

Running head: EFFECTS OF CHILDHOOD EMOTION COACHING ON YOUNG
ADULTHOOD

Emotion Coaching in Childhood and Womens' Romantic Intimacy, Romantic Attachment,
and Emotion Regulation in Young Adulthood

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Abstract

The relationship between female undergraduate students' (n = 151) reports of parental emotion coaching in childhood and their reports of emotion regulation, romantic attachment, and romantic intimacy in young adulthood was investigated. The female undergraduate students completed additional questionnaires about their mood, personality characteristics, and relationship satisfaction in young adulthood, and parental warmth in childhood. Remembered supportive emotion coaching (comprised of Emotion-Focused Reactions, Problem-Focused Reactions and Expressive Encouragement) was significantly and positively correlated with healthier emotion regulation (reappraisal), and was significantly and negatively correlated with less healthy emotion regulation (suppression). Remembered unsupportive emotion coaching (comprised of Minimizing Reactions, Punitive Reactions, and Distress Reactions) was significantly and positively correlated with romantic avoidant and anxious attachment. Romantic intimacy was not significantly correlated with remembered supportive or unsupportive emotion coaching. Emotion regulation mediated the relationship between remembered emotion coaching and avoidant and anxious attachment, but not romantic intimacy. Emotion regulation continued to mediate the relationship between remembered emotion coaching and avoidant attachment after mood, personality characteristics, relationship satisfaction, and parental warmth were entered into the model as covariates, but emotion regulation did not continue to mediate the relationship after covariates were entered into the model when anxious attachment was the predicted variable.

Keywords: emotion coaching, romantic attachment, romantic intimacy, emotion regulation

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Emotion Coaching in Childhood and Romantic Intimacy, Romantic Attachment, and Emotion Regulation in Young Adulthood

How individuals manage their emotional states has important implications for their general adaptation and the quality of their social relationships. Emotion regulation is the process of influencing which emotions are experienced, when they are experienced, the intensity and duration of emotions, and how emotions are expressed (Gross, 1998). Emotion regulation aids in the maintenance of emotional homeostasis, meaning that it is involved in keeping emotional arousal within a range that is optimal for performance in a given situation (Cicchetti, Ganiban, & Barnett, 1991). A main goal of emotion regulation is to meet the demands of one's current situation. For example, a child may employ emotion regulation strategies to decrease negative affect in order to avoid crying at school—allowing him or her to meet the social demand of fitting in with his or her peers.

Healthy vs. Unhealthy Emotion Regulation

Using an undergraduate sample, Gross and John (2003) have studied two commonly used forms of emotion regulation: cognitive reappraisal and expressive suppression. Cognitive reappraisal refers to altering thoughts about an emotional situation in order to modify the emotional effect (Gross & John, 2003). Expressive suppression involves decreasing emotionally expressive acts once the individual is already emotional (Gross & John, 2003). For adults, cognitive reappraisal is an emotion regulation strategy that can be employed earlier on in the emotional sequence and requires fewer cognitive resources to execute, as compared to expressive suppression (Gross & John, 2003). In addition, cognitive reappraisal is a strategy that allows for the possibility of changing the emotional impact of an event, whereas expressive suppression involves hiding emotions externally that are already being experienced internally (Gross & John, 2003).

Gross and John (2003) found that participants who suppressed their negative emotions while watching film clips showed less expressive behaviour, but experienced just as much negative emotion as those that simply watched the film clips, and experienced greater signs of physiological reactivity (cardiovascular and electrodermal systems) as compared to those who simply watched the film clips without suppressing their emotions. Participants who were assigned to the cognitive reappraisal condition had decreased expression and experience of negative emotions without an increase in physiological reactivity while watching these film clips. Gross and John (2003) have found that, unlike reappraisal, use of the suppression strategy seems to use up more cognitive resources leading to deficits in memory for social information that was presented while regulating emotions. Overall, reappraisal tends to be a more helpful and healthy form of emotion regulation: it does not lead to an increase in physiological reactivity, and can be used to decrease the experience of negative emotion when necessary and/or appropriate. In contrast, suppression tends to have a negative impact, cognitively impairing memory for social information, not decreasing the experience of negative emotions, and leading to greater signs of physical reactivity.

Why is Emotion Regulation Important?

Generally, emotion regulation plays a large role in an individual's psychological adjustment or maladjustment (Bell & Calkins, 2000). When emotion regulation abilities do not develop adequately, children may have trouble regulating negative emotions and be at greater risk for the development of behavioural and emotional problems (Cicchetti, Ackerman, & Izard, 1995). In fact, emotion regulation difficulties are involved in approximately half of Axis I clinical disorders and all of Axis II personality disorders

(American Psychiatric Association, 2000). For example, difficulty regulating anger may lead to the development of aggression or conduct disorder (Davidson, Putnam, & Larson, 2007).

As previously mentioned, emotion regulation may also impact physical health. More specifically, suppressing emotions instead of using healthier emotion regulation strategies, such as the reappraisal of a situation, may lead to adverse physical consequences (Gross, 1998). When emotions are not expressed behaviourally but are “bottled up” they may be released via other channels, such as physiological channels. Thus, suppressing emotions may heighten one’s physiological reaction (i.e., increased heart rate). This could explain why the suppression of negative emotions, specifically anger, is associated with a greater risk of developing hypertension and coronary disease (Dembroski, MacDougall, Williams, Haney, & Blumenthal, 1985). These adverse physiological consequences may be diminished if appropriate emotion regulation strategies are employed, allowing emotions to be experienced in a healthy manner, within an individual’s emotional homeostasis.

Not only are appropriate emotion regulation abilities crucial for good physical and mental health but they also play an important role in interpersonal relationships (Bell & Calkins, 2000). Appropriate emotion regulation abilities allow individuals to engage in controlled emotional give-and-take with others and foster a social climate in which there is a higher ratio of positive emotion to negative emotion experienced in interactions, which are essential ingredients for successful social relationships (Gottman, 1993). Without adequate emotion regulation abilities children may display angry/aggressive behaviours towards their peers or, if they cannot regulate their anxiety, may avoid their peers, and these inappropriate emotion-linked responses may lead to peer rejection over time (Fabes & Eisenberg, 1992).

How Parents Influence Children's Emotion Regulation

Parenting style may influence a child's development of emotion regulation. An influential theory on parenting style proposes that parenting style varies on the dimensions of warmth, also sometimes called acceptance/responsiveness, and control (Baumrind, 1971). Parental control refers to the degree to which parents monitor and discipline the child. Varying combinations of warmth and control yield Baumrind's four parenting styles: the *authoritative* parenting style is defined by high warmth and high control, the *authoritarian* parenting style is defined by high control and low warmth, the *permissive* parenting style is defined by high warmth and low control, and the *uninvolved* parenting style is defined by low warmth and low control. The research on these parenting styles suggests that the authoritative parenting style is associated with the best child outcomes as compared to the other parenting styles (Baumrind, 1971). Children who are exposed to the authoritative parenting style tend to be self-confident, well behaved, and responsive to parental messages, have well developed emotion regulation skills, and perform well academically and socially. In contrast, children of authoritarian parents tend to have difficulty regulating their emotions, becoming easily upset and reacting with anger when frustrated. This link between parenting style and child outcome may be explained by emotion regulation abilities. More specifically, when parents display parenting styles that are emotionally dysregulated and punitive in nature, this may lead the child to have difficulty regulating their own behaviour, in turn causing social and academic problems (Eisenberg et al., 1999). Children of permissive parents tend to be disobedient, immature, and overly dependent on adults (Baumrind, 1971). Children of parents who exhibit the uninvolved style tend to experience the most negative outcomes; they often form insecure attachment styles in infancy and later have both social

and academic difficulties and higher rates of delinquent behaviour (Baumrind, 1971). It is important to note that these findings are generalizations and may not apply to every child—a child of an authoritative parent is not guaranteed to have difficulty controlling their anger, for example. Perhaps differences between the parenting styles of the child's mother versus father may be one factor contributing to this. Another important caveat is that these findings come from correlational research; therefore, the direction of the relationship is unknown: it is possible that certain children may elicit authoritarian responses from their parents. However, Thompson (2004) found that, when parents changed their behaviour to become more punitive over a period of six years, their children became more aggressive; if parents became less punitive, their children became less aggressive.

Hardy, Power, and Jaedicke (1993) asked middle-class, college educated mothers and their children aged nine and ten years old to describe how they responded to stressful events that the children had encountered in the past two months. Mothers also completed questionnaires regarding various aspects of parenting (i.e., regarding nurturance, organization). Higher levels of maternal supportive and responsive attitudes were associated with children displaying a wider range of more appropriate emotion regulation strategies in response to everyday stressful situations, as compared to children with less supportive and responsive mothers (Hardy, Power, & Jaedicke, 1993).

Beyond overall parental style, more specific aspects of parenting behaviour such as parental emotional expressivity have also been found to play a part in how children learn to regulate their emotions. Garner and Estep (2001) examined the relation between maternal emotional expressiveness and children's ability to regulate their emotions with peers (i.e., social initiations, the frequency with which children were the recipients of positive social

bids, non-constructive anger-related reactions, and prosocial acts). In the sample of 81 preschool aged children, those who came from families that were more expressive of positive emotion were better at regulating their emotions (i.e., engaged more frequently in self-soothing behaviours). In addition, mothers who demonstrated mild to moderate negative emotion had children with stronger emotion regulation capabilities and better emotional understanding in general. It is believed to be advantageous for children to be exposed to a mild to moderate display of negative emotions because this allows them to learn about negative emotions and how negative emotions are managed (Halberstadt, 1986). However, exposure to extreme negative emotion has not been found to be advantageous because it causes children to become distressed and overaroused, and mothers do not typically model appropriate emotion regulation strategies in these cases (Halberstadt, 1986). Therefore, it is not surprising that Garner and Estep (2001) found that higher levels of maternal child-directed anger significantly predicted higher frequencies of child-initiated non-constructive anger responses in triadic same sex peer interactions.

The effect of parental emotion expressivity was also demonstrated by Stocker, Richmond, Rhoades, and Kiang (2007), who asked 131 16-year-olds to report on their parent's emotional expressivity using an adapted version of the family emotional expressivity questionnaire (Greenberg, Kusche, & Cook, 1991; i.e., "How often does your mother/father show she/he is upset after a bad day?"). Both the adolescents and their parents also rated the adolescent's overall adjustment in terms of internalizing and externalizing symptoms. Parental negative emotional expression was positively correlated with both internalizing and externalizing symptoms in the adolescent sample, suggesting that higher

rates of parental expressions of negative emotions may have negative consequences for the child.

Although the research presented thus far has focused largely on the maternal influence on children's ability to regulate their emotions, it should be noted that fathers also play an important role in helping their children learn this skill. Because fathers tend to engage in more high energy play and use more tactile stimulation with their child (i.e., rough-and-tumble play; i.e, Hossain & Roopnarine, 1994), as opposed to the social and object oriented play of mothers (Parke & Tinsley, 1987), it is thought that fathers may have unique opportunities to teach about emotions (Diener, Mangelsdorf, McHale, & Frosch, 2002). Differences in regulatory behaviors infants use with their mother and father have been found (Braungart-Rieker et al., 1998). For example, 4 month old infants exhibited more object orientation with mothers and more parent orientation with fathers during an exercise in which parents stop interacting with their infant (do not make any facial or vocal expressions), despite being equally distressed in this situation with both their mother and father (Braungart-Rieker et al., 1998). Infants may have different expectation for their mother and father because they often spend more of their time with their mothers during their first four months; therefore, they may see their mothers as the cause of their distress and turn away from them to their surroundings (Braungart-Rieker et al., 1998). Also in support of the important effect of fathers on their child's emotion regulation, Hagman (2014) found that fathers who used more emotion amplification (i.e., smiling, laughing, voice exaggeration), as opposed to suppression of their child's emotion, had children that sought more effective emotion regulation by seeking support from their father via proximity seeking

(i.e., eye contact) and requesting amplification and validation at two years of age (Hagman, 2014).

Emotion Coaching

Another important way in which parents can influence their child's emotion regulation abilities is by engaging in emotion coaching. In the context of parent-child relationships, emotion coaching typically occurs in five steps: (1) becoming aware of the child's emotions, (2) seeing emotional exchanges as opportunities for teaching and intimacy, (3) listening empathetically to the child and validating his or her feelings, (4) verbally labelling the child's emotional experiences, and (5) setting limits while exploring strategies for problem solving (Gottman, 1997, pp. 24). In other words, emotion coaching involves talking about what produced an emotion, the emotion itself, and ways to cope with that emotion (Hooven, Gottman, & Katz, 1995). Appropriate parental reactions to children's emotions involve encouraging the expression of emotion, emotion-focused reactions (i.e., comforting) and problem-focused reactions (i.e., finding a solution to an emotion eliciting problem; Eisenberg, Fabes, & Murphy, 1996). Parents who demonstrate high levels of emotion coaching not only view emotion coaching as an opportunity for teaching children about how to regulate their emotions but also foster an emotional climate that is conducive to establishing a healthy parent-child relationship (see Appendix B for an example of an emotion coaching conversation, p. 23, Gottman, 1997). In contrast, parents who are emotion dismissing do not use emotional experiences as learning experiences and are uncomfortable when their children express emotions (Morris, Silk, Steinberg, Myers, & Robinson, 2007). This theory of emotion coaching suggests that parents who are more likely themselves to

employ emotion suppression strategies may have children who also are more likely to employ less effective emotion regulation strategies (Eisenberg, Fabes, & Murphy, 1996).

A recent study (Wilson, Petaja, Yun, King, Berg, Kremmel, & Cook, 2014) found a significant association between emotion coaching and emotion regulation in 54 kindergarten and first grade children in the United States. Consistent with previous research, this study found that children categorized by their classmates as more aggressive received less reported emotion coaching from their parents than less aggressive children. Among the children that were categorized as “aggressive/rejected”, those who received higher reported levels of emotion coaching had better emotion regulation skills than those who received lower reported emotion coaching from their mothers. Emotion coaching predicted regulation of attention to various emotional faces, but did not predict other behavioural or emotion regulation skills. Overall, parental emotion coaching appears to have a positive impact on children’s ability to regulate emotion and attention (Wilson, Petaja, Yun, King, Berg, Kremmel, & Cook, 2014).

Findings of a relationship between emotion coaching and emotion regulation are not limited to aggressive children. Hurrell, Hudson, and Schniering (2015) found that mothers of anxious children (generalized anxiety disorder, social phobia, separation anxiety disorder, obsessive-compulsive disorder, and specific phobia) aged seven to 12 reported expressing less supportive parental emotion coaching when responding to their children's negative emotions, as compared to the mothers of the children who did not have an anxiety disorder. Supportive and unsupportive parental emotion coaching were associated with children's emotion regulation skills; more specifically, paternal unsupportive emotion coaching was associated with children's negativity/lability.

Thus far, the literature on parental emotion coaching has examined its effect on the functioning of children only in childhood. Correlations between emotion coaching in childhood and childhood functioning, such as emotion regulation abilities and social skills, are typically small to medium in size ($r = .20-.30$, i.e., Wilson, Petaja, Yun, King, Berg, Kremmel, & Cook, 2014; Eisenberg, Fabes, & Murphy, 1996). There is no research that examines how parental emotion coaching impacts these children when they become young adults. Since the impact of emotion coaching in childhood on young adulthood has yet to be examined, the present study attempted to fill this gap. The importance of parental emotion coaching in childhood may conceivably be limited to functioning in childhood or it may also have an impact on the ability of these children later on to regulate their emotions and have healthy romantic relationships in young adulthood. Knowing more about this relationship may have important implications for the parenting literature, and also for promoting the well-being of young adults, a key time in development when many important decisions regarding the choice of life partners and career are being considered (Arnett, 2000).

Emotion coaching and emotion regulation

Parental emotion coaching typically yields many positive effects in childhood (Katz & Hunter, 2007). In general, when parents express a high level of responsiveness, children feel that their emotional needs will be met; they also know what behaviours are appropriate, and what consequences will result if their behaviours are inappropriate (Morris, Silk, Steinberg, Myers, & Robinson, 2007). Effective emotion coaching can foster an emotional environment characterized by consistency and a high degree of nurturance. When children are exposed to emotion coaching, it appears likely that they become better at regulating their emotions because they feel emotionally secure and are more likely to believe that it is not

dangerous to express their true emotions (Morris, Silk, Steinberg, Myers, & Robinson, 2007; Katz & Windecker-Nelson, 2004). Since emotion coaching typically leads to better regulation of negative emotions it also predicts lower levels of anxiety and depression in children (Fainsiber Katz & Windecker-Nelson, 2006). More specifically, Fainsiber Katz and Windecker-Nelson (2006) found that maternal coaching of children's sadness was associated with lower levels of children's anxiety and depression in a sample of preschool-aged children. Emotion coaching also predicts lower levels of aggressive behaviours (Brinton & Fujiki, 2011; Ramsden & Hubbard, 2002). In other words, children exposed to emotion coaching not only are better at managing their emotional expression and adjusting the duration and intensity of their negative emotions but are also less aggressive (Buckley, & Saarni, 2009). For example, in a community sample of 244 families comprised of biological sibling pairs with one child in late elementary school and one child in middle school, anger emotion coaching by mothers was found to be related to better anger regulation and fewer externalizing behaviours in both the younger and older siblings three years later (Shortt, Stoolmiller, Smith-Shine, Eddy, & Sheeber, 2010). In addition, if parents responded with effective emotion coaching when their child expressed negative emotions, their child learned to express negative emotions without shame and was more likely to sympathize with others when they expressed negative emotions (Eisenberg, Fabes, & Murphy, 1996). This ability to be aware of emotions and navigate one's emotional world is crucial in determining a child's success and happiness in life, even more important than IQ in many cases (Gottman, 1997, pp. 20).

Parental Responses to Emotion and Attachment

Increased parental responsiveness may lead both to more emotion coaching and to a more secure attachment style. Emotion coaching may be thought of as a specific aspect of the overall responsiveness of a parent to a child, and responsiveness is strongly related to attachment status. For example, children with avoidant attachment styles, who react to negative emotions by ignoring or minimizing them, may have parents who ignore their child's negative emotions because they find them too painful to address (Eisenberg, Fabes, Murphy, 1996; Meins, Fernyhough, Fradley, & Tuckey, 2003). Children with anxious/ambivalent attachment styles who become distressed when separated from their caregiver are extremely concerned with the caregiver's availability, and are difficult to comfort when reunited with their caregiver: they are more likely than children with other attachment styles to have parents who are chronically unpredictable in how they respond to their child's emotions, sometimes being intrusive and overly affectionate and other times being emotionally unavailable, and this may present difficulties for their children in learning to deal with their emotions. In contrast, children with secure attachment styles typically have parents who are emotionally available and responsive to their needs, and this probably makes learning to regulate their emotions easier for these children (Raval, Goldberg, Atkinson, Benoit, Myhal, Poulton, & Zwiers, 2001). In other words, children with responsive parents are more likely to have secure attachment styles and more likely to have relationships with their parents that are characterized by parental encouragement of the open communication of emotions (Eisenberg, Fabes, & Murphy, 1996). Furthermore, these secure attachment relationships typically allow children's emotions to be legitimized, making it more likely that the child will be effective at regulating negative emotions.

Parental Responses to Emotion and Children's Peer Relationships

Effective parental responses to emotion appear to have a positive influence on a child's peer relationships. Denham (1993) found that maternal expressivity, maternal reactions to their child's emotions, and maternal self-reports of the affective environment were positively correlated with preschool aged children's emotional competence. The children's emotional competence was assessed via preschool teachers' ratings of the children's reactions to their peer's emotions, their prosocial behaviour (i.e., friendliness, cooperativeness), and their emotional displays. Mothers who demonstrated a wider range of emotions, reported less tension in interactions with their children, and reported being consistently responsive to their child's emotions had children who were more prosocial in reacting to their peers' emotions.

Eisenberg, Fabes, and Murphy (1996) found that parents' problem-focused reactions (i.e., encouraging the child to deal with the problem) were associated with reports of children's increased positive social functioning as reported by parents, teachers, and the children themselves. This may be explained by the fact that legitimizing problems with emotional components encourages children to regulate their emotions effectively and as a result they feel competent and self-confident in social situations (Eisenberg, Fabes, Murphy, 1996). Interestingly, not only were positive emotion related parental behaviours associated with children's increased positive social functioning but these parental behaviours were also associated with children's *perceptions* that they had better social skills (Eisenberg, Fabes, & Murphy, 1996). This may be explained by the fact that children with stronger social skills bring out more positive emotion focused parental behaviour. However, it may also be possible that parents who demonstrate more positive emotion related behaviour cultivate

more positive self-perceptions in their children (Eisenberg, Fabes, & Murphy, 1996). More specifically, by being emotionally responsive and supportive, parents may be conveying to their child the idea that they believe he or she is socially skilled. This may then lead to the child developing more positive self-schemas and more positive social behaviour (Eisenberg, Fabes, & Murphy, 1996).

Other positive effects associated with high levels of parental emotion coaching include increased level of prosocial behaviour in toddlers (i.e., sharing and empathetic helping; Brownell, Svetlova, Anderson, Nichols, Drummond, 2012), and children having lower levels of physiological stress, better physiological regulatory abilities, and better attentional capabilities, as well as being sick less often, performing better at school, and having more frequent positive peer interactions than children whose parents engage in less emotion coaching (Eisenberg, Fabes, & Murphy, 1996). In addition, emotion coaching seems to build a bridge of intimacy and loyalty between parent and child, making misbehaviour and discipline less of a concern (Gottman, 1997, pp. 17).

Negative Consequences Resulting from Negative Emotion Related Parental Behaviour

Many negative consequences may result when children do not receive emotion coaching from parents but are instead frequently exposed to inappropriate parental emotion-related responses. Previous research has categorized inappropriate parental responses to children's emotions into the following categories: minimizing/dismissing, punishing/disapproving, reacting with distress or discomfort, and laissez-faire reactions (Eisenberg, Fabes, & Murphy, 1996, Gottman, 1997, pp. 22). Parents' minimizing reactions are associated with children's increased avoidant coping, which involves ignoring or withdrawing from a stressor and/or negative emotions, and generally lower levels of social

competence (Eisenberg, Fabes, & Murphy, 1996). Avoidant coping can be contrasted with ways of coping with stressors that are categorized as approach-oriented (facing and dealing with the stressor and/or negative emotions; Litman, 2006). Avoidant coping has been associated with negative outcomes and personality traits (Litman, 2006). These lower levels of social competence may be explained by the fact that negative emotion related parental responses encourage children to suppress their emotions since expression of negative emotion is punished by the negative parental reaction (Eisenberg, Fabes, & Murphy, 1996; Roberts, & Strayer, 1987). These suppressed emotions may eventually be expressed inappropriately in other emotionally charged situations, such as in the peer context, potentially causing children to be rejected by their peers after repeated inappropriate emotional responses (Eisenberg, Fabes, & Murphy, 1996). Therefore, parents who punish, criticize or dismiss their child's negative emotions may be undermining their child's ability to interact interpersonally in an appropriate fashion. This idea is supported by findings from research by Eisenberg, Fabes, Schaller, Garlo and Miller (1991) who found that, when exposed to an empathy inducing stimulus, male children who had their negative emotions suppressed by their parents became more physiologically aroused than those who did not have their negative emotions suppressed. Once physically aroused in emotionally charged situations, these children were more likely to react in a non-constructive manner (Eisenberg, Fabes, & Murphy, 1996).

In another study by these researchers, parents' self-reported minimization of their children's emotions was associated with a higher frequency of angry outbursts in their young children. In addition, parents' punitive reactions to their child's emotions were associated with children engaging in avoidant and inappropriate emotional coping, and parents' distress

reactions were associated with children's inappropriate coping (Eisenberg, Fabes, Garlo, & Karbon, 1992). However, the sample size was small; these associations were weak and need to be replicated in further research.

An absence of minimizing and/or punitive reactions to a child's emotions is not sufficient to qualify as emotion coaching. When parents accept and empathize with their child's emotions but offer no guidance or limit setting for their child's behaviour—a pattern which is known as *laissez-faire* parenting—these reactions may leave children at a loss as to how to behave in emotionally charged situations (Gottman, 1997, pp. 22).

In summary, parental negative responses to children's emotions may cause children to suppress their negative emotions, become physiologically overaroused, and respond inappropriately to further emotionally charged situations. In general, inappropriate emotion related parental behaviour and an absence of supportive emotion coaching may lead children to develop emotion regulation deficits that may further contribute to their development of poor social skills.

Parental and Child Factors Influencing Emotion Coaching

Katz and Windecker-Nelson (2004) make the case that parents play an important role in their children's emotion dysregulation. It has been found that parents of emotionally dysregulated children exhibit lower levels of emotion coaching than parents of well-regulated children (Katz & Windecker-Nelson, 2004). It may be the case that children who receive less emotion coaching are not being provided the necessary tools to go on to develop more global emotion regulation skills. Parents of emotionally dysregulated children are also less aware of their own emotions, have less insight into their children's emotions (i.e., do not know what caused a specific emotion and have difficulty differentiating one emotion from

another), and put less energy into helping their children manage emotions as compared to parents of well-regulated children (Katz & Windecker-Nelson, 2004). Thus, apart from emotion coaching, parental modeling of maladaptive strategies for regulating emotion may also be a factor in how children handle emotion. It is important to note that it may be inaccurate to place all the blame for children's emotion dysregulation on poor parental emotion regulation and emotion coaching. Engaging in emotion coaching does require the child to possess at least a basic ability to engage in emotion regulation, which can then be built upon via emotion coaching (Katz & Windecker-Nelson, 2004). It seems likely that some children are easier to emotion coach than others, perhaps as a result of factors such as temperament and cognitive level. Thus, it is not clear what the direction of causality is between parent and child effects, and whether levels of parental emotion coaching determine children's emotion regulation abilities or whether children's limitations in terms of emotional lability and ability to attend to parents also effectively limit how much emotion coaching parents engage in.

Previous research has found that mothers and fathers are involved differently in the emotional socialization of their children. Generally, mothers have been found to be more involved than fathers in the emotional lives of their children and adolescents (Klimes-Dougan, Brand, Zahn-Waxler, Usher, Hastings, Kendziora, & Garside, 2007; Fivush, Brotman, Buckner, and Goodman, 2000). For example, with adolescents, mothers have been found to reward and magnify negative emotions more than fathers, while fathers were more likely to ignore their adolescent's negative emotions, based on the self-reports of adolescents (Klimes-Dougan, Brand, Zahn-Waxler, Usher, Hastings, Kendziora, & Garside, 2007). Observational research has also found a similar pattern in parent-child interactions, with

conversations about emotions being significantly longer between mothers and children than between fathers and their children (Fivush, Brotman, Buckner, and Goodman, 2000).

Emotion Coaching and Gender Differences

The research regarding emotion coaching and gender differences is inconsistent. Some research has found that there are no differences in how parents coach girls and boys (Gottman, Katz, & Hooven, 1996; Katz, & Windecker-Nelson, 2004). However, other research has found that fathers talk to their daughters about emotional events more often than they talk to their sons (Eisenberg, Fabes, Shepard, Guthrie, Murphy, & Reiser, 1999). Parents generally also report encouraging their sons to control their emotions more than they do with their daughters (Block, 1979). In summary, although some research studies report no gender differences in how parents engage in emotion coaching behaviour with their children, other research has found that parents talk to their children more about specific emotions depending on their gender, and encourage emotional expressivity in their daughters more than in their sons (Block, 1979; Eisenberg, Fabes, Shepard, Guthrie, Murphy, & Reiser, 1999).

Other gender differences related to emotion coaching have been reported in terms of a given emotion coaching technique producing different results depending on the child's gender. For example, when parents engage in problem-focused coaching—helping their child to find a solution to resolve their negative emotions—this typically leads girls and boys to respond differently to others' distress. When exposed to this type of problem-focused coaching, girls tend to engage in more comforting behaviour (i.e., consoling others when they are sad by saying things that will cheer them up) while boys react more often with sympathy (i.e., expressing pity or sorrow to distressed individuals; Eisenberg, Fabes, Carlo,

et al., 1993). In other words, when exposed to problem-focused coaching, boys will express sadness about others' distress, while girls will try to cheer up the distressed individual.

In addition, some research suggests that girls, unlike boys, may benefit most from moderate, rather than high, parental encouragement to express emotions (Eisenberg, Fabes, & Murphy, 1996). This gender difference may stem from differing cultural demands. Girls are typically expected to be emotionally expressive, and therefore when they receive moderate, but not high, encouragement they may be more likely to express their emotions without becoming overly emotionally aroused (Shields, 1995; Eisenberg, Fabes, & Murphy). Also, unlike girls, it is hypothesized that boys need more coaching to be able to first understand their emotions before they can empathize with others, which is why they may benefit most from parental supportive and problem-focused reactions to their emotions (Eisenberg, Fabes, & Murphy, 1996).

Emotion Regulation in Young Adulthood

Emotion regulation typically becomes more refined with increased maturity, making it more likely that individuals will be more effective emotion regulators as they move from childhood to young adulthood. Individuals tend to learn to use healthier emotion regulation strategies (i.e., reappraisal) over time, rather than unhealthy emotion regulation strategies (i.e., suppression; Gross & John, 2003). Also, greater life experience may allow young adults to have a better understanding of the costs and benefits of various emotion regulation strategies, which in turn may lead to improvement in their overall emotion regulation ability. Initially, individuals may suppress negative emotions in order to avoid the unpleasant and uncomfortable sensations and thoughts that often accompany negative emotions; however, with more life experience they may learn that suppression over the long-term actually causes

negative emotions to become more intense and also leads to worse interpersonal functioning, as compared to the use of healthier emotion regulation strategies, such as reappraisal (Gross & John, 2003). A better understanding of the cost associated with suppression over the long-term, may make it more likely that healthier emotion regulation strategies are used in the future.

In romantic relationships, when both members of the dyad are able to successfully regulate their emotions, they are better able to understand and respond to each other's emotions (Goleman, 2006). Successful emotion regulation may increase the chances that distressed emotions do not overwhelm the partners in the romantic relationship, allowing for the clear expression of, listening to, understanding of, and empathizing with emotions, and also for a reduced rate of conflict in the relationship. Individuals who use less effective emotion regulation strategies, such as suppression, are more likely to be reluctant about sharing their own emotions, and generally more uncomfortable in their relationships due to their unwillingness to be emotionally open (Gross & John, 2003). On the other hand, those that use more effective emotion regulation strategies, such as reappraisal, have been found to express more positive emotion and to be more willing to take on emotionally challenging situations (Gross & John, 2003). For example, individuals that possess effective emotion regulation strategies are more likely to take on the challenge of applying for a competitive job that they covet because they are equipped with the necessary emotion regulation strategies (e.g., reappraisal) to cope with the fear of failing and the potential disappointment of not being chosen for the position. Especially relevant for the current research is the fact that individuals who are skilled at regulating their emotions have partners who report knowing better where they stand in the relationship because they can pay more attention to

their emotions and understand what influenced them, and find their partner to be more emotionally synchronized with them (e.g., when they notice that their partner is upset they are able to regulate their own emotions in order to tune in to their partners emotions)(Gross & John, 2003).

Gender differences have been found in the use of emotion regulation strategies. Nolen-Hoeksema and Aldao (2011) found that women were more likely than men to report the use of a variety of both 'adaptive' and 'maladaptive' emotion regulation strategies (i.e., rumination, reappraisal, problem solving, acceptance, and social support) in a community sample of adults (25-75 years old). Within this sample, when the emotion regulation strategies of young adults (25-35 years old) were examined, young women reported using acceptance and social support most frequently, whereas young adult males reported using acceptance and active coping most frequently. This study also found that these gender differences were significant even when self-reported depressive symptoms were controlled for: the authors state that this suggests that these gender differences are therefore not simply a reflection of womens' greater tendency to experience symptoms of depression (Nolen-Hoeksema & Aldao, 2011). A study by Tamres, Janicki, and Helgeson (2002) found that women tend to use more emotion regulation strategies than men. They reported that women tend to use strategies that involve verbal expression, such as seeking emotion support, ruminating about problems, and using positive self-talk, more often than men.

Emotion Coaching and Romantic Attachment

Roisman, Collins, Sroufe, and Egeland (2005) followed participants from birth to young adulthood in order to examine what factors shaped a young adult's representations of and behaviour in their romantic relationships. They found that young adults' (n = 170, 20-21

years old) secure, as opposed to dismissing or preoccupied, attachments to their current romantic relationship were correlated with higher quality affective involvement (i.e., lower levels of anger, hostility, and negative affect) in romantic relationships of four months duration or longer. Children who are exposed to emotion coaching by their parents also may be more likely to develop in young adulthood a model of a healthy relationship in which they are worthy of being loved and others are dependable, as opposed to children who are not emotion coached. Walper and Beckh (2005) found that in nuclear families relatedness to both parents predicted relatedness to partners. Parental behaviour related both to childhood attachment relationships and to parental emotion coaching may set up expectations for the nature of children's relationships in adulthood even before they occur (Roisman et. al., 2005). Many researchers began noticing decades ago that lonely adults with distant romantic relationships were reporting difficult relationships with their parents in childhood, suggesting that early relationships with parents go on to influence adult romantic relationships (Hazan & Shaver, 1987). Hazan and Shaver (1987) theorize that adult romantic attachment occurs in the same sequence, and is governed by the same biological processes (i.e., wanting to be physically close to the attachment figure), as the initial attachment relationship between young children and their parents.

In addition to providing their children with an adaptive internal working model for relationships, parents who emotion coach also probably provide their children with opportunities to learn how to reciprocate empathically.

In addition to parental factors, gender may also play a role in romantic attachment. In a meta-analysis (Del Giudice, 2009) that included adults from both community and student samples, males were found to have higher levels of avoidant attachment and lower levels of

anxious attachment compared to females. The gender differences were larger in the community samples ($D = .28$) than in the student samples ($D = .12$); Del Giudice proposed that the large number of prosocial and cooperative psychology students in the student samples could explain weaker gender differences in this group. Interestingly, gender differences in romantic anxious attachment were found to peak in young adulthood (between age 20 and 30), whereas avoidant romantic attachment increased throughout the life course.

In summary, emotion coaching may lead children to develop better emotion regulation skills and also a healthy internal working model for the emotional side of relationships. Whether emotion coaching in childhood affects romantic relationships in young adulthood is the focus of the current research.

Emotion Coaching and Romantic Intimacy

Romantic intimacy involves feelings of affiliative need, willingness to help, and exclusiveness towards one's partner (Rubin, 1970). After conducting a review of the literature, Moss and Schwebel (1993) proposed a formal definition of romantic intimacy: "Intimacy in enduring romantic relationships is determined by the level of commitment and positive affective, cognitive, and physical closeness one experiences with a partner in a reciprocal...relationship." In other words, intimacy refers to how close and connected romantic partners feel towards one another, and previous research differentiates intimacy from other concepts such as passion, which involves mainly sexual arousal, and commitment, which involves deliberate choice (Acker & Davis, 1992).

Some researchers propose that romantic intimacy and attachment are intertwined, in that secure attachment makes it easier for individuals to engage in romantic intimacy (Cassidy, 2010). For example, state of mind in regard to attachment and attachment styles were found

to predict capacity for romantic intimacy in a sample of 80 male Israeli adolescents (Mayseless & Scharf, 2007). In this study, attachment style was assessed via self-report questionnaires and attachment status was assessed with the Adult Attachment Interview (AAI) in late adolescence (17-18 years of age). Four years later, after the participants had participated in mandatory military service, they were asked to fill out questionnaires regarding their psychological functioning and were interviewed on their capacity for romantic intimacy (Intimacy Status Interview). In the Intimacy Status Interview, were asked about their emotional closeness, conflict resolution, involvement and autonomy, satisfaction, and commitment with a close friend and in past or current romantic relationships. The number of stressful events participants had endured was assessed and was not found to moderate any of the findings. Secure attachment was associated with higher capacity for intimacy in both romantic relationships and in relationships with close friends. Avoidant attachment was associated with lower capacity for intimacy in both romantic relationships and in relationships with close friends. One might argue then that, although attachment and romantic intimacy are interrelated, attachment status perhaps involves more general expectations for how people will behave with respect to oneself and how responsive they will be, while romantic intimacy is more a function of experience in a given relationship.

Cardova and Scott's Intimacy Theory (2001) states that romantic intimacy develops when interpersonally vulnerable behaviour is shared and one's romantic partner responds supportively. These expressions of vulnerable behaviour are positively reinforced by the partner and therefore are exhibited more often. Romantic intimacy involves an increased level of vulnerability, increasing the potential for romantic partners to be emotionally hurt by one another. The manner in which an individual responds to being emotionally hurt in their

romantic relationship has much to do with the type of emotion regulation skills they possess. When an individual possesses adequate emotional skills, emotional hurt may lead to self-disclosure, confident emotional communication, repair seeking, positive approach, appropriate self-care, forgiveness, relationship-enhancing attributions, and assertive communication, maintaining intimacy and enhancing relationship health (Mirgain & Cordova, 2007). Alternatively, if one does not possess adequate emotional skills, emotional hurt may lead to retaliation, withdrawal, defensiveness, hostility, or avoidance, diminishing intimacy and overall relationship health (Mirgain & Cordova, 2007). Individuals that have competent emotion skills hurt their partner emotionally less often (Cordova & Scott, 2001). This link between emotional competence and romantic intimacy is supported by research that has found that individuals who empathize with their partner's emotions are happier with their relationships (Noller & Ruzzene, 1991). Furthermore, the link between general emotion skills and romantic intimacy is illustrated by research that has found that partners who are able to identify and communicate their emotions report increased marital health, an association which appears to be mediated by self-perceived romantic intimacy (Cordova et al., 2005).

Reis and Shaver (1988) define intimacy as "...an interpersonal process within which two interaction partners experience and express feelings, communicate verbally and nonverbally... talk and learn about themselves and their unique characteristics, and become "close". Sroufe (2005) describes intimacy as a classic developmental phenomenon that develops in a logical way, with each stage building on the previous stage. These researchers also state that, beginning with parents in infancy, and then with peers, the groundwork to support one's capacity for intimacy is laid down. For example, reciprocity in a symmetrical

relationship, which is important for later romantic relationships, is first developed beginning in peer relationships. However, this skill draws on the earlier skills one may have obtained from relationships with parents. The capacity for intimacy carries forward from one relationship to another. This is illustrated by the fact that children who have positive intimacy experiences with their parents are more likely to have positive intimacy experiences with their peers. Positive intimacy experiences with peers may also compensate for less supportive experiences with parents; however, children who have less positive intimacy experiences with their parents are also less likely to have positive intimacy experiences with peers (Collins & Sroufe, 1999). Sroufe's (2005) conceptualization of intimacy describes the parent-child relationship as the key relationship in which the capacity for intimacy first develops. In support of this theory, Black and Schutte (2006) found that young adults (18 to 22 years old) who retrospectively reported having more positive and loving relationships with their mothers as children were more likely to also report being more trusting in their romantic relationships and relying on their romantic partners in times of distress. Participants who retrospectively reported having more positive and loving relationships with their fathers were also more likely to rely on their romantic partners in times of distress and reported feeling less conflict between their need for love and their discomfort in relying on their romantic partner. However, Black and Schutte (2006) highlight the fact that the correlations between the retrospective recall of relationships with parents and current romantic relationships in this age group were modest, in the range of .05-.30. This may be due to the fact that 18 to 22 year olds are in a transition from using their parents as main attachment figures to using other individuals (romantic partner, close friends) as their main attachment

figure. One would perhaps expect stronger correlations to exist between retrospective recall of relationships with parents and current romantic relationships for older, long term couples.

In terms of gender differences in romantic relationships in young adulthood, both cohabiting and dating men and women in young adulthood (18-23 years old) report generally similar levels of love for their partner and similar levels of relationship satisfaction (Brown & Bulanda, 2008). Giordano, Manning, Longmore, and Flanigan (2009) explored more specific elements of romantic relationships in young adulthood, and found that young adult males reported higher levels of attempted and actual influence by their partner (i.e., “[partner] always tries to change me”, and a less favorable power balance (i.e., less likely to get their way). A national study found that young adult males were less likely to be in romantic relationships, and were also less likely to believe that lifelong commitment was a necessary component of a successful relationship (Scott et al., 2009); this gender difference is important to note as it could play a role in terms of some of the variables explored in the current study, namely romantic intimacy, romantic attachment and relationship satisfaction.

Thus far how parents play an important role in their child’s early development has been explored in terms of attachment, emotion regulation, and peer relationships. However, a gap remains in the literature: how does parental emotion related behavior towards their children go on to affect these children as they become young adults? If parents use more supportive emotion coaching with their children, will these children grow up to be better able to regulate their emotions, and have healthier romantic attachments and greater romantic intimacy in young adulthood?

Parental Warmth versus Emotion Coaching

Is emotion coaching necessary for a child's healthy emotional development or is it sufficient for a parent simply to express warm concern and caring for her child? Gottman (1997) argues that warmth, caring, and love alone are not enough to enable children to become effective at recognizing and expressing their emotions (p. 16). Gottman (1997) differentiates emotion coaching parents from parents who generally demonstrate concern and warmth towards their children but are often incapable of talking to their children about their emotions. In fact, Gottman (2001) argued that warm parents can also be parents who dismiss their children's negative emotions (i.e., "Sweetheart, cheer up. Just put a smile on your face. Now that's better isn't it? There's my big girl." (Gottman, 2001, p. 26). Although these warm parents may have good intentions, they may dismiss their child's negative emotions (Gottman, 2001, pp. 16). Gottman (2001) states that only if parental warmth and concern is combined with emotion coaching do children reap the benefits (i.e., better peer relationships and emotion regulation skills). Davidov and Grusec (2006) found that mothers' and fathers' supportive responses to distress (an element of supportive emotion coaching), but not parental warmth, predicted better emotion regulation of negative emotions in a sample of children aged six to eight. Responsiveness to distress in the child by mothers also predicted empathy and prosocial responding in children. It is thought that, unlike supportive responsiveness to distress, warmth alone does not allow the child to learn to effectively cope with their own distress. Davidov and Grusec (2006) found that maternal warmth, but not responsiveness to distress, was linked to better regulation of positive emotions, and, in boys only, to greater peer acceptance. Parental responsiveness to distress has been found to be central to the development of secure attachment and to successful management of stressful

situations for children, whereas warmth may be associated more with the development of social reciprocity (Bugental, 2000). Other research has also distinguished between parental warmth and responsiveness to distress. For example, Roberts and Strayer (1987) found that the academic competency of preschool children, assessed by teacher ratings, was predicted by supportive parental responsiveness to distress, such as the encouragement of emotional expressiveness, after parental warmth was controlled for. In the current study, parental warmth was included as a variable of interest in order to examine whether emotion coaching or parental warmth was more important for subsequent emotion regulation, romantic attachment, and romantic intimacy.

Personality, Relationship Satisfaction, and Mood/Depressive Symptoms

In addition to parental warmth, there are other variables that may affect the relationship between remembered emotion coaching in childhood and emotion regulation, romantic attachment, and romantic intimacy in young adulthood, one class of which are personality characteristics. Previous research has found associations between personality characteristics and emotion regulation (Gresham & Gullone, 2012). Gresham and Gullone (2012) looked at how the self-reported personality characteristics of ten to 18 year olds affected the use of two emotion regulation strategies operationalized by Gross (1998): reappraisal (i.e., looking for the silver lining of a difficult situation) and suppression (i.e., inhibiting emotional experience). It was found that extraversion and openness predicted greater use of the reappraisal strategy. With the exception of neuroticism, higher scores for all personality characteristics on the five factor model (openness, conscientiousness, extraversion, and agreeableness) predicted less suppression. Neuroticism was positively associated with suppression use. Other research, using a sample of adults, also found links

between personality and emotion regulation, in that individuals high on extraversion and low on neuroticism were more likely to use reappraisal than suppression as an emotion regulation technique (Matsumoto, 2006).

In the current study, it was also of interest whether overall romantic relationship quality would affect the relationship between early emotion coaching and later emotion regulation, romantic attachment, and romantic intimacy. Previous research has found links between overall relationship satisfaction and attachment in university students in both Hong Kong and the United States (Ho et al., 2011). Individuals identified as having avoidant or anxious romantic attachment styles reported weaker relationship satisfaction in both cultures (Ho et al., 2011). Generally, individuals with avoidant attachment styles tend to be more distrusting of their partner and also tend to avoid intimacy, while individuals with anxious attachment styles tend to engage in rumination about being rejected and/or abandoned and may become overly dependent on their partner. Gleeson and Fitzgerald (2014) also found significant associations between the attachment style of adults aged 18-39 years and the quality of their romantic relationship; participants with secure attachment styles were more satisfied with their relationship, as compared to those with anxious or avoidant attachment styles. These differences in romantic attachment are thought to account in part for the decrease in relationship satisfaction as compared to those who are securely attached; however, it is important to take into consideration the possibility of bidirectional influences between current romantic relationship satisfaction and romantic attachment with this correlational research (Ho et al., 2011).

In the current study, mood/depressive symptoms were included to examine whether global emotion regulation was important for romantic attachment and intimacy above and

beyond the effect of one type of emotion dysregulation, namely low mood/depression. Previous research has found links between emotion regulation and mood, in that undergraduates that typically use suppression are more pessimistic about their future and more prone to become depressed, as compared to those who use reappraisal (Gross & John, 2003). Those who used reappraisal more often were found to be more optimistic and more satisfied with their lives (Gross & John, 2003). Low mood/depression has also been associated with avoidant and anxious romantic attachment, as opposed to secure attachment, in many samples including undergraduate students (Williams & Riskind, 2003) and a sample of adult women aged 26-46 years old (Whiffen, Kallos-Lilly, & MacDonald, 2001). This link between low mood/depression and romantic attachment may be explained by the fact that the individual's internal working model of both self and others is typically negatively affected by the cognitive correlates of depression, such that the depressed individual may believe that they are unlovable and will be rejected/abandoned by others, and ambiguous relationship events are interpreted in a way that is consistent with their model of self and others, potentially causing hostility between partners (Whiffen, Kallos-Lilly, & MacDonald, 2001). For example, an unreturned phone call by one's partner may be automatically assumed to be an act of abandonment by a depressed individual, whereas a non-depressed individual may be more likely to explore other reasons why the call was not returned. It is in this way that depression/low mood is thought to influence the greater likelihood of individuals being anxiously or avoidantly attached to their partner (Kobak, 1994).

The Present Study

Since the impact of emotion coaching in childhood on young adulthood functioning has yet to be examined, the present study attempted to fill this gap. The goal of

this study was to investigate the relationship between young women's retrospective reports of parental emotion coaching in childhood and their reports of emotion regulation, romantic attachment, and romantic intimacy in young adulthood.

Dalton III, Frick-Horbury, and Kitzmann (2006) also asked young adults to provide retrospective reports of their parents' behavior in childhood in order to examine possible associations with current quality of their relationships. The young adults rated the extent to which each of three paragraphs described their parents' caregiving behavior (warm and responsive, cold/rejecting, or ambivalent/inconsistent). It was found that retrospective reports of mothers' and fathers' parenting were related to the current quality of relationship with parents, but only retrospective reports of fathers' parenting were related to the current quality of relationship with a romantic partner. Additionally, it was found that retrospective reports of fathers' parenting were related to young adults' views of self as being able to form secure and close relationships (Dalton III, Frick-Horbury, & Kitzmann, 2006). Rothrauff, Cooney, & An (2009) also asked adults (40 years old and older) to provide retrospective reports regarding their parents' behavior in childhood; those who retrospectively reported authoritative, instead of authoritarian and uninvolved parenting, reported greater overall psychological well-being (in terms of relationships, self-acceptance, autonomy, personal growth, environmental mastery and purpose in life) and less depressive symptoms. While these studies do not address how similar retrospective reports of parenting by young adults are to parental reports in childhood, they do indicate that retrospective reports by young adults do relate meaningfully to adjustment in young adulthood.

It was hypothesized that young women who reported having received more supportive emotion coaching from their parents in childhood would also report healthier emotion

regulation skills (i.e., would report using more reappraisal strategies than suppression strategies to regulate their emotions), healthier romantic attachments, and stronger romantic intimacy as young adults as compared to those who reported receiving less supportive emotion coaching as children. It was also hypothesized that emotion regulation would mediate the relationships between early emotion coaching and later romantic attachment and intimacy (see Appendix A for a graphic of the model used to conceptualize these hypotheses). The current study focused on romantic relationships in young adulthood because, although romantic relationships occur in earlier stages of development, emotional intimacy plays a more central role in the romantic relationships of young adults than in early adolescence (Meier & Allen, 2009). Due to sampling issues (i.e., difficulty in attracting male undergraduate students to participate in the study), only women were included in the current study. In the current study it was also of interest whether depressive symptoms (mood), personality characteristics, overall relationship satisfaction, and parental caring (warmth) would impact the relationship between remembered emotion coaching in childhood and emotion regulation, romantic attachment and romantic intimacy in young adulthood. It was hypothesized that young women who reported having received more supportive emotion coaching from their parents in childhood would report healthier emotion regulation skills, healthier romantic attachments, and stronger romantic intimacy as young adults as compared to those who reported receiving less supportive emotion coaching as children, even after the previous variables had been included in the model.

Method

Participants

An *a priori* power analysis was conducted using G-Power software to establish an appropriate sample size for the current study. Previous studies have found small effect sizes for the relationship between parent-child dyadic behaviours and later romantic relationship process. For example, aspects of parent-child dyadic interactions at age 13, including the degree to which parent-child relationships entailed acceptance and expression of as well as responsiveness to individual feelings and ideas, had low correlations with negative affect ($r = -.29, p < .05$) and with aspects of dyadic interactions in romantic relationships eight to nine years later at age 20-21 that were similar to those measured earlier in parent-child interaction ($r = .26, p < .05$) (Roisman, Madsen, Sroufe, & Collins, 2001).

In order to achieve adequate power of .80 with an alpha level of .05, using one predictor measure with a total of six subscales and multiple regression as the mode of analysis, the necessary total sample size for the present study was calculated to be 74 in order to obtain a small effect size. The sample for the current study consisted of 151 female undergraduate students, which was a large enough sample to achieve adequate power to detect the typically small effect sizes ($r \leq 0.20$) that are found between parental emotion related behaviours in childhood and dyadic interactions in young adulthood. The only inclusion criterion that applied to the current study was that the female undergraduate students had to be between the ages of 18-20 years old and had to have been in a romantic relationship for a minimum of three months.

The female undergraduate students were recruited via the research participant program at the University of Ottawa (Integrated System of Participation in Research; ISPR).

The ISPR program is designed to help psychology students at the undergraduate level increase their understanding of the psychological research process via their participation in research and also to aid researchers in their recruitment of participants. Students are eligible to participate in the program if they are enrolled in a section of the Introduction to Experimental Psychology course. Students can earn up to four percent of their course grade by participating, with one percent awarded per hour of research participation. Alternatively, students may decide to earn credit by viewing films of research methods in psychology in place of research participation. Given the low number of male participants recruited via ISPR (10%) for the current study, and the difficulty experienced in recruiting male participants via other means (i.e., no participants were recruited by inviting engineering students to participate in the study), the focus of the current study was shifted to include only females. The two male participants recruited via ISPR were excluded from the study.

Measures

The female undergraduate students were asked to complete the following questionnaires online via the Integrated System of Participation in Research.

Reported Emotion Coaching by Parents in Childhood (RECPC). This questionnaire was adapted from the Coping with Children's Negative Emotions Scale (CCNES; Fabes, Eisenberg, & Bernzweig, 1990). The original questionnaire asked parents to indicate the likelihood that they would respond in six different ways to their child in 12 different situations in which children are likely to experience negative affect (i.e., "If my child loses some prized possession and reacts with tears, I would tell him/her it's OK to cry when you feel unhappy"). The current research adapted the questionnaire by asking female undergraduate students to report retrospectively on the likelihood that their mother and

father would have reacted in the six different ways (i.e., “If I had lost some prized possession and reacted with tears, my mother/father would have told me it’s OK to cry when I feel unhappy”). The items were rated on a seven point Likert scale (1 = very unlikely to 7 = very likely) (Fabes, Eisenberg, & Bernzweig, 1990).

Alpha coefficients were calculated for the CCNES across the 12 situations for the six types of reactions identified (Eisenberg & Fabes, 1994) separately and also presented separately for mothers and fathers. The types of reactions included (1) *distress reactions*: the degree to which the parent would have reacted with distress to the child’s negative affect in childhood, (2) *punitive responses*: the degree to which the parent would have reacted with punitive reaction to the child’s negative affect in childhood, decreasing their need to address their child’s negative affect, (3) *encouraging responses*: the degree to which the parent would have validated their child’s negative affect, (4) *emotion-focused socialization reactions (comforting)*: the degree to which the parent would have engaged in comforting behaviour, (5) *problem-focused socialization reactions*: the degree to which the parent would have helped their child problem solve around the issue that was causing distress, or encouraged the child to engage in problem solving independently, (6) *minimizing responses*: the degree to which the parent would have “played down” the issue that was causing distress (i.e., giving the message that the child was overreacting. In the current study, each of the subscales reached a good level of reliability, except for the maternal and paternal Distress subscales (see results section for more information).

The CCNES has been found to have good internal reliability (Fabes, Poulin, Eisenberg, & Madden-Derdich, 2002). The subscales of this measure that assess supportive parental reactions (Emotion-Focused Reactions (EFR), Problem-Focused Reactions (PFR)

and Expressive Encouragement (EE)) are significantly positively correlated with one another. The subscales that assess the non-supportive parental reactions (Minimizing Reactions (MR), Punitive Reactions (PR), and Distress Reactions (DR)) are significantly and positively correlated with one another. This measure was also found to have good test-retest reliability in a sample of parents, mostly mothers, of young children. When the CCNES was completed a second time four months after the original administration, scores from the first and second administration were significantly correlated. The CCNES also has good evidence for construct validity: the EFR, PFR and EE subscales of the CCNES have been found to be significantly and positively correlated with self-reported empathetic concern and perspective taking scores from the *Interpersonal Reactivity Index* (Davis, 1983).

In this study, the items were modified to obtain responses from the female undergraduate students, rather than from the parent, about reactions of the parent in response to children's emotional experiences. In addition, separate ratings for participants' recollections about mothers and fathers were collected (i.e., female undergraduates chose from six options in response to questions such as: "If I lost a prized possession and reacted with tears, my parent would..." separately for their mother and father). Thus, the psychometrics for the CCNES are not directly relevant to the version that was constructed for this study. However, two indices were constructed for this new measure that were based on the intercorrelations of the subscales on the CCNES: reports of positive (supportive) parental emotion coaching (EFR + PFR + EE) and reports of negative (unsupportive) parental emotion coaching (MR + PR + DR). In addition, in the current study a composite emotion coaching score was generated for data reduction purposes using the sum of the supportive emotion coaching subscales for mother and father ratings and subtracting the sum

of the unsupportive emotion coaching scales for mother and father ratings. In the current study, the composite score was used in the analyses. Cronbach's alphas were also calculated for the RECPC supportive emotion coaching subscales, for the unsupportive emotion coaching subscales, and for the composite score for remembered emotion coaching. These Cronbach's alphas indicated adequate to good levels of internal consistency (see Table 2).

Emotion Regulation Questionnaire. The Emotion Regulation Questionnaire (ERQ; Gross & John, 2003) is a ten-item measure consisting of two scales that measure the use of reappraisal (i.e., "When I want to feel less negative emotion (such as sadness or anger), I change what I'm thinking about") and suppression (i.e., "I control my emotions by not expressing them") strategies. These two factor structures were identified via confirmatory factor analyses (Gross & John, 2003). This measure includes the following introductory statement: "We would like to ask you some questions about your emotional life, in particular, how you control (that is, regulate and manage) your emotions. The questions below involve two distinct aspects of your emotional life. One is your emotional experience, or what you feel like inside. The other is your emotional expression, or how you show your emotions in the way you talk, gesture, or behave. Although some of the following questions may seem similar to one another, they differ in important ways." Items are rated on a 7-point Likert scale (1 = strongly disagree to 7 = strongly agree). In a sample of undergraduate students, internal reliability for these subscales averaged $\alpha = .79$ for Reappraisal and $\alpha = .73$ for Suppression (Gross & John, 2003). Test-retest reliability across the span of three months was $r = .69$ for both the Reappraisal and Suppression subscales. Gross and John (2003) found that chronic use of suppression predicted inauthenticity (i.e., being aware of deceiving others about their true feelings/thoughts; beta = .47), but not reappraisal. Inauthenticity is

described by Gross and John (2003) as masking one's true inner self in order to present oneself in a certain way to others (Gross & John, 2003). Inauthenticity was measured using a 13-item scale that included items such as, "I'm not always the person that I appear to be" (Gross & John, 2003). Use of reappraisal to regulate emotions was found to predict the use of the *reinterpretation* coping style (i.e., looking for the positive) to manage stressful events (beta = .43). Use of suppression to regulate emotions was found to negatively predict *venting* as a coping style to manage stressful events (beta = -.43; i.e., use of suppression to regulate emotions predicts that individuals will not express their emotions, or vent, as a coping strategy). A composite emotion regulation score was calculated for the present study for data reduction purposes by subtracting the suppression subscale scores from the reappraisal subscale scores.

Experiences in Close Relationships. In order to assess romantic attachment in young adults, the Experiences in Close Relationships questionnaire (ECR-R; Fraley, Waller, & Brennan, 2000) was administered to the undergraduate females. This is a self-report questionnaire that yields two scores, one of romantic attachment anxiety, and the other of romantic attachment avoidance. These scores were calculated as opposed to identifying participants who fell into a specific attachment category. This questionnaire includes items such as: "I'm afraid that I will lose my partner's love" and "I prefer not to show a partner how I feel deep down". These items were rated on a 7-point Likert scale (1 = strongly disagree and 7 = strongly agree). In an undergraduate student sample, the ECR-R has been found to have good test-retest reliability over a six week period (Sibley & Liu, 2004) for both the romantic attachment avoidance and romantic attachment anxiety subscales with test-retest correlations in the low .90s. The ECR-R was also found to have good predictive

validity; it predicted significant portions of the variance in diary ratings of anxiety and avoidance experienced during interactions with a romantic partner (r s roughly equal to .50). The romantic attachment avoidance and romantic attachment anxiety subscales were significantly and positively correlated ($r = .51, p < .001$). Lastly, the ECR-R was found to have good convergent validity with the Relationship Questionnaire (RQ; Bartholomew & Horowitz, 1991). The ECR-R and the RQ measures of romantic attachment anxiety ($r = .69, p < .001$) and romantic attachment avoidance ($r = .45, p < .001$) were moderately and positively correlated.

Love Scale. Rubin's (1970) Love Scale is a 13-item questionnaire measuring romantic intimacy. Items such as, "I feel that I can confide in [loved one] about virtually everything", are rated on a nine-point Likert-scale (1 = not at all true to 9 = definitely true). Rubin's Love Scale is specific to the female undergraduate students' current romantic relationship, whereas the previously described Experiences in Close Relationships questionnaire asks the female undergraduate students to reflect both on their current romantic relationship (i.e., "I tell my partner just about everything") and on romantic relationships in general (i.e., "I feel comfortable depending on romantic partners"). Rubin's Love Scale and the intimacy subscale of Sternberg's Triangular Love scale have been found to be strongly correlated ($r = .68$ in liking relationships and $r = .74$ in loving relationships; Sternberg, 1986, 1997). Rubin (1970) found that those with high romantic intimacy scores on the Love Scale also spent more time gazing into their partner's eyes in a laboratory experiment, suggesting that the Love Scale had good predictive validity in this sample of college dating couples. The Love Scale also has good discriminative validity, with scores for love of one's romantic partner being only weakly correlated with love for one's same sex

friend ($r = .18$ for women; $r = .15$ for men) in the same sample of the college students. Rubin's Love Scale was administered to a sample of college dating couples twice, with a one year gap between administrations. Women in the couples that stayed together over the one year period had initially higher romantic intimacy scores than their boyfriends at time one. Women's initial scores were lower than their boyfriend's scores in the couples who broke up over the one year period. In addition, of the couples who broke up over the one year period, women's scores remained lower over time and dropped even more sharply, as compared to couples who stayed together for over a year. The overall Sex \times Together/Breakup interaction was significant ($F = 7.83$, $df = 1$, 129 , $p < .01$.; Rubin, Peplau, & Hill, 1981). This suggests that romantic intimacy scores may be more significant for relationship success for women than for men, making this instrument particularly relevant for use in this all female sample.

Depressive Symptoms Subscale from the Personal and Relationships Profile.

The Depressive Symptoms subscale from the Personal and Relationships Profile (Straus, Hamby, Boney-McCoy, & Sugarman, 1999) includes eight items (i.e., "I usually wake up feeling pretty good") that are rated on a four-point Likert scale (ranging from 1= strongly disagree to 4= strongly agree). Participants are asked to reflect on the last 14 days when answering items on this subscale. This subscale has been shown to have high internal consistency in a student sample ($\alpha = .83$) and in a community sample ($\alpha = .79$). The correlation of the PRP Depressive Symptoms scale with the Beck Depression Inventory (Beck, Steer, and Brown, 1996) for a sample including participants from 12 nations was found to be moderate, $r = .43$. In the current study this measure was used to obtain a score for undergraduate female's mood. The Depressive Symptoms subtest was included to

evaluate whether it was global emotion regulation that was important for romantic attachment and intimacy or merely low mood/sadness/unhappiness.

The Care Subscale from the Parental Bonding Instrument. The Parental Bonding Instrument (PBI) is one of the most widely used instruments used to assess parenting style. The Care subscale from the Parental Bonding Instrument's (PBI-Care; Parker, Tupling, & Brown, 1979) Mother Form and Father Form each include the following introductory statement: "This questionnaire lists various attitudes and behaviours of parents. Please rate the statements as you remember your mother/father in childhood (birth to 12 years old)." The PBI-Care is comprised of 12 items (i.e., "Spoke to me with a warm and friendly voice") that are rated on a 4-point Likert scale ranging from "1 = Very Like" to "4 = Very Unlike". The PBI-Care subscale was found to have good test-retest reliability for maternal care ($r = 0.63$) and paternal care ($r = 0.72$) over a period of ten years in a sample of University students (Wilhelm & Parker, 1990). The PBI was found to have good internal consistency in the original study that looked at the psychometrics of the PBI using a non-clinical sample (Parker, Tupling, and Brown, 1979). The PBI has also been found to have satisfactory construct and convergent validity and to be independent of the effect of mood in a sample of outpatients suffering from depression (see Parker, 1983). The Control subscale of the PBI was not included in the current study.

Scores for both mothers and fathers were collected and then combined by adding the scores together to create a composite parental caring score; this composite score was used in the analyses. This measure was included to assess whether it was emotion coaching specifically that was important for later emotion regulation and romantic attachment and intimacy as opposed to global parental caring for the child.

PersonalityInventory. The Ten Item Personality Inventory (TIPI) includes the following introductory statement: “Here are a number of personal characteristics that may or may not apply to you. Please write a number next to each statement to indicate the extent to which you agree or disagree with that statement. You should rate the extent to which the pair of traits applies to you, even if one characteristic applies more strongly than the other.” An example of an item included in this inventory is: “I see myself as extraverted, enthusiastic”. Participants rate these items on a 7-point Likert scale ranging from “1=Disagree strongly” to “7=Agree strongly”. Two items are used to assess each of the Big 5 personality characteristics. In a sample of undergraduate students, this inventory has demonstrated adequate levels of convergence with other broadly used personality measures using self, observer, and peer reports (see Gosling, Rentfrow, & Swann, 2003). In the same sample of undergraduate students, the TIPI was found to have adequate test-retest reliability over a six week period ($r = .72$), high correlations between the TIPI and the NEO-Personality Inventory-Revised (NEO-PI-R) dimension scales, ranging from $r = .68$ for Conscientiousness to $r = .56$ for Openness, and adequate convergence between self and other ratings (see Gosling, Rentfrow, & Swann, 2003).

The TIPI was included in the present study to determine whether broader personality characteristics such as extraversion, agreeableness, and conscientiousness were possibly contributing to emotion regulation in that they influenced parental emotion coaching, and were perhaps also contributing to the relationship between emotion regulation and romantic attachment and intimacy. Negative Affect, a main dimension of mood, has been found to be associated with the personality construct of Neuroticism (Digman, 1997). Individuals who score high on Neuroticism are prone to negative emotional experiences, such as fear, guilt,

shame, and sadness (Watson, 2000). Because individuals high on Neuroticism may be more likely to be demanding and unpleasant, for example, some argue that these individuals actively create stressful life events (i.e., getting fired, unsatisfying relationships) that are in part responsible for the higher levels of negative affect they experience (Kokkonen & Pulkkinen, 2001). In addition, it has also been found that Neuroticism affects the coping/emotion regulation strategies that one chooses; individuals higher in Neuroticism tend to choose more passive forms of coping, such as behavioral disengagement, rather than active forms of coping such as active reinterpretation and seeking social support (Watson, David, & Suls, 1999). Because of its overlap with the construct of emotion regulation and mood, the measure of Neuroticism/Emotional Stability was not employed in this study. Since no predictions could be made for the importance of Openness to Experience as a determinant of romantic attachment and intimacy, this measure also was eliminated from this study.

Couple's Satisfaction Index. The Couple's Satisfaction Index's (Funk & Rogge, 2007) four item version, CSI (4), includes items such as "I have a warm and comfortable relationship with my partner" that are rated on six (0 = not at all to 5 = completely) and eight (0 = extremely unhappy to 7 = perfect) point Likert scales. The CSI (4) has been shown to have excellent internal consistency ($\alpha = .94$) in a sample of predominantly female college students; the majority (about 60%) of these participants had been dating seriously for about a year and a half, although some participants were engaged (about 16%) or married (about 23%), with average relationship lengths of three and nine years, respectively (Funk & Rogge, 2007). The CSI scales has also demonstrated strong convergent validity with other existing measures of relationship satisfaction, including the Marital Adjustment Test (MAT;

Locke & Wallace, 1959) and Dyadic Adjustment Scale (DAS; Spanier, 1976), with intercorrelations with these measures ranging from $r = .84$ to $r = .97$ (Funk & Rogge, 2007). The Couple's Satisfaction Index was used to examine whether relationship satisfaction was contributing to the relationship between emotion regulation and romantic attachment and intimacy.

Results

Before analyses were conducted, data were cleaned and transformed to meet assumptions of multivariate normality, linearity and homoscedasticity. In addition, data were screened for univariate outliers by checking histograms and frequencies for unusual values. There were no univariate outliers or missing data. The data were scrutinized for multivariate outliers. This was done by running a regression using subject number as a "dummy variable" with Mahalanobis distance to display outliers in the data. This same regression, with the dummy-coded variable, was run with collinearity diagnostics to assess multicollinearity. Analyses were run with and without the multivariate outliers; two outliers were removed because their inclusion affected the outcomes of these analyses. Means and standard deviations for the main variables can be found in Table 1.

Table 1

Means and standard deviations for main variables and covariates.

Variable	Mean	Standard deviation
Emotion Coaching Composite	1.21	1.18
Supportive Emotion Coaching	4.29	.89
Unsupportive Emotion Coaching	3.08	.65

Emotion Regulation Composite	1.26	1.81
Emotion Regulation-Reappraisal subscale	4.77	1.05
Emotion Regulation-Suppression subscale	3.51	1.30
Avoidant Attachment	1.48	.35
Anxious Attachment	3.37	1.46
Romantic Intimacy	6.88	1.13
Depressive Symptoms	1.20	.51
Parental Caring	30.16	1.76
Maternal Caring	29.94	2.07
Paternal Caring	30.38	2.64
Conscientiousness	5.16	1.04
Agreeableness	4.50	.96
Extraversion	3.92	1.53
Couple's Satisfaction	4.41	.83

Internal reliability and factor structure for the RECPC

The emotion coaching questionnaire used in the current study, the RECPC, had good internal consistency across its subscales (with the possible exception of the distress reactions subscale) (see Table 2). Internal reliability for RECPC was assessed by calculating Cronbach's alpha for each of the subscales. Each of the subscales reached a good level of reliability, except for the maternal and paternal Distress subscales. All Cronbach's alphas for the six subscales of the adapted form, the RECPC, were higher than the Cronbach's alphas

reported for the original measure (CCNES) when it was originally published except for the distress scale for both mothers and fathers (Fabes, Poulin, Eisenberg, Madden-Derdich, 2002; see Table 2). Cronbach's alphas were also calculated for the supportive emotion coaching subscales, for the unsupportive emotion coaching subscales, and for the composite score for remembered emotion coaching. These Cronbach's alphas indicated adequate to good levels of internal consistency both when the subscales were entered into the analyses, and when the individual items were entered into the analyses (see Table 3).

Table 2

Cronbach's alphas for the subscales from the original CCNES and for the subscales of the RECPC.

Subscales of the CCNES	α Original CCNES	α RECPC
Distress reactions	.70	.62
Punitive responses	.69	.86
Minimizing responses	.78	.88
Expressive encouragement	.85	.93
Emotion-focused responses	.80	.92
Problem-focused responses	.78	.88

Table 3

Cronbach's alphas calculated for the unsupportive, supportive, and composite total remembered emotion scores from the RECPC.

Composite scores of the RECPC	α when the subscales are entered into the analyses	α when individual items are entered into the internal reliability analyses
Unsupportive	.92	.80
Supportive	.96	.76
Total	.93	.63

Table 4

Cronbach's alphas calculated for maternal and paternal supportive and unsupportive emotion coaching.

Composite scores of the RECPC	α when the subscales are entered into the analyses
Unsupportive maternal	.62
Supportive maternal	.88
Unsupportive paternal	.83
Supportive paternal	.72

An exploratory factor analysis for the RECPC extracted two factors: Expressive Encouragement, Emotion Focused Reactions, and Problem Focused Reactions loaded on one factor (i.e., the three supportive emotion coaching subscales). Minimizing Reactions, Punitive Reactions and Distress Reactions (i.e., the three unsupportive emotion coaching subscales) loaded on a second factor (see Table 4) This result of the exploratory factor analysis is congruent with the intercorrelation patterns of subscales found for the CCNES and in line with our expectations; we expected that all supportive subscales would load on

one factor, and all unsupportive factors would load on a second factor. However, to further examine the psychometric properties of this adapted emotion coaching measure, more research is needed with a larger sample, since the sample size for the EFA was below what is suggested for such an analysis.

Table 5

Factor loading from the Exploratory Factor Analysis conducted on the Reported Emotion Coaching by Parents in Childhood (RECPC).

Subscales of the RECPC	Factor 1	Factor 2
Problem Focused Reactions	.90	-.12
Emotion Focused Reactions	.81	-.13
Expressive Encouragement	.59	.13
Punitive Reactions	.03	.85
Minimizing Reactions	.11	.82
Distress Reactions	-.12	.35

Intercorrelations among Measures

The hypothesis that reporting receiving more supportive emotion coaching in childhood would be associated with the use of healthier emotion regulation strategies in young adulthood was supported (see Table 6 for correlations between all main variables). As expected, the remembered supportive emotion coaching score was significantly and positively correlated with the reappraisal subscale of the emotion regulation measure, and was also significantly and negatively correlated with the suppression subscale of the emotion regulation measure. As expected, the composite emotion coaching score was significantly

and positively correlated with the supportive emotion coaching score, and significantly and negatively correlated with the unsupportive emotion coaching score.

Also as expected, the composite emotion regulation score was significantly and positively correlated with the emotion regulation reappraisal subscale, and significantly and negatively correlated with the emotion regulation suppression subscale. The maternal and paternal caring scores were significantly and positively correlated with the composite parental caring score.

In line with predictions, the unsupportive emotion coaching score and the avoidant attachment score were significantly and positively correlated. However, the association between the supportive emotion coaching subscale and the avoidant attachment score was not statistically significant. As expected, the significant correlation between the unsupportive emotion coaching subscale and the anxious attachment subscale was positive. However, the correlation between the supportive emotion coaching score and the anxious attachment score did not reach statistical significance. The correlations between both the supportive and unsupportive emotion coaching scores and the romantic intimacy score were also not statistically significant.

The depressive symptoms/mood scale was significantly and negatively correlated with the Couple's Satisfaction score and with the agreeableness and extraversion subscales (but was not significantly correlated with the other personality subscale of conscientiousness).

The composite emotion coaching score was significantly and positively correlated with the agreeableness personality subscale, but was not significantly correlated with the

remaining personality subscales (conscientiousness and extraversion). See Table 5 on the following page for the intercorrelations between the main variables.

Table 6

Correlation matrix for the main variables and covariates.

Variables	2	3	4	5	6	7	8	9	10	11
1. Emotion coaching composite	.23**	-.15	-.19*	.08	-.33**	-.09	-.04	.23**	-.02	.16*
2. Emotion regulation composite		-.26**	-.34**	.02	-.30**	-.04	-.16	.13	.19*	.11
3. Anxious attachment			.31**	.18*	.45**	-.10	.06	-.18*	-.14	-.29**
4. Avoidant attachment				-.44**	.36**	-.03	-.01	-.29**	-.04	-.47**
5. Romantic intimacy					.09	.11	.06	.14	-.13	.52*
6. Depressive symptoms						.08	.15	-.35**	-.24**	-.24**
7. Parental caring composite							-.15	.02	-.06	.10
8. Conscientiousness								-.18*	-.10	.05
9. Agreeableness									.02	.25**
10. Extraversion										.06
11. Couple's satisfaction										

* $p \leq 0.05$. ** $p \leq 0.01$.

Mediation Analyses

The major hypotheses of the current study were that both emotion coaching and emotion regulation would predict romantic attachment and intimacy, but that emotion regulation would mediate the relation between remembered emotion coaching in childhood and romantic attachment and intimacy in young adulthood. To test these hypotheses, multiple regression analyses examining mediation patterns were conducted using the PROCESS command created for SPSS by Preacher and Hayes (2008). The PROCESS command was used to generate a 95% bootstrap confidence interval for the indirect effect in the mediation model, with 1000 bootstrap samples. The beta values reported are unstandardized.

Prediction of avoidant attachment. In the first multiple regression the dependent variable was avoidant attachment (Table 7). Reported emotion coaching from childhood is significantly correlated with avoidant attachment in young adulthood (see Figure 1). Reported emotion coaching explained 3.4% of the variance in avoidant attachment. Then the mediation effects of emotion regulation were explored. It can be seen in Figure 2 that emotion regulation significantly mediated the relation between reported emotion coaching and avoidant attachment. Together, remembered emotion coaching and emotion regulation explained 12.9% of the variance in avoidant attachment.

Table 7

Mediation analyses for the relation between remembered emotion coaching and avoidant attachment in young adulthood

Steps of regression	Beta coefficient	Standard error	p value	Lower limit confidence interval	Upper limit confidence interval	Effect size k^2
<u>Step One</u>						
Composite emotion coaching onto avoidant attachment	-.01	.005	<.05	-.023	-.003	-
<u>Step Two</u>						
Composite emotion coaching onto emotion regulation	.09	.029	<.05	.028	.144	.073
Composite emotion regulation onto avoidant attachment	.06	.016	<.01	-.092	-.029	-
Emotion coaching onto avoidant attachment	-.01	.006	<i>n.s.</i>	-.012	.012	-
<u>Step Three</u>						
Composite emotion coaching onto emotion regulation	.06	.031	<i>n.s.</i>	-.002	.121	-
Composite emotion regulation onto avoidant attachment	-.05	.015	<.01	-.082	-.023	-

Emotion coaching onto avoidant attachment	-.0005	.006	<i>n.s.</i>	-.012	.011	-
Mood	.17	.059	<.05	.055	.287	-
Parental caring	-.06	.015	<i>n.s.</i>	-.044	.014	-
Conscientiousness	-.11	.066	<.05	-.244	-.016	-
Extraversion	.01	.009	<i>n.s.</i>	-.011	.023	-
Agreeableness	-.03	.014	<.05	-.062	-.006	-

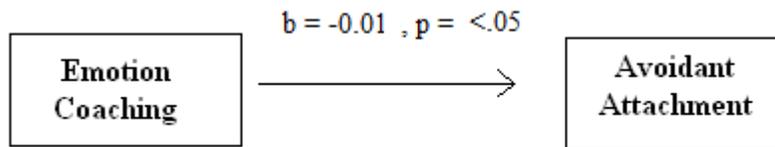
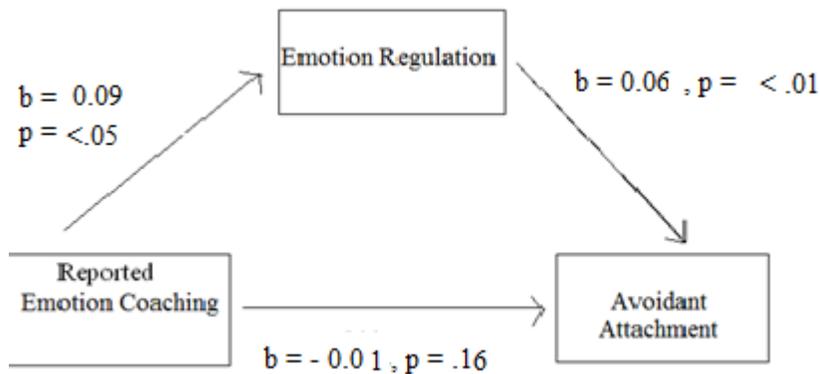


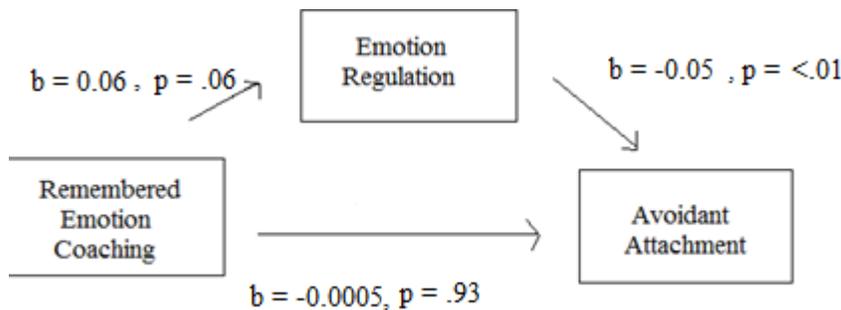
Figure 1. Step one: Direct relation between reported emotion coaching from childhood and avoidant attachment in young adulthood.



Direct effect, $b = -0.01$, $p = .16$
 Indirect effect, $b = -0.01$, 95% CI [-0.01, -0.002]

Figure 2. Step two: Indirect relation between reported emotion coaching in childhood and avoidant attachment in young adulthood.

In the third step, mood, the personality subscales (conscientiousness, extraversion, agreeableness), and parental caring were entered into the model in order to explore whether emotion regulation would continue to mediate the relation between remembered emotion coaching in childhood and avoidant attachment in young adulthood after these covariates were entered into the model. Although the effect of remembered emotion coaching on emotion regulation was not significant in this analysis, emotion regulation continued to mediate the relation between remembered emotion coaching and avoidant attachment even after the addition of the covariates (see Figure 3); the combined effect (path a + path b) of remembered emotion coaching and emotion regulation on avoidant attachment was statistically significant ($b = -0.003$, 95% CI -.01 to -.0004). In this model, mood, agreeableness, and conscientiousness were the only statistically significant covariates (see Table 5). Remembered emotion coaching along with the covariates predicted 14.11% of the variance in avoidant attachment. After emotion regulation was entered into the model as a mediator, the model explained 24.17% of the variance in avoidant attachment.



Direct effect, $b = -0.0005$, $p = .93$
 Indirect effect, $b = -0.003$, 95% CI [-0.01, -0.0004]

Figure 3. Step three: The indirect relation between remembered emotion coaching from childhood and avoidant attachment in young adulthood with mood, the personality subscales, and the parental caring composite index entered as covariates.

Prediction of anxious attachment. As can be seen in Figure 4, reported emotion coaching in childhood did not significantly predict anxious attachment in young adulthood. Today's thinking about mediation, however, does not require evidence of a significant association between the independent and predicted variables (i.e., the causal steps approach) to examine indirect effects (Preacher & Hayes, 2008; Shrout & Bolger, 2002; MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002). In fact, this causal steps approach has been criticized for lack of power, in that Type-II errors occur more frequently with causal steps approaches than they do with alternative approaches (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002; Fritz & MacKinnon, 2007). Shrout and Bolger (2002) note that requiring the association between the independent and dependent variable to be significant before going on to look at mediation is not realistic when looking at developmental processes, where distal processes can be shown to have only limited effects over time if the influence of more proximal mediators is not examined. Given this line of thinking about mediation, emotion regulation in adulthood was entered into the model (see Table 7). Figure 5 indicates that emotion regulation significantly mediated the relation between reported emotion coaching and anxious attachment. Together, emotion regulation and remembered emotion coaching explained 7.5% of the variance in anxious attachment.

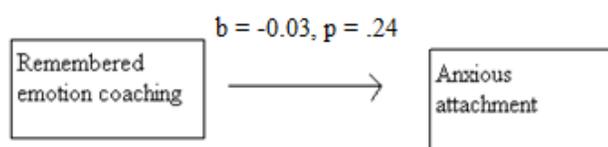
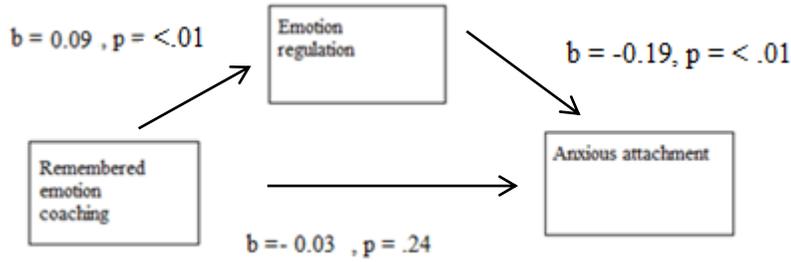


Figure 4. Step one: The direct relation between remembered emotion coaching in childhood and anxious attachment in young adulthood.



Direct effect, $b = -0.03, p = .24$
 Indirect effect, $b = -0.02, 95\% \text{ CI } [-0.04, -0.01]$

Figure 5. Step two: The indirect relation between remembered emotion coaching from childhood and anxious attachment in young adulthood.

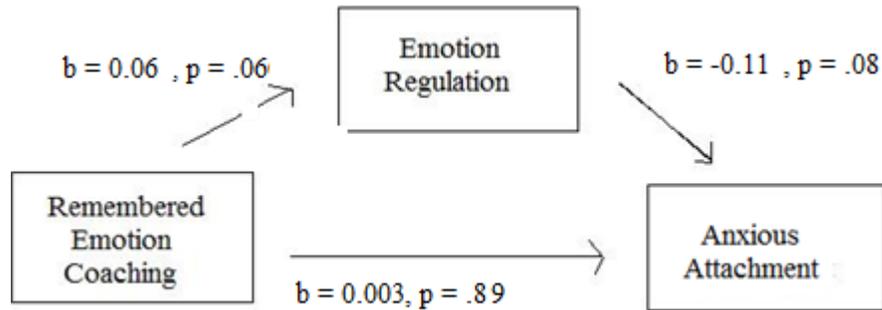
Table 8

Mediation analyses for the relation between remembered emotion coaching and anxious attachment in young adulthood

Steps of regression	Beta coefficient	Standard error	p value	Lower limit confidence interval	Upper limit confidence interval	Effect size k^2
Step One						
Emotion coaching onto anxious attachment	-.03	.026	<i>n.s.</i>	-.096	.0054	-
Step Two						
Emotion coaching onto emotion regulation	.09	.029	<.01	.028	.144	.054
Emotion regulation onto anxious attachment	-.19	.066	<.01	-.320	-.060	-
Emotion coaching onto anxious attachment	-.03	.027	<i>n.s.</i>	-.082	.024	-
Step Three						
Emotion coaching onto emotion	.06	.031	<i>n.s.</i>	-.002	.121	-

regulation						
Emotion regulation onto anxious attachment	-.11	.063	<i>n.s.</i>	-.240	.014	-
Emotion coaching onto anxious attachment	.003	.024	<i>n.s.</i>	-.044	.051	-
Mood	1.20	.247	<.001	.709	1.686	-
Parental Caring	-.12	.062	<i>n.s.</i>	-.241	.003	-
Conscientiousness	-.19	.277	<i>n.s.</i>	-.087	.057	-
Extraversion	-.02	.037	<i>n.s.</i>	-.087	.057	-
Agreeableness	-.02	.060	<i>n.s.</i>	-.137	.100	-

When mood, parental caring, and the personality subscales (conscientiousness, extraversion, agreeableness) were entered into the model as covariates, the indirect effect between remembered emotion coaching and anxious attachment through emotion regulation was no longer significant (see Figure 7), and the combined effect of remembered emotion coaching and emotion regulation on anxious attachment was not statistically significant ($b = -.006$, CI $-.021$ to $.0005$). In this model, mood was the only significant covariate (see Table 8). Remembered emotion coaching together with the covariates predicted 14.11% of the variance in avoidant attachment. After emotion regulation was entered into the model as mediator the model, including the remembered emotion coaching and the covariates, explained 24.14% of the variance in avoidant attachment.



Direct effect, $b = 0.003, p = .89$

Indirect effect, $b = -0.01, 95\% \text{ CI } [-0.02, 0.001]$

Figure 6. Step three: The indirect relation between remembered emotion coaching from childhood and anxious attachment in young adulthood, with mood, conscientiousness, extraversion, agreeableness and parental caring entered as covariates.

Prediction of romantic intimacy. As can be seen in Figure 7, reported emotion coaching from childhood did not significantly predict romantic intimacy in young adulthood. Taking the Preacher and Hayes (2008) perspective that mediation does not require evidence of an association between the independent and predicted variable to examine indirect effects, emotion regulation in adulthood was entered into the model as a mediator. It can be seen in Figure 8 that emotion regulation did not significantly mediate the relation between reported emotion coaching and romantic intimacy. Together, emotion regulation and remembered emotion coaching explained only 0.6% of the variance in romantic intimacy.

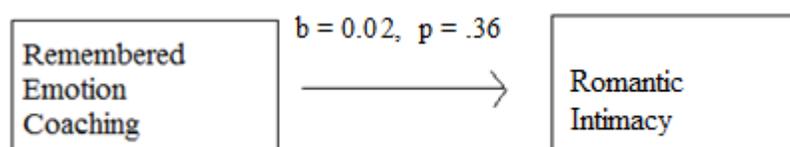
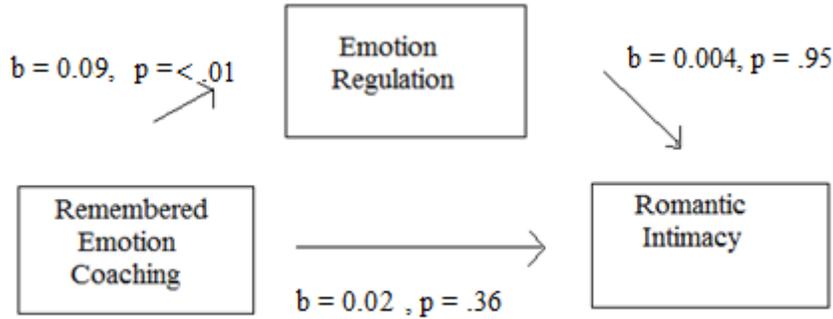


Figure 7. Step one: The direct relation between remembered emotion coaching from childhood and romantic intimacy in young adulthood.



Direct effect, $b = 0.02, p = .36$
 Indirect effect, $b = 0.0003, 95\% \text{ CI } [-0.012, 0.012]$

Figure 8. Step two: Indirect relation between remembered emotion coaching from childhood and romantic intimacy in young adulthood.

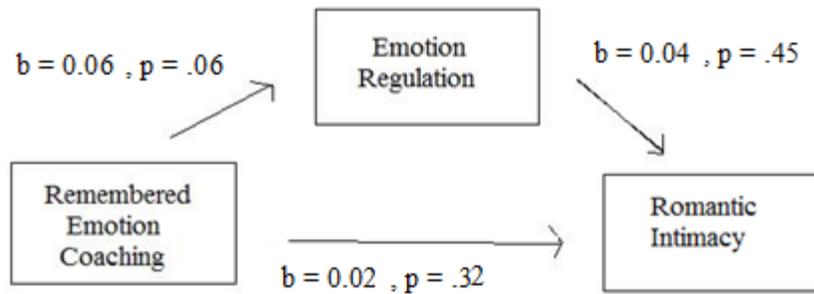
Table 9

The relations between remembered emotion coaching, emotion regulation and romantic intimacy

Steps of regression	Beta coefficient	Standard error	p value	Lower limit confidence interval	Upper limit confidence interval	Effect size k^2
<u>Step One</u>						
Emotion coaching onto romantic intimacy	.02	.019	n.s.	-.019	.056	-
<u>Step Two</u>						
Emotion coaching onto emotion regulation	.09	.029	<.01	.028	.144	
Emotion regulation onto romantic intimacy	.004	.056	n.s.	-.114	.121	
Emotion coaching onto romantic intimacy	.02	.019	n.s.	-.020	.056	-
<u>Step Three</u>						

Emotion coaching onto emotion regulation	.06	.031	<i>n.s.</i>	-.002	.121	-
Emotion regulation onto romantic intimacy	.04	.054	<i>n.s.</i>	.454	-.066	-
Emotion coaching onto romantic intimacy	.02	.021	<i>n.s.</i>	-.020	.061	-
Mood	.37	.212	.042	-.048	.789	-
Parental caring	.07	.053	<i>n.s.</i>	-.030	.179	-
Conscientiousness	.25	.238	<i>n.s.</i>	-.095	.029	-
Extraversion	-.03	.031	<i>n.s.</i>	-.095	.029	-
Agreeableness	.11	.051	<.05	.009	.212	-

In the third step, when mood, the personality subscales (conscientiousness, extraversion, agreeableness), and parental caring were entered into the model, emotion regulation still did not significantly mediate the relation between remembered emotion coaching and romantic intimacy (see figure 9); the combined effect (path a + b) of remembered emotion coaching and emotion regulation was not statistically significant ($b = .0024$, CI $-.0030$ to $.0154$). In this model, mood and agreeableness were the only significant covariates (see Table 9). Remembered emotion coaching and the covariates predicted 14.11% of the variance in romantic intimacy. After emotion regulation was entered into the model as mediator, the model, including remembered emotion coaching and the covariates, explained 8.01% of the variance in romantic intimacy.



Direct effect, $b = 0.02$, $p = .32$

Indirect effect, $b = 0.02$, 95% CI [-0.003, 0.02]

Figure 9. Step three: Indirect relation between remembered emotion coaching and romantic intimacy, with mood, the personality subscales and maternal and paternal caring entered as covariates.

When these same mediation analyses were conducted separately for remembered reports of maternal emotion coaching and remembered reports of paternal emotion coaching the same results emerged for all three of the predicted variables (anxious attachment, avoidant attachment and romantic intimacy).

Discussion

The goal of the current study was to investigate the relationship between young adults' reports of parental emotion coaching in childhood and their reports of emotion regulation, romantic attachment, and romantic intimacy in young adulthood. It was hypothesized that when young adults reported that their parents used emotion focused problem solving strategies, and encouraged them to appropriately express their negative emotions in childhood (i.e., supportive emotion coaching), they would grow up to be more likely to use reappraisal, as opposed to suppression, as an emotion regulation strategy. This hypothesis, that supportive emotion coaching strategies would be associated with the use of healthier emotion regulation strategies, received partial support from the fact that supportive emotion coaching and the use of reappraisal strategies were positively and significantly correlated. As previously discussed, Gross and John (2003) have found that reappraisal (e.g., looking for the "silver lining" of negative events) tends to be a healthier way of coping with negative emotions, since it does not lead to the same increase in physiological reactivity that suppression does, and, also unlike suppression, reappraisal can be used to decrease the experience of negative emotion when helpful and/or appropriate. Children who are exposed to supportive emotion coaching strategies are essentially being taught that it is acceptable to be authentic with one's negative emotions—that there is no need to be ashamed of feeling and behaviourally expressing disappointment, frustration, sadness, anger etc. It is perhaps because they learn that these feelings are normal and acceptable that they do not feel the need to shut them down (i.e., suppression) and are more likely to use the reappraisal strategy. Remembered emotion coaching in childhood was significantly associated with emotion regulation when avoidant attachment, anxious attachment and romantic intimacy were being

predicted so long as the covariates were not entered into the model. Once the covariates were entered, emotion coaching no longer had a significant effect on emotion regulation for any of the three dependent variables.

Other research has found that not receiving supportive emotional coaching in childhood, and instead having parents that created emotional unhealthy environments in which their emotional needs were not responded to, is associated with difficulty regulating anger and sadness in adolescence (Cui, Sheffield Morris, Criss, Houlberg, & Silk, 2014; Ramsden & Hubbard, 2002). More specifically, Cui, Sheffield Morris, Criss, Houlberg, and Silk (2014) asked participants from disadvantaged backgrounds aged 10-18 years old to report on parental psychological control (which included a component of unsupportive emotion coaching), minimization of emotions, and generally creating an unhealthy emotional environment, and their depressive symptoms. In addition, they and their parents reported on their aggressive behaviour and emotion regulation abilities. Associations between parental psychological control and adolescent aggressive behaviour and depressive symptoms were moderated by adolescents' ability to regulate their anger. Interestingly, this study found that parental psychological control was negatively related to healthy emotion regulation in youth. In the current study unsupportive emotional coaching was not significantly related to emotion regulation; however, unsupportive emotion coaching differs from "psychological control" in that it does not necessarily include parent behaviours such as coercion, manipulation, and unpredictability, which may account for the difference in the findings (Cui, Sheffield Morris, Criss, Houlberg, & Silk, 2014). The current study did find that, when a healthier emotional climate was created by parents via supportive emotion coaching, female undergraduate

students reported using a healthier form of emotion regulation (reappraisal) rather than suppressing their emotions as a form of emotion regulation.

As expected, the unsupportive emotion coaching (minimizing, dismissing, and distress) score was significantly and positively correlated with the romantic avoidant and anxious attachment scores. Previous research has found that children with secure attachment styles are those that have parents that are generally responsive to their needs (Raval, Goldberg, Atkinson, Benoit, Myhal, Poulton, & Zwiers, 2001). Given that responsiveness is necessary for supportive emotion coaching to occur, it makes sense that children who reported receiving less supportive emotion coaching are more likely to report having an avoidant attachment style with their romantic partner in young adulthood.

As expected, the composite score for remembered parental emotion coaching was significantly associated with romantic avoidant attachment. However, contrary to expectations, the composite remembered emotion coaching score was not significantly related to romantic anxious attachment in young adulthood. When one exhibits avoidant attachment behaviours this often involves inhibiting emotional expression and avoiding turning to one's partner in times of need, for example. These avoidant behaviours are perhaps more observable, and noticed by the individual themselves more often than the underlying separation anxiety and worries that characterize an anxious attachment style. In other words, perhaps avoidant attachment is more externalized (i.e., not talking to one's partner), whereas anxious attachment is more internalized and less obvious to the individual, making it harder for participants to accurately report it. This may perhaps explain why associations between emotion coaching in childhood and anxious attachment in young adulthood in the current sample were not significant. In previous studies parental emotion

coaching was found to be related to having fewer adolescent externalizing problems, yet unrelated to internalizing problems (Stocker, Richmond, Rhoades, and Kiang, 2007).

It was surprising that the correlations between avoidant and anxious attachment scores and the *supportive* emotion coaching score were not statistically significant. Given that the current study looked at *remembered* emotion coaching, it may be the case that supportive emotion coaching (i.e., when a parent helped their child engage in problem solving) is more difficult to recall than unsupportive emotion coaching (i.e., when parents became distressed by their child's negative reactions) because of a negativity bias; negative information tends to command more of our attention, and learning from negative reinforcers is more rapid and more resistant to extinction as compared to learning from positive reinforcers (Rozin & Royzman, 2001).

As expected, emotion regulation significantly mediated the relationship between reported emotion coaching and avoidant attachment both with and without the addition of the covariates. This finding adds to other research that has found emotion regulation to mediate the effects of emotion coaching; longitudinal research has shown that the benefits of emotion coaching for children's better adjustment and boys' reduced internalizing and externalizing symptoms is mediated by better emotion regulation skills (Gottman, Katz, & Hooven, 1996). The current study is, however, the first to support emotion regulation as a mediator for outcomes in young adulthood. In the current study, emotion regulation was predicted to be a partial mediator of this relation; therefore, it is interesting that in this model emotion regulation emerged as a full mediator. In other words, emotion coaching in childhood no longer affected the relation with avoidant attachment in young adulthood once emotion regulation is controlled for. What this may suggest is that emotion regulation, one's

use of suppression or reappraisal to regulate negative emotions in the case of the current study, is a broader construct than emotion coaching and that the skills that parents teach children via supportive and/or unsupportive emotion coaching may go on to form in part the basis for emotion regulation in young adulthood. In other words, parental supportive emotion coaching may be one important factor that contributes to healthy emotion regulation, but not the only one. For example, the emotional lability or temperament of the child might also play a role in successful emotion regulation. Emotion coaching typically occurs exclusively during childhood, while emotion regulation emerges incrementally over time after emotion coaching and is used throughout the lifespan. Through socialization with multiple individuals, such as peers, teachers, and romantic partners, individuals learn how and when to use emotion regulation skills; however, parents are typically the main individuals involved in emotion coaching. For these reasons, emotion regulation may be a more complex construct than emotion coaching.

As previously mentioned, reported emotion coaching in childhood did not significantly predict anxious attachment in young adulthood. Given that today's thinking about mediation (i.e., Preacher & Hayes, 2008) does not require evidence of a significant association between the independent and predicted variables to examine indirect effects, emotion regulation in adulthood was entered into the model to explore whether it would mediate any relationship between remembered emotion coaching and anxious attachment to a partner. The hypothesis that emotion regulation in young adulthood would mediate the relation between emotion coaching in childhood and anxious attachment in young adulthood was supported in the analysis that did not include covariates (when the covariates were added the mediation effect was no longer significant). The fact that emotion regulation

mediated this relationship even though there was no significant relationship between emotion coaching and anxious attachment again suggests that emotion regulation may be a larger, more proximate, more all-encompassing construct than emotion coaching.

It was of interest that when mood, parental caring (warmth), personality variables, and couple satisfaction were entered into the model as covariates, emotion regulation continued to mediate the relation between emotion coaching in childhood and avoidant attachment in young adulthood. In other words, emotion regulation appears to be an important factor above and beyond factors such as overall positive mood, sociability, parental caring, and couple happiness in explaining the link between emotion coaching and avoidant attachments to a partner.

Mood was the covariate that was most consistently predictive of romantic attachment. Due to the social isolation, difficulty in finding events and interactions pleasurable, fatigue, irritability, and negative thoughts and feelings about themselves and others that often accompanies low mood, it was of interest whether mood could decrease the importance of emotion regulation as a mediator in this model. Despite typically feeling quite close and intimately bonded to their romantic partner, individuals' typical attachment style might be altered if they were experiencing low mood. Previous research has found that individuals experiencing low mood score significantly higher on fearing the loss of their attachment figure and proximity seeking of their attachment figure, angry withdrawal when their needs are not met, and compulsive care seeking patterns as compared to a control group (Pattem, West, Mahoney, & Keller, 1993). This research argues that attachment may not be a stable characteristic of individuals in all cases, but affected by factors such as low mood/clinical depression (Pattem, West, Mahoney, & Keller, 1993). It is interesting that

when the covariates (mood, parental caring, personality characteristics, and couple's satisfaction) were entered into this model, emotion regulation no longer mediated the relation between remembered emotion coaching in childhood and anxious romantic attachment in young adulthood. In this model, mood emerged as a significant covariate. It may be that cognitive correlates associated with low mood that are incompatible with effective emotion regulation, such as maladaptive beliefs and "distorted" thought processing (e.g. a greater focus on negative events, self-blaming, anticipating that events will turn out badly), may account for why emotion regulation does not significantly mediate the relationship between remembered emotion coaching and anxious attachment. These cognitive correlates associated with low mood may make it difficult to use the reappraisal strategy ("look for the silver lining") when one's mood is very low. In other words, mood may be acting as a powerful covariate that "overrides" the importance of emotion coaching and the role of emotion regulation as a mediator.

In contrast to the findings obtained when anxious attachment was the dependent variable, the covariates included in the present study did not significantly impact the strength of emotion regulation as a mediator in the relationship between emotion coaching and avoidant attachment.

The hypothesis that emotion regulation would mediate the relation between reported emotion coaching in childhood and romantic intimacy in young adulthood was not supported. Another unexpected finding was that supportive remembered emotion coaching in childhood was not correlated with greater romantic intimacy in young adulthood. One possibility that may explain why neither of these associations was significant may have to do with the fact that, to endorse items on the romantic intimacy scale (Rubin, 1970), one would

have to be highly invested in the romantic relationship. For example, this scale includes items such as “I would do anything for my partner” and “One of my primary concerns is [loved one]’s wellbeing”. Perhaps these items do not well represent the intensity and/or type of feelings/thoughts that undergraduate students have towards their romantic partners at a time in their lives when academic demands and friends are competing for their time and attention, and the large majority of participants are still almost a decade away from the typical time when adults decide to marry; the average age of a female’s first marriage in 2008 was 29 years old (Statistics Canada, 2011) and the mean age of participants in the current study was 19. Thus, romantic relationships at this age may be more short-lived and less intense, with less investment and commitment than later relationships. The items of this romantic intimacy measure were specific to the participant’s current romantic relationship, whereas the previously discussed romantic attachment measure was more reflective of the participants’ romantic relationships in general, which may be why we see significant associations between remembered emotion coaching and the romantic avoidant attachment subscales but not romantic intimacy. In addition, the mean length of romantic relationships in the current study was one year and five months (with the modal number of months being six months long); thus, perhaps another factor that affected the lack of association between remembered emotion coaching in childhood and romantic intimacy in young adulthood is that many of the participants have not been with their current partner long enough to establish strong romantic intimacy, even if they have been equipped with the necessary emotional skills to do so via emotion coaching in childhood. Perhaps emotion regulation mediated the relation between emotion coaching and both avoidant and anxious romantic attachment but not romantic intimacy because there are many other factors, other than how

parents responded to emotions, that impact romantic intimacy. For example, perhaps the romantic partner's characteristics overpower the effects of how emotions were responded to by their parents in childhood when it came to romantic intimacy.

Overall, the measures used in the current study appeared to be psychometrically sensitive and conceptually appropriate to the constructs of interest. The emotion coaching measure was a new one adapted from the Coping with Children's Negative Emotions Scale (Fabes, Eisenberg, & Bernzweig, 1990) as there were no existing measures that asked individuals to report on remembered emotions coaching from the past. This adapted measure produced good Cronbach's alphas (ranging from $\alpha = .62 - .93$), with the exception of the distress subscale, and it also had good predictive strength in the current study, despite the fact that it relied on retrospective judgements about parental behaviour during childhood. It was significantly and negatively correlated with the suppression subscale of the emotion regulation measure and the avoidant attachment subscale. However, additional psychometric information, perhaps regarding correlations with other measure of emotion coaching and factor loadings, is needed to understand better how effective this measure was and how it compares to other measures of the same construct.

The romantic attachment measure, Experiences in Close Relationships Questionnaire (Fraley, Waller, & Brennan, 2000), used in the current study was related to the predictor variables in the way we anticipated. However, the romantic intimacy measure, the Love Scale (Rubin, 1970), was less strongly related to our predictor variables. This measure may have been less of a good fit for the data in the current study because many of the items on the measure tap into very high investment and commitment to the relationships (i.e., I would do anything for my partner) that may not be representative of the typically feeling

individuals have for their partners when they are 18-20 years old. In addition, Rubin's Love Scale does not include items that explore the passionate or sexual elements of romantic intimacy, and this element may be particularly important for this age group. This missing element from the Love Scale may be another reason why the measure did not have strong predictive ability in the current study. The Emotion Regulation Questionnaire (Gross & John, 2003) which has been widely used in previous studies was found to have good predictive strength in the current study. Factor analysis confirmed that participants' responses on this questionnaire loaded onto the two factors, reappraisal and suppression, that have been reported in previous research using this measure (Gross & John, 2003).

In summary, the current study found that reported parental emotion coaching in childhood had significant direct relations with emotion regulation, and with avoidant romantic attachment. In terms of the mediation models, self-reported emotion regulation in young adulthood mediated the relation between remembered emotion coaching in childhood and avoidant and anxious attachment in young adulthood, but not between remembered emotion coaching in childhood and romantic intimacy in young adulthood. Finally, mood emerged as a significant covariate in the relationship between emotion coaching and both avoidant and anxious romantic attachment.

Strengths and limitations of the present study

The present study used a relatively large and homogeneous sample to investigate the importance of remembered emotion coaching in childhood for emotion regulation and relationship quality in young adult women. It is one of the first studies to examine the significance of emotion coaching for adjustment beyond childhood. The measures employed demonstrated good psychometric properties and predictive validity.

One of the additional strengths of the current study is that it attempted to account for some of the many variables that can have an impact on a parent's ability to engage in emotion coaching with their child and a young adult's ability to regulate emotions. For example, a child's emerging personality is thought to be one of the factors that can potentially get in the way of a parent being able to use supportive emotion coaching strategies: a very difficult child may prevent a parent from being able to use the strategies even if they have the knowledge of how to be an effective emotion coach. Other studies have also found that the characteristics of the individual receiving emotion coaching is of importance in regards to the way that parents talk about emotions (Bugental, Shennum, & Shaver, 1984). For example, Laible (2004) found in a study of mothers and their preschool children that mothers were more likely to discuss negative emotions when prompted to talk generally of past events if the child was rated by their mother as being high in negative reactivity. This is perhaps because they felt their highly reactive child needed more soothing and explanation regarding past incidents that brought up these negative emotions. In the second part of this study mothers were asked to read a story book to their child. Here also mothers were found to adapt their style of discussing emotions on the basis of the child's temperament. The authors of this study speculated that mothers spent more time elaborating when talking about negative emotions to children when they had rated them as highly reactive to negative emotions because they may have been trying to help their child learn to regulate negative emotions better and also elaborated more on the story that was being read so that the child could digest the moral message outside of highly charged discipline situations. Another interesting finding from this study was that mothers were more likely to talk to their child about the child's past behaviour if they rated their child high on effortful

control and low in extraversion-surgency. The authors speculate that this is because these children are able to pay attention to what their parents is saying for long enough for their parents to get their message across due to their better emotion regulation skills (or “effortful control”). A child who is low on emotion regulation and high on extraversion may undermine effective parental emotion coaching or may make a parent’s emotion coaching more difficult for this type of child to internalize. This latter finding from Laible’s study (2004) demonstrates the important point that emotion coaching is a bidirectional process with both parent and child affecting each other.

The characteristics of the parent engaging in the emotion coaching are also important, even though this factor was not one that was addressed in the current study. One parent characteristic that can greatly impact parental emotion coaching is the parent’s ability to regulate their own emotions (Havighurst, Wilson, Harley, Kehoe, Efron, & Prior, 2013). Parents have to be especially good at regulating their emotions in order to engage in supportive emotion coaching when their children have behaviour difficulties, given the stress that can be generated in these circumstances (Havighurst, Wilson, Harley, Kehoe, Efron, & Prior, 2013).

The present study also demonstrated the importance of mood for determining whether emotion regulation would mediate the relationship between emotion coaching and attachment.

A potential limitation of the current study was that the covariates (mood, parental caring, personality characteristics, and relationship satisfaction) that were added into the mediation analyses overlapped with the main variables in the study, making it more difficult to detect the mediation effects. For example, it is possible that the romantic satisfaction

covariate overlapped substantially with romantic intimacy. It is also possible that there was some overlap between mood and avoidant attachment, given that both may involve isolating oneself from others and avoiding situations. Because of this, when the covariates were entered first, the influence of variables that were entered later may have been underestimated.

The mediation analyses in the current study assumed that emotion coaching occurs prior to the development of emotion regulation; emotion coaching was added into the mediation models as the independent variable, and emotion regulation was entered into the model as the mediator. However, it is possible to argue that children are able to regulate their emotions somewhat from a very young age, but that emotion coaching by parents only begins after the child attains a certain level of cognitive functioning. In future studies it could be interesting to reverse the direction of this model, with emotion regulation as the independent variable and emotion coaching as the mediator, in order to see whether emotion coaching would emerge as a significant mediator. This would allow for further exploration of the ways in which emotion coaching and emotion regulation interact to affect romantic attachment and romantic intimacy in young adulthood.

Young adult women provided retrospective reports of their parent's emotion coaching in childhood in this study. Having more informants, such as having parents of the participants in the current study also report on their emotion coaching, might have added to the strength of the measurement of emotion coaching, preferably in a nonretrospective way by using parent reports of emotion coaching during childhood. Although it is not possible to rule out the possibility of a single informant bias, having participants provide reports about their parents' emotion coaching in childhood may provide more candid information, as

compared to parent reports. Parents might not have been as candid about having ignored or responded angrily to their child's emotions. However, it is also possible that young adults' recollections of how their parents responded to their emotions in childhood did not veridically reflect the actual way in which their parents responded to them as a result of forgetting or the influence of later parental behavior on their reports. In order to explore this possibility, future longitudinal research might also obtain observations of parent-child interactions in order to assess the degree of supportive and/or unsupportive emotion coaching. These observations could also be compared to retrospective reports in young adulthood in order to better determine the validity of retrospective reports of parental emotion coaching.

It is not known precisely to what degree the participants in the current study influenced their parents' ability to engage in supportive emotion coaching and whether the participants' temperament or behaviors in childhood somehow invited more unsupportive emotion coaching. Lukenheimer, Shields, and Cortina (2007) discuss how well regulated children may help to influence the way that parents respond to their child's emotions. The current study did include a short questionnaire about the participant's personality characteristics, but this measure may not have been detailed enough to evaluate adequately the importance of this variable because it does not provide us with specific information in regards to participants' temperament in childhood. However, this personality measure did correlate with other variables in the expected direction: extraversion and agreeableness were significantly and negatively correlated with mood, which provides some support for concluding that this measure was a valid measure. In addition, couple's satisfaction was significantly and positively correlated with agreeableness.

In future studies it might be interesting to have multiple informants report on emotion coaching at different points in childhood, such as at 4, 7, and 11 years of age. Children closer to adolescence (i.e., 11 year olds) have been found to be more likely to experience unsupportive parental emotion coaching, such as being dismissed, due to the increase in emotional conflict that comes with this developmental stage (Laursen, Coy, & Collins, 1998). Parents may engage in less supportive emotion coaching in later childhood when there is the expectation that these older children should be regulating their emotions more independently, as compared to earlier childhood. It would be informative to see how parents respond to their children's emotions at different time points and how measures at different ages differentially predict adjustment in young adults. Are lower rates of supportive emotion coaching always associated with poorer outcomes? Is emotion coaching at one age more important for overall adjustment as a young adult? A longitudinal design would help answer these types of question.

In future studies on this topic, it could prove useful to investigate the influence of the separate components of emotion coaching (unsupportive and supportive) and emotion regulation (reappraisal and suppression) rather than relying on composite scores. In the current study the scores were combined for data reduction purposes. However, being able to draw conclusions about whether suppression or reappraisal is more important for the relationship between emotion coaching and the various outcome variables could be helpful in developing better clinical interventions to promote healthy intimate relationships. For example, this type of mediation analysis might suggest that there is an important link between suppressing one's emotions (but not reappraising one's situation) and having an

avoidant romantic attachment style, above and beyond the degree of supportive emotion coaching that was received in childhood.

In future studies on this topic, having a more diverse sample would contribute to stronger external validity. For example, having a sample not exclusively made up of female undergraduate students, and making attempts to ensure that there is greater cultural diversity within the sample would be important, as it is known that emotion is shaped by one's linguistic, social and cultural experiences (Kitayama & Markus, 1994). Some research has found that in childhood parents encourage their sons to control their emotions more than they do with their daughters, and encourage more emotional expressivity in their daughters than their sons (Eisenberg, Fabes, Shepard, Guthrie, Murphy, & Reiser, 1999). Perhaps including males in the current sample would have led to more reports of remembered unsupportive emotion coaching (i.e., minimizing son's emotions) and less reports of supportive emotion coaching (i.e., expressive encouragement of emotions) in childhood. It is also possible that emotion regulation is differentially related to relationship characteristics such as attachment and intimacy for men and women. The difficulties in enlisting young men to participate in this study were severe, and suggest that different recruitment strategies need to be explored in order to increase the number of young men participating.

It might also be interesting and beneficial for future studies to look more at whether there is one particularly important "active component" in parental emotion coaching. In other words, is there a specific part of emotion coaching (i.e., acceptance of negative emotions, active listening, problem solving, teaching about emotion) that even if the other components were taken away would still be powerful enough to produce the beneficial effects that we are seeing from the total emotion coaching package? Some previous research

has found that empathy or “stepping into their child’s shoes” is a central part of emotion coaching (Havighurst, Wilson, Harley, Kehoe, Efron, & Prior, 2013). When a control condition using treatment as usual (i.e., active ignoring, time outs) was compared to a parenting program that taught emotion coaching, one of the main differences was that parents who had learned emotion coaching skills showed significant gains in empathy, as compared to parents in the treatment as usual group. Future research examining the effect of parental emotion coaching on functioning in young adulthood may want to include specific items that assess the empathy component of emotion coaching in addition to the emotion-focused reactions, problem-focused reactions, expressive encouragement, minimizing reactions, punitive reactions, and distress reactions assessed by the measure used in the present study. The previously mentioned study by Havighurst, Wilson, Harley, Kehoe, Efron, and Prior (2013) created an empathy scale that parents completed in addition to another emotion coaching measure. This empathy scale includes items such as, “I take some time to try to experience this feeling with him/her”. Employing this scale in future studies could allow for a better understanding of whether parental empathy in childhood continues to be an important component of emotion coaching.

Parental emotion coaching in childhood produces many positive effects for children (i.e., Gottman, 1997). Emotion coaching skills have been added to parenting programs such as Tuning Into Kids (TIK; Havinhurst, Wilson, Harley, Kehoe, Efron, & Prior, 2013), a six session group parenting program for young children with behaviour problems aged four to five. Tuning Into Kids teaches parents emotional awareness, regulation, and emotion coaching skills. The program trains parents how to respond to different emotions, such as anxiety and anger. Fifty-four mothers were either assigned to the TIK program or clinical

treatment as usual. Clinical treatment as usual consisted of behavioural strategies taught by a pediatrician (family rules, planned ignoring, and time out), as well as speech-language, psychology, and occupational therapy professionals, as needed. Those mothers who were placed in the TIK program reported greater empathy and had improved observed emotion coaching skills. The children of these parents that had been part of the TIK program had greater emotion knowledge and reduced teacher-reported behaviour problems. Parents both in the intervention group and in the treatment as usual group reported that their children demonstrated less behavioural difficulties at the end of the six weeks. However, this study reassessed participants at a six month follow up and found that only the TIK intervention group explored emotions more frequently and used emotion labels with their children (both elements of emotion coaching), as compared to the treatment as usual group. It would be interesting to conduct longer follow-up with participants when they become young adults to see if these differences between the treatment as usual and TIK intervention group are maintained. Would participants from the intervention group report fewer behaviour problems and better emotion regulation in young adulthood? How long lasting are the beneficial effects of parental emotion coaching in childhood? Results from the present study suggest that there are residual effects of emotion coaching into young adulthood.

Findings from the current study also have important implications for the romantic relationship literature. The current study adds to our understanding of what leads an adult to develop an avoidant or anxious attachment style in their romantic relationships. This is of importance because having an avoidant romantic attachment style has been found to make individuals less likely to resist opportunities for infidelity because of their lower levels of commitment in romantic relationships (DeWall, et al., 2011).

Summary

In this study the results indicated that receiving more supportive emotion coaching in childhood was significantly and positively correlated with use of healthier emotion regulation strategies (reappraisal) in young adulthood, and the unsupportive emotion coaching score and the avoidant attachment score were significantly and positively correlated. Emotion regulation significantly mediated the relation between reported emotion coaching and avoidant attachment, even after covariates of mood, parental caring, romantic satisfaction, and personality were entered into the model. Even though remembered emotion coaching did not significantly predict romantic anxious attachment, emotion regulation significantly mediated the relation between reported emotion coaching and anxious attachment; however, emotion regulation was no longer a significant mediator when covariates of mood, parental caring, romantic satisfaction, and personality were entered into the model. Reported emotion coaching from childhood did not significantly predict romantic intimacy in young adulthood, nor did emotion regulation mediate the relation between remembered emotion coaching and romantic intimacy.

The literature and research on emotion coaching is relatively new. The current study adds weight to the argument that supportive emotion coaching plays a vital role in shaping the long-term emotional and social worlds of individuals, as well as their physical health (Gottman, 1997). Teaching parents, educators, and mental health professionals, as well as other adults that interact regularly with children, how to respond appropriately to the negative emotions of children can have far-reaching implications; it may serve as a way to prevent internalizing and externalizing mental health issues from developing in childhood

(Katz & Gottman, 1997), or contribute to healthier relationships in young adulthood and beyond.

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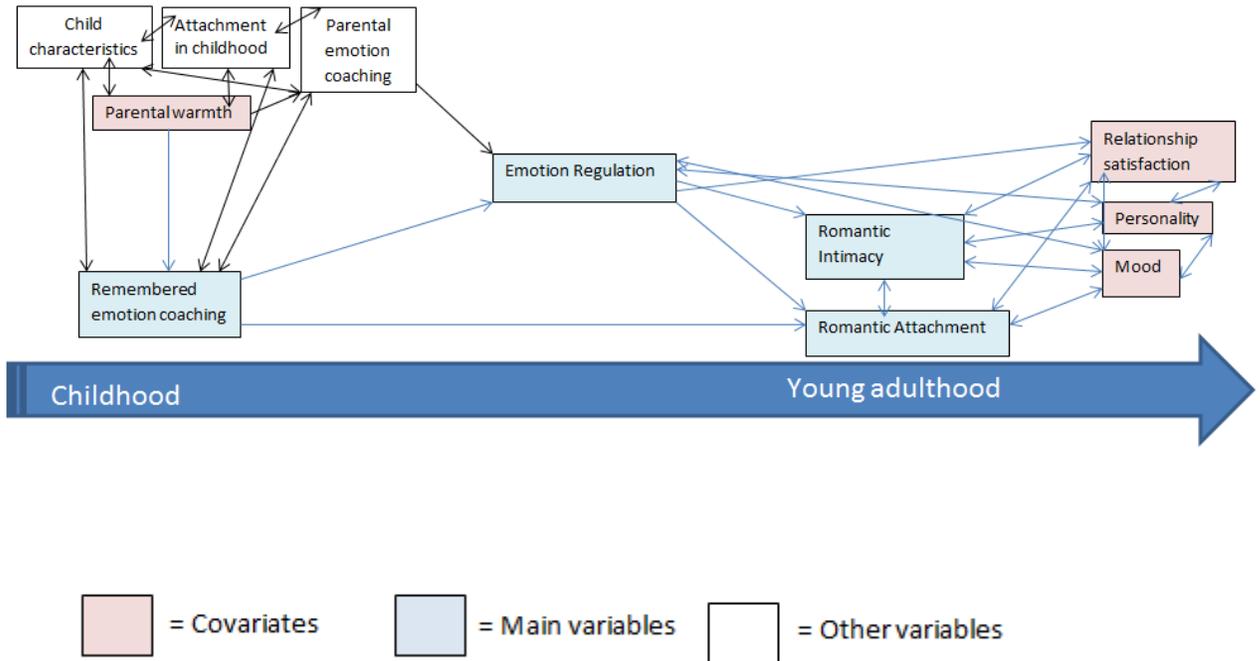
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Appendix A: Model of the current study



Appendix B: Example of an Emotion Coaching Conversation between a Mother and Son

Excerpt from Gottman (1997):

Diane: Let's put on your jacket, Joshua. It's time to go.

Joshua: No! I don't want to go to daycare.

Diane: You don't want to go? Why not?

Joshua: Because I want to stay here with you.

Diane: You do?

Joshua: Yeah I want to stay home.

Diane: Gosh, I think I know just how you feel. Some mornings I wish you and I could just curl up in a chair and look at books together instead of rushing out the door. But you know what? I made an important promise to the people at my office that I'd be there at nine o'clock and I can't break that promise.

Joshua (starting to cry): But why not? It's not fair. I don't want to go.

Diane: Come here, Josh. (Taking him onto her lap.) I'm sorry, honey, but we can't stay home. I'll bet that makes you feel disappointed doesn't it?

Joshua (nodding): Yeah.

Diane: And kind of sad?

Joshua: Yeah.

Diane: I feel kind of sad, too. (She lets him cry for a while and continues to hug him, letting him have his tears.) I know what we can do. Let's think about tomorrow, when we don't have to go to work and daycare. We'll be able to spend the whole day together. Can you think of anything special you would like to do tomorrow?

Joshua: Have pancakes and watch cartoons?

Diane: Sure, that would be great. Anything else?

Joshua: Can I take my wagon to the park?

Diane: I think so.

Joshua: Can Kyle come, too?

Diane: Maybe. We'll have to ask his mom. But right now it's time to get going, okay?

Joshua: Okay. (p. 23)