative attitudes toward sadness.
Method. – One hundred and forty undergraduate students (mean age of 22) completed a questionnaire for assessing the socialization of emotion (QSE), another for evaluating types of attitudes toward sadness (QAFET), and the Brief Symptom Inventory Depression scale (BSI-D).
Results. – Results show that four attitudes toward sadness, namely perception of sadness as a complaint, anger against the self if sad, fear of being rejected if sad and fear of where sadness might lead, each partially mediate the relationship between unsupportive parental socialization of emotion and adult depression.
Conclusion. – Our findings have both theoretical and practical implications. On the one hand, we demonstrated that unsupportive parental socialization of emotion and some attitudes toward sadness both predict depression. On the other hand, our results justify a closer look at parental socialization of emotion and attitudes toward sadness when clinically investigating depression.

Mots clés :
Socialisation parentale des émotions
Dépression
Attitudes envers la tristesse
Colère contre soi
Tristesse comme plainte
Peur du rejet
Peur de la tristesse

RÉSUMÉ

Introduction. – Un manque de sensibilité parentale et un contrôle parental élevé ont été systématiquement associés à la dépression. Des schémas dysfonctionnels expliqueraient cette relation.
Objectif. – Nous proposons que l'évaluation rétrospective d'une socialisation parentale des émotions non soutenante devrait prédire la dépression à l'âge adulte et que cette relation devrait être médiatisée par des attitudes négatives envers la tristesse.
Méthode. – Cent quarante étudiants de premier cycle universitaire (âge moyen de 22 ans) ont complété un questionnaire mesurant la socialisation des émotions (QSE), un questionnaire évaluant les attitudes typiques face à la tristesse (QAFET) et l'échelle de dépression du Brief Symptom Inventory (BSI-D).
Résultats. – Les résultats démontrent que quatre attitudes envers la tristesse, soit la perception de la tristesse comme étant une plainte, la colère envers soi-même d'être dans un état de tristesse, la peur d'être rejeté si l'on est triste et la peur de l'état auquel la tristesse pourrait conduire, agissent chacune comme médiateur de la relation entre une socialisation parentale des émotions non soutenante et la dépression à l'âge adulte.
Conclusion. – Nos résultats ont des contributions à la fois théoriques et pratiques. D'une part, nous avons démontré que la socialisation parentale des émotions non soutenante et certaines attitudes envers la

* Corresponding author.
E-mail address: marie-eve.do.boucher@umontreal.ca (M.E. Boucher).

1162-9088/$ – see front matter
http://dx.doi.org/10.1016/j.erap.2012.11.003

tristesse prédisent la dépression. D'autre part, nos résultats justifient que l'on prête davantage attention à la socialisation parentale des émotions et aux attitudes envers la tristesse lors de l'évaluation clinique de la dépression.

1. Introduction

Some aspects of parenting have consistently been found to increase vulnerability to depression (Alloy et al., 2001; Oliver & Berger, 1992; Whisman & Kwon, 1992). This association has been obtained across different age groups including infants, children and adults and using various types of measure, such as observation and retrospective reports (Blatt & Homann, 1992). Culture does not seem to impact this association either: parenting was related to adolescent depressed mood in Eastern culture just as in Western culture (Dmitrieva, Chen, Greenberger, & Gil-Rivas, 2004).

Beck (1967) conceptualized the association between parenting and adult depression as being mediated by the formation of enduring concepts. According to Beck, children's attitudes toward themselves and their environment are forged by their interaction with significant others. Negative enduring self-concepts, or negative schemas as Beck would call them, would predispose to depression because "the affective state can be regarded as the consequence of the way the individual views himself or his environment" (p. 261).

This three-stage chain of events, namely negative parenting leading to dysfunctional schemas leading to depression, has been tested and supported by numerous studies on depressed adolescents (Charoensuk, 2007; Liu, 2003) and adults (Harris & Curtin, 2002; McGinn, Cukor, & Sanderson, 2005; Randolph & Dykman, 1998; Shah & Waller, 2000). All studies used the same self-reported retrospective parenting measure, namely the Parental Bonding Instrument (Parker, Tupling, & Brown, 1979). Depressed individuals reported low parental care and high parental overprotection/control (Shah & Waller, 2000). These findings indicate that aspects of parenting influence the way the future adult will regulate emotions. Obviously, parenting is a complex, multifaceted task. One of these tasks indirectly related to parental bonding, but more closely linked to emotion regulation, is the socialization of emotion.

1.1. Socialization of emotion

Since the 1990s, research on the socialization of emotion has received increasing attention. Socialization of emotion encompasses the parental behaviors that influence children's learning of the expression, regulation and experience of emotion (Eisenberg, Cumberland, & Spinrad, 1998). In their review, these authors identified three main parental emotion-related socialization behaviors: nonsupportive and supportive reactions to children's experience and expression of emotion; discussion of emotion; parental expressivity. In general, non-supportive reactions, such as punitive reactions and distress, were predictors of negative social and emotional child outcomes, such as low levels of social competence (Gottman, Katz, & Hooven, 1997; Jones, Eisenberg, Fabes, & MacKinnon, 2002) and externalizing problems (Tao, Zhou, & Wang, 2010), whereas supportive reactions were associated with positive social and emotional child outcomes, such as constructive coping (Valiente et al., 2004) and emotional decoding and expressiveness (Fabes, Poulin, Eisenberg, & Madden-Derdich, 2002). Discussion of emotion and parental expressivity were also linked to children's more effective regulation of negative emotions and greater expressivity of emotion respectively (Eisenberg et al., 1998).

Parenting practices are thought to have an enduring impact on the emotional development of the child (Stack, Serbin, Enns, Ruttle, & Barrieau, 2010). That is why perceived parental socialization of emotion (PSE) was studied in adolescents and even adults. Perceived parental dismissing of emotion, such as in punishing or neglecting the child's sadness, was positively correlated to internalizing symptoms in adolescents (O'Neal & Magai, 2005) and psychological distress in young adults (Garside & Klimes-Dougan, 2002), while perceived parental emotion-coaching, accepting and discussing of the child's negative affect for instance, was negatively correlated to internalizing symptoms (Stocker, Richmond, Rhoades, & Kiang, 2007). Socialization of emotion regulation was also posited as a resilience factor against biological vulnerability to depression (Silk et al., 2007). Thus, although scarce, some early research findings have begun to establish an association between parental socialization of emotions and adult depression. However, research on the relationship between socialization and depression as mediated by constructs related to self-concepts is still more scant. One indirect way to get at such self-concepts has been to focus on meta-emotions and attitudes toward emotions.

1.2. Meta-emotions and attitudes toward emotions

A meta-emotion structure is "an organized and structured set of emotions and cognitions about the emotions, both one's own emotions and the emotions of others" (Gottman et al., 1997, p. 7). Most probably due to the fact that meta-emotions were theoretically viewed as an antecedent to parental practices regarding the child's emotions, research on meta-emotions has until now solely examined parents' meta-emotions predicting, among other variables, their behaviors toward children's expression of negative emotions (Wong, Diener, & Isabella, 2008; Yap, Allen, Leve, & Katz, 2008) and adolescents' depressive symptoms (Katz & Hunter, 2007). To our knowledge, only two studies (Buckholdt, Parra, & Jobe-Shields, 2009; Hunter et al., 2011) have measured aspects of meta-emotions in adolescents as an outcome of PSE or parental meta-emotions. Buckholdt et al. found that perceived parental neglect and punishment of children's sadness predicted negative evaluations of sadness in adolescents, such as anger against the self when sad and believing nothing can be done to feel better. Hunter et al. found that parent's meta-emotion philosophy about their child's emotions predicted depressed meta-emotion philosophy in adolescence. However, no study has done the same for adults. In another line of research, emotional inhibition, which can be thought as reflecting the action of a negative evaluation of an emotion, was found by Krause et al. to act as a mediator in the relationship between invalidating parental socialization of emotion and adult distress, including depression symptoms (Krause, Mendelson, & Lynch, 2003). The present study aims at providing further evidence as to how specific socialization practices might contribute to adult depression by influencing intermediary belief structures. In order to amplify on this trend while staying closer to emotion regulation, beliefs about a central emotion to depression, namely sadness, will be explored.

1.3. Sadness and depression

Sadness is linked to the appraisal of an irrevocable loss (Lazarus, 1991). The adaptive function of this emotion would be to elicit a reparative cognitive work in order to accept and adjust to this permanent loss (Arieti & Bemporad, 1978). Consequently, when

sadness is experienced, mental and physical functioning are both slowed down and attentional processes are turned inward and are more detail-oriented (Bonanno, 2009; Izard, 1991).

For many authors, depression is a condition involving a form of complicated, dysfunctional, or malignant sadness (Hagen, 2011; Horwitz & Wakefield, 2007; Izard, 1972; Wolpert, 1999). According to Arieti and Bemporad (1978), depression could be seen as the failure of sadness' reparative work. In addition to biological hypotheses, namely that depression would be the result of a brain chemical defect, these authors propose that "the reparative process (sorrow work) cannot take place because the person is not psychologically equipped for it" (p. 128).

Negative attitudes toward emotions, such as believing that one has to eliminate emotions perceived as weak and negative (such as sadness), are frequently endorsed by depressed people (Power, 1999). In a similar way, Arieti and Bemporad (1978) explain that the repression of painful ideas in order to avoid depression is a frequent process in depressed patients. Thus, negative attitudes toward sadness have been found to be associated with depression.

1.4. Hypotheses

We propose that attitudes toward sadness could be seen as acting as a mediator of the relationship between perceived parental practices regarding a child's emotions and depression in adulthood. We believe that specific negative attitudes toward sadness might contribute to some kind of inhibition of sadness and therefore might be a relevant mediator of the relation between PSE and depression. Since research on attitudes toward emotions and PSE is scarce, we cannot predict exactly which attitude(s) will mediate the relationship between PSE and depression. Therefore, we will use an exploratory approach for identifying the mediator variable(s). We thus hypothesize that:

- retrospective reports of unsupportive PSE in childhood will predict depression scores in adulthood;
- this relationship will be mediated by negative attitudes toward sadness.

2. Method

2.1. Participants

The participants were 140 undergraduate students enrolled in a psychology program at a Canadian University, with a mean age of 21.5 years ($SD = 4.4$). The class in which participants were recruited had a total of 195 students; the response rate was thus 71.7%. Seventy-six percent of the participants were women.

2.2. Instruments

2.2.1. Questionnaire de Socialisation des Émotions (QSE) (Lecours, Philippe & Descôteaux, 2009)

The QSE is a retrospective self-report of parental reactions to the participant's emotions when he/she was a child. The QSE has 20 items which are anchored on a 5-point Likert-type scale, ranging from "Never true" to "Very often true". It has five subscales, each made of four items (prompt: "When I was a child. . ."):

- parental indifference (e.g. "my parents were not interested in how I reacted to important events");
- parental hostility (e.g. "my parents punished me when I was really angry");
- parental distress (e.g. "my parents panicked when I started to cry");
- an attitude of fostering cognitive evaluation, which is reversely coded when the QSE total score is calculated (e.g. "my parents tried to understand why I was angry");
- and parental lack of emotional communication (e.g. "my parents did not talk about their emotions").

The expression "my parents" refers to one or both parents or to the principal caretaker(s) during childhood. Consequently, if at least one parent/caretaker's behavior fits the item description, the participant is told to rate it as being true. Since the measure was designed as an indicator of the importance of each participant's general exposition to unsupportive parental socialization, the specific response of each parent was not differentiated.

The initial psychometric properties of the scale were satisfactory. The questionnaire's items were obtained from a pool of descriptors generated from a literature review on parental reactions to their child's emotional expression and socialization behaviors. The scales were constructed on the basis of a principal component analysis applied to the responses of a validation student sample different from the one used for this study. A confirmatory factor analysis using maximum likelihood as the method of estimation was conducted in Mplus 6.12 (Muthén & Muthén, 2012) in order to confirm the factorial validity of the QSE. Results for a 5-factor model revealed adequate fit indices, $\chi^2(142) = 253.50$, $p < .001$, NC = 1.79, CFI = .95, TLI = .94, RMSEA = .058 [.046; .069], SRMR = .063. All factor loadings were high and significant, ranging from .59 to .93. The QSE total score, indicating the level of unhelpful parental socialization practices, was coherently associated with measures of child trauma, alexithymia and symptoms. For the present study, alphas were: parental indifference ($\alpha = .86$); parental hostility ($\alpha = .66$); parental distress ($\alpha = .67$); parental lack of communication ($\alpha = .84$); and an attitude of fostering cognitive evaluation ($\alpha = .83$).

We preferred to construct the QSE instead of translating into French an existing instrument. In order to measure PSE in adults, Krause et al. adapted the Coping with Children's Negative Emotions Scale (Fabes et al., 2002) into the Socialization of Emotions Scale (SES), a retrospective self-report measure of caretakers' attitudes towards the participant's negative emotions (Krause et al., 2003). The Emotions as a Child Inventory (EAC) (Magai, 1996) can also be used as a questionnaire or an interview for similar dimensions of emotion socialization (reward, neglect, punishment, magnification, override) for four discrete negative emotions (anger, fear, sadness, shame) (O'Neal & Magai, 2005). While the SES and EAC assess direct emotion socialization strategies, that is, parental reactions that are contingent to the child's emotion, the QSE measures both direct (punishment, distress, cognitive elaboration, indifference) and indirect (lack of parental emotional communication) socialization of emotion. It was important to us to include this indirect form of PSE since it is associated with observational learning, implicit in the effect of the level of parental emotional expressivity, thought to be an important dimension of PSE (Eisenberg et al., 1998).

2.2.2. Questionnaire sur l'Attitude Face à l'Émotion de Tristesse (QAFET) (Lecours & Philippe, 2010)

The QAFET is a self-report measure evaluating one's typical attitudes toward sadness. It has 34 items based on a 7-point Likert-type scale, ranging from "Not at all" to "A lot". It has nine subscales (prompt "Usually, when I am in a situation that can cause sadness. . ."):

- replacement of sadness with a positive thought (4 items, e.g. "I try to think about something happier");

- perception of sadness as useful for self-growth, which is reversely coded when the QAFET total score is calculated (4 items, e.g. "I think that sadness helps me understand myself better");
- perception of sadness as a complaint (3 items, e.g. "I tell myself that I don't want to be pitied");
- anger against the self if sad (4 items, e.g., "I find myself stupid for being affected that way");
- perception of sadness as being harmful (4 items, e.g. "I think that sadness should not exist");
- fear of being rejected if sad (4 items, e.g., "I tell myself that if I express my sadness, someone is going to make fun of me");
- denial of sadness (4 items, e.g. "I am not sad, because to me, life is always beautiful");
- fear of where sadness might lead (4 items, e.g. "I am scared of not knowing where my sadness could take me if I let myself being sad";
- and lack of interest for sadness (3 items, e.g. "I don't want to understand what is going on in me").

This questionnaire was constructed for the current study. Again, an initial pool of items was generated on the basis of a literature review on sadness evaluation. The scales were derived from a Principal Component Analysis applied to the responses of a validation student sample different from the one used for this study and the one for the validation of the QSE. A confirmatory factor analysis using maximum likelihood as the method of estimation was conducted in Mplus 6.12 (Muthén & Muthén, 2012) in order to confirm the factorial validity of this scale. Results for a 9-factor model revealed adequate fit indices, $\chi^2(99) = 234.44$, $p < .001$, NC = 2.37, CFI = .96, TLI = .94, RMSEA = .050 [.042; .059], SRMR = .043. All factor loadings were high, ranging from .64 to .95. The initial Cronbach alphas for each of the nine dimensions were satisfactory. The QAFET total score, indicating typical negative attitudes toward sadness, was coherently associated with measures of alexithymia, depression, anxiety, well-being and self-esteem. The psychometric data for the current sample are also satisfactory:

- replacement of sadness with a positive thought ($\alpha = .70$);
- perception of sadness as useful for self-growth ($\alpha = .86$);
- perception of sadness as a complaint ($\alpha = .71$);
- anger against the self if sad ($\alpha = .75$);
- perception of sadness as being harmful ($\alpha = .72$);
- fear of being rejected if sad ($\alpha = .81$);
- denial of sadness ($\alpha = .77$);
- fear of sadness ($\alpha = .77$);
- and lack of interest for sadness ($\alpha = .58$).

The construction of the QAFET was motivated by the fact that, as far as we know, only general measures of attitudes toward emotions have appeared in the literature, such as the Attitude Toward Emotional Expression Scale (Joseph, Williams, Irwing, & Cammock, 1994), the Ambivalence over Emotion Expression Questionnaire (King & Emmons, 1990) and the Emotional Schemas Scale (Leahy, 2002). While all three instruments were found to be predictors of psychological distress (including depression) (King & Emmons, 1990; Leahy, 2002; Surgenor & Joseph, 2000), no study has tried to relate them to PSE. These three instruments assess the (negative or ambivalent) attitude toward emotional expression and do not focus on a specific emotion.

2.2.3. Brief Symptom Inventory - Depression Scale (BSI-D) (Derogatis, 1975)

This scale is part of the BSI, which assesses clinically relevant psychological symptoms. The following prompt was used in our study: "During the past 7 days (including today), how much were you distressed by…?" The BSI-D has six items evaluated on a 5-point Likert-type scale, ranging from "Not at all" (1) to "Extremely" (5). The total score (BSI-D-tot) represents the actual self-reported level of depressive symptoms.

The BSI's psychometric properties are well established (Boulet & Boss, 1991). For the present study, Cronbach's alpha was .82. The BSI depression scale (BSI-D) has demonstrated specificity and sensitivity indices similar to the Beck Depression Inventory's (BDI-II) (Stukenberg, Dura, & Kiecolt-Glaser, 1990). It also predicts BDI-II scores when demographic and clinical variables are controlled (Khalil, Hall, Moser, Lennie, & Frazier, 2011) and it is significantly correlated to the Zung Self-Rating Depression Scale (SRDS) (Tate, Forchheimer, Maynard, Davidoff, & Dijkers, 1993). Moreover, the BSI-D has a fair discriminative value: in a psychiatric inpatient sample, there was a significant difference between BSI-D scores of the depressed and the non-depressed participants (Johnson, Chipp, Brems, & Neal, 2008). The BSI-D was essentially preferred over other self-report depression scales because of its reduced length. While presenting similarly adequate psychometric properties, it has the advantage of being shorter than other well-known depression scales (BDI-II = 30 items, SRDS = 20 items).

2.3. Procedure

Participants were asked to participate in the study during a class. They were free to participate or not, without prejudice, and were not remunerated for their participation. The principal investigator described the study and distributed the three questionnaires to those who accepted the invitation. The participants were told that the questionnaires were constructed by the researcher in order to assess aspects of emotional functioning and that he needed to evaluate their relationships and properties. The questionnaires were completed in the following order: QSE, QAFET and BSI-D. The testing session lasted less than 15 minutes.

2.4. Statistical analyses

In order to test our hypotheses, correlations between the QSE, QAFET and BSI-D total mean scores and subscales' mean scores were calculated. As recommended by Baron and Kenny (1986), hierarchical regressions were also conducted to test our mediational model predicting level of depression symptoms and to control for possible confounding variables, namely sex and age.

3. Results

3.1. Descriptive statistics

Descriptive statistics of the three principal variables are presented in Table 1 and correlations among all variables of the study are shown in Table 2. The correlations between retrospective parental unsupportive socialization of emotion (QSE), actual negative attitudes toward sadness (QAFET) and actual depressive symptoms (BSI-D) scores are all significant, being congruent with our first hypothesis: the more participants report a non supportive PSE, the more negative attitudes toward sadness and the higher the level of depression symptoms are. In addition, with increasingly negative attitudes toward sadness come higher levels of depressive symptoms. The correlations are small to moderate in size (Cohen, 1988).

We could not anticipate which attitudes toward sadness would be related to unsupportive parental socialization and depressive symptoms so we decided to look at the correlations between each dimension of the QAFET and these variables. As shown in Table 2, correlations vary a lot according to which dimension of QAFET is considered. It was thus apparent that the construct of "attitudes toward sadness" was not a homogeneous

Table 1
Descriptive statistics and correlations between QSE, QAFET and BSI-D mean scores.

Variable	M	SD	Minimum	Maximum	QSE	QAFET
QSE	48.61	11.71	22	82	–	
QAFET	115.22	21.97	68	180	.20*	–
BSI-D	1.97	0.76	1	3.83	.28**	.32**

QSE: unsupportive parental socialization of emotion; QAFET: negative attitudes toward sadness; BSI-D: Brief Symptom Inventory Depression Scale.
*$p < .05$, **$p < .01$.

Table 2
Correlations among QSE mean score, QSE dimensions mean scores, QAFET mean score, QAFET dimensions mean scores, and BSI-D mean score.

	QSE	IND	HOST	DIST	COG	COM	QAFET	POS	USE	COMP	ANG	HARM	REJ	DENI	FEAR	LINT	BSI-D
IND	.83**	–															
HOST	.59**	.34**	–														
DIST	.49**	.32**	.23**	–													
COG	−.81**	−.68**	−.29**	−.18*	–												
COM	.73**	.50**	.24**	.12	−.56**	–											
QAFET	.20*	.07	.21*	.23**	−.08	.15	–										
POS	−.13	−.07	.04	.03	.27**	−.14	.27**	–									
USE	−.04	.06	.07	.02	.14	−.15	−.46**	.06	–								
COMP	.21*	.11	.24**	.04	−.13	.19*	.68**	−.07	−.15	–							
ANG	.19*	.06	.16	.29**	−.12	.08	.66**	−.04	−.18*	.49**	–						
HARM	.09	−.01	.11	.14	.03	.13	.75**	.24**	−.45**	.33**	.35**	–					
REJ	.32**	.20*	.25**	.18*	−.27**	.20*	.59**	−.15	−.11	.55**	.42**	.29**	–				
DENI	−.12	−.03	−.06	−.03	.18*	−.11	.27**	.43**	−.08	.09	−.15	.15	−.06	–			
FEAR	.28**	.12	.24**	.31**	−.17*	.18*	.63**	.01	−.07	.41**	.57**	.36**	.46**	−.19*	–		
LINT	.12	.04	−.04	.01	−.22*	.16	.19*	−.25**	−.42**	.11	.11	.07	.06	−.03	.08	–	
BSI-D	.28**	.13	.19*	.22**	−.23**	.23**	.32**	−.27**	−.12	.29**	.52**	.20*	.44**	−.47**	.48**	.10	
AGE	.11	.13	−.02	.09	−.10	.07	−.01	.10	.08	.02	−.06	−.03	.10	.09	−.10	−.02	−.03
SEX	.02	.07	−.06	.16	.02	−.08	−.05	.09	.11	−.13	.15	.10	−.13	−.28**	.14	−.19*	.14

QSE: unsupportive parental socialization of emotion; IND: parental indifference; HOST: parental hostility; DIST: parental distress; COG: parental cognitive elaboration; COM: lack of parental emotional communication; QAFET: negative attitudes toward sadness; POS: replacement of sadness with a positive thought; USE: perception of sadness as useful to self-growth; COMP: perception of sadness as a complaint; ANG: anger against the self if sad; HARM: perception of sadness as being harmful; REJ: fear of being rejected if sad; DENI: denial of sadness; FEAR: fear of where sadness might lead; LINT: lack of interest for sadness; BSI-D: Brief Symptom Inventory Depression Scale; Sex: female: 1, male: 0.
*$p < .05$, **$p < .01$.

one in its relationship with socialization of emotion and depressive symptoms. This was confirmed by a failed, underpowered, attempt to obtain a significant mediation effect of attitudes toward sadness in the relationship between unsupportive parental socialization of emotions and depression while using the total scores of the QSE and QAFET. We then explored which specific types of attitude toward sadness could act as mediators. Four dimensions of QAFET show significant correlations with both the QSE mean score and the BSI mean score: the perception of sadness as a complaint, the anger against the self if sad, the fear of being rejected if sad and the fear of where sadness might lead.

Furthermore, as can be seen in Table 2, since unsupportive parental socialization is rather homogeneously related to depressive symptoms, as apparent from the pattern of correlations between the QSE subscales and the BSI-D, we selected the QSE total score as the predictor in our mediational model.

3.2. Mediational models

As introduced in our second hypothesis, we decided to test a mediational model where a negative attitude toward sadness would explain the relationship between an unhelpful PSE and the present level of depressive symptoms. Since four negative attitudes toward sadness were found to be significantly correlated to both the BSI-D and the QSE mean scores, four mediational models will be presented, where the QSE mean score is the independent variable, the negative attitude toward sadness is the mediator and the BSI-D mean score is the dependent variable. According to Baron & Kenny (1986), three regressions must be calculated to demonstrate a mediation effect: a regression of the mediator on the independent variable (see Models 2, 4, 6 and 8 in Table 3), a regression of the dependent variable on the independent variable (see Model 1 in Table 3) and a multiple regression of the dependent variable on both the independent variable and the mediator (see Models 3, 5, 7 and 9).

3.2.1. Perception of sadness as a complaint

As can be seen in Table 3, our first mediational model, controlling for age and sex, satisfies the three conditions for establishing mediation: first, QSE significantly predicts perception of sadness as a complaint (Model 2); second, QSE also significantly predicts BSI-D (Model 1); and third, perception of sadness as a complaint predicts BSI-D (Model 3). Additionally, when the perception of sadness as a complaint mean score is introduced in the regression of the BSI-D mean score on the QSE mean score (Model 3), the unstandardized beta of the QSE becomes smaller in value (B = .015, $p < .01$) compared to Model 1 (B = .019, $p < .01$). Hence, the relation between the total score of unsupportive PSE and the actual depression score seems to be partially mediated by perception of sadness as a complaint, this finding being congruent with our second hypothesis. In this mediational model, sex is also a significant predictor of the BSI-D score (B = .316, $p < .05$), females presenting significantly more depressive symptoms than males when all other variables are controlled. The mediation effect is significant ($z = 2.36$) and represents 20% of the total effect (see Frazier et al., 2004, for calculations). In other words, 20% of the total effect of unsupportive PSE on actual depressive symptoms level is mediated by the perception of sadness as a complaint. The model that includes the contribution of age, unsupportive PSE, sex, and the perception of sadness as a complaint explains 17% of the variance of the BSI-D mean score, which is a medium effect (Cohen, 1988).

Table 3
Summary of unstandardized regression coefficients from linear regression analyses testing four mediational models for parental socialization of emotion and depression.

	Model 1 (Does QSE predict BDI-D controlling for age and sex?)	Model 2 (Does QSE predict COMP controlling for age and sex?)	Model 3 (Does COMP predict BDI-D controlling for age, sex and QSE?)	Model 4 (Does QSE predict ANG controlling for age and sex?)	Model 5 (Does ANG predict BDI-D controlling for age, sex and QSE?)	Model 6 (Does QSE predict REJ controlling for age and sex?)	Model 7 (Does REJ predict BDI-D controlling for age, sex and QSE?)	Model 8 (Does QSE predict FEAR controlling for age and sex?)	Model 9 (Does FEAR predict BDI-D controlling for age, sex and QSE?)
Age	−.009	−.005	−.008	−.021	−.003	.016	−.013	−.036	.000
Sex	.248	−.476	.316*	.421	.129	−.366	.349*	.385	.151
QSE	.019**	.026*	.015**	.021*	.013*	.031***	.010	.032**	.011*
COMP	–	–	.143**	–	–	–	–	–	–
ANG	–	–	–	–	.281***	–	–	–	–
REJ	–	–	–	–	–	–	.276***	–	–
FEAR	–		–	–	–	–	–	–	.251***
R^2	.10**	.06*	.17**	.06*	.31***	.12**	.26***	.11**	.26***
F Value	5.00 (3, 133)	2.93 (3, 130)	10.62 (1, 129)	2.96 (3, 133)	38.94 (1, 132)	6.17 (3, 133)	27.17 (1, 132)	5.46 (3, 133)	28.49 (1, 132)

QSE: unsupportive parental socialization of emotion; BSI-D: Brief Symptom Inventory Depression Scale; Sex: female: 1, male: 0; COMP: perception of sadness as a complaint; ANG: anger against the self if sad; REJ: fear of being rejected if sad; FEAR: fear of where sadness might lead.
* $p < .05$, ** $p < .01$, *** $p < .001$.

3.2.2. Anger against the self if sad

As shown in Table 3 (Models, 1, 4 and 5), our second mediational model, controlling for age and sex, also satisfies the three conditions for establishing mediation. Moreover, when the anger against the self if sad mean score is introduced in the regression of the BSI-D mean score on the QSE mean score (Model 5), the unstandardized beta of the QSE becomes smaller in value and significance (B = .013, $p < .05$) compared to Model 1 (B = .019, $p < .01$). Hence, the relationship between the total score of unsupportive PSE and the actual depression score seems to be partially mediated by the anger against the self if sad. The mediation effect is significant ($z = 2.33$) and represents 31% of the total effect. In other words, 31% of the total effect of unsupportive PSE on actual depressive symptoms level is mediated by the anger against the self if sad. The model that includes age, sex, unsupportive PSE and anger against the self if sad explains 31% of the variance of the BSI-D mean score, which is a large effect (Cohen, 1988).

3.2.3. Fear of being rejected if sad

As presented in Table 3 (Models 1, 6 and 7), our third mediational model, controlling for age and sex, also satisfies the three conditions for establishing mediation. Moreover, when the fear of being rejected if sad mean score is introduced in the regression of the BSI-D mean score on the QSE mean score (Model 7), the unstandardized beta of the QSE becomes smaller in value and significance (B = .010, $p = .054$) compared to Model 1 (B = .019, $p < .01$). Hence, the relationship between the total score of unsupportive PSE and the actual depression score seems to be mediated by the fear of being rejected if sad. In this mediational model, sex is also a significant predictor of the BSI-D score (B = .349, $p < .05$), which means that females present significantly more depressive symptoms than males when all other variables are controlled. The mediation effect is significant ($z = 3.86$) and represents 45% of the total effect. In other words, 45% of the total effect of unsupportive PSE on actual depressive symptoms level is mediated by the fear of being rejected if sad. This model, which is composed of the contribution of age, sex, unsupportive PSE and fear of being rejected if sad, explains 26% of the variance of the BSI-D mean score, which is a large effect (Cohen, 1988).

3.2.4. Fear of where sadness might lead

As can be seen in Table 3 (Models 1, 8 and 9), our fourth and last mediational model, controlling for age and sex, also satisfies the three conditions for establishing mediation. Moreover, when the fear of where sadness might lead mean score is introduced in the regression of the BSI-D mean score on the QSE mean score (Model 9), the unstandardized beta of the QSE becomes smaller in value and significance (B = .011, $p < .05$) compared to Model 1 (B = .019, $p < .01$). Hence, the relationship between the total score of unsupportive PSE and the actual depression score seems to be partially mediated by the fear of where sadness might lead. The mediation effect is significant ($z = 3.55$) and represents 42% of the total effect. In other words, 42% of the total effect of unsupportive PSE on actual depressive symptoms level is mediated by the fear of where sadness might lead. This model, which includes age, sex, unsupportive PSE and fear of where sadness might lead, explains 26% of the variance of the BSI-D mean score, which is a large effect (Cohen, 1988).

4. Discussion

Using an exploratory approach, the goals of this study were first to verify if retrospective reports of unsupportive parental socialization of emotion (PSE) would predict present levels of depressive symptoms and, second, if actual negative attitudes toward sadness would mediate this relationship. Results confirmed our first hypothesis and revealed that four specific attitudes toward sadness, namely the perception of sadness as a complaint, the anger against the self if sad, the fear of being rejected if sad and the fear of where sadness might lead, were, of all nine measured attitudes, the ones correlated to both retrospective unsupportive PSE and actual depressive symptoms. Moreover, these four attitudes each mediated the relationship between retrospective unsupportive PSE and actual depressive symptoms. These results are now discussed.

First, the prediction of present levels of depressive symptoms by retrospective reports of unsupportive PSE is congruent with numerous studies predicting depression with retrospective childhood emotional abuse and neglect (i.e. parental humiliation, rejection, psychological unavailability or ignoring of the child's emotional needs) (Maciejewski & Mazure, 2006; Wright, Crawford, & Del Castillo, 2009) and low parental care and high overprotection (Alloy et al., 2001; Whisman & Kwon, 1992). Many of these related studies explained this relationship by the development of dysfunctional cognitions or schemas (i.e., feelings of worthlessness, fear of criticism and rejection), which would increase vulnerability to depression. Since we specifically assessed the recall of parental reactions to the emotions of the participant as a child (instead of general parenting practices), considering present attitudes toward emotions as a mediator between unsupportive PSE and depression (instead of more general cognitions about the self and the environment) was a logical choice and is congruent with the aforementioned studies. In line with our results, Silk et al. suggested in 2007 that the socialization of emotion regulation was a possible

developmental process contributing to resilience against depression (Silk et al., 2007).

Second, four attitudes toward sadness mediated the prediction of actual depressive symptoms by retrospective reports of unsupportive PSE. Before discussing each attitude separately, we will discuss them as a whole. The perception of sadness as a complaint, the anger against the self if sad, the fear of being rejected if sad and the fear of where sadness might lead can all be seen as attitudes contributing to emotional inhibition, which was found to be a mediator in the relationship between invalidating parental socialization of emotion and adult distress (Krause et al., 2003). Indeed, these four negative attitudes toward sadness are linked to the anticipation of possible negative consequences if sadness is expressed: being looked upon with pity, being rejected by others, or by oneself, and losing emotional control. The fact that these four attitudes are highly correlated (Table 2) suggests that they could be part of the same system of attitudes: when one attitude is reported, it is very likely that another, or others, will also be reported. Different hypotheses regarding their dynamics can be elaborated and could be investigated in future studies: for example, the perception of sadness as a complaint could be a consequence of the fear of being rejected if sad, and anger against the self could be the following emotional reaction for exposing the self to potential social rejection. Fear of where sadness might lead could also be followed by anger against the self as a means to avoiding sadness and potential rejection.

We will now discuss each attitude individually. Since they are both related to anticipating negative social consequences of sadness, the perception of sadness as a complaint and the fear of being rejected if sad will be discussed together. The perception of sadness as a complaint is the impression that expressing sadness is akin to whining and could elicit pity or contempt from others. In the same way, the fear of being rejected if sad can be seen as a fear of possible external consequences of expressing sadness, namely being laughed at or not being taken care of. Previous studies have indeed reported that people reporting negative attitudes toward emotional expression, such as a belief of social rejection, also tend to have higher scores on the BDI (Joseph et al., 1994). But how can these specific attitudes toward sadness predict depression? Those who have negative attitudes toward emotional expression would also be more ambivalent about expressing their emotions (Laghai & Joseph, 2000) and would report reduced social support seeking following a distressing event (Joseph et al., 1994). Furthermore, the more depressed people report to be, the more they believe their emotions are different from others' (Leahy, 2002). This low consensus judgment might lead to reduced social contact and turn into a vicious circle where depressed people, considering there is a low probability that others share their experiences and emotions, will avoid social interaction and, consequently, will not receive feedback that could change their initial perception of low consensus, leading again to reduced social contact (Brewin & Furnham, 1986). Thus, depressive states and fear of being rejected have been clearly linked to less confiding relationships. Yet, expressing one's negative feelings to another person might alleviate distress by reducing distress about distress and facilitating insight (Kennedy-Moore & Watson, 2001). More precisely, talking to someone else about one's distress might, on one hand, let one see their emotions as less frightening or unbearable than one first thought and, on the other hand, might help create meaning for the sources and implications of sad feelings, the two processes being associated with less distress and higher well-being.

Sex turned out to be a significant predictor of the BSI score only in the mediational models involving the perception of sadness as a complaint and the fear of being rejected if sad. Being a woman was indeed more related to depressive symptoms when those two negative attitudes toward social consequences of expressing sadness were used as mediators of the relationship between PSE and depression scores. This essentially means that the unique contribution of sex to depression becomes significant over and above the mediation effects observed for these two attitudes. Since the relationship between sex and depression is modest ($r = .14$), and the size of the correlations between sex and the four attitudes is somewhat equivalent (COMP: $r = -.13$, ANG: $r = .15$, REJ: $r = -.13$, FEAR = .14), this finding is likely to be the result of a small, conceptually inert, advantage of sex in the pattern of correlations among the variables in the regressions for sadness as a complaint and fear of being rejected if sad.

Anger against the self if sad could be defined as blaming oneself for being sad. Consistent with our results, the BDI score was found to be positively correlated with guilt toward emotions in another study (Leahy, 2002). In the same way, Buckholdt et al. (2009) suggest that parental neglect and punishment of sadness could lead children to feel ashamed of their sad feelings and thus use deliberate self-harm to regulate their negative feelings. Furthermore, anger is frequently experienced in reaction to sadness in psychotherapy, since it would be a less painful and a more powerful emotion than sadness, and would thus be used for self-protection when sadness is experienced (Henretty, Levitt, & Mathews, 2008). Thus, anger against the self if sad could be seen as both being critical toward the self for feeling sad and as avoiding sadness by feeling less vulnerable. But how could anger against the self if sad be related to depression? Just as the three other discussed attitudes, being angry against oneself if sad could inhibit the experience of sadness and thus prevent the reparative work normally elicited by sadness, resulting in depression (Arieti & Bemporad, 1978). Anger against oneself would also "complicate" sadness when experienced and thus lead to an even more painful and dysphoric feeling of hurt when sad (Izard, 1991).

As for the fear of where sadness might lead, it can be conceptualized as a fear of possible internal consequences of experiencing sadness, such as losing emotional control, being overwhelmed by sadness, etc. This attitude was reported by clients who experience sadness in psychotherapy (Henretty et al., 2008): they were afraid that their sadness could become pathological if they experienced it for too long a time. This conceptualization is also in line with findings from Leahy (2002), who reported that depression scores were positively correlated with believing one's emotions were incomprehensible and uncontrollable. In addition, the BDI score was found to be predicted by the negative reactivity to emotions, which consists of negative attitudes toward emotions, such as the fear of losing control if one expresses emotion (Mennin, Holaway, Fresco, Moore, & Heimberg, 2007). Furthermore, the fear of losing emotional control if sad could be explained by a difficulty in being self-reassuring, which has been found in those reporting a lack of parental warmth and which predicts depressive symptoms (Irons, Gilbert, Baldwin, Baccus, & Palmer, 2006). Moreover, development of self-reassurance through compassionate mind training was associated with significant reductions of depression level (Gilbert & Procter, 2006).

The results of this study are limited by different factors. First, the convenience sample used prevents us from generalizing the results to the general population. Therefore, other studies are needed to test the validity of our results. The use of clinical and non-clinical samples representative of the general population would allow a greater variance of depression scores. Second, we used a retrospective and self-reported measure of PSE, which might not have been an exact assessment of parental reactions to participants' emotions when they were children. Some participants could have minimized or even forgotten, intentionally or not, their parents' behaviors toward their emotions during childhood. Or inversely, depressive symptoms might bias participants toward recalling more negatively tinged interactions with their parents.

A longitudinal study would be the best way to overcome this limitation, where observational and self-reported measures of PSE could be used and compared. Third, the Cronbach alphas for two QSE subscales and one QAFET subscale were under .70, the usual threshold for acceptable internal consistency (Pallant, 2007).

Concerning the theoretical contributions of this study, we demonstrated that unsupportive PSE and attitudes toward sadness, two relatively new variables in the psychology literature, both predicted depression levels. We also suggest that negative attitudes toward sadness, such as perceiving sadness as a complaint, anger against the self, fear of rejection and fear of losing emotional control, would arise from perceived unsupportive PSE. As for the practical contributions of this study, our findings justify a closer look at PSE and attitudes toward sadness when clinically investigating depression. In particular, the four attitudes that were found to be mediators could be specifically targeted by therapeutic interventions in the psychotherapy of depression. For example, education and cognitive restructuring could be used to alter these negative attitudes toward sadness. By modifying their attitudes toward sadness, patients would most probably be more inclined to fully experience their sadness instead of avoiding it. The reparative work of sadness (Arieti & Bemporad, 1978) could then take place, thus contributing to the reduction of depressive symptoms.

Disclosure of interest

The authors declare that they have no conflicts of interest concerning this article.

Acknowledgments

The collection and analysis of data of this research were conducted with the help of a grant from the Social Sciences and Humanities Research Council of Canada.

References

Alloy, L. B., Abramson, L. Y., Tashman, N. A., Berrebbi, D. S., Hogan, M. E., Whitehouse, W. G., et al. (2001). Developmental origins of cognitive vulnerability to depression: parenting, cognitive, and inferential feedback styles of the parents of individuals at high and low cognitive risk for depression. *Cognitive Therapy and Research*, *25*, 397–423. http://dx.doi.org/10.1023/A:1005534503148

Arieti, S., & Bemporad, J. R. (1978). *Severe and mild depression: The psychotherapeutic approach*. New York, NY: Basic Books.

Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*, 1173–1182. http://dx.doi.org/10.1037/0022-3514.51.6.1173

Beck, A. T. (1967). *Depression: causes and treatment*. Philadelphia, PA: University of Pennsylvania Press.

Blatt, S. J., & Homann, E. (1992). Parent-child interaction in the etiology of dependent and self-critical depression. *Clinical Psychology Review*, *12*, 47–91. http://dx.doi.org/10.1016/0272-7358%2892%2990091-L

Bonanno, G. A. (2009). *The other side of sadness: What the new science of bereavement tells us about life after loss*. New York, NY: Basic Books.

Boulet, J., & Boss, M. W. (1991). Reliability and validity of the Brief Symptom Inventory. *Psychological Assessment: A Journal of Consulting and Clinical Psychology*, *3*, 433–437. http://dx.doi.org/10.1037/1040-3590.3.3.433

Brewin, C. R., & Furnham, A. (1986). Attributional versus preattributional variables in self-esteem and depression: a comparison and test of learned helplessness theory. *Journal of Personality and Social Psychology*, *50*, 1013–1020. http://dx.doi.org/10.1037/0022-3514.50.5.1013

Buckholdt, K. E., Parra, G. R., & Jobe-Shields, L. (2009). Emotion regulation as a mediator of the relation between emotion socialization and deliberate self-harm. *American Journal of Orthopsychiatry*, *79*, 482–490. http://dx.doi.org/10.1037/a0016735

Charoensuk, S. (2007). Negative thinking: a key factor in depressive symptoms in Thai adolescents. *Issues in Mental Health Nursing*, *28*, 55–74. http://dx.doi.org/10.1080/01612840600996265

Cohen, J. W. (1988). *Statistical power analysis for the behavioural sciences*. Hillsdale, NJ: Lawrence Erlbaum Associates.

Derogatis, L. R. (1975). *Brief Symptom Inventory*. Baltimore: MD: Clinical Psychometric Research.

Dmitrieva, J., Chen, C., Greenberger, E., & Gil-Rivas, V. (2004). Family relationships and adolescent psychosocial outcomes: converging findings from Eastern and Western cultures. *Journal of Research on Adolescence*, *14*, 425–447. http://dx.doi.org/10.1111/j.1532-7795.2004.00081.x

Eisenberg, N., Cumberland, A., & Spinrad, T. L. (1998). Parental socialization of emotion. *Psychological Inquiry*, *9*, 241–273. http://dx.doi.org/10.1207/s15327965pli0904_1

Fabes, R. A., Poulin, R. E., Eisenberg, N., & Madden-Derdich, D. A. (2002). The Coping with Children's Negative Emotions Scale (CCNES): psychometric properties and relations with children's emotional competence. *Marriage & Family Review*, *34*, 285–310. http://dx.doi.org/10.1300/J002v34n03_05

Frazier, P. A., Tix, A. P., & Barron, K. E. (2004). Testing moderator and mediator effects in counseling psychology research. *Journal of Counseling Psychology*, *51*, 115–134.

Garside, R. B., & Klimes-Dougan, B. (2002). Socialization of discrete negative emotions: gender differences and links with psychological distress. *Sex Roles*, *47*, 115–128. http://dx.doi.org/10.1023/A:1021090904785

Gilbert, P., & Procter, S. (2006). Compassionate mind training for people with high shame and self-criticism: overview and pilot study of a group therapy approach. *Clinical Psychology & Psychotherapy*, *13*, 353–379. http://dx.doi.org/10.1002/cpp.507

Gottman, J. M., Katz, L. F., & Hooven, C. (1997). *Meta-emotion: How families communicate emotionally*. Hillsdale, NJ, England: Lawrence Erlbaum Associates, Inc.

Hagen, E. H. (2011). Evolutionary theories of depression: A critical review. *Canadian Journal of Psychiatry*, *56*, 716–726.

Harris, A. E., & Curtin, L. (2002). Parental perceptions, early maladaptive schemas, and depressive symptoms in young adults. *Cognitive Therapy and Research*, *26*, 405–416. http://dx.doi.org/10.1023/A:1016085112981

Henretty, J. R., Levitt, H. M., & Mathews, S. S. (2008). Clients' experiences of moments of sadness in psychotherapy: a grounded theory analysis. *Psychotherapy Research*, *18*, 243–255. http://dx.doi.org/10.1080/10503300701765831

Horwitz, A. V., & Wakefield, J. C. (2007). *The loss of sadness: How psychiatry transformed normal sorrow into depressive disorder*. Oxford: Oxford University Press.

Hunter, E. C., Katz, L. F., Shortt, J. W., Davis, B., Leve, C., Allen, N. B., et al. (2011). How do I feel about feelings? Emotion socialization in families of depressed and healthy adolescents. *Journal of Youth and Adolescence*, *40*, 428–441. http://dx.doi.org/10.1007/s10964-010-9545-2

Irons, C., Gilbert, P., Baldwin, M., Baccus, J., & Palmer, M. (2006). Parental recall, attachment relating and self-attacking/self-reassurance: their relationship with depression. *British Journal of Clinical Psychology*, *45*, 297–308. http://dx.doi.org/10.1348/014466505X68230

Izard, C. E. (1972). *Patterns of emotions: A new analysis of anxiety and depression*. New York: Academic Press.

Izard, C. E. (1991). *The psychology of emotions*. New York, NY: Plenum Press.

Johnson, M. E., Chipp, C. L., Brems, C., & Neal, D. B. (2008). Receiver operating characteristics for the Brief Symptom Inventory Depression, Paranoid Ideation, and Psychoticism Scales in a large sample of clinical inpatients. *Psychological Reports*, *102*, 695–705. http://dx.doi.org/10.2466/PR0.102.3.695-705

Jones, S., Eisenberg, N., Fabes, R. A., & MacKinnon, D. P. (2002). Parents' reactions to elementary school children's negative emotions: relations to social and emotional functioning at school. *Merrill-Palmer Quarterly: Journal of Developmental Psychology*, *48*, 133–159. http://dx.doi.org/10.1353/mpq.2002.0007

Joseph, S., Williams, R., Irwing, P., & Cammock, T. (1994). The preliminary development of a measure to assess attitudes towards emotional expression. *Personality and Individual Differences*, *16*, 869–875. http://dx.doi.org/10.1016/0191-8869%2894%2990231-3

Katz, L. F., & Hunter, E. C. (2007). Maternal meta-emotion philosophy and adolescent depressive symptomatology. *Social Development*, *16*, 343–360. http://dx.doi.org/10.1111/j.1467-9507.2007.00388.x

Kennedy-Moore, E., & Watson, J. C. (2001). How and when does emotional expression help? *Review of General Psychology*, *5*, 187–212. http://dx.doi.org/10.1037/1089-2680.5.3.187

Khalil, A. A., Hall, L. A., Moser, D. K., Lennie, T. A., & Frazier, S. K. (2011). The psychometric properties of the Brief Symptom Inventory Depression and Anxiety subscales in patients with heart failure and with or without renal dysfunction. *Archives of Psychiatric Nursing*, *25*, 419–429. http://dx.doi.org/10.1016/j.apnu.2010.12.005

King, L. A., & Emmons, R. A. (1990). Conflict over emotional expression: psychological and physical correlates. *Journal of Personality and Social Psychology*, *58*, 864–877. http://dx.doi.org/10.1037/0022-3514.58.5.864

Krause, E. D., Mendelson, T., & Lynch, T. R. (2003). Childhood emotional invalidation and adult psychological distress: the mediating role of emotional inhibition. *Child Abuse & Neglect*, *27*, 199–213. http://dx.doi.org/10.1016/S0145-2134%2802%2900536-7

Laghai, A., & Joseph, S. (2000). Attitudes towards emotional expression: factor structure, convergent validity and associations with personality. *British Journal of Medical Psychology*, *73*, 381–384. http://dx.doi.org/10.1348/000711200160598

Lazarus, R. S. (1991). *Emotion and adaptation*. New York, NY: Oxford University Press.

Leahy, R. L. (2002). A model of emotional schemas. *Cognitive and Behavioral Practice*, *9*, 177–190. http://dx.doi.org/10.1016/S1077-7229%2802%2980048-7

Lecours, S., & Philippe, F. L. (2010). Le questionnaire sur l'attitude face à l'émotion de tristesse (QAFET). Unpublished manuscript.

Lecours, S., Philippe, F. L., & Descôteaux, J. (2009). *Emotion socialization and alexithymia* Poster presented at the annual meeting of the Society for Personality Assessment, New Orleans, March.

Liu, Y.-L. (2003). The mediators between parenting and adolescent depressive symptoms: dysfunctional attitudes and self-worth. *International Journal of Psychology*, *38*, 91–100. http://dx.doi.org/10.1080/00207590244000205

Maciejewski, P. K., & Mazure, C. M. (2006). Fear of criticism and rejection mediates an association between childhood emotional abuse and adult onset of major depression. *Cognitive Therapy and Research*, *30*, 105–122. http://dx.doi.org/10.1007/s10608-006-9012-2

Magai, C. (1996). *Emotions as a child*. Brooklyn: Long Island University. Unpublished manuscript.

McGinn, L. K., Cukor, D., & Sanderson, W. C. (2005). The relationship between parenting style, cognitive style, and anxiety and depression: does increased early adversity influence symptom severity through the mediating role of cognitive style? *Cognitive Therapy and Research*, *29*, 219–242. http://dx.doi.org/10.1007/s10608-005-3166-1

Mennin, D. S., Holaway, R. M., Fresco, D. M., Moore, M. T., & Heimberg, R. G. (2007). Delineating components of emotion and its dysregulation in anxiety and mood psychopathology. *Behavior Therapy*, *38*, 284–302. http://dx.doi.org/10.1016/j.beth.2006.09.001

Muthén, L. K. & Muthén, B. O. (2012). Version 6 Mplus user's guide. Retrieved from http://www.statmodel.com/download/usersguide/Mplus%20Users%20Guide%20v6.pdf (May 22th, 2012).

O'Neal, C. R., & Magai, C. (2005). Do parents respond in different ways when children feel different emotions? The emotional context of parenting. *Development and Psychopathology*, *17*, 467–487. http://dx.doi.org/10.1017/S0954579405050224

Oliver, J., & Berger, L. S. (1992). Depression, parent-offspring relationships, and cognitive vulnerability. *Journal of Social Behavior & Personality*, *7*, 415–429.

Pallant, J. (2007). *SPSS survival manual*. Maidenhead, England: McGraw-Hill.

Parker, G., Tupling, H., & Brown, L. (1979). A parental bonding instrument. *British Journal of Medical Psychology*, *52*, 1–10.

Power, M. J. (1999). Sadness and its disorders. In *Handbook of cognition and emotion*. New York, NY: John Wiley & Sons Ltd., pp. 497–519

Randolph, J. J., & Dykman, B. M. (1998). Perceptions of parenting and depression-proneness in the offspring: dysfunctional attitudes as a mediating mechanism. *Cognitive Therapy and Research*, *22*, 377–400. http://dx.doi.org/10.1023/A:1018761229824

Shah, R., & Waller, G. (2000). Parental style and vulnerability to depression: the role of core beliefs. *Journal of Nervous and Mental Disease*, *188*, 19–25. http://dx.doi.org/10.1097/00005053-200001000-00004

Silk, J. S., Vanderbilt-Adriance, E., Shaw, D. S., Forbes, E. E., Whalen, D. J., Ryan, N. D., et al. (2007). Resilience among children and adolescents at risk for depression: mediation and moderation across social and neurobiological context. *Development and Psychopathology*, *19*, 841–865. http://dx.doi.org/10.1017/S0954579407000417

Stack, D. M., Serbin, L. A., Enns, L. N., Ruttle, P. L., & Barrieau, L. (2010). Parental effects on children's emotional development over time and across generations. *Infants & Young Children*, *23*, 52–69. http://dx.doi.org/10.1097/IYC.0b013e3181c97606

Stocker, C. M., Richmond, M. K., Rhoades, G. K., & Kiang, L. (2007). Family emotional processes and adolescents' adjustment. *Social Development*, *16*, 310–325. http://dx.doi.org/10.1111/j.1467-9507.2007.00386.x

Stukenberg, K. W., Dura, J. R., & Kiecolt-Glaser, J. K. (1990). Depression screening scale validation in an elderly, community-dwelling population. *Psychological Assessment: A Journal of Consulting and Clinical Psychology*, *2*, 134–138. http://dx.doi.org/10.1037/1040-3590.2.2.134

Surgenor, T., & Joseph, S. (2000). Attitudes toward emotional expression, relational competence and psychological distress. *British Journal of Medical Psychology*, *73*, 139–142. http://dx.doi.org/10.1348/000711200160264

Tao, A., Zhou, Q., & Wang, Y. (2010). Parental reactions to children's negative emotions: prospective relations to Chinese children's psychological adjustment. *Journal of Family Psychology*, *24*, 135–144. http://dx.doi.org/10.1037/a0018974

Tate, D. G., Forchheimer, M., Maynard, F., Davidoff, G., & Dijkers, M. (1993). Comparing two measures of depression in spinal cord injury. *Rehabilitation Psychology*, *38*, 53–61. http://dx.doi.org/10.1037/h0080287

Valiente, C., Eisenberg, N., Fabes, R. A., Shepard, S. A., Cumberland, A., & Losoya, S. H. (2004). Prediction of children's empathy-related responding from their effortful control and parents' expressivity. *Developmental Psychology*, *40*, 911–926. http://dx.doi.org/10.1037/0012-1649.40.6.911

Whisman, M. A., & Kwon, P. (1992). Parental representations, cognitive distortions, and mild depression. *Cognitive Therapy and Research*, *16*, 557–568. http://dx.doi.org/10.1007/BF01175141

Wolpert, L. (1999). *Malignant sadness: The anatomy of depression*. London: Faber.

Wong, M. S., Diener, M. L., & Isabella, R. A. (2008). Parents' emotion related beliefs and behaviors and child grade: associations with children's perceptions of peer competence. *Journal of Applied Developmental Psychology*, *29*, 175–186. http://dx.doi.org/10.1016/j.appdev.2008.02.003

Wright, M. O. D., Crawford, E., & Del Castillo, D. (2009). Childhood emotional maltreatment and later psychological distress among college students: the mediating role of maladaptive schemas. *Child Abuse & Neglect*, *33*, 59–68. http://dx.doi.org/10.1016/j.chiabu.2008.12.007

Yap, M. B. H., Allen, N. B., Leve, C., & Katz, L. F. (2008). Maternal meta-emotion philosophy and socialization of adolescent affect: the moderating role of adolescent temperament. *Journal of Family Psychology*, *22*, 688–700. http://dx.doi.org/10.1037/a0013104