



PONTIFICIA
UNIVERSIDAD
CATÓLICA
DE CHILE



UNIVERSIDAD DE CHILE

PONTIFICIA UNIVERSIDAD CATOLICA DE CHILE

UNIVERSIDAD DE CHILE

Psychotherapy PhD Program

DOCTORAL THESIS

**PARENTAL STRESS, ATTACHMENT AND MATERNAL REFLECTIVE
FUNCTIONING AND THE EFFECTS OF A PSYCHOEDUCATIONAL PROGRAM
AMONG MOTHERS OF PRESCHOOLERS IN VULNERABLE CONTEXTS**

BY

JOHANA S. ZAPATA HABED

Advisor:

María Pía Santelices, PhD, Pontificia Universidad Católica de Chile

Co-Advisor:

Juan Enrique Wilson, PhD, Universidad de Chile

Thesis committee:

Patricia Cordella, PhD, Pontificia Universidad Católica de Chile

Patrick Luyten, PhD, Katholieke Universiteit Leuven

December, 2017

Index

ABSTRACT	4
INTRODUCTION.....	5
THEORETICAL AND EMPIRICAL BACKGROUND	8
ATTACHMENT THEORY	8
<i>Conceptualization of attachment theory.....</i>	<i>8</i>
<i>Attachment style in infants</i>	<i>14</i>
<i>Attachment styles in adults.....</i>	<i>21</i>
<i>Intergenerational transmission of attachment.....</i>	<i>27</i>
MENTALIZING	29
<i>Mentalizing definition</i>	<i>30</i>
<i>Conceptual origins of mentalization.....</i>	<i>32</i>
<i>Mentalizing within the context of the attachment theory.....</i>	<i>33</i>
<i>Development of mentalizing ability</i>	<i>36</i>
<i>Mentalizing, attachment style and language.....</i>	<i>41</i>
<i>Mentalizing difficulties.....</i>	<i>44</i>
<i>Mentalizing-based interventions and psychoeducational programs</i>	<i>53</i>
CHILEAN CONTEXT.....	55
STUDY 1	58
OBJECTIVES	58
HYPOTHESIS	59
METHOD.....	60
<i>Study design</i>	<i>60</i>
<i>Participants.....</i>	<i>60</i>
<i>Procedure.....</i>	<i>61</i>
<i>Measurement.....</i>	<i>62</i>
<i>Data Analysis.....</i>	<i>66</i>
RESULTS.....	67
<i>Preliminary Results.....</i>	<i>67</i>
<i>Descriptive Results.....</i>	<i>74</i>
<i>Correlation results.....</i>	<i>77</i>
<i>Moderation results.....</i>	<i>78</i>
STUDY 2	82
OBJECTIVES	82
HYPOTHESIS	83
STUDY DESIGN	83
PARTICIPANTS	83
PROCEDURE.....	84
<i>Intervention program.....</i>	<i>85</i>
MEASURES	86
DATA ANALYSIS.....	88
RESULTS.....	88
<i>Preliminary Results.....</i>	<i>88</i>
<i>Descriptive Results.....</i>	<i>92</i>

<i>Intervention Outcomes</i>	96
DISCUSSION AND CONCLUSIONS	104
<i>Strengths and Limitations</i>	114
REFERENCES	117
APPENDICES	151

Abstract

The ability of mothers of thinking about their children's thoughts and emotions are essential for present and future mental health -especially for young children- so it is necessary to understand the factors that may have an effect in this ability, as well as creating programs to promote maternal mentalizing. However, there are few studies reported in Latin America with mothers of preschoolers.

This work includes two studies, the purpose of the first one is to explore the moderating role of parental stress and depression in the relationship of maternal reflective functioning and attachment in a sample of 125 mothers of children between 3 and 5 years old in public preschools in Santiago, Chile. Multiple linear regressions show that parenting stress but not symptoms of depression has a moderating role in the relationship between attachment style and maternal mentalizing, so mothers with similar attachment anxiety present lower scores in parental reflective functioning -highest score on prementalizing scale- as maternal stress increases. Also, mothers who have low attachment anxiety but high parenting stress will have a diminished mentalizing capacity as the parenting stress gets higher.

The second study assesses the outcome of a five-session intervention program to enhance maternal mentalizing in 19 preschooler's mothers compared with 26 mothers which were not exposed to any intervention. A Wilcoxon rank test revealed that mothers who attend to the intervention had significant differences in the number of cognitive words and no metal state words when reading a story to their children. Also, decreased their attachment anxiety, contrary to mothers in the control group.

Introduction

A large body of research shows the extreme importance of the mother-child relationship in the optimal child development since caregivers -*typically mothers*- not only provide for physical needs but they also provide for their child's social and emotional inner world necessities (Ainsworth, 1967; Bowlby, 1969; Cassidy, 2008; Main, 1996). Furthermore, the quality of this first relationship is related with later long term mental health (Bowlby, 1969; van IJzendoorn, 1995).

The study of the caregiver-child relationship is framed in the context of the attachment theory that originated as a child development theory but years later evolved its approach to understand adult relationships as well categorizing the behavior of proximity and trust towards significant others in two distinct dimensions *Anxiety* and *Avoidance* in others (Ainsworth, 1989; Bouchard et al., 2008). Mentalization in adult attachment narratives: Reflective functioning, mental; Sable, 2007).

From attachment theory, has emerged the concept of *mentalizing* referring to the ability to understand and reflect one's own as well as others' thoughts and feelings in order to formulate interpretations about one's own and others' behavior (Ha, Sharp, Ensink, Fonagy, & Cirino, 2013; Fonagy, Steele, Moran, Steele, & Higgitt, 1991).

Although this ability begins to develop at a very young age is not until around 3 years old that the child acquires the ability to reason about her own emotions, beliefs and desires, so along with a sensible response children need mentalizing adults to help them to be aware of their own mind and to understand their inner world (Carvacho, Farkas & Santelices, 2012).

It is important that caregivers have appropriate mentalizing while they are raising young children, especially in preschool period, as this is a sensitive period of the development

for future mentalization (Santelices, Perez, Rivera, Gomez & Farkas, 2012).

The mentalizing ability in the specific context of the caregiver-child relationship called parental reflective functioning referred to the caregiver's ability to interpret and reflect their young child's mental states and emotional needs (Slade, 2005) are essential elements of the early parent-child relationship (Cicchetti, Ganiban, & Barnett, 1991; De Wolff & van IJzendoorn, 1997).

Parental reflective functioning has a bidirectional association with attachment, which may be weakened by parental psychopathology and consequently may give some lights on the effect of the caregiver's mental health on the transmission of attachment style to their offspring. Furthermore, some researchers argue that the mentalizing ability of caregivers is not only crucial for maintaining and facilitating healthy development, but its absence may be associated with various forms of psychopathology, attachment insecurity, difficulties in acquiring mentalizing ability and mental disorders in adulthood (Fonagy, Gergely, Jurist & Target, 2002).

Although some authors have studied the effects of psychopathologies and parental stress of caregivers in their reflective functioning ability, the results are inconclusive and there is need for more evidence. That's why the first study of this work aims to examine the moderating role of *parenting stress* and *symptoms of depression* in the relationship between *attachment* and *maternal reflective functioning* in mothers of preschoolers in a vulnerable population in a sample of 125 mothers between 19 to 47 years old.

The second study, pretend to analyze the impact in *maternal reflective functioning* of a psychoeducational intervention program among 19 preschooler's mothers compared to 26 mothers at 7 preschool centers of vulnerable neighborhoods in Santiago, Chile from families

who are experiencing poverty and social vulnerability, which sometimes makes it difficult to develop parenting skills due to overload to which these families are under; coupled with the high rates in symptoms of depression, stress and other emotional and conduct problems in Chilean women of high risk population as well as the prevalence of mental disorders.

It is important to mention that this work is framed in a larger project carried out from 2013 to 2016 financed by the Chilean government, which designed and applied a psychoeducational intervention based on mentalizing treatment.

Theoretical and empirical background and due to the complexity of attachment theory and mentalizing concept, a review of the literature is divided. First it is discussed the conceptualization of the attachment theory, followed by the attachment styles across the lifespan and then how attachment is transmitted from one generation to another.

After, the term of mentalizing and its conceptual origins linking the mentalizing context with the attachment theory to later examine the development of the mentalizing ability, its relationships with language and attachment style are discussed. Further mentalizing difficulties, interventions and psychoeducational programs are reviewed. Finally, an overview of the Chilean context and the need of interventions programs in this kind of populations.

Then, methodological strategies used in the first study followed by preliminary results and other results found then the second study is discussed. The second study describes the intervention program and then results are be presented. Finally, discussion with strengths and limitations as well as future research will of taking into account both studies.

Theoretical and Empirical Background

Main concepts of the studied variables are revised, starting with a review of the attachment theory from its conceptualization and description of both childhood and adult attachment styles. Then, mentalizing ability is described followed by maternal mentalizing or maternal reflective functioning as a specific ability in parenthood and its association to attachment theory and language.

Furthermore, it is taken into consideration the impact of the parental reflective functioning in mental health and vice versa followed by some interventions aimed to enhancing this ability, then early prevention/intervention and psychoeducational intervention are mentioned.

At the end of this section the need of these kind of interventions as well as the preschool education in Chilean context are mentioned, in order to contextualize the theoretical framework of this doctoral dissertation.

Attachment Theory

In the next section the concept of attachment is described; the theories of its main exponents are developed as well as the main concepts of the attachment theory. Then, a revision of the development of attachment and attachment styles through the lifespan will be conducted; finally, different parental characteristics in relation to attachment style are discussed.

Conceptualization of attachment theory

John Bowlby conceptualized attachment as an emotional and lasting bond characterized by a behavioral system set down with significant others or *attachment figures* from birth thru the lifespan (Allen, Fonagy & Bateman, 2008; Bowlby, 1969/1982).

Bowlby -supported by different psychological postures, such as developmental psychology and evolutionary psychology- based his theory in the observation of children being separated from their parents in children's hospitals and children institutions (Bowlby, 1969/1982; Bretherton, 1992).

One conclusion from these observations, was the identification of three stages in the separation response from the attachment figure: protest, despair and denial or detachment (Robertson & Bowlby, 1952). Bowlby's also proposed that to become a mentally healthy adult, a human being needs to have had the experience of a satisfactory, warm and continuous relationship with their mother or a permanent caregiver during their first years of live (Bowlby, 1969/1982; Bretherton, 1992).

According to this theory, since babies are born they have an innate behavioral system, which has the objective of ensuring survival through obtaining protection, affection and security from a caregiver (or caregivers) and subsequently other human beings (Bowlby, 1969/1982; Fonagy, 2001).

Additionally, the attachment system is composed on the one hand by attachment behaviors and on the other by an exploration system (Ainsworth, Bell & Stayton, 1971; Bowlby, 1969/1982). The attachment behavior has the function of regulating the emotional experience during early childhood (Carlson & Sroufe, 1995), when caregivers are capable of understanding and responding to their baby's necessities infants will achieve a dyadic regulation of their emotions and as a result, they will internalize that they are capable of managing their emotional experience in the presence of their caregiver who help them to calm down (Fonagy & Allison, 2012).

This theory claims that infants have the expectation that once they activate their attachment system through behaviors -such as smiles, crying, touching or protesting- in front

of their caregivers' departure or distance then their caregivers will approximate or hold them. Then if the proximity necessity of the infant is satisfied, the infant's exploration system is activated and attachment behaviors and signals of discomfort is deactivated (Bowlby, 1969/1982).

Bowlby identifies a number of conditions, which relate to the attachment system's activation/deactivation such as fatigue, hunger, illness, pain, and cold. The caregiver could either satisfy the necessities of the child, be absent or leave, therefore discouraging the attachment behavior (Prior & Glaser, 2006).

The infant's perception of *presence* or *absence* of their attachment figures is crucial. The anticipation of inaccessibility or lack of response from the attachment figures could result in elevate levels of anxiety in the child (Ainsworth, Bell & Stayton, 1978).

Despite that at the beginning attachment was conceptualized as a dual or start-stop system -that is either present or not- Bowlby accepts the attachment redefinition of Mary Ainsworth *as a continuous system* that is monitored by physical proximity, as well as the accessibility to the attachment figures. That is why if the infant perceives a major threat the activation of the attachment system is intense and so is the necessity of proximity and physical contact. On the contrary, if the activation is low it will only take the infants to be able to observe, even from afar, the attachment figures (Ainsworth et al., 1978; Bowlby, 1969).

It is important to mention that if the caregiver or significant figure responds with attention and care for the child, not only is assuring its survival and comforting him/her, but also, this allows him/her to recognize how to satisfy its own needs (Bowlby, 1982).

During the first three months from birth, the baby has social responses and with proximity signals to all adults, without discriminating between one person and another.

Gradually start focusing on primary caregivers -who they expect will be more responsive to their signals- however after the second trimester of life the children adapt their behavior to optimize the proximity response from their caregivers (Prior & Glaser, 2006; Schaffer & Emerson, 1964).

Furthermore between the second semester and the second year of live, the *secure base* behavior emerges (Bowlby, 1969/1982; Waters & Cummings, 2000) which makes reference to the trust that the infant develops in the attachment figure who has responded in a sensitive manner to the infant's needs, with the certainty of being able to count on this figure in moments of anxiety or danger and therefore being able to explore and enjoy the world in a secure manner knowing that they can turn to this person in case of need (Ainsworth 1989; Bowlby, 1982).

Based on the child experiences and according to her caregiver responses, children internalize primary relationships through *Internal Working Models* (IWM) or mental representations of attachment, which help them to predict what to expect from others in moments of need. Moreover, these IWMs guide and regulate the child's behavior and have a great influence on the development of the self and the capacity to relate with others (Bowlby, 1975; Bretherton & Munholland, 1999; Schimmenti & Bifulco, 2013).

The relationship between the prediction of the infant's behavior and their IWM, was demonstrated by Johnson and colleagues using habituation techniques in situations related to *secure* and *insecure attachment patterns* according to Ainsworth's strange situation procedure (which will be explained in the next section) in 21 infants between 12 and 16 months old.

These authors demonstrated that differences in children's experiences with their caregivers lead them to construct different IWM, including different expectations about their caregivers' response: Those infants having a secure attachment style would maintain their

gaze for a longer time when the representation of the attachment figure acted in a non-responsive manner. The results showed that boys and girls with secure attachment style observed their attachment figure's representation relatively more time when they had an unexpected non-responsive behavior than when they acted responsively in comparison with children who had insecure attachment. This experiment evidenced that attachment experiences are reflected in social interaction representation and that infants have a general representation of the behavior that they expect from their caregiver in situations related to attachment (Johnson, Dweck & Chen, 2007; Sherman, Rice & Cassidy, 2015).

One key aspect of IWM is that they include affective and cognitive components regarding the attachment figures like where to find them and what to expect from them as well as information about themselves. For instance, if it is a valued person and capable of being loved by attachment figures, which constitutes the basis of identity (Delgado, 2004; Sherman et al., 2015).

Given that IWMs are based on the caregiver's response to child's signals, Ainsworth proposed the concept of *maternal sensitivity* to measure the prompt and appropriate caregiver's ability for interpretation, awareness and response to the child's signals. At the same time the observation of adult's sensitive behavior as they help to calm down their child and to reduce the child's distress (Ainsworth, Blehar, Waters & Wall, 1978; Crittenden & Ainsworth, 1989).

In this direction, Winnicott proposes that caregivers have to be a proper reflection of their child's emotions in their eyes and faces, which he called *mirroring*. Moreover, he stated that good enough mother could manage the affective regulation through this mirroring helping to emerge the child true self (Winnicott, 1967).

It is in this way that attachment theory provides a solid framework of knowledge that

aims understanding the effect of early experiences in child development, demonstrating that as caregivers respond to their child signals, they do not only meet the physical needs but also their emotional needs of their child. That's why the caregiver-child relationship has a major influence on the individual's optimal development (Bowlby, 1969; Cassidy, 2008; Main, 1996; van IJzendoorn, 1995).

It is relevant to mention that not all interpersonal relationships are considered attachment relationships, an attachment figure only exists when a person –regardless of age- seeks *comfort* and *proximity* from her significant person under stressful situations or in the presence of a threat (Weiss, 1998).

Furthermore, empirical observation demonstrates that majority of children do not have only one attachment figure (Ainsworth, 1967; Bowlby, 1969/1982; Cassidy, 2008). Many children have more than one figure where they direct their attachment behavior, furthermore empirical research demonstrates that mothers and fathers become the baby's attachment figure during their first year of life (Ainsworth, 1967; Cassidy, 2008; Schaffer & Emerson, 1964).

Even though multiple attachment figures may exist, children do not conceive these figures as equivalent or interchangeable, rather, the child has a special bond and preference with one figure in particular as a hierarchy of the attachment figure (Bowlby, 1982; Cassidy, 1999). As a result, children maintain the same *attachment style* –as it is discussed below- that they had with their primary caregiver, which is repeated and expanded to the social world like siblings, friends, and teachers. In addition, attachment style remains stable from childhood throughout adulthood (Waters, Hamilton, & Weinfield, 2000).

Furthermore, attachment style between parents and children is transmitted from one generation to another (Hazan & Zeifman, 1999, Zeifman & Hazan, 2008), as it will be

discussed later. However, some factors as *parent's divorce, serious illness or death of an important person* could affect and change attachment style (Waters, Merrick Treboux, Crowell, & Albersheim, 2000; Weinfeld, Sroufe, & Egeland, 2000).

In conclusion, attachment forms a dyadic regulation system between the caregivers and their children where the caregiver's presence and availability alongside the quality of repeated experiences -both positive and negative- influence the attachment that children build with their caregivers, as well as mental representations of their relationships with significant others and themselves.

Even though the attachment system is crucial during the first years of life, attachment behaviors remain active throughout the lifespan as children gets older create close bonds with significant others (Hazan & Zeifman, 1999) as it will be described in the following paragraphs.

Attachment style in infants

As mentioned above, it is important to underline the fact that infants will always create an attachment bond with their caregivers, regardless of having a positive experience or even if the adults' behavior are difficult, unpleasant or negligent (Bowlby, 1969; Strathearn, 2007).

This special bond can be qualified as *secure* or *insecure* depending on the IWM and the child's behavior. Attachment styles differ from each other regarding the child's expectations and availability of her caregivers in moments of need and protection (Ainsworth et al., 1978; Bowlby, 1975).

Based on the infant's behavior there is a classification of the attachment pattern developed from an experimental situation standardized by Ainsworth and her colleagues, called *strange situation*. This is a 20 minutes' procedure where infants are exposed to different

events increasing their levels of stress. First, the caregiver and the infant are invited to remain in a game room, then a stranger enters the room, while this new person plays with the infant the caregiver leaves the room leaving the child alone with the stranger. Subsequently, the caregiver returns and leaves the room again, this time along with the stranger and leaving the child completely alone. Finally, both -caregiver and stranger- return (Ainsworth et al., 1978).

It can be observed, from this experiment, how the child uses the caregiver as a *secure base* for exploration. The perception of threat –the stranger- activates the attachment behavior, decreasing exploratory behaviors (Ainsworth et al., 1978).

The main aspects observed in the strange situation for the classification of attachment are the *proximity seeking behavior* or avoidance, whether the child rejects through anger or lack of cooperation, exploration by locomotion, manipulation of objects -like toys- and crying. It is determinant the *child's behavior at the moment the stranger enters the room*, (b) the *moment when the caregiver leaves the room* and in a special way (c) *the moment when the caregiver and the child are reunited* (Ainsworth et al., 1978, Main & Solomon, 1986).

Ainsworth and her colleagues recognized three types of behavioral patterns in infants, classifying attachment patterns in: *secure, insecure-anxious or ambivalent and insecure-avoidant* (Ainsworth et al., 1978). These patterns are detailed below.

Secure attachment style

Within this category are those children who behave with genuine curiosity to explore, using their caregivers as a secure base during non-stressful moments. They trust and seek comfort in their caregivers in moments of stress in a non-persistent manner. Frequently children become sad when their caregiver leaves the room, but once they are reunited the children accomplish to calm down and happily welcome their caregivers, accepting their demonstrations of affection and seeking physical proximity. These children have warm and

easy interactions with their primary caregivers (Ainsworth et al., 1978; Mikulincer & Shaver, 2007; Nievar & Becker, 2008).

At the same time, most caregivers constantly respond in a sensitive and timely manner to their children's needs. In addition, they facilitate their children's environment and are capable of regulating both pleasant and unpleasant emotions, making the world seem as something predictable and pleasant most of the time (Barudy & Dantagnan, 2010).

Insecure-ambivalent attachment style

Children classified with this attachment style present a *hyper-vigilance* of the presence and availability of their caregivers, which is evidenced in the frequent reach for verbal and physical contact and hyper activation of attachment strategies. They show preoccupation once the stranger enters the room and also when the caregiver leaves the room. In many cases, children with this attachment style display anger and resistance once they are reunited with their caregivers (Mikulincer & Shaver, 2007).

These children appear to develop fear of separation, easy crying, exacerbated responses to stress and become angry when there are delays in satisfying their needs. At the same time, these children will explore the world in an ambivalent way. Generally, this pattern of attachment is caused by an inconsistent care behavior, where caregivers in some situations are characterized by being present and close but in other situations as being distant and absent (Ainsworth et al., 1979).

Moreover, this type of attachment style is not only related to mother's personality, but also biographical moments in which the relationship is being developed for instance, mourning, separation, or illness of a loved one (Barudy & Dantagnan, 2010).

Insecure-avoidant attachment style

Children with this attachment style are characterized by avoiding, not showing interest, resisting physical proximity or maintaining emotional distance from their caregiver in stressful situations. Besides, they do not demonstrate much different behavior when their caregivers are in the room or when they leave. Generally, these children develop internal working models where self-reliance is highlighted and a lack of trust in relying on others when they are needed (Collins & Read, 1994; Pietromonaco & Barret, 2000; Sroufe & Waters, 1977). Frequently their caregivers have not accomplished to respond to their child needs or even they may be seen as a threat triggering the avoidant behavior.

In order to classify these three firsts types of attachment, coding takes two dimensions into account: *avoidance* and *anxiety*. Avoidance dimension refers to the child's behavior characterized for eluding contact and proximity with the caregiver in the other hand the anxiety scale includes behaviors such as crying, anger or resistance when trying to calm down the child; when these behaviors are present attachment pattern is classified as insecure attachment otherwise, lack of these behaviors is categorized as secure attachment style (Mikulincer & Shaver, 2007).

Years later a fourth classification was denominated *disorganized attachment style*.

Some other children will respond with inconsistency in the strange situation experiment seeking closeness and proximity with their caregivers in stressful situations, however unable to be comforted due to being in a constant state of alert under the possibility of being abandoned by their attachments figure's availability in spite of the closeness and comfort that adults may provide (Belsky & Fearon, 2002; Pietromonaco & Barret, 2000).

The unpredictable response to children's needs promotes uncertainty in children and

inability to interpret or anticipate in precise manner their caregiver's availability, obstructing them to develop a mental representation regarding whether if their needs will be satisfied or not characterized by a *disorganized attachment style* (Fonagy et al., 2004).

Commonly, these children may be afraid of not being able to predict how their parents are going to react, developing contradictory behaviors in stressful situations -like freezing or coming closer- and completely refuse contact (Main & Solomon, 1986).

Disorganized attachment is the result of neglect, rejection and ambivalence. Caregivers presenting severe personality disorders and lacking of support network, or having psychotic episodes could induce a disorganized and ambivalent behavior in the child as well (van IJzendoorn, Schuengel & Bakermans-Kranenburg, 1999).

The child's response is a permanent sensation of discomfort, crying is more frequent, same as anger and rejection from caregivers. In general, parents or primary caregivers seem to be uncomfortable with the child's needs and often respond annoyed, trying in occasions to ignore the child as a way to avoid their needs. This kind of caring is the one possible to be provided from anguished or depressed adults (Sroufe & Waters, 1977).

Generally, caregivers of children classified with avoidant attachment fail in being available, rejecting or not being sensitive to their children's needs. Moreover, from the systematization of these observations it is concluded that caregivers with insecure attachment have a tendency to be less sensitive and responsive, interfering with the children's attachment behaviors; while caregivers of secure children have a tendency to be more sensitive (Ainsworth et al., 1978; Sroufe & Waters, 1977; van IJzendoorn et al., 1999).

Attachment styles in adults

During their first year of life, children are not capable of understand that their caregivers can have intentions and emotions different from their own. Once they turn two years old, the infant re-organizes their behavior and attachment system, directing it towards goals, which at the same time makes the relationship with their caregivers more complex and increases the chance of having reciprocal interactions (Bowlby, 1969).

Small children operate at a sensory-motor level; however, once they improve their language -during the preschool period from ages between 3 to 5 years old- experiences can be stored in an adequate manner within memory. In this moment, IWMs are further generalized to all relationships (Bretherton, 2005).

Additionally, through their language development children can obtain symbolic representations, therefore they no longer need their parent's physical proximity or presence as much as when they were babies. Herby from preschool period throughout adolescence, securely attached children are more prone to express their emotions in an appropriate way and to communicate their intentions and emotions (Allen, 2008; Gottman & Declaire, 1998).

In this line, research demonstrates that children between 6 to 17 years old –since elementary school- prefer to spend their time with peers and have them as a secure base rather than their parents (Hazan & Zeifman, 1994).

During childhood and despite the fact that caregivers' physical proximity is no longer required, their presence and availability is still necessary in order to preserve attachment security. In contrast to prior stages, to maintain a secure attachment it is necessary to co-construct a relationship with bi-directional communication of thoughts and emotions, parents and children should be taken into account each other (Bowlby, 1988; Gamble & Roberts; 2005; Karavasilis, Doyle, Markiewicz, 2003).

Although children prefer the company of their peers during their pre-adolescence; it is not around 12 years old that peers actually turn to be main attachment figures as a result teenagers reach out for friends and/or romantic partners in moments of stress (Allen, 2008; Markiewicz, Lawford, Doyle, Haggart, 2006).

In this way, as the teenager gets into adulthood, peers and romantic partners will be gradually replacing parents as the main attachment figure, this does not mean that parents figure will become totally displaced, but instead their function and hierarchy position will change (Ainsworth, 1991; Allen & Land, 1999).

Later in the lifespan, the romantic partner as a new attachment figure has a greater equity in comparison with previous attachment relationships, due to the fact that both parties function as secure base for each other and have expectations that need to be fulfilled by the partner (Hazan & Zeifman, 1994; Mikulincer & Shaver, 2007).

However, if by adulthood there is not an established partner or a long-time commitment relationship, parents may continue to be main attachment figures. Further evidence demonstrates that certain factors such as commitment, intimacy, confidence and amount of time the couple has been together -in most cases after two years the bond is consolidated- are determining in who the attachment would be (Feeney, 2004; Fraley & Davis, 1997; Hazan & Zeifman, 1994; Trinke & Bartholomew, 1997).

A different body of research has found evidence suggesting that adults during difficult moments or important events as the transition to parenthood -especially women after the birth of their first child- may change their attachment figure, from their couple back to their parents (Feeney, Hohaus, Noller & Alexander, 2001).

As it will be discussed below, the understanding and classification of the attachment style in adults gains complexity, because in this stage there is place for choosing a couple, which involves both the automatic activation of the attachment figure as well as a more conscious process, in addition to the multiplicity of attachment figures.

Attachment styles in adults

In the 80s, Philip Shaver was studying behavioral and emotional patterns in teenagers and observed similarities between child's attachment and the feeling of loneliness in teenagers and adults (Rubenstein & Shaver, 1982; Shaver & Hazan, 1988). Later with Cindy Hazan, suggested that attachment theory could explain the romantic love in individuals, as these long-lasting couple relationships can be conceptualized parallel to the emotional relationship that infants have with their caregiver (Bowlby, 1979; Hazan & Zeifman, 1999; Shaver, Hazan, & Bradshaw, 1988).

Likewise, during these years Mary Main continued searching for evidence that sustains Ainsworth's theory about the association between children's attachment and their caregiver's attachment through the construct of the *adult attachment interview* (AAI; George, Kaplan & Main, 1985).

Unlike strange situation -that codifies child behavior- AAI measure attachment styles in adults through mental representations embodied in speech maintaining Ainsworth's typology - secure, avoidant, and anxious/resistant- with new nomenclatures *autonomous*, *dismissing* and *preoccupied* respectively, depending on coherence form of the speech and the ability to collaborate with the interviewer while describing relevant childhood experiences (George et al., 1985).

Later, Hazan & Shaver (1987) developed a self-report to assess attachment style categorizing their feelings as well as their behavior in context of their romantic relationships through the same three main categories.

Through the years, self-report measures were created in order to improve the measurement of attachment in two dimensions: *anxiety* referring to how concern is a person about being abandoned or rejected and *avoidance* of intimacy (Obegi, Morrison, y Shaver, 2004).

Depending if IWM of self and others were positive or negative Ainsworth classification of attachment were expanded to include four categories also taking into account the search for proximity, anxiety during separation, and having their partner as a secure base –as Ainsworth's measured infant attachment- according to these characteristics, adult attachment can be characterized as:

Secure attachment style

This attachment pattern corresponds with the secure attachment style in children. Individuals that have developed a secure attachment report *low* levels for both *anxiety* and *avoidance*, they also have a positive view of themselves as lovable and conceive others as loving and trustworthy, so they report having high levels of satisfaction in their interpersonal relationships, and feel comfortable depending on their couples because they perceive them as a source of support. At the same time, they do not feel anxiety on the fact that their couple could abandon them (Bartholomew & Horowitz, 1991; Mikulincer & Shaver, 2007; Simpson & Rholes, 2012).

Other studies demonstrate that people with this attachment style have a tendency to defend what they believe and to think they are in control of their own lives, in addition to

having conviction that in general others have good intentions (Collins & Read, 1994; Simpson, Winterheld, Rholes, & Orina, 2007).

Although there is little evidence of the influence of attachment style in parental role (Adam, Gunnar, & Tanaka, 2004), some studies demonstrate that parents with a secure attachment feel comfortable managing multiplicity of roles -being parents, spouses, workers, etc.- and experience less anxiety when they become separated from their children and have fewer family worries, involving in their children's tasks and responding in an empathic way to their children's needs (Adam et al., 2004; Mikulincer & Shaver, 2012; Vásquez, Durik, & Hyde, 2002).

Similarly, parents with secure style show more warmth and supportiveness, give more helpful assistance to their children in problem-solving tasks, are more engaged and provide more structure than insecure parents. Secure attached parents also use more flexible disciplinary practices (Cohn, Cowan, Cowan, & Pearson, 1992; Crowell & Feldman, 1988; Rholes, Simpson, Blakely, Lanigan, & Allen, 1997).

Preoccupied attachment style

Preoccupied adult attachment resembles the insecure-ambivalent attachment style in children. These individuals have high levels of anxiety and low levels of avoidance in attachment, they demand intimacy and closeness that may be excessive, and could be hyper-vigilant of being rejected or abandoned. They may also feel that others do not want to be with them, or they do not really love them, always assuming the worst in their partners and other attachment relationships (Simpson, Rholes, & Nelligan, 1992; Vicary & Fraley, 2007).

These adults have a self-view as unlovable or unworthy but value others and are preoccupied - as the name implies - for others acceptance (Bartholomew & Horowitz, 1991).

The *preoccupied* style is also characterized by feelings of dependence and need constant attention from their loved ones. Furthermore, when they do not have the required attention, fear of abandonment and negative emotions as rage and jealousy are intensified (Mikulincer & Shaver, 2007).

In addition, they report negative beliefs about themselves, and in turn, they usually have high esteem for their romantic couples despite the fact that they often feel misunderstood and underappreciated (Bartholomew, 1990; Simpson, 1990). Generally, adults with this attachment style are very vulnerable individuals and they perceived themselves as incompetents, which as a result activates a search for proximity with their couples. Additionally, anxiety in attachment is associated with bad strategies for emotional regulation (Mikulincer & Shaver, 2007).

In regard to parental role, individuals classified as preoccupied attached often insecure parents who do not feel competent in managing their children's negative emotions and they feel highly stressed during separations (DeOliveira, Moran & Pederson, 2005; Mayseless & Scher, 2000; Volling, Notaro, & Larsen, 1998).

Moreover, these parents do not often appreciate or push their children towards independence and have unrealistic high expectations regarding their children (Mayseless & Scher, 2000; Snell, Overbey, & Brewer, 2005); possibly to overcome their own insecurity about their parental abilities (Mikulincer & Shaver, 2007).

Dismissing attachment style

On the other hand, dismissing attachment is characterized by low levels in the anxiety and high levels in avoidance dimension, thus individuals classified with this attachment style may feel uncomfortable with intimacy and closeness and may perceive others as rejecting but

relatively or other negative sense of others, hence they may have positive views of self as worthy (Bartholomew & Horowitz, 1991).

Furthermore, avoidant attachment style is portrayed by lack of trust or few social relationships, as a result they may have an excessive independence, deactivate their attachment systems, trust more in themselves than in others because during their childhood. Frequently they have had painful experiences and learned to deactivate the attachment system as a defense mechanism (Mikulincer & Shaver, 2007; Simpson et al., 2007).

Avoidant adults tend to give low emotional support and not expressing their emotions do or their experiences with their children or couples (Schachner, Shaver, & Mikulincer, 2005). Moreover, parents classified with avoidant attachment style do not express to feel close to their children, they also exhibit less emotional tuning with their children and offer little emotional support to them when they are in a situation of need as parents categorized with secure attachment style (Mikulincer & Shaver, 2012; Rholes, Simpson & Blakely, 1995).

Furthermore, several researches that have filmed interactions between mothers and their toddlers, concluded that mothers with avoidant attachment style are less attentive and responsive towards their children's needs, while, mothers with an anxious attachment style can be highly emotionally affected and be intrusive in regard to their children's needs, just mothers with a secure attachment style are the ones who responded in an optimal manner to their children's requirements (Raval et al., 2001; Tarabulsy et al., 2005).

People who fit into this pattern of attachment try to maintain their independence, control and autonomy in attachment relationships, therefore in the many times they do not want to seek for emotional proximity (Schachner et al., 2005).

Fearful attachment style

Finally, fearful attachment is characterized as high avoidant and high anxiety with negative views of both the self and others. A person in this category is likely to avoid intimacy with others and withdraw themselves from relationship partners and for this reason some authors associate this attachment style with dismissing pattern (Bartholomew & Horowitz, 1991; Mikulincer & Shaver, 2007).

However fearful trait along to the negative view of others also have negative self-view. Moreover contrary to avoidant attachment style -who reject the need and support of significant others- fearful individuals have high anxiety exhibiting strong dependency on others so they avoid closeness to decrease fear of disappointment and rejection on their loved ones, moreover adults with this attachment styles are who report most interpersonal problems whereas *dismissing* adults are more likely to report problems related to lack of warmth in social interactions (Main & Hesse, 1990; Mikulincer & Shaver, 2007).

Other studies have found that fearful attachment style is associated with lack of assertive (Bartholomew & Horowitz, 1991) and that physical or sexual abuse or other childhood traumas also show low empathy distressed people (Mikulincer & Shaver, 2007).

In addition, people classified with this attachment style fail to achieve goals of the major attachment strategies “safety and security following proximity seeking -the primary, secure strategy-, defensive deactivation of the attachment system -the avoidant strategy-, or intense and chronic activation of the attachment system until security-enhancing proximity is attained -the anxious strategy-”.

In summary, according to the proximity seeking, activation or deactivation of attachment behavior in presence and absence of the attachment figure, human beings’

attachment styles can be classified into four categories. Furthermore, a large body of research suggests that this attachment patterns can be transmitted from one generation to the next due to the caregivers' capacity to address their children attachment necessities depends on their own representations, in a sense that those parents that are being sensitive towards their children's needs and responding opportunely, promote a secure attachment in them (Waters et al., 2000).

The inadequate sensitivity and response that can be observed in primary caregivers of children with insecure attachment styles could be the factor that explains the intergenerational transmission of attachment (van IJzendoorn, 1995), given that these children grow up with high amounts of insecurities and preoccupations, deactivating or hyper-activating the system and creating defenses to face their deficits limiting the opportunity for these children to develop a secure attachment throughout their lifespan, and therefore transmitting their attachment style from one generation to the next (Mikulincer & Shaver, 2012), as it will be discussed below.

Intergenerational transmission of attachment

The intergenerational transmission of attachment suggests that caregivers pass their attachment representations to their children in such manner that those adults with secure, avoidant or preoccupied attachment styles will consequently have children with a secure, avoidant or preoccupied attachment (Bowlby, 1975; Shah, Fonagy & Strathearn, 2010).

IWMs are based in children experiences and their attachment figures contribute significantly to the understanding of attachment transmission, because -as it was previously explained- IWMs are the representation we have about others, ourselves, and interpersonal relationships.

Therefore, if one had an available and responsive caregiver during stressful moments this will be transformed into positive expectations in regards that others are sensitive and protective people and in regards to themselves as valuable and deserving of care (Bowlby, 1975/1982; Weinfield, Sroufe, Egeland & Carbon, 2008; Mikulincer & Shaver, 2007).

The IWM is determinant in caregiving as it involves the ability to attend and integrate the signs of the child and in consequence, affects the capacity to respond in a sensitive and contingent manner (Sette, Coppola, & Cassiba, 2015).

There is a large number of research focused on the effect of mother's or primary caregiver's sensitivity on the development of a secure attachment with inconclusive results (Isabella, 1993; McElwain & Booth La-Force, 2006; Ward & Carlson, 1995). Therefore, it is suggested that despite sensitivity is associated with attachment security, it is not the only characteristic related to the intergenerational transmission of attachment (de Wolff & van IJzendoorn, 1997).

van IJzendoorn's (1995) results from a meta-analysis with 661 dyads from 13 different studies demonstrated first, that there are caregivers with a secure attachment that *do not* have sensitive responses toward their children, resulting in whole generations with insecure attachment. Second, the preservation of secure attachment is stronger than its continuity through generations with caregivers who have insecure attachment styles suggesting that a transmission gap may exist.

Some social factors such as lack of social support, financial problems, presence of an external attachment figure such as grandparents, siblings, or other caregivers, as well individual factors such as marital problems, depression, genetic factors or innate differences such as temper may influence the transmission of attachment styles (Mikulincer and Shaver, 2007).

Others researcher have found that parents' predisposition to understand intentionality and emotions underlying their children's behaviors, predicted a greater secure attachment in children (Fonagy et al., 1991; Fonagy & Target, 2005). These findings indicate that through attributing meaning to the affective experience and representing this experience in a regulated manner, caregivers facilitate a feeling of security in their children, which could be determining in the transmission of attachment throughout generations (Fonagy & Target, 1998).

The experience of children with their caregivers, modify their mental contents allowing them to operate from these contents (Main, 1991). Thus, caregivers with secure attachment style promote the development of the ability to think in terms of intentions and emotions in children and only then children can relate with others in a way that creates a secure attachment with their caregiver or the mentalizing ability.

It is important to mention that implementation of a specific style of attachment is not given exclusively by the parent's behavior, rather than by a combination of factors, it is possible that caregivers transmit their attachment style through an appropriate mentalizing (Sharp & Fonagy, 2008) so *parental mentalizing* or *parental reflexive function* (PRF), understood as the caregiver's capacity to read and hold their owns and their child's mental states (Allen et al., 2008), allowing caregivers to understand their child's behavior and affective experience (Besoain & Santelices, 2009) as it will be discussed in the next section.

Mentalizing

In this section, the concept of mentalization and its conceptual origins are described in depth. Then, an approximation to the study of the mentalizing capacity in the context of the attachment theory systematized in reflective functioning will be developed.

In addition, a revision of the development of mentalizing ability through childhood and adulthood is conducted. To finalize this section, the interconnection that exists between mentalization and language according to the different attachment styles will be reviewed.

Finally, mentalizing difficulties, especially in the presence of stress, depressive symptoms, and experience of trauma and its effects on development. Finally, interventions to improve will be discussed.

Mentalizing definition

Mentalizing is the imaginative mental activity that allows perceiving and translating human behavior in terms of intentional mental states such as necessities, desires, feelings, beliefs, goals, purposes and reasons (Allen et al., 2008; Fonagy, Bateman & Luyten, 2012). Under this perspective, mentalization is inherent to human beings, allowing understanding self and others' behaviors in relation to different cognitive process or mental states (Fonagy & Target, 1998).

Likewise, this capacity allows not only to predict, explain, and justify actions but also to infer on the mental states that cause them (Fonagy et al., 2007) determining emotional self-regulation and organization of the self, getting to know underline motives of actions and giving meaning to mental representations (Slade, 2005; Allen et al., 2008). As a result, it is possible to predict and give sense to behavior, therefore adapt and organize self-response in social interactions (Fonagy & Target, 1997).

In other words, mentalization is the capacity, which allows us to react to our and others mental states behaviors thus facilitating successful social relationships (Fonagy & Target, 2005; Slade, 2005).

Considering the advances in neurosciences and clinical knowledge, Fonagy and his colleagues conceptualized mentalization as a multidimensional and dynamic construct, organized in at least three dimensions shaped in tensed polarities (Allen et al., 2008):

1. *Automatic or implicit mentalizing vs. Controlled or explicit mentalizing.*

Explicit mentalization makes reference to verbal, conscious and reflective process, in contrast to automatic mentalization that makes reference to non-conscious, nonverbal, procedural and immediate process, supposing the perception of different sensorial indicators (posture, voice tone, gestures, way of speaking, way of looking, etc.) which are processed simultaneously.

2. *Cognitive mentalizing vs. affective mentalizing.* Mentalizing incorporates both affective and cognitive aspects, because it makes reference to beliefs, needs and emotions. It includes the theory of the mind mechanism (ToM) and empathy system, both working simultaneously in social understanding.

3. Mentalizing based on *internal vs. external* cues of *self and others*. The focus on internal mentalizing makes reference to feelings, thoughts, and inner experiences such as self-reflection and autobiographical memory. On the other hand, external mentalization makes reference to the perception of visible or physical characteristics or actions of oneself or others.

The process through which this theory was elaborated will be described within the next section in order able to understand in depth the importance of mentalizing.

Conceptual origins of mentalization

Even though mentalizing theory as we know it had its peak in the 90's, the concept origins are dated in the beginning of the XIX century and rooted in classic psychoanalytic theory with contributions from French psychoanalysis, object relations psychoanalysis, as well as other theories such as cognitive theory, attachment theory and developmental psychology (Bouchard et al., 2008; Fonagy, 1999/2006).

Freud, during the origins of psychoanalysis, stated that one of the functions of ego is to transform the immediate experiences -physical and somatic- into associations, in order to adapt external reality into mental representations of oneself and others (Freud, 1911; Laplanche & Pontalis, 1973; Lecours & Bouchard, 1997).

Similarly, Bion described the containing function of thoughts in the mother-child relationship pointing the fact that an infant is not able to understand or provide meaning to inner and external world sensations, thus they must be contained by the caregiver who should give back to the child what it is experimenting in a more comprehensible way and only then the child succeeds in making sense and understanding her own experience. It is through the repetition of this action that leads the child to be able to internalize this function and regulate their affective states (Bion, 1962; Holmes, 2006).

Later, Winnicott proposes that the mother not only has the role of holding and reflecting her child's responses -as gestures, necessities, and actions- but also of putting herself in the infant's place to recognize its needs and therefore avoid the child to experience unbearable anxiety of new experiences (Bouchard et al., 2008; Winnicott, 1956/1962).

Lastly, mentalizing concept was also influenced by French psychoanalysis inspired in Freud's -previously mentioned- who proposed that inner experience of psychophysiological

patterns is represented in form of affective components (Marty, 1991), in other words, the mind transform physical signals and somatic sensations into symbols.

In conclusion, mentalizing concept is based in psychoanalytic theories which propose that human being should transformed emotional experiences in order to label it and caregivers promote this ability in their children only through repetitive interaction with them, capturing the children's experience, transform it and return it to them allowing to build representations of them-selves as independent being, with different emotions, goals, and interests to those from their caregivers, and the importance of caregiver-child relationship which will be discussed the mentalizing ability within the frame of attachment theory.

Mentalizing within the context of the attachment theory

As an effort to explain the transmission of attachment across generations, Fonagy and his colleagues developed their own conceptualization concerning mentalization. These authors proposed that despite the fact that human beings are born with the ability to comprehend or attribute intentionality to human behavior based on mental states this capacity is not fully developed until the child has the cerebral maturity for achieving it (Fonagy et al., 2004).

Moreover, children need a caregiver who reflects their internal and external world through their caregiver reflection or *mirroring*, a central concept in the affective component of mentalization, based on Winnicott notion –mentioned in a previous section- that infant's experiences depend of the quality of how well they have been properly mirrored and recognized as an intentioned being (Fonagy et al., 2002; Fonagy & Target, 1997)

According to Winnicott a *good-enough* mother not only reflects her child's needs, but also has the capacity of putting herself in the place of the child and her needs (Winnicott, 1962). As a result, infants validate them-selves, start creating a different image from internal

and external reality. Moreover, infants base their own perception of themselves as a being that feels and thinks through her mother's eyes (Fonagy et al., 2004; Holmes, 2006; Winnicott, 1956).

This is why Allen and his colleagues emphasize that the quality of mirroring the child's mental states and its role in the development of self-regulation in the child's future mentalizing ability (Allen et al., 2008).

Furthermore, according to these authors it is not enough for the caregiver to be responsive in time, space and emotional tone, additionally must also *mark the emotion* (Allen et al., 2008; Fonagy et al., 2012; Gergely & Watson, 1996), that is when a caregiver replicates the emotion of her child, which it is complemented with manifestations of empathy, adding facial and verbal expressions simultaneously at the same time demonstrating, that she -the caregiver- is not overwhelmed by this emotion (Allen et al., 2008).

In other words, the caregiver needs to express an emotion indicating that it is not her own but belongs to her child so the child could understand it as part of its own emotional experience. Additionally, authors support that if caregivers lack on *marking* emotions, then their child could feel overwhelmed by her own experience (Fonagy & Allison, 2012).

In sum, caregivers must first *reflect and then mark* their child's emotion promoting an optimal emotional and social development, as well as a secure attachment style in their child (Allen et al., 2008) letting the child to experience that her emotions do not frighten her caregiver, on the contrary her affection is contained and regulated, calming and promoting a secure attachment style (Fonagy, 2004; Grienberger, Kelly & Slade, 2005).

As a result, secure attachment and mentalizing capacity can be facilitated to the extent that the caregiver can take emotional distance regarding its own mental states and the child's states in order to mirror them appropriately (Sharp & Fonagy, 2008).

Moreover, it is the mentalizing capacity that allows us to create a mental representation of ourselves and as a result to feel embrace our own behavior and thoughts and we develop a representation of our self as an *agent* (Bateman y Fonagy, 2004).

This same capacity could be extrapolated to the context of relationships between caregivers and children, especially in the capacity that caregivers have to treat their child as a psychological agent. Following this line, Sharp y Fonagy (2008) propose that caregivers' mentalizing capacity has a strong relation with security of the child's attachment, thus a caregiver with high levels in mentalizing capacity it is prone to develop a secure bond with her child, as well as a low mentalizing capacity may impact attachment relationships.

Also, researchers have found that mentalizing and attachment style have a bidirectional relationship, in a way that insecure-avoidant, insecure-ambivalent or disorganized attachment patterns may affect the emergence of the capacity to mentalize in the caregiver as well (Bouchard et al., 2008; Fonagy, Fearon, Steele, & Steele, 1998; Schechter, et al., 2005; Sharp & Fonagy, 2008).

Consequently, mentalizing is thought to play a central role in the transmission of attachment thus appropriate parental reflective function, stimulates the development of the mentalizing capacity in the child and in return these children will be able to form a secure attachment with their caregiver (Sharp & Fonagy, 2008).

On the contrary, caregivers with insecure attachment patterns fail to adequately reflect their child's emotion and instead provide an incongruent response or in the contrary be very intrusive, causing a dismissive attitude toward self and others' mental state and increasing discomfort (Fonagy et al., 2004). This can lead to a vicious circle in which difficulties to understand others' mental states cause stress and activate the attachment system resulting increasing mentalizing.

At the same time, low capacity to mentalize may affect attachment relationships (Fonagy & Luyten, 2009) in that sense, a person with a secure attachment will have a wider confidence in exploring their own and others' mental states.

It is important to mention that maltreatment or parental disorganized attachment style may cause mistrust in children and develop hyper-vigilant stance toward adult's mental states leading the child to disrupt monitoring on her own behavior resulting in long term consequence like not being able to perceive themselves as intentional agents, disorganized behavior and establishing chaotic relationships with others (Fonagy, Bateman & Bateman, 2011).

As a result of the importance of attachment and mentalizing ability in the caregiver–child relationship, the concept of *Parental Reflective Function* (PRF) emerge referring to the mother's or caregiver's ability to attribute emotions, thoughts, and desires which are implicit in the child's behavior, as well as the capacity to hold in mind the child's mental states (Fonagy et al., 1991b; 1997). These manifestations take place in different ways and through different stages of the child's development and parent-child interaction, first through gestures and actions, later on through words and play (Slade, 2005) as will be explained in detail below.

Development of mentalizing ability

The capacity of mentalizing is not present since birth; instead it is acquired according to development, cerebral maturity, and the child's interpersonal experiences and attachment relationship (Fonagy & Target, 1997), as it was mentioned before.

Mentalizing and the organization of the *self*, starts with the integration of bodily experiences that define the barriers between oneself and the exterior world, setting the perception of a physical self (Brownell & Kopp, 1991).

During the six first months of life, human beings perceive themselves as physical agents whose actions are capable of influencing external objects (Allen et al., 2008; Fonagy & Allison, 2012; Leslie, 1994). Then, after the sixth month and once babies establish a physical self as the social inter-exchange rises, babies manage to identify social causality and initiate to realize that there is a relationship between their actions and their caregivers' responses (Fonagy & Allison, 2012; Neisser, 1991).

These two learning milestones constitute the foundation of the connection between their actions and events around them, it is then around nine months old that infants start to realize that people conduct their actions with underlying intentions (Baldwin, Baird, Saylor, & Clark, 2001).

Around 10 months old, the infant does not only seek to attract attention from the caregiver, but also call for the adult's attention deliberately towards close objects changing the meaning of attention to a more reciprocal or *joint attention* (Bretherton, 1991; Fonagy et al., 2004). At the beginning babies aim to fulfill their own desires, and then to generate a joint emotional implication starting to internalize their caregiver's verbal language (Wellman, 1993).

This joint attention is triadic involving the infant, her caregiver and a third object to which the infant wishes to jointly direct the attention to, and have as a guide her mothers' emotional reactions – as danger or pleasure- to this third object (Woodward, 2003).

After the appearance and around the first year of life, infants already have expectations about how objects will behave in consequence, a sense of self as a *social agent* starts to develop (Fonagy & Target, 1996; Fonagy et al., 2004).

It is around the first year of life during the *teleological stance* that children can

evaluate the emotional response of others (Allen et al., 2008) where they perceive themselves and others as having the capacity to choose between different alternatives that are more effective for achieving an objective (Fonagy & Allison, 2012) beginning to understand that thoughts and feelings are expressed through behavior.

During this teleological stance, actions with a specific goal are understood in terms of physical results rather than mental process, since the child is not yet able to separate external reality from inner world, neither external reality from other's mental states (Fonagy, 2006).

Is after past the first birthday when children increase their language at an accelerated rate and start to reasoning in a non-egocentric way about others and primitive mental states; nevertheless, at this point the difference between mental states, external and internal reality and remains blurry for them (Allen et al., 2008).

Then, about 18 months old babies may perceive social contingencies and start to interpret behavior using this information as a base to carry out actions directed towards a goal (Gergely, Nadasdy, Cisbra, & Biro, 1995).

Approximately children at three years old turn to a *psychic equivalence stance*, where mentalizing ability is not fully developed -as it is still a pre-mentalizing stage- and children are not aware that their ideas are a representation of reality and not reality itself. Therefore, at this stage they believe their representations are exact copies of an external word and thus they are always true and shared by everybody (Allen et al., 2008).

It is around four years old and due to vocabulary acquisition, children begin to understand mental states as such, *differentiating mental states and external reality* as two separated and different entities acknowledging that internal reality of the mental world, does not necessarily match external world, giving way to representations and being able to imagine mental states in others (Firth & Firth, 2003).

This prementalizing mode is known as *pretend mode* allowing the child to differentiating internal from external reality, maintaining both domains separated and developing awareness that her experience is not a mirror of reality (Fonagy & Target, 1996/1997; Fonagy et al., 2004).

Therefore, the development of the self becomes more complex during this developmental stage and children recognize that their experience is individual and that there might be several perspectives from a reality so they require their caregivers *parental reflective functioning* to face her new abilities (Jemerin, 2004; Steele & Steele, 2001).

When children get around age five years old, are capable of having a coherent and integrated speech about their mental states and about their family and peers' mental states (Steele & Steele, 2001) so they learn that their actions and intentions are connected with their emotions and that these emotions may influence the environment developing a stronger sense of self. So, close to the sixth birthday, children can organize their memories about their own actions and experiences in a causal-temporal frame that allows them to development an autobiographical self as well as understanding themselves and others through coherent narratives (Fonagy et al., 2004).

Furthermore, at age of seven and throughout their lifespan, children as they grow up will still acquiring experiences to predict behavior and mental states in themselves and others in a varied number of situations (Firth & Firth, 2003); being necessary for the caregiver to recognize the developmental stage of their child in offer to be able to understand her capacity to express and understand own and others' mental states (Besoain & Santelices, 2009).

In sum, there are three prementalizing stances the *teleological mode*, *psychic equivalence*, *pretend mode* which are developmental precursors of the mentalizing capacity

helping children to integrate the experience of inner and psychical realities between the second and fifth year of life (Fonagy & Target, 1996/1997).

Moreover, in the light parent–child interactions as mirroring, play, conversation about mental states and emotions, caregiver’s responses to their infant necessities as well as *parental reflective functioning* emerge the understanding of his own and others behavior.

Additionally, given that mentalization is developed through attachment, the quality of the interaction is central to this development. In this sense, research has demonstrated that there is a complex relationship between the mentalization capability of parents, secure attachment achieved by the child and their own mentalization capacity, therefore parents’ capacity of understanding their children’s mental states occupies a predominant place in the comprehension of their cognitive and emotional development.

According to some authors, *attachment influences parental reflective functioning* in at least two levels; first in the mother’s or caregiver’s ability to reflect the child’s mental state and second, in the security the child has to explore the caregiver’s mental state (Fonagy et al., 2002) so children with secure attachment style would feel sufficiently secure to attribute mental states to their primary caregivers.

Specifically, children with an insecure-anxious attachment pattern are more preoccupied about their own mental states and trying to regulate their internal world as they do not have the capacity to think in others’ mental states (Fonagy et al., 2004).

On the other hand, children with insecure-avoidant attachment style avoid others’ mental states because being aware of others’ mental state is painful or provokes too much anxiety (Fonagy et al., 2004).

Finally, secure attached children frequently have caregivers who create an environment

that promotes mentalizing (Fonagy et al., 1991a/b; Slade, Grienberger, Bernbach, Levy, & Locker, 2005), where language plays a moderator role between attachment style and mentalization development (Fonagy et al., 2004), which will be explained deeply in the next section.

Mentalizing, attachment style and language

Language plays a central role in attachment influences and mentalizing since this capacity allows to represent the external world as well to symbolize inner states of mind (Fonagy & Target, 1997). Also, language enable children to understand that a person, not only receives information but also allow children to corroborate that they are recognized as someone having feelings, thoughts and ideas of their own (Fonagy et al., 2004).

Through these linguistic processes caregivers translate child's behavior in words for the child to be able to label their own behavior and then be internalized and understood, facilitating the development of mentalizing (Fonagy & Target, 1997). Facilitating sensitive caregivers to construct a bridge between the physical experience and the inner world gathering, attachment and mentalizing, two different aspects of social development (Jewell et al., 2016).

Findings in attachment research, describe that language serve to the individual to organize attachment representations and internal working observable at in the quality of parenting during parent-child social interaction (Huth-Bocks, Muzik, Beeghly, Earls & Stacks, 2014).

Other studies suggest that secure attachment in mothers is associated with conversations about emotions and at the same time these mothers may have a greater maternal mentalizing (Bost et al., 2006).

Other study has found that mothers who use verbs referring to cognitive states to describe the events on a story, favored the child's later understanding of mental states on their preschool children (Adrián, Clemente, & Villanueva, 2007).

Moreover, the relationship between adult discourse and child attachment has been established in preschool age children, since children's communication their attachment figure tends to be more elaborate and incorporating emotions is related with secure styles of attachment (Etzion-Carasso & Oppenheim, 2000).

Besides, it has been demonstrated that children with secure attachment style are more involved in fantasy games which requires understanding mental states and language -since they need to transform their own and others' reality into a simulation- than children with insecure attachment patterns (Fonagy et al., 2002).

Since parental reflective functioning is subscribed in the emotional experience, due to the intensity of the affects is not possible to exist a perfect tuning, for this reason caregivers overwhelmed by their child's emotions have to be able to take distance during high-stress moments, and then be able to regain emotional control to be able to maintain a mentalizing posture. Moreover, caregivers with high parental reflective functioning do not perceive emotions -despite these may be painful- as immutable and concrete realities they openly think and talk about affects and emotions (Grienenberger et al., 2005).

Therefore, self-regulated caregivers with a high PRF are more predictable for their child, facilitating a mentalizing posture and where the child can make sense by creating a mental scheme about their caregiver's intentions and behaviors (Fonagy et. al, 2002, Grienenberger et al., 2005).

On the contrary, caregivers with a less developed parental reflective functioning are more likely to have problems in regard to the emotional communication with their child, leading to regulation and mentalization problems in the child in the long term.

Moreover, empirical studies show that the incapacity to understand others affects and intentions may difficult close interpersonal relationships, contributing to mental health problems such as depression, chronic stress or personality disorders (Burnette, Davis, Green, Worthington & Bradfield, 2009; Fonagy & Luyten, 2009; Mohapatra, Holgersen, Binder, & Nielsen, 2006).

All these suggest that in communicative interaction between preschoolers and their caregivers provide evidences about the adult characteristics that improve the development of symbolic abilities in children, and security in attachment since sharing affective experiences thru speech are key elements that promotes theory of mind and healthy relationships (Caravacho, Farkas & Santelices, 2012).

In addition, failure in PRF is associated to maternal psychopathology, resulting in mothers who are not psychologically accessible to their children, thus increasing their children's risk of suffering from mental illness during different developmental stages (Grienenberger et al., 2005; Schechter et al., 2005).

Consequently, it has been shown that PRF has a protective role in behavioral problems and depression in children (Ostler, Bahar & Jessee, 2010) and has a moderating role between attachment and aggression (Fossati et al., 2009).

Moreover, failure in mentalizing can be present with high levels of stress in social context (Fearon, van IJzendoorn, Fonagy, Bakermans-Kranenburg, Schuengel & Bokhorst, 2006), depression, or have been exposed to traumatic childhood experiences (Allen, Lemma, & Fonagy, 2012; Fonagy et al., 2012).

Therefore, the following section will discuss the difficulties in mentalizing capacity and its relationship to psychological aspects such as attachment, depression, parenting stress, and childhood trauma in mothers.

Mentalizing difficulties

As mentioned above, according to Fonagy and colleagues the capacity to mentalize is developed during early infancy, the child needs a person to hold the child's mental states and reflect them adequately. However, situations where caregivers fail to mirror their child's mental states generate difficulties in differentiate between the physical world and the psychic world resulting in the child's failure to mentalize (Allen et al., 2008; Fonagy et al., 1991b; 2004).

General failures as well as specific difficulties in mentalization can exist; some general failures are present in at least three cases, (1) if the individual has constant mentalizing failures resulting in a persistent distortion of emotion, (2) that the individual interprets other's behaviors in physical terms rather than as cognitive or emotional processes (3) rigidity, whether it be in communication or in more general aspects of interpersonal relationships such as the expectation that relationships to others will not change throughout time (Bateman & Fonagy, 2016).

On the other hand, partial mentalizing difficulties depend on the context since they are only present in thoughts, feelings, or specific situations like trauma experiences. In general, a high level in the activation in the attachment system as well as the interaction with specific people also can reduce or obstruct mentalizing capacity temporarily (Bateman & Fonagy, 2016).

One way of understanding partial difficulties in mentalizing is the *switch model* based

on the activation and deactivation of the attachment system. Since this system is related to arousal and stress regulation, in stressful situations the attachment system is activated and the individuals stop controlling their mental state entering an *automatic mentalizing mode* given as result non-mentalizing modes. Likewise, attachment style influences the amount of stress an individual can hold without making the switch, the amount of time it will take me individual to retake his mentalization and leave the automatic mode (Heinrichs & Domes, 2008; Lieberman, 2007; Mayes, 2006).

In this way, Individuals with secure attachment will be able to control their mentalization in the face of more stress and will recover their mentalization faster. On the other hand, individuals with an avoidant style have a relatively high tolerance to stress and will move towards non-mentalizing modes relatively slowly. However, individuals with an anxious attachment style will have low tolerance to stress and it will take them time to control their ability to mentalize because to avoid abandonment there is a hyper activation of the attachment system. Finally, individuals with disorganized attachment will also take longer to recover their capacity to mentalize, but will additionally have incoherent responses and will tend to become deregulated easily (Fonagy, Luyten & Strathearn, 2011; Fonagy & Bateman, 2008; Mayes, 2006).

Besides stress and attachment style, mentalizing may be reduced by different emotions overwhelming the person and getting to prementalizing states such as psychic equivalents, pretend mode, or teleological mode -described previously- which while are appropriate for young children, they are considered a mentalizing failures in adults (Allen et al., 2008; Fonagy & Target, 1996; Fonagy et al., 2002) as it will be discussed below.

Symptoms of depression and mentalizing failures

Sadness, feelings of emptiness and irritability, combined with cognitive changes are some of the depressive symptoms may significantly disturb an individual's general functioning (APA, 2013). Furthermore, depression can prune mentalizing capacity in so far concrete and non-mentalized thoughts are frequent, without understanding how own mental states are disturbed by depressive mood (Bateman & Fonagy, 2016).

Other patients with depressive mood may be overly demanding of themselves, have low self-esteem, high self-blame, and tendency to perpetuate the experience of failure, self-imposing unrealistic goals (Auerbach & Blatt, 2001; Blatt, Shahar & Zuroff, 2001) that maintain this vicious circle.

Depression also may lead to sleep difficulties, lack of energy, feelings of hopelessness, decrease in the capacity to concentrate, suicidal thoughts, difficulties in social, professional and individual life, thus affecting mentalizing (Allen et al., 2008). Furthermore, symptoms of depression can also affect the capacity to establish satisfactory interpersonal relationships, altering the development of a realistic self-image (Blatt, 2004)

This may result in mentalizing failures that when patients are parents exposed to high demands of rising a young child, or misbehaving children, ending in mentalizing failures (Auerbach & Blatt, 2001; Blatt et al., 2001). These parents frequently are ambivalent, demanding, and have hostile relationships with their children. As a result, the child experiences shame a doubt due to not meeting expectations and an excessive preoccupation to reach these goals.

Moreover, in the context of the caregiver-child context, studies suggest that caregivers that experience depression respond with threats in their attachment relationships, whether it be

due to separation, rejection, loss, experiences of failure, or a combination of these, resulting in impediments and distortions of mentalizing (Fonagy et al., 2012).

Furthermore, caregivers that experience this disorder, are not emotionally available due that they are overwhelm by their own feelings of despair, which particularly affects attachment relationships directly and indirectly their children behavior, showing difficulties in regulating emotion or cognitive difficulties (Atkinson, Paglia, Coolbear, Niccols, Parker, & Guger, 2000; Goodman et al., 2011; Toth, Rogosch, & Cicchetti, 2009).

Other studies evidence that depression in caregivers is associated with decreased synchronicity and less perception in regards to the impact of their emotions on their children resulting in children with insecure attachment patterns (Martins & Gaffin, 2000; Carter, Rokous, Chazan-Cohen, Little & Briggs-Gowan, 2001; Coyne, Low, Miller, Seifer, Dickson, 2007). Additionally, disorganization in attachment patterns in preschool children and other long term developmental outcomes like emotional regulation problems and high risk of developing psychopathology are associated with insecure attachment and depressive symptoms in mothers (Toth et al., 2009).

On the other hand, some studies have found differences between sex mother-child dyadic interactions; the symptoms of depression are related to behavioral problems in male children than in females (Carter et al., 2001).

Mothers who suffer from depressive disorders demonstrate decreased positive affect and more negativity, hostility and irritability. They also report perceiving themselves as less competent mothers than mothers without the symptoms of depression (Lovejoy, Graczyk, O'Hare, & Neuman, 2000); thus, negatively affecting their sensibility and decreasing their parental abilities like parental reflective functioning.

In conclusion, depressive mood is associated not only to a reduced mentalizing capacity, but also induces the emergence a distorted mentalizing modes (Fonagy et al., 2012).

Nevertheless, it is difficult to differentiate which factors are specific to depressive symptoms and which are due to the comorbidity with other symptoms (Katznelson, 2014) such as experiences of trauma during childhood which will be presented in the following section.

Childhood experiences of trauma and mentalizing failures

As it was mentioned above, difficult experiences during childhood affect the caregiver-child bond. If the caregiver behavior is repeatedly or severely distressing exceeding the ability of the child to cope, then this behavior is classified in two main categories: *abuse* and *neglect* (Bifulco, Moran, Baines, Bunn, & Stanford, 2002), these experiences may generate profound fear of emotional intimacy with others and consequently cause independence.

At the same time, abuse is classified in physical abuse, sexual abuse, and emotional abuse. Additionally, it is considered traumatic to have been exposed to domestic violence, as well as, chronic secondary trauma related to abandonment or physical, sexual, and emotional abuse (Bryant, 2010; Holt, Buckley, & Whelan, 2008).

In addition to traumatic experience, there are three determining factors in how this experience will affect child development and the child reaction, which are how *frequent* the abuse is, the kind of *relationship* that the perpetrator has with the child, and the *level of violence* involved by the abuser (Holt et al., 2008).

Generally abuse coexist with felling of abandonment, hopelessness and fear so the consequences affect attachment patterns resulting in anxious or disorganized attachment style, conflicts in the development, interpersonal relationships and deficiencies in the ability to mentalize (Cicchetti & Valentino, 2006) being a greater risk to impacting future generations

that other experiences of trauma that take place outside the family circle (Sagi-Schwartz et al., 2003; Steele, Steele, & Murphy, 2010).

In this line, one study interested in differentiate the effects of trauma caused inside the family circle to trauma caused by strangers, collected data of daughters and grandchildren of 48 survivors of the holocaust. The results showed that the effect of trauma in offspring of holocaust victims was much less to those who experienced of trauma within their family circle. Moreover, these authors concluded that the secure attachment relationships acted as a protective factor in order to confront the brutality in many descendants of survivors from the holocaust (Sagi-Schwartz et al., 2003).

It has also been noted that one in five children exposed to traumatic experiences are afflicted with posttraumatic stress and two-thirds present comorbidity disorders such as depression and substance abuse (Elwood, Hahn, Olatunji, & Williams, 2009). Evidence also shows that children who have suffered maltreatment have a high-risk of decreased development of mentalizing capacity (Fonagy, 1997).

Furthermore, children with history of abuse, present certain deficiency in internal language and though they might not have delays in receptive language, they can present delays in the production of language; consequently, many of them are shy, leading to stepping away from their internal world (Beeghly & Cicchetti, 1994).

Furthermore, childhood experiences of trauma negatively influence mentalizing at least in five different ways (Fonagy & Allison, 2012): (a) the child comes to see actions as inevitable and not intentional; (b) complicates the internalization of the caregiver, internalizing the representation of the caregiver and creating a separation from the self which results in an externalization of behavior in which the child's mental states are rejected by himself and can

feel as though they belong to others; (c) interrupts the communication between the caregiver and the child, interfering in the caregiver's ability to assist the child in the creation of bonds between his internal states and his actions; (d) children can internalize that they deserve the abuse, even reaching a point on occasion where the child "enjoys" the abuse making mentalization difficult in relation to themselves and to others; (e) lastly, can produce a split in which the child creates a nonexistent control over the abuser.

In the same line, studies show that children who had suffered from traumatic experiences have low empathy, low emotional regulation and struggle to understand emotion in facial expressions, interfering in the contemplation of mental states in their caregivers as a protective response leading to diminish capacity to mentalize in long term (Fonagy et al., 1996).

Paradoxically, these children can have more physical closeness with their caregivers because their ability to adapt to their caregiver's behavior becomes limited by their low mentalizing capacity and the physical experience becomes more important (Fonagy, 1997).

Mentalizing capacity of children whose mothers have lived through traumatic childhood experiences can also become limited depending on the mother's ability to integrate and resolve her own painful experience of trauma. On occasions, it becomes difficult for these mothers to focus their attention on their children or to be able to tolerate negative attributions and emotions coming from their child because these trigger the mother's own experience of trauma (Gara, Allen, Herzog & Woolfolk, 2000). For example, when an infant cries the mother can re-experience her own hopelessness during her own abuse and result in their response that is not in synchrony, thus, communicating to the child that this is a dangerous and injurious emotion (Fonagy, 2006; Hesse & Main, 2006; Slade, 2005).

Moreover, when children who experienced trauma grow up and become parents are more likely to have mentalizing failures, since trauma experiences deactivates attachment system as well as inactivates the emotional response, to give place to a fight-flight-freeze response resulting in decrease of mentalizing (Allen, Bleiberg & Haslam-Hopwood, nd).

Another explanation for low mentalizing in those afflicted by dramatic experiences in childhood, is that psychological defenses are activated so individuals cannot read the mental states of others who had malevolent thoughts towards them (Allen et al., 2008).

Some authors have found evidence that different types of maltreatment have different types of consequences across the lifespan, thus the experiences of physical abuse during childhood are associated to hostile and intrusive behavior as mothers, whereas mothers with a history of sexual abuse exhibit physical or verbal distancing in the relationship to their child (Lyons-Ruth, Bronfman, Parsons, 1999).

Other studies show that similarly to depressive symptoms, experiences of trauma during childhood are specifically significant in girls than boys because they are more likely to experience sexual abuse and its consequences such as, emotional tension, posttraumatic stress, acts of delinquency and suicidal ideation and attempts (Afifi et al., 2014; Wolfe, Scott, Wekerle & Pittman, 2001).

In addition to traumatic experiences other conditions can lead to symptoms of depression or high levels of stress impacting mentalizing and parental reflective functioning such as the role of parenting of small children. These and other stressful events will be discussed below.

Parenting stress and mentalizing failures

Parents must complete different functions in order to satisfy their children needs, from

basic necessities for their child survival, such as housing, clothing, and food to emotional demands such as attention, holding, and love; which can generate elevated levels of stress (Rodrigo, Martín, Cabrera & Márquez, 2009).

In addition to children's needs, the parental role may cause stress because it generates interpersonal conflicts triggered by the uncertainty of doing a good job, making the right parenting decisions, as well as social demands regarding managing children's behavior or being a competent caregiver (Deater-Deckard, 2005).

Parenting stress is bi-directionally associated with behavioral problems in children so behavioral problems are a predictive factor of parenting stress and vice versa (Baker, Blacher & Olsson, 2005; Karlen, 2004). In the same line, parenting stress affects the recognition and identification of behavioral problems in children, often attributing erroneous intentionality in child's behavior (Deater-Deckard, 2004).

Also, a large body of evidence shows that parents with high levels of stress tend attribute their child's problematic behaviors as a reality common to all children (Crnic & Low, 2002). Moreover, parents with high levels of parenting stress are inconsistent and emotionally nonresponsive to their child's emotional needs, especially negative emotions (Jackson, Brooks-Gunn, Huang, & Glassman, 2000; Nelson, O'Brien, Blankson, Calkins, & Keane, 2009).

Parenting stress is associated to the quality of the attachment so that parents with insecure attachment style *-avoidant or fearful-* will have higher levels of parenting stress than parents with secure attachment patterns (Nygren, Carstensen, Ludvigsson, & Frostell, 2012; Rholes, Simpson, & Friedman, 2006; Vásquez et al. 2002).

Some authors propose that self-sufficiency feelings and the need from the caregivers'

need of independence in avoidant attachment styles caregivers, difficult the assumption of appropriate caregiving roles (Gillath, Shaver & Mikulincer, 2005; Mikulincer & Shaver 2007; Rholes et al. 2006) generating high levels of parenting stress.

In regards to parents with anxious attachment styles, who tend to be overwhelmed by the needs of their children which hyper-activates their own strategies of emotional regulation and constant preoccupation with their own attachment structure (Mikulincer, Shaver, Gillath & Nitzberg, 2005; Mikulincer & Shaver, 2007) therefore influencing mentalizing ability.

Moreover, stress affects mentalizing since produces the physiological survival reaction of *fight-flight-freeze* that dominates the individual and decreases her capacity to mentalize (Fonagy et al., 2012).

In this way, parenting stress in the rearing of small children is a risk factor for developmental problems and psychopathology (Anthony et al. 2005; Crnic and Low 2002; Crouch & Behl, 2001) having an effect in parental capacities resulting in negative emotions, decrease of parental mentalizing, sensibility and strict style of discipline towards their children enhancing childhood maltreatment (Bonds, Gondoli, Sturge-Apple & Salem, 2002; Coyl, Roggman, & Newland, 2002; Sidebotham, 2001; Willinger, Diendorfer-Radner, Willnauer, Jorgl & Hager, 2005).

Taking into account all these difficulties –depression, experience of trauma and parenting stress- and their consequences mentalizing as well as in mental health, different interventions have been designed to improve this ability as it is discussed in the next section.

Mentalizing-based interventions and psychoeducational programs

Psychoeducational interventions aim to promote and prevent providing the necessary tools to avoid mental health problems in children and in families, as for

mentalization-based interventions main goals are to improve mentalizing capacity needed to achieve a sense of self that is strong and secure (Bateman y Fonagy, 2004). To achieve these objectives these interventions center efforts in developing a more curious and inquisitive stance, offering direct interventions and maintaining a balance in the exploration between oneself and others mental states. Furthermore, participants are invited to observe interactions between their own experience and diverse perspectives (Allen et al., 2006).

There are several modalities within mentalization-based treatment, however there is a lack of studies that support mentalization based psychoeducational programs that have preventive purpose in non-clinical populations (Allen et al., 2008).

In terms of programs dedicated to favoring parental reflective functioning, Slade (2006) proposes some general guidelines such as improve a reflective stance, model parental mentalizing, facilitate curiosity, promote affect as a means of reflecting mentalization, to keep parents in mind and work at a level that parents can manage.

The group who worked at the project founded by National Fund for Scientific and Technological Development (Fondecyt 1130786) -in which this thesis is framed- published a systematic review of the literature regarding mentalization-based treatments oriented to caregivers of preschoolers (Santelices et al., 2016) and after eliminating articles that did not comply with the inclusion criteria like having a control group or a intervention with non-clinical samples, results yielded 11 articles, most of which -more than 90%- have been published between 2010 and 2013, which allows us to infer a growing interest in studying this phenomenon.

Among the articles selected, six of them took place in the United States and the rest came from countries like Israel, UK, and Netherlands, therefore it is important to know that there is a research gap regarding *Latin American* studies.

Considering the sample that received the intervention, according to this publication three works are directed solely towards both parents and eight articles include mother/father-child dyads as participants of the interventions. However, it is necessary to clarify that in these last articles, though they evaluated changes in adults and infants, the intervention was only directed towards the adults.

An important aspect to note is that the effects of the intervention -in the cases that it was evaluated- can be observed that children were not directly exposed to the intervention, for example the decrease externalizing behaviors in children after promoting their parent's mentalizing ability in a study conducted by Ordway et al. (2013) allows to infer that the quality of caregiver's mentalizing influenced children's social and cognitive development, therefore it is important to create interventions that seek to increase this capacity in adults.

Another program designed to enhance parental reflective functioning parents in preschoolers parents at Yale University named Parent's First, however no publications regarding this program were found at the time of the systematic revision.

As it will be shown in the next section due to the high rates of mental problems in Chilean population it would be beneficial to replicate successful interventions since to date no published studies on parental reflective functioning.

Chilean Context

There is a great body of research which support the need of intervention programs in Chilean population, specifically in low socioeconomic status, moreover World Health Organization (WHO) describes that 31.5% of adults in Chile have had a lifetime mental illness, even more at least one in five people (22.2%) have had a disorder in the past 12 months (WHO, nd).

Additionally, according to a nationwide health survey (Minsal, 2011) with 5,434 participants there are at least four significant symptoms referent to mental health:

- 1- *Depression Symptoms.* At least one in ten people present depressive symptoms in the last year according to the diagnostic criteria of the DSM IV. However this prevalence it is grater in women with low educational level reaching to 27.9% (N=618) in mothers of young children (between 25 to 44 years old).
- 2- *Alcohol consumption.* Most Chilean people (1643; 98%) drink intermittently and excessively. The average of pure alcohol consumed in a single day -among drinkers- is higher than 4 glasses (.76ml), which places Chilean drinkers at high risk to suffer any of the problems related to dependence disorder or other disorder related. Furthermore, the higher prevalence of abuse or dependence on alcohol problems is located in the lower socio-economic status.
- 3- *Stress.* At least one in 10 women report being permanent stressed in the last year. Moreover, most Chilean women (N=687; 62.5%) who are mothers of young children -between 25 to 44 years old- described having stressed related events such as divorce, losing their job, being a victim of violence or lost or a love one in the past year.
- 4- *Other emotional problems.* Just 44,1% (N=1344) of Chilean women report to never have had everything they wanted to do where emotional problems were not an impediment, in other words most women referred that at least one time in the last month had an emotional problems that were a setback.

In the same line, mental problems are disorders wich take more disability-adjusted life years (DALY) from Chilean people, where depressive disorders are the second cause of

DALY with a great economic cost to the entire society (Valdés & Errázuriz) and with long term consequences for families and children of these individuals.

According to an epidemiological study, prevalence of mental illness and the impairment caused from this condition is even larger in children (22.5% , N=350) than adults (Vicente et al., 2012).

Again, low socioeconomic status, living only with one parent and with family history of a mental illness were significant higher probability to develop a mental disorders. Furthermore, most children in need of mental health services (N=910; 58.4%) did not receive treatment (Vicente et al., 2012).

Finally, in an international compilation of behavioral and emotional problems in preschool children found that Chilean parents reported significantly higher behavioral and emotional mean scores in their children, compared to those from other societies in the same region (e.g., Peru). Even more, Chile had significantly higher ($p < .001$) mean scores in *seven* scales such as externalizing problems, total problems score-than *all the other 23 societies* which participated in this study (Rescorla et al., 2011).

In view of the great need for prevention and intervention programs and considering the importance that family has on child development, numerous programs such as *Father-child Program* (PPH) at the Centro de Investigación y Desarrollo de la Educación CIDE, *Get To Know Your Child* (CASH) belonging to the Junta Nacional de Jardines Infantiles JUNJI, *Manolo and Margarita learn with their parents* at the Centro de Perfeccionamiento, Experimentación e Investigaciones Pedagógicas CPEIP of the Education Ministry, *Looking At My Tree Program* of Fundación Integra, and *Nobody is Perfect* of the Health Ministry have been developed to improve parental abilities in Chile expecting to benefit child development.

However, none of these programs works specifically with parents and the implications on development that attachment and parental reflective functioning generate on parental behavior.

It is noteworthy that the findings presented in this section demonstrate a clear association between parental mentalization and attachment security from infancy to adulthood. In spite of the great need of parental interventions due the mental health situation of the overall Chilean population, more specifically in mothers of young children and their high rates in depressive disorders and stress –as it is shown above- to date no research has considered to observe the moderation role of parenting stress or symptoms of depression to enhance maternal mentalizing capacities and attachment security thru a psychoeducational intervention in vulnerable population mothers of preschoolers as the following research questions arise.

Study 1

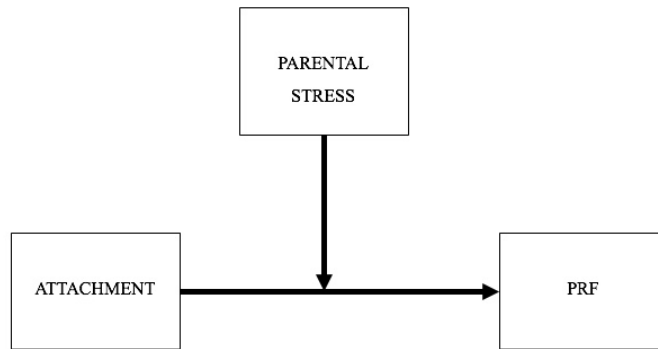
Objectives

General objective

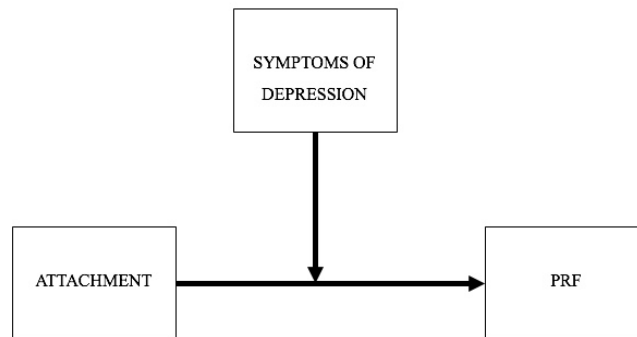
To examine the moderating role of *parenting stress* and *symptoms of depression* in the relationship between *attachment* and *maternal reflective functioning* of preschoolers' mothers in vulnerable population.

Specific objectives

1. To determine the moderating role of parenting stress in the relationship between attachment and parental reflective functioning.



2. To define the moderating role of symptoms of depression in the relationship between attachment and parental reflective functioning.



Hypothesis

It is hypothesized that *parenting stress* will have a moderating role in the relationship between *adult attachment* and *maternal reflective functioning* in mothers, so mothers with low scores on attachment anxiety will present higher parental reflective functioning when their parenting stress is low. On the contrary, mothers with high parenting stress scores will present lower parental reflective functioning, even if they have low attachment anxiety.

Likewise, mothers with low attachment avoidance will present higher parental reflective functioning when their parenting stress is lower than when parenting stress is higher.

It is also hypothesized that *symptoms of depression* will have a moderating role in the relationship between *adult attachment* and *maternal reflective functioning*, so mothers with low attachment anxiety will present higher parental reflective functioning when they have less symptoms of depression. Furthermore, mothers with higher depressive symptomatology will present lower parental reflective functioning even though they present low attachment anxiety.

In addition, mothers with low attachment avoidance will present higher parental reflective functioning when they have less symptoms of depression, and mothers with higher depressive symptomatology will present lower parental reflective functioning even though they present low attachment avoidance.

Method

Study design

This is transversal descriptive study with quantitative method; mothers were evaluated just at their homes or at the preschool center if it was required.

Participants

As it was mentioned before, the collected data is part of the Fondecyt project No. 1130786 which was in progress between 2013 and 2016. Mothers were between 19 to 47 years old ($M = 29.69$, $SD = 6.55$) and at the time of assessment they had a child between 36 and 54 months ($M = 44.65$, $SD = 3.74$) assisting to a public preschool center. Children are

comparable in gender, since 62 (49.6%) were girls and 61 (48.8%) boys, it is worthy to note that one of the mothers do not specified the gender of her child.

Regarding to their education attendance, most mothers in this study finished from high school (n=55; 44%) and one in four mothers do not finished it (n=33; 26.4%). While at least one in five (n=27; 21.6%) of these mothers went to college, just eight (6.4%) had a college diploma and just one (.8%) had a postgraduate degree. Yet most of them provided their education attendance, three of them (2.4%) do not.

Moreover, most of the participants worked either full time (n=49; 39.2%) or part time (n=41; 32.4%), nearly a third of the participants were stay-at-home mothers (n=34; 27.2%) and one mother (0.8%) mother do not provide her employment status.

According to the mothers in this study, half of them were living with their couple (n=64; 51.2%) either married (n=35; 28%) or not (n=29; 23.2%), the rest of them (n=61; 48.8) do not have a partner or do not lived with her partner either they were single (n=55; 44%) or were separated (n=6; 4.8%).

Procedure

After coordinating with the formal institutions, the inclusion of the preschool centers in the study, meetings with the preschool centers administrators took place in order to explain the entire project and informed consents forms were also signed.

Then caregivers whose children were between 3 to 5 years old were asked to volunteer by flyers or meetings with in the preschool centers; and those who expressed interest and consented to participate were called by evaluators (psychologists or psychology students) in order to explain what was expected and to agree on an initial meeting to begin the evaluation where consent forms are signed. Although other caregivers –fathers, grandparents, aunts-

were also welcomed to participate in the larger project, but have been excluded for this study in mothers.

During the home visit, evaluators reviewed the protocol and mothers were given the opportunity to ask any questions or concerns about participating and self-reports were handed as follows.

Measurement

Demographic questionnaire

This questionnaire was specifically developed for this Fondecyt project and consists of four parts; the first part asks about the history of the child, the second part is related to the personal history of the mother, the third section refers to family history and the last part probes whether past or present conditions of the child, that might be not asked and have been considered relevant.

Parental Reflexive Functioning Questionnaire (PRFQ-1; Luyten, Mayes, Nijssens & Fonagy 2017).

This is an 18-item self-report consisting in three subscales (Appendix 1): *Prementalizing modes* (PM), *Certainty of Mental States* (CM) and *Interest and Curiosity* (IC) in mental states of the child. Each item in the PRFQ-1 is scored on a Likert scale 7 points, where 1 is strongly disagree and 7 completely agree he PRFQ intended for parents with children under 6 years of age.

The pre-mentalizing subscale aims to recognize Pre-mentalizing or not mentalizing stance as is observed in the next items: "*My child cries around strangers to embarrass me.*" "*Often, my child's behavior is too confusing to bother figuring out.*" A decrease on PM

scores indicates an increase in paternal reflective functioning.

Certainty of Mental States scale it is designed to measure the inability of parents to recognize that mental states are not transparent by items like *“I can always predict what my child will do.”* *“I can completely read my child’s mind”*. Low scores suggest great uncertainty or hypermentalizing, in the other hand high scores suggest capture over certainty without recognition of mental states or hypomentalizing.

Finally, Interest and Curiosity subscale captures the interest and curiosity of parents for their child mental states, for example: *“I am often curious to find out how my child feels.”* *“I try to understand the reasons why my child misbehaves.”* Increase scores on this scale indicates increased parental reflective functioning.

Although a preliminary validation of this measure was recently published and there are no clinical cut points at this time, previous studies have shown a good internal consistency of these three subscales Pre-mentalizing ($\alpha=0.70$), Interest and Curiosity ($\alpha=0.77$) and Certainty of mental states ($\alpha=0.82$) in mothers who their child was up to 36 months (Luyten, Mayes, Nijssens, & Fonagy, 2017). In this study, the three subscales were modified in order to achieve reasonably good reliability in each of the subscales: Prementalizing ($\alpha=0.68$), Certainty in Mental States ($\alpha=0.64$) as well as Interest and Curiosity of mental states ($\alpha=0.78$) as it is explained later.

Experiences in Close Relationships/Short Version (Wei, Russell, Mallinckrodt & Vogel, 2007).

This self-report questionnaire assesses two dimensions of attachment in adults, anxiety towards rejection or abandonment from the romantic partner and avoidance of intimacy or discomfort on depending and being close to others (Alonso-Arbiol et al., 2008; Brennan et al.,

1998; Obegi et al., 2004). Although, Chilean Millennium Institute for Research in Depression and Personality (MIDAP) was authorized to change the wording so it was not addressed just to romantic partner but to any close relationship with significant others with high intimacy. Each dimension consists of 6 items rated on a Likert scale from 1 “strongly disagree” to 7 “totally agree” (Appendix 2). Scores are obtained from the average of the values corresponding to each scale. Examples of items would be “*I am quite concerned about the possibility of losing my partner*” in the Anxiety Scale, and “*I prefer not to show my partner my feelings*” in the Avoidance Scale. In addition to the dimensional evaluation, the ECR-S allows the distinction of 4 categories of adult attachment: secure, fearful, preoccupied and dismissing, resulting from the combination of both dimensions. This test has shown high reliability in previous studies, both scales in different languages. With regard to the Anxiety scale had a consistency $\alpha=0.78$ and Avoidance scale an $\alpha=0.84$ (Wei et al., 2007). In this study, these scales were modified in order to achieve reasonably acceptable reliability in this study $\alpha=0.74$ in Anxiety Scale and $\alpha=0.66$ Avoidance Scale as it is explained later.

Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock & Erbaugh, 1961; Vásquez & Sanz, 1999 Spanish Version).

Is a questionnaire consisting of 21 items aimed to assess current symptoms of depression. In this test, there is a set of four alternatives ordered from lowest to highest severity, and participants must choose the phrase that best describes their emotional state during the last week (e.g. “*I am not particularly discouraged about the future*” in Appendix 3).

Each item can be measured from 0 to 3 points, obtaining a total score from 0 to 63 points where higher scores indicate greater depressive symptoms. In addition, four categories are defined: *minimum*, *mild*, *moderate* and *severe* depression. Cut scores are established for each

category total score < 10 for minimum depression, 10 to 18 mild depression, 19-29 moderate depression, total score > 30 severe depression (Beck & Beamesderfer, 1974). A good reliability has been demonstrated in the Spanish version by Vázquez & Sanz (1999 with a $\alpha = .90$). In this study, this measure also had a good reliability ($\alpha = 0.84$).

Parenting Stress Index (PSI-SF; Abidin, 1995; Díaz-Herrero, Brito de la Nuez, Lopez-Pina, Perez-Lopez, & Martinez-Fuentes, 2010 Spanish version).

This is a self-report of 36 questions that measure stress produced by the demand of raising young children; it consists of three subscales with 12 items each scale (Appendix 4). Parents use a Likert scale of 5 points to indicate the degree to which they agree with each statement. There are three subscales, the *Parenting Distress* (PD) including items 1 to 12 determining the experience of stress due to personal factors directly related to the exercise of the functions of parental role (e.g. “*Since my child was born I could not do any new or different things*”). The subscale of *Parent-Child Dysfunctional Interaction* (PCDI) including items 13 to 24 focus on the perception that the parent has and to what extent the child meets her expectations, and the degree of reinforcement that the child provides to the parent (e.g. “*My child smiles at me much less than I expected*”). The third subscale called *Difficult Child* (DC) includes items 25 to 36 provides an assessment of how parents perceive the ease or difficulty of controlling their children in terms of their behavior: challenges in learning patterns, disobedience and demanding behavior are also included (e.g. “*My child gets angry easily by anything*”). The sum of these three subscales indicates the total degree of stress (PSI-total) experienced by parent with exercise their parental role, increase scores on this scale indicates increase of parental reflective functioning. Cut-off score of 72.5 percentile was after this was found to be *optimal* in Latin-American population (Barroso, Hungerford, Garcia, Graziano & Bagner,

2016). Spanish version of this test has good internal consistency coefficients $\alpha = 0.90$ as well as in this study ($\alpha > 0.87$).

Childhood Trauma Questionnaire (CTQ, Bernstein et al., 2003)

This is a self-report, with 28 items in which participants use a 5-point Likert scale from 1 (never) to 5 (very often) about traumatic experiences, as they were children (Appendix 5). The construct is indexed in five domains: emotional abuse (e.g. *“Some people in my family called me name as stupid, ugly or lazy”*), physical abuse (e.g. *“Someone in my family hit me so hard I had to see a doctor”*), sexual abuse (e.g. *“I was sexually abused”*), physical neglect (e.g. *“There was someone to take me to the doctor if I needed”*) and emotional neglect (e.g. *“I felt loved”*). This test has a good reliability consistency this study ($\alpha > 0.91$). Cut scores are established for presence or absence of the traumatic experience, it is considered Physical Abuse (PA) and Physical Neglect (PN) scores of 8 and higher; Sexual Abuse (SA) scores of 6 and higher; for Emotional Abuse (EA) scores of 9 and higher and Emotional Neglect (EN) scores of 10 and higher (Bernstein & Fink, 1998; Stacks, Muzik, Wong, Beeghly, Huth-Bocks, Irwin, & Rosenblum, 2014), nevertheless others studies have used lower cutoff scores (MacDonald, Thomas, MacDonald & Sciolla, 2014).

Data Analysis

To begin, questionnaires were stored in a database created for this Fondecyt project using Excel, then data analysis was made in R for Statistical Computing Program version 3.2, examining for input accuracy, plausible means, standard deviations, assumptions and missing data. Due to the lack of reliability and relationship between items in PRFQ and ECR scales, there were performed modifications as it is detailed below.

Although normal distribution was not accomplished, sample size is bigger than 100 participants, so it can be considered as normally distributed based on the *central limit theorem* (De la Puente, 2009) so it was decided to use parametric analyses.

First, reliability analyses were made for all measurements used in this study, also principal component analyses were made when applied. Then, correlation analyses and moderation models were verified thru multiple regression tests.

Results

Preliminary Results

Given that PRFQ-1 it is of great importance in this explanatory model, besides as it was mentioned before there are few validation analyses of this questionnaire, therefor detailed analyses were conducted as and factor structure was explored (Santelices, Olhaberry, Zapata, Valdez, Luyten, manuscript in progress). For this propose, analyses consider samples from two other Chilean studies that were using this measurement in similar population - preschoolers' parents in high risk population- adding up 254 caregivers between 19 and 62 years old (M=31.6; SD=8.48 years) raising children between 0 to 4.5 years old (M=2.8; SD=1.3 years).

There were no significant differences between mothers or fathers. Though *Prementalizing* scores were slightly higher in mothers (M=2.33; SD=1.2) than fathers (M=1.9; SD=0.9) as well, mothers (M=4.2; SD=1.4) scored marginally higher than fathers (M=4; SD=1.5) in *Certainty of Mental States*. Lastly mothers (M=6; SD=1.1) scored lower than fathers (M=6.2; SD=0.9) in *Interest and Curiosity* of their children mental states scale. Each scale was analyzed separately.

Although occasionally correlations within items was low (Table 1), Prementalizing scale had a reasonably good reliability scale ($\alpha=0.68$) with the 3 Chilean samples and its reliability do not improve after the removal of any item.

Table 1. Item correlation of Prementalizing scale with 3 Chilean samples

Item	1	2	3	4	5	6
1 PRFQ 1	-	0.244	0.215	0.318	0.343	0.305
2 PRFQ 4		-	0.157	0.3	0.258	0.441
3 PRFQ 7			-	0.068	0.189	0.243
4 PRFQ 10				-	0.156	0.293
5 PRFQ 13					-	0.378
6 PRFQ16						-

Reliability found in Certainty of Mental States subscale was 0.61, but item 11 reversed had negative correlation with item 5 as well as low correlation with the rest of the scale's items –between 0.03 and 0.07- as it's shown in Table 2, and its removal increased the reliability of the scale to $\alpha=0.68$, so this item was removed.

Table 2. Item correlation of Certainty of Mental States scale with 3 Chilean samples

Item	1	2	3	4	5	6
1 PRFQ 2	-	0.405	0.469	0.083	0.24	0.328
2 PRFQ 5		-	0.466	-0.03	0.03	0.296
3 PRFQ 8			-	0.061	0.218	0.29
4 PRFQ 11r				-	0.025	0.049
5 PRFQ 14					-	0.216
6 PRFQ17						-

Moreover, item 14 also showed low correlation with the rest of the scale's items –from 0.03 to 0.24- and its removal increased the reliability's scale to $\alpha=0.71$ it was decided to eliminate this item too.

Finally, the IC scale obtained an $\alpha=0.61$, however item 18 reversed had negative correlation with item 15 and low correlation with the rest of the items—between 0.03 and 0.08 as its shown in Table 3, so it was decided to remove this item increasing Cronbach ($\alpha=0.71$).

Table 3. PRFQ-CM Item correlation and Cronbach alpha in 3 Chilean samples

Item	1	2	3	4	5	6
1 PRFQ 3	-	0.415	0.545	0.36	0.39	0.027
2 PRFQ 6		-	0.444	0.284	0.179	0.08
3 PRFQ 9			-	0.284	0.405	0.039
4 PRFQ 12				-	0.35	0.084
5 PRFQ 15					-	-0.018
6 PRFQ18r						-

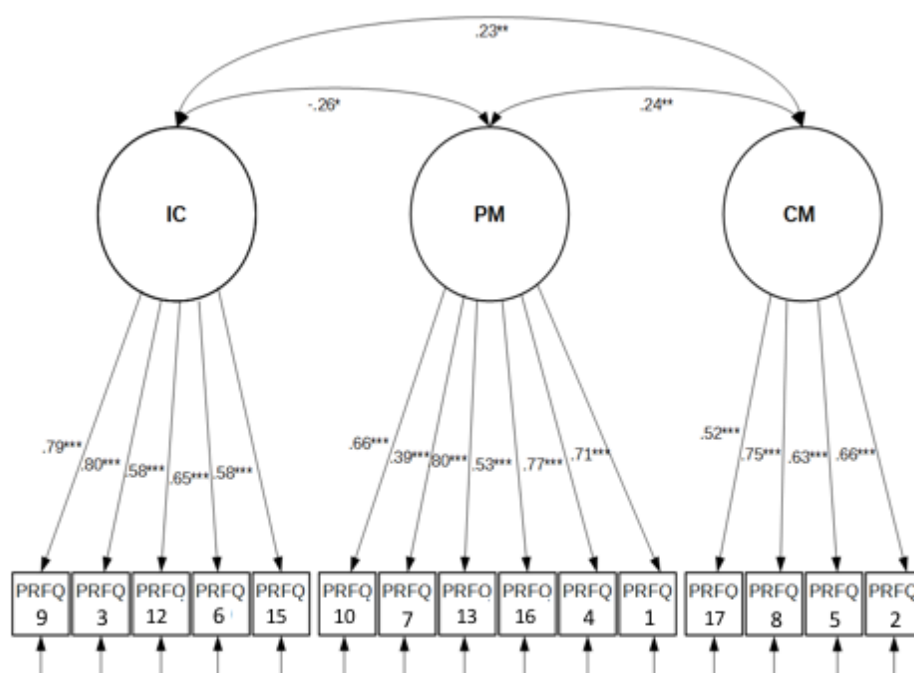
Using the structure of the instrument and eliminating items that diminished the reliability of Certainty of Mental States scale and Interest and Curiosity of mental states scale, a Confirmatory Factor Analysis (CFA) was made in order to assess the construct validity of each scale using a robust estimator of Weighted Least Square (WLS) and adjustment of the model was found adequate (chi-square = 167.92; gl = 87; $p = 0.000$; CFI = 0.959; TLI = 0.951; RMSEA = 0.061). This indicating that the model proposed explains of way significant the relationships observed between the variables.

The model in Figure 1, shows that correlations between factors do exist, but they are relatively low. Furthermore, the IC presents an inverse logic of the other scales since this scale higher score indicates higher level of reflective functioning, while in other scales a higher score indicates lower reflective functioning as was mentioned before.

After, reliability and factor structure of the reminding measurements with the 125 mothers who completed the evaluation of Study 1 were analyzed.

Results in Table 4 show good reliability in general -between 0.64 and 0.91- even though to reach these coefficients PRFQ-1 was modified as explained above.

Figure 1. Confirmatory factor analysis of the PRFQ-1



In addition, both scales of the ECR-S had much lower reliability coefficients than desirable as it's explained later. Also, there was a low to moderate correlation ($0.26 > r < 0.33$; $p < 0.01$) between PM, CM and IC subscales as is shown in the next section (Table 9).

Since BDI do not show any reliability complications and this assessment consist only of one scale no further analyses were made.

Next, ECR-S scales were analyzed. This version is an abbreviated form of the ECR-R with numerous international publications (Cheng, McDermott, & Lopez, 2015; Yarbrow, Mahaffey, Abramowitz & Kashdan, 2013) it is also being validated in Chile with MIDAP large samples, however in this study reliability results show that correlation between item is low, and both scales are having difficulties with reversed items as it is explained below

Table 4. Reliability results

Variable	N Items	Cronbach's alpha	Items	Cronbach's alpha	N
				Adjusted	
PM	6	0.68	-	-	125
CM	6	0.51	4	0.64	125
IC	6	0.70	5	0.78	125
BDI	21	0.85	-	-	125
Anx	6	0.53	3	0.74	125
Avoid	6	0.57	5	0.66	125
PSI Total	36	0.90	-	-	117
CTQ Total	25	0.91	-	-	122

Six items of the ECR-S Anxiety scale were subjected to a principal component analysis (PCA) and results revealed the presence of one component with eigenvalues exceeding 1, explaining the 40.05 of the variance. The KMO value was 0.75 with statistical significance. Correlation matrix between items of the Anxiety scale (Table 5) shows that item 8 reversed had negative correlation with all items, for this reason this item to was removed improving the Cronbach's alpha to 0.70.

Table 5. Item correlation and Cronbach alpha in ECR-S Anxiety Scale

Item	1	2	3	4	5	6
1 ECR 2	-	0.214	0.183	0.217	0.26	-0.098
2 ECR 4		-	0.345	0.39	0.502	-0.209
3 ECR 6			-	0.208	0.28	-0.028
4 ECR 10				-	0.55	-0.205
5 ECR 12					-	-0.219
6 ECR 8 r						-

A PCA with the five remaining items implied the presence of one component explaining 46.2% of the variance with a significant KMO value of 0.74.

Then examination of the correlation matrix showed that item 2 had a weak correlations

($r < 0.3$) with the reminding item and its removal improved reliability to 0.71, so this item was also removed. A PCA with the four remaining items implied the presence of one component explaining 54.01% of the variance with a significant KMO value of 0.71.

Lastly, item 6 had also weak correlations ($r < 0.29$) also its removal improved reliability to 0.74, so this item was removed. A last PCA with the three remaining items implied the presence of one component explaining 65.47% of the variance with a significant KMO value of 0.66.

Then, the six items of the ECR-S Avoidance scale were subjected to PCA and results revealed the presence of two components with eigenvalues exceeding 1, explaining 32.03% and 26.82% of the variance respectively. The KMO value was 0.63 with statistical significance. An inspection of the correlation matrix (Table 6) revealed that item 5 reversed had low and negative correlation with most items as coefficients below 0.04. So, this item was removed, maintaining the Cronbach's alpha at 0.56.

Table 6. Item correlation and Cronbach alpha in ECR-S Anxiety Scale

Item	1	2	3	4	5	6
1 ECR 3	-	0.443	0.326	0.087	-0.096	0.059
2 ECR 7		-	0.423	0.076	-0.035	0.151
3 ECR 11			-	0.097	0.009	0.124
4 ECR 1 r				-	0.432	0.251
5 ECR 5 r					-	0.348
6 ECR 9 r						-

A PCA of the five remaining items of the ECR-S Avoidance scale were subjected revealed that two components with eigenvalues exceeding 1 were still present, explaining 37.8% and 23.23% of the variance respectively. The KMO value was 0.65 with statistical significance.

Low correlation ($r < 0.3$) between item 1 reversed and the rest of the items, as well as its removal would increase the reliability coefficient to 0.58, item 1 was removed. A PCA of the four remaining items of the ECR-S Avoidance scale revealing one component with eigenvalues exceeding 1, explaining 46.04% with a KMO value was 0.66 with statistical significance.

Finally, one more time due to the low reliability between the reminding items ($r < 0.151$), item 9 was removed improving Cronbach's alpha to 0.66. The PCA of with the remaining three items of the ECR-S Avoidance scale were revealing one component with eigenvalues exceeding 1, explaining 59.89% with a KMO value was 0.65 with statistical significance.

For this reason, items 2,6 and 8 were removed from Anxiety dimension of the ECR-S as well as items 1,5 and 9 from Avoidance dimension improving the test's reliability as it was shown above moreover, correlation between both scale is low ($r = 0.195$; $p < 0.05$).

Then, the 36 items of the Parenting Stress Index were subjected to PCA, the suitability of the data factor analysis was assessed. Inspection of the correlation matrix revealed the presence of many coefficients of 0.3 and above. The KMO value was 0.80 and Bartlett's Test of sphericity reached statistical significance, supporting the factorability of the correlation.

PCA revealed the presence of six components with eigenvalues exceeding 1 and explaining 26.0%, 8.62%, 6.46%, 5.17%, 4.34%, 4.01% of the variance respectively. An inspection of the scree plot revealed a break after the third component. So, it was decided to retain three components for further investigation. To aid in the interpretation of these three components, Promax rotation was performed. The rotated solution explained the 41.1% of the variance, with Component 1 contributing 26.0%, Component 2 contributing 8.62% and

Component 3 contributing 6.46%. It also revealed the presence of a structure with all three components showing strong loadings in their components. At last, there were mild correlation ($0.344 > r < 0.416$) between the three scales.

Finally, the 25 items of the Childhood Trauma Questionnaire were subjected to PCA. Inspection of the correlation matrix revealed the presence of many coefficients of 0.3 and above. The KMO value was 0.81 and Bartlett's Test of sphericity reached statistical significance, supporting the factorability of the correlation.

PCA revealed the presence of six components with eigenvalues 32.34%, 11.32%, 10.13%, 5.64%, 4.93%, 4.3% of the variance respectively. It was decided to investigate the five components determined in previous studies. To aid in the interpretation of these five components, Promax rotation was performed. The rotated showed a number of strong loadings and most variables loading substantially on only one component. Moreover, there were low to mild correlations between the three scales ($0.103 > r < 0.506$).

Descriptive Results

Descriptive results (Table 7) and Frequencies (Table 8) for symptoms of depression, parental stress, attachment dimensions and experience of trauma are shown as they were reported by the mothers who participated in this study.

Result show that CM subscale of the PRFQ-1 which had a normal distribution as is shown in Table 7, no other scale had a normal distribution (Appendix 6), nevertheless, since the sample size for this study is bigger than 100 participants, it can be considered as normal distributed based on the *central limit theorem* (De la Puente, 2009), so parametric analyses are used as was mentioned before.

According to the BDI, most mothers ($n=87$, 69.6%) reported minimal presence of

depressive symptoms, and almost a third of the mothers reported having depressive symptoms, of which 22.4% (n=28) reported mild symptoms and only one (8%) mother reported having moderate or severe symptoms.

Table 7. Descriptive results

Variable	Min	Max	M	SD	Asymmetry	Kurtosis	W-Shapiro	p
PM	1	6.50	2.52	1.22	0.88	0.26	0.92	<.001
CM	1	7.00	4.06	1.36	-0.06	-0.83	0.98	0.053
IC	1	7.00	5.91	1.17	-2.03	4.93	0.78	<.001
BDI	0	40.00	7.78	6.57	1.62	4.03	0.87	<.001
PSI -Total	40	155.00	72.18	19.50	1.01	1.83	0.95	<.001
ANX	1	6.67	3.08	1.57	0.30	-1.01	0.94	<.001
AVOID	1	7.00	3.19	1.57	0.32	-0.81	0.95	<.001
TOTAL	28	90	42.07	12.78	1.58	2.86	0.85	<.001

Additionally, the majority of mothers (n=97, 81.5%) do not report parenting stress, in the other hand 22 mothers (18.5%) did report stress caused by the burden of raising their child.

Regarding attachment, as measured by the ECR-S, little more than a third of the mothers (n=44, 35.2%) are classified as secure attached, while one in five of these mothers classified as having fearful attachment style (n=33, 26.4%). Mothers who reported preoccupied and avoidant attachment styles are almost equally distributed 20% (n=25) and 18% (n=23) respectively, according to this self-report.

Furthermore, PSI indicates that most mothers (n=90, 76.3%) do not report parenting stress, nevertheless almost one in five (n=28, 23.7%) does.

Finally, according to the CTQ at least one in two mothers (n=84, 67.2%) reported to have been exposed to a traumatic experience during their childhood, being emotional neglect the most reported (n=72, 42.4%), followed by emotional abuse (n=51, 40.8%), physical neglect (n=48, 38.4%), physical abuse (n=36, 28.8%) and sexual abuse (n=34, 27.2%).

Table 8. Frequency of psychological features and childhood experience of trauma

Category	N	%
Symptoms of Depression (BDI)		
Minimal	87	69.6
Mild	28	22.4
Moderate	9	7.2
Severe	1	0.8
Parental Stress Index (PSI)		
Absence	94	79.7
Presence	24	20.3
Attachment (ECR)		
Secure	45	36
Fearful	44	35.2
Preoccupied	11	8.8
Dismissing	25	20
Childhood Trauma Experience (CTQ)		
Absence	41	32.8
Presence	84	67.2
Physical Abuse		
Absence	89	71.2
Presence	36	28.8
Sexual Abuse		
Absence	91	72.8
Presence	34	27.2
Emotional Abuse		
Absence	74	59.2
Presence	51	40.8
Physical Neglect		
Absence	77	61.6
Presence	48	38.4
Emotional Neglect		
Absence	53	57.6
Presence	72	42.4

Correlation results

Correlation analyses were made in order to understand associations between variables.

First, Spearman correlation analyses were made to identify which demographic factors were associated with the variables of interest in this study. Results showed that educational attainment and occupational level correlated with parental reflective functioning, attachment and parental as follows.

As education attendance increased prementalizing decreased ($r=-0.36$; $p<0.01$). In the same way, as occupational level increased prementalizing decreased ($r=-0.25$; $p<0.05$). Attachment avoidance was associated with educational attainment ($r=-0.34$; $p<0.01$) so high scores in avoidance attachment were associated with low education attainment reported by mothers. Similarly, as occupational level increased, attachment avoidance scale decreased ($r=-0.29$; $p<0.01$).

Another demographic variable associated with maternal reflective functioning was the gender of the child ($r=-0.19$; $p<0.05$) so higher scores on prementalizing scale were associated with being mother of a girl.

Pearson correlation analyses (Table 9) showed that parental stress caused by parent-child dysfunctional interaction correlated with mothers age ($r=0.22$; $p<0.01$), so mothers of younger children presented higher parental stress scores in this scale.

Also, *Prementalizing* scale correlated with three scales of *PSI* as well as both *ECR*'s scales. So, as *prementalizing* scores increased scores of the four Parenting Stress Index scales decreased ($0.27<r<0.48$, $p<0.05$). Likewise, as prementalizing scores increased, *Anxiety* ($r=0.20$; $p<0.01$) and *Avoidance* ($r=0.26$; $p<0.01$) attachment scores also increased.

At the same time, results showed that attachment anxiety was related with mothers' parenting stress, childhood trauma experiences and symptoms of depression. As attachment anxiety scores increased scores in all scores in these scales decreased as it is shown in Table 9.

In addition, *Symptoms of depression* also correlated with *Parenting Stress* score, attachment *Anxiety* and *Avoidance* as well as *Childhood Trauma Experiences*. As Parenting Stress scores increased also increased Symptoms of Depression scores ($r=0.36$; $p<0.01$), attachment as *Anxiety* ($r=0.37$; $p<0.01$) and *Avoidance* ($r=0.37$; $p<0.05$). At last, *Childhood Trauma Experiences* scores increased symptoms of depression increased ($r=0.25$; $p<0.05$).

At the same time, *Parenting Stress* in mothers was significant correlated with attachment *Anxiety* ($r=0.38$; $p<0.01$) and attachment *Avoidance* ($r=0.44$; $p<0.01$), as these variables increased parenting stress scores also increased.

Table 9. Pearson's Correlation

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1 PRFQ-PM	-																	
2 PRFQ-CM	0.32***	-																
3 PRFQ-IC	-0.14	0.27**	-															
4 ANX-Ecr	0.20*	0.06	-0.04	-														
5 AVOID-ECR	0.26**	0.08	-0.07	0.58***	-													
6 BDI-Total	0.11	-0.04	-0.06	0.37***	0.37***	-												
7 PSI-PD	0.27**	0.08	0.04	0.39***	0.43***	0.45***	-											
8 PSI-PCDI	0.41***	0.12	0.01	0.26**	0.37***	0.18	0.48***	-										
9 PSI-DC	0.27**	-0.005	-0.07	0.28**	0.26**	0.22*	0.52***	0.49***	-									
10 PSI-Total	0.38***	0.08	-0.01	0.38***	0.44***	0.36***	0.84***	0.78***	0.83*	-								
11 CTQ-PA	0.05	0.01	0.01	0.21*	0.13	0.13	0.03	0.04	-0.10	-0.01	-							
12 CTQ-SA	-0.06	-0.001	0.07	-0.03	0.15	0.35***	0.10	-0.02	-0.09	-0.002	0.30**	-						
13 CTQ-EA	0.02	0.01	0.06	0.22*	0.30**	0.33***	0.16	0.04	-0.07	0.06	0.59***	0.54***	-					
14 CTQ-PN	0.04	0.07	0.03	0.25**	0.20*	0.20*	0.17	0.17	0.02	0.15	0.34***	0.35***	0.49***	-				
15 CTQ-EN	0.15	-0.16	-0.08	0.16	0.23*	0.09	0.14	0.21*	0.03	0.15	0.33***	0.30**	0.41***	0.62***	-			
16 CTQ-Total	0.07	-0.05	0.001	0.20*	0.24**	0.25**	0.15	0.14	-0.05	0.10	0.69***	0.66***	0.69***	0.75***	0.80***	-		
17 Child's age	0.01	0.01	0.14	0.06	0.01	0.11	-0.05	-0.22*	-0.05	-0.12	-0.04	0.21*	0.08	0.03	0.01	0.06	-	
18 Mothers' age	0.18	0.04	-0.05	0.03	0.13	0.08	0.11	-0.01	-0.07	0.02	0.30**	0.22*	0.11	0.08	0.10	0.24**	0.02	-

*Significant correlation in level 0.05

**Significant correlation in level 0.01

***Significant correlation in level 0.001

Moderation results

Linear regression analyses were conducted to test the hypothesis that *parenting stress* had a moderating role in the relationship between *attachment style* and *reflective functioning*

in mothers of preschoolers. The model was tested only with PM-PRFQ since this was the only scale correlated with variables of interest in this study, following analysis consider just PRFQ-1 *Prementalizing* scale. Additionally, the three subscales and PSI total are tested in separate ways.

Also, demographic variables such as mothers' educational attainment and occupational level as well as child's gender and age were controlled.

Models among standardized variables were tested as follows:

$$(PM) = a + b1_ (Anx) + b2_ (Anx * PSI_PD) \quad (1)$$

$$(PM) = a + b1_ (Anx) + b3_ (Anx * PSI_CDI) \quad (2)$$

$$(PM) = a + b1_ (Anx) + b4_ (Anx * PSI_DC) \quad (3)$$

$$(PM) = a + b1_ (Anx) + b5_ (Anx * PSI_Total) \quad (4)$$

$$(PM) = a + b6_ (Avoid) + b2_ (Avoid * PSI_PD) \quad (6)$$

$$(PM) = a + b6_ (Avoid) + b3_ (Avoid * PSI_CDI) \quad (5)$$

$$(PM) = a + b6_ (Avoid) + b4_ (Avoid * PSI_DC) \quad (7)$$

$$(PM) = a + b6_ (Avoid) + b5_ (Avoid * PSI_Total) \quad (8)$$

Moderation results based in multiple regressions showed that just parenting stress due to mothers' perception of their child do not meet their expectations (PSI-PCDI), and the degree of reinforcement that the child provides to their mother significantly moderated the relationship between attachment anxiety and prementalizing mode. Together, they accounted for 26% of the total variance in prementalizing $F(14, 99) = 3.87, p = 0.04, R^2 = 0.26$, as it is shown in Table 10. For this reason, null hypothesis is rejected, since one of the models was significant.

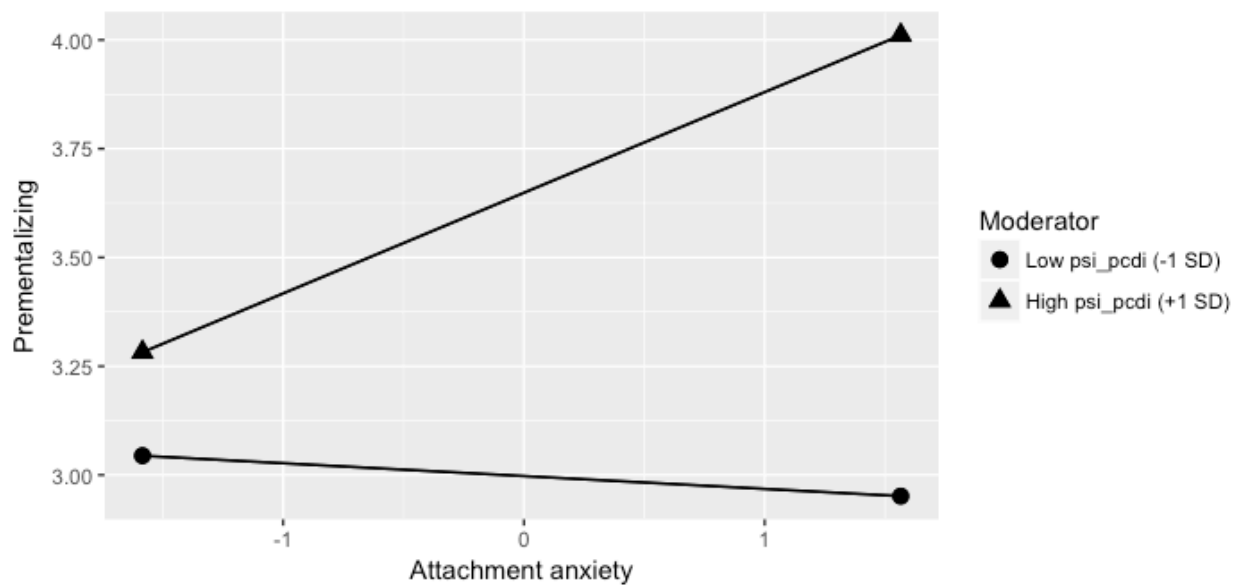
In other words, parenting stress moderated the association between *maternal reflective functioning* and *attachment*, so mothers with similar attachment anxiety present less parental reflective functioning (highest scores on prementalizing scale) as maternal stress increases when children do not meet their mothers' expectations (Figure 2).

Table 10. Regression models

Model	Predictor	β	p	R^2	F
1	Intercept	2.85	<0.001	0.14	2.32
	Anx	0.14	0.09		
	PSI-PD	0.02	0.23		
	Gender	0.58	0.01		
	Anx*PSI-PD	0.01	0.53		
2	Intercept	2.58	<0.001	0.26	3.87
	Anx	0.10	0.16		
	PSI-PCDI	0.05	0.01		
	Gender	0.51	0.02		
	Anx*PSI-PCDI	0.02	0.04		
3	Intercept	2.69	<0.001	0.20	3.03
	Anx	0.13	0.09		
	PSI-DC	0.04	0.01		
	Gender	0.63	0.004		
	Anx*PSI-DC	0.01	0.30		
4	Intercept	2.73	<0.001	0.22	3.31
	Anx	0.08	0.28		
	PSI Total	0.02	0.005		
	Gender	0.56	0.01		
	Anx*PSI Total	0.004	0.21		
5	Intercept	2.92	<0.001	2.18	0.13
	Avoid	0.11	0.19		
	PSI-PD	0.02	0.13		
	Gender	0.58	0.02		
	Avoid*PSI-PD	0.004	0.66		
6	Intercept	2.51	<0.001	0.24	3.57
	Avoid	0.08	0.28		
	PSI-PCDI	0.05	0.008		
	Gender	0.50	0.02		
	Avoid*PSI-PCDI	0.02	0.096		
7	Intercept	2.78	<0.001	0.18	2.82
	Avoid	0.10	0.002		
	PSI-DC	0.04	0.002		
	Gender	0.6	0.007		
	Avoid*DC	0.01	0.47		
8	Intercept	2.78	<0.001	0.21	3.13
	Avoid	0.06	0.46		
	PSI Total	0.02	0.002		
	Gender	0.55	0.01		
	Avoid*PSI Total	0.003	0.45		

On the other hand, results were not statistically significant for the moderation role of parenting stress in the relationship between attachment avoidance and prementalizing. However, there was a marked tendency ($p=0.096$) towards the moderation role of mothers' perception of their child do not meet their expectations and the degree of reinforcement that the child provides to their mother (PSI-PCDI) as well as on attachment anxiety explained above.

Figure 2. Moderating role between of parenting stress (PSI-PCDI) in the relationship between attachment anxiety and maternal reflective functioning



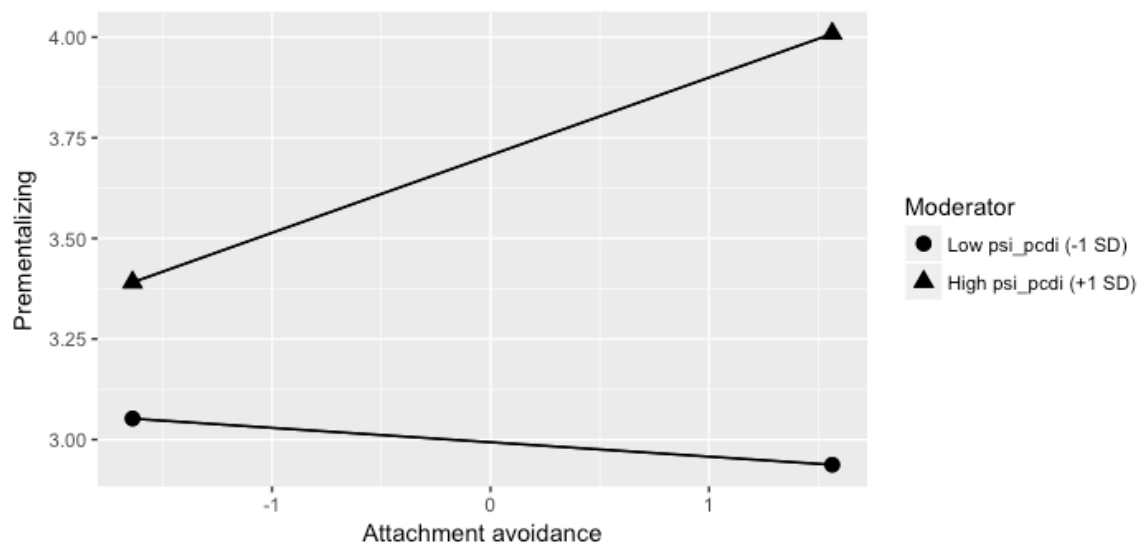
Thus, mothers at comparable avoidance's scores in attachment, at high PSI-PCDI scores high prementalizing scores but as the parenting stress scores decreased prementalizing also decreased (increasing PRF) as is shown in Figure 3.

Surprisingly gender and not attachment dimensions predicted prementalizing scores in the models that were tested.

Since Pearson's correlation results show no association between *depressive symptoms*

with *maternal reflective functioning* or *attachment* (as shown in Table 8), the hypothesis of the moderating role of depressive symptoms in the relationship between attachment and reflective functioning was not tested.

Figure 3. Moderating role of maternal stress (PSI-PCDI) in the relationship between attachment avoidance and maternal reflective functioning



Study 2

Objectives

General Objective

Analyze the impact in of an intervention program among mothers at preschool centers from vulnerable populations in Santiago, Chile.

Specific Objectives

1. To examine differences in maternal mentalizing in a group of mothers who attended to an intervention program.

2. To compare maternal mentalizing in a group of mothers who attended to an intervention program with a control group.

Hypothesis

1. Mothers who receive the intervention will increase their levels of maternal mentalizing after the intervention program.
2. Mothers who receive the intervention will increase their levels of maternal mentalizing compared to mothers that were not exposed to the intervention.

Study Design

This study had a comparative descriptive, cuasi-experimental design. This design was implemented because in spite that preschool centers were randomly assigned to either the intervention or control group, mothers who participated in this study were not assigned randomly to each group, instead, all mothers whose children were attending to a preschool center which were assigned as intervention group were asked to participate and those mothers of children who attended to preschool centers which were assigned to control group do not have an intervention. However, at the end of the evaluation period the control group received a didactic material similar to the material discussed at the intervention program.

Participants

Collected data is part of larger Fondecyt project -as was mentioned on Study 1- and, the inclusion criteria for this study were to be older than 18 years old, have a child attending in a public preschool center and that their child would be between 3 and 5 years old. In addition, mothers experiencing severe psychopathology were excluded.

The proposed study, was intended to include 40 mothers in the intervention group and

40 mothers in the control group. However, after the first measurement some of the 125 mothers could not be contacted, 77 were invited to participate in the intervention group and only 26 complete at least three of the sessions, 21 of them complete pre-test and post-test assessment. On the other hand, the control group is composed of 28 mothers. These women were between 20 and 47 years old ($M = 30$, $SD = 6.68$). Almost half of them were single ($n=27$; 55.1%) and nearly the other half were married or living with their partner ($n=22$; 44.9%). With regard to their education attainment, 11 (22.4%) mothers had not finished high school, 21 (42.9%) attained to complete high school, 10 (20.4%) began collage but without finishing and five (10.2%) had a college degree. Two (4.1%) mothers do not inform their educational attainment. As for their occupation, most mothers ($n=31$; 63.3%) were working at the time of the study, while the rest ($n=17$; 34.7) were staying home mothers and one mother do not provide this information.

Procedure

Meetings with the preschool centers administrators took place in order to explain what the intervention consisted of, as well as the benefits for the participants in both groups later informed consents forms were signed.

After, self-reports measurements were completed as explained above (same as Study 1), videos were recorded of the mothers reading a story to their child as it will be explained later. Once all mothers in the intervention group concluded their first evaluation, group's leaders -postgraduate students and psychologists- contacted mothers at the intervention group and began the intervention as it is detailed below. After four intervention groups finished their last session mothers in the intervention group as well as the non-intervened group were once again evaluated.

Deriving from a systematic revision regarding intervention programs in this area (Santelices et al., 2016), a psychoeducational intervention program called "Emotional development, attachment and mentalizing" was designed. This intervention had a format of 10 hours, organized in five week of two-hour sessions. Each session was intended to be experiential and aimed to enhance maternal mentalizing. Also, each session had a take-home assignment which mothers were encouraged to complete with their children. All sessions included theoretical components, group discussions and games. In addition, two sessions used Video-feedback technique in order to achieve the purposes of the intervention as is describe in the next section.

Intervention program

The first session named “**What is Mentalizing?**” group leaders and participants were introduced in order to establish group identity and to establish a frame of work. Then general objectives and contents of the entire program are discussed. This session is geared towards an in-depth discussion of mentalizing concepts and how to put it on practice through different activities. Lastly, this session aims to identify participant’s self-representations.

The second session “**Our Communication**” is focused on improving the capacity to adequately perceive thoughts and feelings of young children, as well as to put into practice different types of responses to children’s needs, identifying the representations that participants have of themselves, of their children and of their relationship. Lastly, to improve how to communicate own mental states through the analysis of movie’s fragments in which a mother-child relationship is presented, followed by an activity in which the participants are asked to represent their relationship with their child in a ceramic sculpture.

The third session “**Recognizing Us**” pretends that mothers may recognize their emotional own experience and how they register this experience internally. This session also

seeks to help mothers recognize their children's emotions and mentalizing attitudes. The techniques used in this session are through imagination, meditation, and Video-feedback technique.

The fourth session “**What to do in difficult times?**” also uses the Video-feedback procedure and is intended to help mothers confront their own limits with respect to what they know about their children and putting into practice some responses that promote mentalizing.

Lastly, the fifth session “**Having the mind in mind**” is intended that mothers exercise to enhance the skills that were acquired thru the intervention program. It is also intended that mothers reflect their difficulties at the time they tried to apply these new abilities and what they have learned in the past session as well as to share their experiences. Finally, mothers are asked to make recommendations in order to enrich the group experience.

As it was mentioned before, the group who participated in the program -intervention group- was assessed before and after the intervention. During the same time, control group was also evaluated as it is explained bellow.

Measures

Most of the tests used and explained in Study 1 were used in this study; just PRFQ-1 was not used in Study 2, instead maternal mentalizing was assessed thru a Mentalizing Story Telling (MST) since it was thought that an observational measurement could account for more subtle changes. This instrument was codified by two psychologists who were expert coders trained by the author of the instrument and two students in their last year of the career who were trained by one of the expert coders. MST is used as follows.

Mentalizing Storytelling Test (MST; Farkas et al., 2012).

This instrument was developed with a Chilean sample and aims to categorize parental mentalizing through significant caregiver's speech based on the work of Ruffman and colleagues (2002) as well as Meins & Fernyough (2010) who use story-telling activities to assess the caregivers' ability to reflect the story characters' experiences (Farkas et al., 2012). In this test caregivers are asked to read to their children two stories (Appendix 7) that are videotaped. Then, verbatim transcriptions are coded so words used by the parent intended to understand mental states and subsequent behavior either from the characters from the story or their child are coded. After, it is considered the presence or absence as well as the number of mention of four mental states such as desires (e.g. "It was her *favorite* toy"), emotions (e.g. "The girls was so *sad* when she lost her doll"), cognitions (e.g. "Oh...you *remembered*") and psychological attributes (e.g. "He is very *friendly*"). Together with four non-mental states which are related to the characters' behavior such as causality (e.g. "She felt *because* she do not look her step), factual thinking (e.g. "And she took an apple, apple are fruits that grow in trees"), links with the child's life (e.g. "He ran when he saw his father, *just like you do* when daddy comes home") and physical states (e.g. "Poor Pablo, he *got sick*").

Finally, coding categorizes maternal mentalizing in *low* if the caregiver does not mention any words referent to causality or words referent to emotions and/or cognitions; *adequate* if at least four categories are present and if the caregiver uses words referent to causality, cognition and/or emotion. Finally, if at least five different or more than 4.5 average mental or non-mental categories are mentioned in the story, then it is considered as *high*. Previous studies of this instrument show an acceptable reliability with between 0.47 and 0.91 (Farkas et al., 2012). In this study, Cohens's Kappa between coders was acceptable ($0.40 > 1$).

Self-reports also had good reliability, as it is shown in the preliminary results section.

Data Analysis

First of all, Kapa coefficient was tested as it was specified above, after reliability test of each self-report and factor structured was verified thru Principal Components Analyses (PCA), then Mann-Whitney U tests were conducted to examine differences in demographic variables, maternal mentalizing, attachment, depressive symptoms, parenting stress and trauma between groups. Lastly, Wilcoxon Signed Rank Test were performed in order to examine if the intervention had an effect on maternal mentalizing.

Non-parametric analyses were made since the dependent variable -maternal mentalizing- was assessed with an observational measure as a categorical variable, furthermore other variables do not accomplish a normal distribution. All analyses were made using SPSS 22th version. Results are discussed in detail in the next section.

Results

Preliminary Results

Results showed good reliability in general, between 0.67 and 0.93, even though some scales were modified removing certain items in order to accomplish this coefficient values as is explained below.

As it can be seen in Table 11, BDI had a good reliability with a Cronbach's alpha of 0.83. Instead both dimensions of ECR-S had a low reliability (less than 0.55) so the six items of the Anxiety scale were subjected to a principal component analysis (PCA) and results revealed the presence of two components with eigenvalues exceeding 1, explaining the 37.02 and 17.71 of the variance respectively. The KMO value was 0.66 with statistical significance. A reliability test showed a Cronbach's alpha of 0.31.

Table 11. Reliability results

Variable	N Items	Cronbach's alpha	Items	Cronbach's alpha
			Adjusted	
BDI	21	0.83	-	-
Anx-ECR	6	0.31	4	0.68
Avoid-ECR	6	0.52	4	0.67
PSI Total	36	0.87	25	0.92
CTQ	28	0.94	-	-

Then an inspection of the correlation matrix (Table 12) revealed that item 8 (reversed) correlated negative with all items and its removal improved Cronbach's alpha to 0.67 so it was decided to remove this item. A PCA with the five remaining items implied the presence of one component explaining 44.01% of the variance with a significant KMO value of 0.67.

Since item 2 also showed a low correlation coefficient –below 0.3- a PCA removing this item was tested and results showed one component explaining 51.29% of the variance with a significant KMO value of 0.66 improving Cronbach's alpha to 0.68.

Table 12. Item correlation and Cronbach alpha in ECR Anxiety Scale

Item	1	2	3	4	5	6
1 ECR 2	-	0,289	0,233	0,137	0,212	-0,28
2 ECR 4		-	0,249	0,186	0,424	-0,378
3 ECR 6			-	0,318	0,382	-0,149
4 ECR 10				-	0,506	-0,219
5 ECR 12					-	-0,432
6 ECR 8 r						-

Then, the six items of the ECR-S Avoidance scale were subjected to PCA and results revealed the presence of two components with eigenvalues exceeding 1, explaining 34.9% and 24.8% of the variance respectively. The KMO value was 0.62 with statistical significance.

An inspection of the correlation matrix revealed the presence of negative coefficients as well as coefficients below 0.03 (Table 13). Moreover, a reliability test showed a Cronbach's

alpha of 0.52.

Table 13. Study 2 Item correlation and Cronbach alpha in ECR Avoidance Scale

Item	1	2	3	4	5	6
1 ECR 3	-	0,492	0,291	-0,011	-0,159	0,102
2 ECR 7		-	0,623	-0,056	-0,117	0,293
3 ECR 11			-	-0,014	-0,084	0,24
4 ECR 1 r				-	0,277	0,199
5 ECR 5 r					-	0,244
6 ECR 9 r						-

Since item 5 reversed improved reliability to a Cronbach's alpha of 0.58, this item was removed and a PCA with the five remaining items implied the presence of two components explaining 41.66% of the variance with a significant KMO value of 0.61. Item 1 reversed also had a negative correlation with the rest of the items and if this item is removed Cronbach's alpha improved to 0.67. Next a PCA with the reminding items revealed the presence of one component with eigenvalues exceeding 1, explaining 52.01% of the variance respectively. The KMO value was 0.63 with statistical significance.

Subsequent analyses were made with items 4, 6, 10 and 12 for anxiety scale and 3,7,9r and 11 for the avoidance scale.

Later, the 36 items of the Parenting Stress Index were subjected to PCA. Inspection of the correlation matrix revealed the presence of many coefficients of 0.3 and above. However, the KMO value was 0.53 exhibiting low support to factorability of the test. For this reason, it was decided to explore the correlations between items. Five items had item-total correlation lower than 0.3 therefor items 2, 6, 15,19 and 22 were removed for later analysis.

Then a PCA of the remaining 31 items and inspection of the correlation matrix revealed the presence of many coefficients of 0.3 and above. The KMO value was 0.64 and Bartlett's Test of septicity reached statistical significance, supporting the factorability of the

correlation.

PCA revealed the presence of more than six components with eigenvalues exceeding 1 and explaining 30.57%, 11.39%, 7.43%, 6.6%, 5.96%, 5.72% of the variance and below.

An inspection of the scree plot revealed a break after the third component. So, it was decided to retain three components for further investigation. To aid in the interpretation of these three components, Promax rotation was performed. The rotated solution revealed the presence of a structure with three components showing strong loadings but not necessary in their components. There was mild correlation ($0.290 > r < 0.432$) between the three scales. Since some items do not load in the component that it was expected, some items had low item-total correlation, the Total Parental Index with 31 items were used in subsequent analyses instead of 36 items or the three subscales separately.

Finally, the 25 items of the Childhood Trauma Questionnaire were subjected to PCA. Inspection of the correlation matrix revealed the presence of many coefficients of 0.3 and above. The KMO value was 0.71 and Bartlett's Test of sphericity reached statistical significance, supporting the factorability of the correlation.

PCA revealed the presence of seven components with eigenvalues 37.31%, 13.65%, 10.47%, 6.69%, 5.01%, 4.57%, 4.01% of the variance respectively. Five components determined in previous studies was investigated and to aid in the interpretation of these five components, Promax rotation was performed. The rotated showed a number of strong loadings and most variables loading substantially on only one component. Moreover, there were low to mild correlations between the three scales ($0.125 > r < 0.495$).

Descriptive Results

Descriptive results and frequencies for maternal mentalizing, symptoms of depression, parental stress, attachment dimensions and experience of trauma are shown as they were reported by both groups of mothers in Table 14.

According to the Mentalizing Story Telling test, more than one third ($n=8$; $n=38.1$) of the mothers in the intervention group were rated as having high maternal mentalizing, one third ($n=7$; 33.3) were rated as having adequate ability and less than a quarter ($n=5$; 23.8%) were rated with low ability to mentalize their child.

Table 14. Pre-test descriptive results

Variable	Intervention Group				Control Group			
	Min	Max	Md	IQR	Min	Max	Md	IQR
MST-Category	1	3	2	2	1	3	2	1.5
Total Number of words	140	484	276	155	128	383	201	140
Mental state words	0	4	2	1	0	4	1	1.5
Desires	0	10	1	1.5	0	3	0	1.25
Emotions	0	5	0	2	0	6	0	1.25
Cognitions	0	6	1	2	0	5	0	1
Psychol. Attributes	0	3	0	0.5	0	4	0	0.25
No-mental state words	1	3	2	1	1	2	1	1
Causality	0	11	5	5.5	1	11	2	4
Linking with child life	0	3	0	1	0	1	0	0
Physical States	0	4	0	1	0	1	0	1
BDI-Total	0	21	6	4	0	26	6	7.75
PSI-Total	35	73	51	17.5	35	107	57	25.75
ANX-ECR	1	6	3.75	2.31	1	5	2.63	2.13
AVOID	1	6	3.5	2.42	1	7	3	3
CTQ-Total	29	72	43	19	28	90	35.5	10.25

In the other hand, half ($n=14$, 50%) of the mothers in the control group were rated as having adequate maternal mentalizing, more than one third as having low ability ($n=10$; 35.7%) and just three (10.7%) were rated as high in mentalizing as they read the story. Is

worthy to mention that one mother in each group was no able to be rated, as shown in Table 15.

According to the BDI, most mothers in the intervention group (n=18, 85.7%) as well as in the control group (n=22, 78.6%) reported minimal presence of depressive symptoms and just two (9.5%) of the mothers in the intervention group and three (10.7%) in the control group reported having mild depressive symptoms.

Table 15. Pre-test Frequencies

Category	Intervention Group		Control Group	
	N	%	N	%
Mentalizing Story Telling				
Low	5	23.8	10	35.7
Adequate	7	33.3	14	50
High	8	38.1	3	10.7
Missing	1	4.8	1	3.6
Symptoms of Depression				
Minimal	18	85.7	22	78.6
Mild	2	9.5	3	10.7
Moderate	1	4.8	3	10.7
Attachment				
Secure	5	23.8	14	50
Fearful	8	38.1	7	25
Preoccupied	4	19	1	3.6
Dismissing	4	19	6	21.4
Parenting Stress				
Absence	15	71.4	19	67.9
Presence	3	14.3	9	32.1
Missing	3	14.3		
Childhood Trauma Experiences				
Absence	3	14.3	14	50
Presence	18	85.7	14	50

Finally, just one (4.5%) mother in the intervention group and three (10.7%) in the control group reported moderate depressive symptoms. None of the mother reported having sever depressive symptoms.

Then, the intervention group reported most commonly fearful attachment style ($n=8$; 38.1%), however in the control group mothers reported most commonly to have secure attachment style ($n=14$; 50%) according to the ECR-R. Just five mothers (23.8%) reported secure attachment style. Moreover, the same number of mothers ($n=4$; 19%) reported to have either preoccupied or dismissing attachment style in this group.

As for control group, after secure attachment style, fearful ($n=7$; 25%) and dismissing styles ($n=6$; 21.4%) were also commonly reported; just one mother (3.6%) reported to have preoccupied attachment according to the ECR-R.

In the other hand, there are quiet more stressed mothers for the burden of raising young children in the control group ($n=9$, 32.1%) than in the control group ($n=3$; 14.3%) according to the PSI total scores.

And finally, even though in both groups there is high prevalence of traumatic experience during their childhood according to the CTQ, highest rates are reported by mothers in the intervention ($n=19$, 86.4%) compared to mothers who reported these harsh experiences in the control group ($n=14$; 50%).

Since these results showed differences between groups, to confirm if both groups start out on similar base lines, Mann-Whitney U test were used with exact significance since the small sample size as it is shown in Table 16.

Results indicated significant differences in maternal mentalizing as it is measured with the MST ($U=202$, $z=-1.83$, $p<0.05$), mothers in the intervention group were rated as having

higher maternal mentalizing than mothers in the intervention group. In the same line, mothers in intervention group mentioned more mental categories ($U=189$, $z=-2.01$, $p=0.02$), as well as non-mental categories ($U=202.5$, $z=-1.89$, $p=0.03$) than mothers in the control group.

Also, there are significant differences between the total scores of *childhood trauma experiences* ($U=172$, $z=-2.66$, $p<0.01$), mothers in the intervention group reported higher scores in the CTQ than mothers in the control group.

Nevertheless, the Mann-Whitney U tests revealed no *significant differences* between groups in demographic variables, symptoms of depression, parenting stress, anxiety and avoidance attachment.

Since there are differences between groups in maternal mentalizing and experience of trauma reported, the groups will be analyzed separately.

Table 16. Differences between groups in pretest evaluation

	Child's age	Child's gender	Mother's age	Educational attainment	MST	Non-mental Categories (MST)	Mental Categories (MST)	BDI Total	PSI Total	ANX ECR	AVOID ECR	CTQ Total
Mann Whitney U	307.5	294	235	280	202	202.5	180	307.5	231.5	226	248.5	172
Z	-0.01	-0.316	-1,19	-0.573	-1.83	-1.89	-2.06	-0.01	-0.748	-1,61	-1.17	-2,66
Bilateral significance	0.992	0.752	0.232	0.567	0.068	0,06	0,04	0.992	0.454	0.108	0.242	0.008
Exact bilateral significance	0.996	0.783	0.237	0.572	0.075	0,06	0,04	0.996	0.461	0.109	0.246	0.007
Exact unilateral significance	0.498	0.487	0.118	0.287	0.045	0,03	0,02	0.498	0.231	0.055	0.123	0.004

Intervention Outcomes

Wilcoxon signed-rank tests were used to test the hypothesis that mothers who received the intervention increased their levels of maternal mentalizing after the intervention, to reject or not the null hypothesis several indicators of maternal mentalizing are taken into account.

There are no significant differences in the *mentalizing overall classification* between pre-test and post-test, either in the experimental ($z=-1.1$, $p=0.17$) or control group ($z=-0.45$, $p=0.41$) as is shown in Table 16.

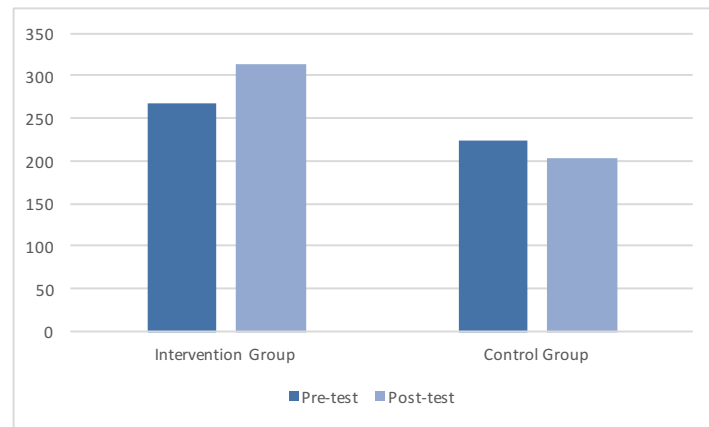
Table 16. Results of Wilcoxon Signed-Rank between Pre-test and Post-test for Treatment and Control Group

Factor	Intervention Group						Control Group					
	Pre-test		Post-test		z ratio	p-value*	Pre-test		Post-test		z ratio	p-value*
	Md	M	Md	M			Md	M	Md	M		
Total number of words	278.4	267.5	292	312.63	-1.05	0.15	201	222.78	175	203.11	-1.77	0.04
Mental state words	2	2.19	2	2.63	-0.84	0.24	1	1.5	1	1.59	-0.1	0.46
Desires	1	1.55	0	1.63	-0.95	0.18	0	0.81	0	0.74	-0.23	0.45
Emotions	0	0.95	1	2.21	-1.07	0.15	0	0.85	0	0.44	-1.49	0.08
Cognitions	1	1.5	2	2.79	-2.12	0.02	0	0.93	1	1	-0.12	0.45
Psychol. Attributes	0	0.35	0	0.11	-1.63	0.13	0	0.46	0	0.11	-1.52	0.13
No-mental state words	2	1.81	2	2.84	-1.63	0.07	1	1.44	1	1.48	-0.22	0.43
Causality	4.5	5.2	4	5.84	-0.18	0.43	2	3.41	2	2.59	-1.67	0.05
Links with child's life	1	0.7	0	0.37	-1.25	0.16	0	0.19	0	0.22	-0.33	0.5
Physical States	0	0.6	0	0.26	-1.41	0.16	0	0.26	0	0.07	-1.51	0.12
BDI-Total	6	6.36	6	7.14	-0.04	0.49	6	7.18	5.5	6.71	-0.28	0.39
PSI-Total	60.5	53.47	66	57.52	-0.38	0.5	57	60	62	62.32	-0.31	0.39
ANX-ECR	3.75	3.52	2.63	3.02	-2.17	0.02	2.63	2.79	2.88	3.20	-1.69	0.05
AVOID	3.5	3.42	2.17	2.92	-1.4	0.08	3	2.96	3.33	3.24	-2.12	0.22

*Exact unilateral significance

In terms of *total number of words* told to their children, mothers in the control group decreased significantly ($z=-1.05$, $p=0.04$) from first time they were evaluated to six months after that. Instead, as is shown in Figure 4* mothers in the intervention group increased slightly their verbalization from the first evaluation and after the intervention, although this difference was not significant ($z=-1.77$, $p=0.15$).

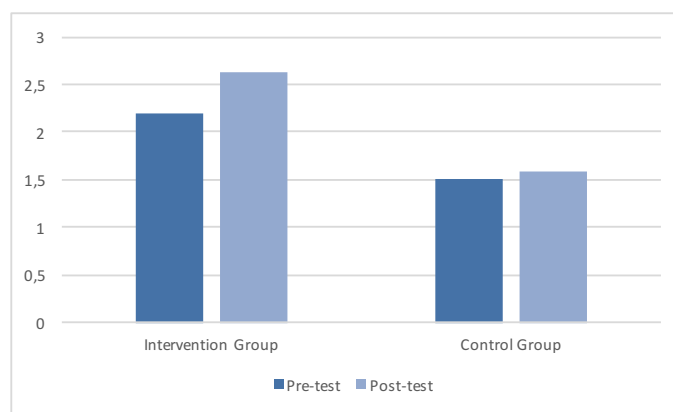
Figure 4. Mean* of number of total words by group



*Figures 4 to 13 and 15 to 18 represent means of the variables and not the median ones, since some of them were equal to zero and could not be plotted.

Regarding the number of words referring specifically to *mental states*, as is shown in Figure 5, mothers in both groups increased slightly however these differences were not significant in the intervention group ($z=-0.84$, $p=0.24$) neither in the control group ($z=-0.1$, $p=0.46$).

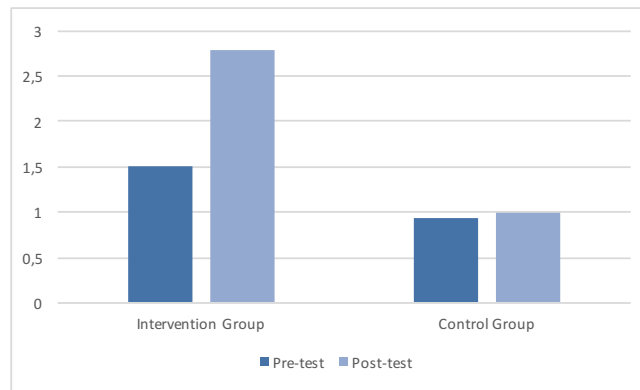
Figure 5. Mean of mental states words by group



Within number of words mentioned by the mother referring to mental states in the story, the intervention group increased significantly ($z=-2.12$; $p=0.02$) the amount of words they told their child regarding *cognitive* mental state after the intervention (Figure 6) with

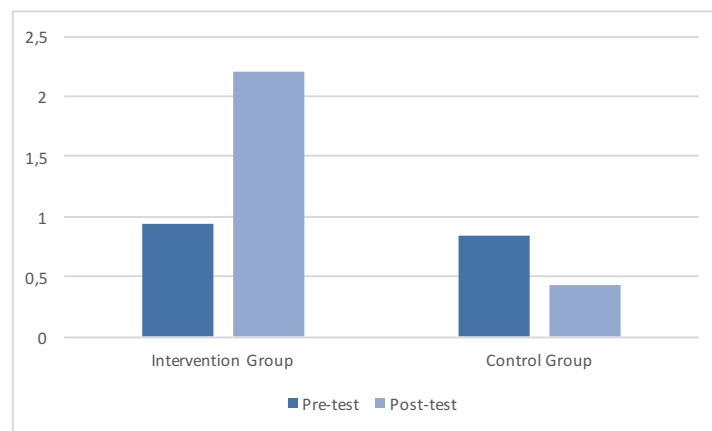
medium effect size ($r=0.4$). Control group slightly increased on the number of words they used referent to cognitive mental state, nevertheless this difference over time was not significant ($z=-0.12$; $p=0.45$).

Figure 6. Mean of cognitive words by group



As is shown in figure 7, while the control group had a strong tendency to decrease the number of words referring to *emotions* overtime ($z=-1.49$; $p=0.08$), the group of mothers attending the intervention increased this number, however, this increment was not significant ($z=-1.07$; $p=0.15$).

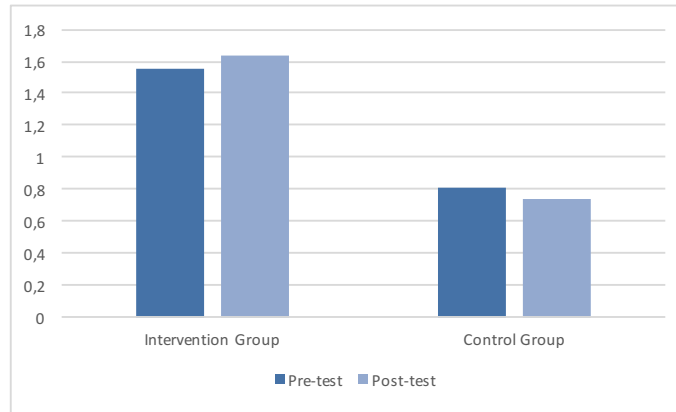
Figure 7. Mean of words referent to emotions by group



Although mothers in the intervention group slightly increased the number words referent to *desires* in the post-test (as shown in figure 8) on the other hand, the control group

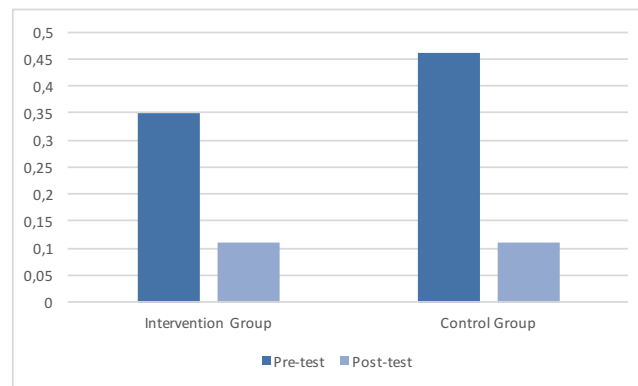
marginally decreased this number, however the differences were not statistical significant neither in the intervention group ($z=-0.95$, $p=0.18$) or control group ($z=-0.23$, $p=0.45$).

Figure 8. Mean of words referent to desires by group



To conclude with the categories of mental states, mothers in both groups mentioned fewer *psychological attributes* in their stories as it is shown in Figure 9, however these differences were not significant in either the intervention ($z=-1.63$, $p=0.13$) or control group ($z=-1.52$, $p=0.13$).

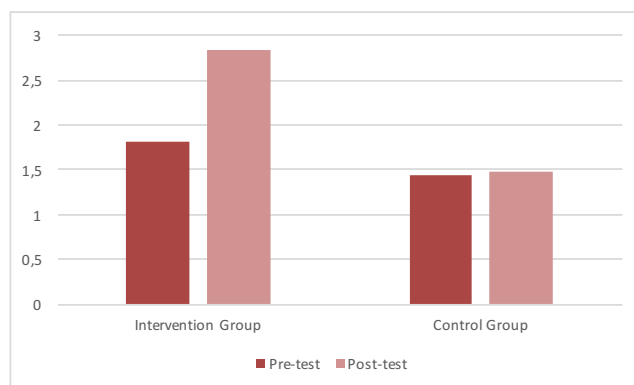
Figure 9. Mean of psychological attributes mentioned by group



In terms of *non-mental categories*, the intervention group has a marked tendency ($z=-1.63$, $p=0.07$) to increase the number of words referring to these categories, however the control group does not show this tendency ($z=-0.22$, $p=0.43$) as is shown in Figure 10.

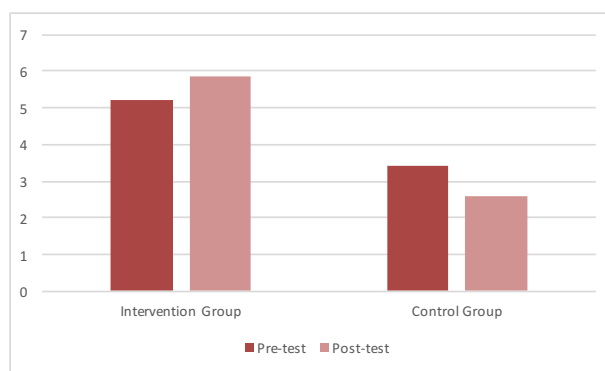
Within the non-mental categories, there were no differences between the pre-test and post-test in the intervention group and any category (causality, links to the child's life or physical status). However, there were differences in the control group as detailed below.

Figure 10. Mean of non-mental categories by group



The intervention group increased the number of words referring to *causality* in the post-test as is shown in Figure 11, however this difference was not significant ($z=-0.18$, $p=0.43$). Meanwhile, the control group had a marked tendency to decreased the mention of these references in the post-test ($z=-1.67$, $p=0.05$).

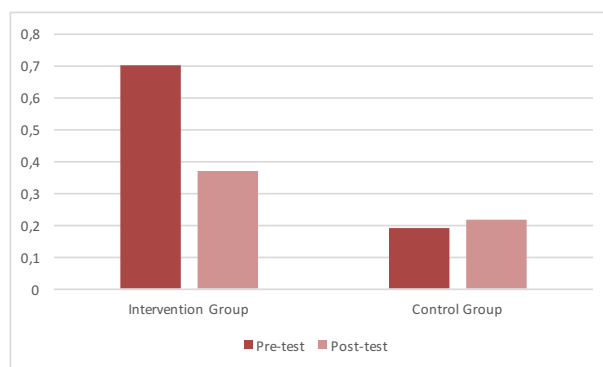
Figure 11. Mean of causalities mentioned by group



As for the *links with the child life* mentioned by mothers in stories, intervention control group had a slight decreased contrary to the control group which had a sight increased, these

differences were not significant neither for the intervention ($z=-1.25$, $p=0.16$) or the control group ($z=-0.33$, $p=0.5$) as is shown in Figure 12.

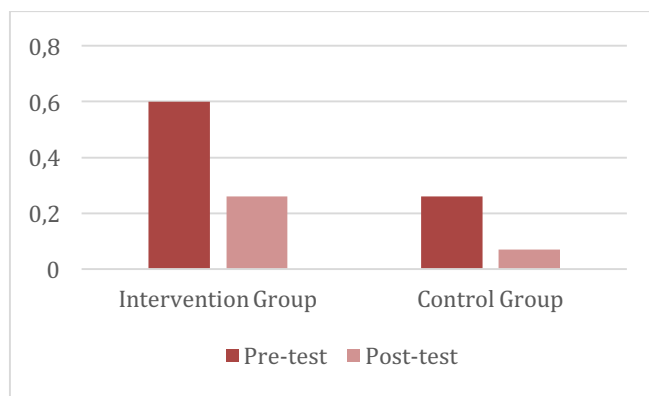
Figure 12. Mean of links with the child life mentioned by group



There were also no significant differences either in the intervention group ($z=-1.41$, $p=0.16$) or the control group ($z=-1.51$, $p=0.12$) between the assessments of *physical states* mentioned as is shown in Figure 13.

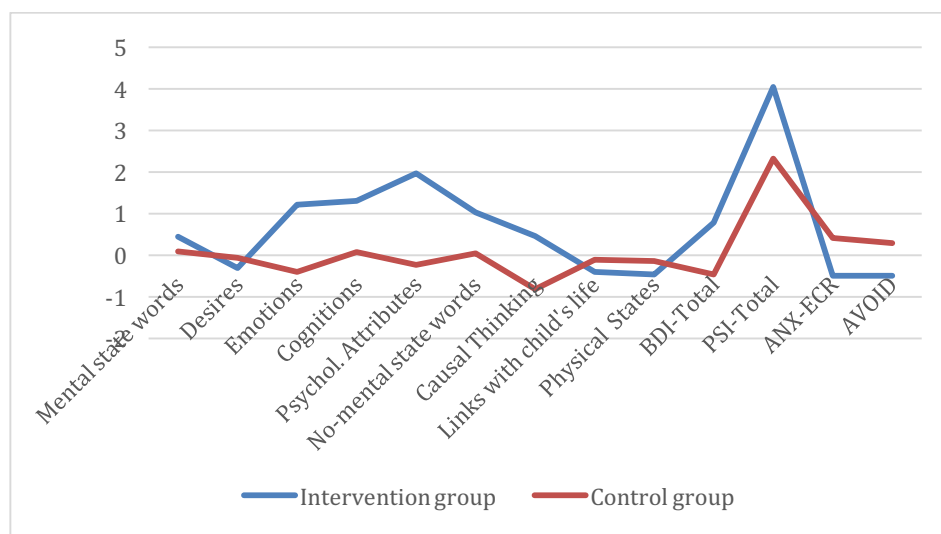
Finally, it is important to mention that no factual language was detected in any of the groups neither in the pre-test or post-test.

Figure 13. Physical states mentioned by group



Taking into account differences in the intervention group discussed above, the hypothesis that mothers who received the intervention increased their levels of *maternal mentalizing* compared to mothers that was partially supported as is shown in Figure 14.

Figure 14. Differences between pre-test and post-test in intervention and control group



Even though, the main goal of the intervention was to improve maternal reflective, it was examined whether participation in the intervention program had effects on other factors related to maternal mentalizing such as anxiety and avoidance attachment and parenting stress.

Results showed that mothers who received the intervention had significant lower scores in *attachment anxiety* ($z=-2.17$; $p=0.02$) with a mild effect size ($r=0.34$) contrary to mothers in control group who had a strong tendency ($z=-1.69$; $p=0.05$) to have higher scores in this dimension in their second self-report as is shown in Figure 15.

As well, mothers who participated in the intervention had a tendency to report lower scores in attachment avoidance ($z=-1.4$; $p=0.08$), contrary to mothers in the control group who slightly scored higher in the post-test but do not have significant differences over time ($z=-1.08$; $p=0.22$) as it is shown in Figure 16, even though this intervention do not emphasis in reduce attachment anxiety or avoidance

Regarding parenting stress index scores, both groups increased slightly between the pre-test and post-test as is shown in Figure 17, although these differences were not significant either in the intervention ($z=-0.38$, $p=0.5$) or control group ($z=-0.31$, $p=0.39$).

Figure 15. Mean of attachment anxiety by group

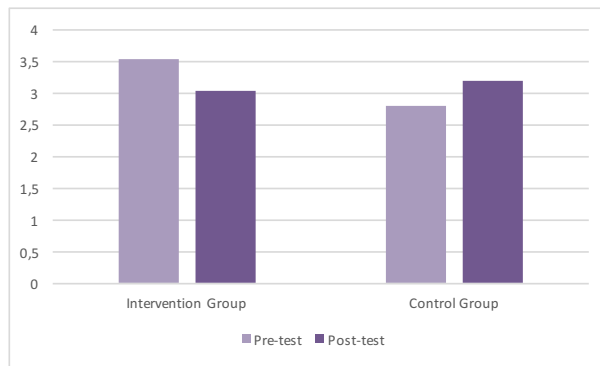


Figure 16. Mean of attachment avoidance by group



Regarding parenting stress index scores, both groups increased slightly between the pre-test and post-test as is shown in Figure 17, although these differences were not significant either in the intervention ($z=-0.38$, $p=0.5$) or control group ($z=-0.31$, $p=0.39$).

Figure 17. Mean of parenting stress by group



Discussion and Conclusions

In this section, will be discussed and placed in context main findings described in the results section, followed by additional findings, clinical implications and finally strengths and limitations of this work will be explored.

As it was mentioned earlier, a large body of research supports the relationship between attachment and reflective functioning, showing that low levels in anxiety and avoidance or secure attachment is associated with higher levels of parental reflective functioning and vice-versa (Ensink, Normandin, Target, Fonagy, Sabourin, & Berthelot, 2014; Slade et al., 2005; Sharp, Fonagy & Goodyer, 2006) and there is still dearth in understanding of how parental mentalizing failure in context of stress, causing that the caregiver shift to less healthier forms of relating to their child.

That's why Study 1 was designed hopping to understand the effects of parenting stress and depressive symptoms in mothers of vulnerable populations.

Furthermore, there are few studies of interventions in preschool children, especially in Latin American populations, so Study 2 evaluated the outcome of an intervention program for mothers of vulnerable populations with children at this age.

According to Study 1, the hypothesis that *parenting stress* have a moderating role in the relationship between *attachment* and *maternal reflective functioning* was supported since at the same levels of attachment anxiety, maternal reflective functioning *decreased* as maternal stress which focus on the perception that the parent has and to what extent the child meets her expectations, and the degree of reinforcement that the child provides to the parent *increased* (as measured by the PSI).

Moreover, there also was a marked tendency of the moderation role on this sort of parenting stress in the relationship between attachment avoidance and prementalizing.

Most interesting finding in this study was that while controlling variables such as their child's gender and mother's educational attainment this one specific form of maternal stress - the child do not meet their mothers' expectations- was the only kind of parenting stress that had significant or marked tendency on the relationship between the attachment dimensions and parental reflective functioning. Mothers with high stress as a result the mismatch of their expectations and their child have lower parental mentalizing even at low anxiety in attachment

These findings contribute to the literature, since few publications examine the role of parenting stress in the relationship of maternal attachment and maternal reflective functioning. One of the few studies found examined stress in caregivers of children under two years old, and found that parental reflective functioning not only correlated with parenting stress but this correlation was not found regarding every day stress or stress no related to parenting (Rutherford et al., 2013).

All these findings support the theory that low parenting stress is a protective factor, promoting an adequate capacity to think about their child's mental states even in the face of adverse attachment styles.

It is also interesting that in Study 1, the only kind of parenting stress that moderated the relationship between attachment and maternal reflective functioning was the one concerning to expectations of the mothers towards their child.

Even tough the relationship between expectations and parental reflective functioning is not a novel idea, since Arietta Slade stressed the importance of taking into account the parents "*own dreams and expectations for their child*" in order to improve their parental mentalizing ability (Slade, 2005), there is limited information about the role that plays mothers'

expectations in the relationship between attachment and parental reflective function. Findings in this study add to this literature by showing this moderation role in mothers of vulnerable populations.

At the same time, this finding has clinical implications since supports the evidence of the important role of evaluating mother's expectations about their child in early years and to contrast their actual child in order to reduce the experience of parenting stress.

Also, contributing to clinical practice is the importance of giving tools to mothers with high levels of attachment anxiety to perceive maternity difficulties as stressful events rather to perceive their child or their relationship as problematic.

Furthermore, it would be interesting to probe this moderation role in samples with less childhood experiences of abuse and neglect, as well as more secured attachment styles since these features are strong related with expectations about becoming a mother (Ensink et al., 2014) may also be a predictor in mothers of young children.

Additionally, it seems of great importance to explore the incidence of child gender in maternal reflective functioning, since results in Study 1 unexpectedly showed that gender and not attachment dimensions predicted prementalizing scores in all of the regression models that were tested, so mothers of girls reported lower prementalizing scores –higher maternal reflective functioning- than mothers of boys.

One explanation may be that girls may have had more theory of mind than mothers of boys as others studies have found (Ha, Sharp & Goodyear, 2011), which may allow mothers feel that their daughters understand social cues in a better way than boys do, therefore they can perceive their behavior as less confusing than boys.

Another explanation may be in the line with other studies, that found that girls tend to exhibit less externalizing behaviors than boys and less aggressive behaviors than boys after

their third birthday (Hay, Nash, Caplan, Ishikawa, & Vespo, 2011; Meins, Centifanti, Fernyhough, & Fishburn, 2013) making believe mothers that they understand their daughters' behavior better.

Also, differences in maternal reflective functioning differences depending on the child gender may be due to girls being more advanced in language development (Charman, Ruffman, & Clements, 2002; Walker, 2005), which may allow mothers to communicate in a better way and to understand them better than boys, therefore, to have a better awareness of their mental states.

Moreover, it was interesting that results in Study 1 showed low and middle associations between educational level - another demographic variable- and prementalizing stance, in such way that as educational attainment increases parental reflective function increases too, this makes a contribution to literature since there is not a general agreement regarding parental reflective functioning since some studies have found a correlation between this two variables (Fearon et al., 2006; Luyten et al., 2017; Pajulo et al., 2012; Rosenblum, McDonough, & Sameroff, 2008), but other results support that demographic factors do not relate with this parental function (Fonagy, et al., 2001; Meins, Fernyhough, Arnott, Leekam, & Turner, 2011).

This contributes to existing theory and research since this variable was associated with attachment and depression emphasizing the role of socioeconomic variables in psychological traits.

On the other hand, it was surprising that an association between depressive symptoms and parental reflective functioning was not found in this study, since results reported in previous studies showed that depressive symptoms may interfere with reflective function

(Fischer-Kern et al., 2013; Toth et al., 2009; Zobel, Werden, Linster, Dykieriek, Drieling & Berger, 2010).

One explanation is the sample of Study 1; since most of the studies mentioned above were made with clinical population while this study included at risk populations with no depression diagnosis. Also, lack of association between these variables may exist because cultural differences since neither of the mentioned publication were carried on with Latin-American population. In the other hand, these other studies associated reflexive function, but not necessarily *parental* reflective functioning with depressive symptoms.

Furthermore, as it was expected both attachment dimensions -anxiety and avoidance-related with symptoms of depression and parenting stress, though just attachment avoidance but not anxiety related with childhood trauma experiences, possible as self-defense mechanism to prevent to be harmed by the people they love (Prunell, 2010).

Additionally, depression symptoms are related with parenting stress and childhood trauma experiences. Surprisingly there was not a correlation between experiences of childhood trauma and parenting stress total scores, contrary to other findings were mothers with a history of trauma during childhood was associated with parenting stress when controlling for household income and general psychiatric distress (Ammerman, Shenk, Teeters, Noll, Putnam, & Van Ginkel, 2011; Barrett, 2010).

Equally important, this study makes evident the high rates of childhood trauma experiences in low SES communities in Santiago and the need of treatment aimed to mitigate the dangerous effect on this sole condition in parenting as well as interventions focused on the importance in the treat their children to prevent the intergenerational transmission of trauma.

Nevertheless, surprisingly there were no significant correlation between experiences of trauma in childhood and prementalizing stance contrary to what was expected. This result was

also found in previous studies, where the relationship between traumatic experiences and the quality of parenting with, specifically parental reflective functioning could not be proven with mother–infant dyads (Ensink, Normandin, Plamondon, Berthelot & Fonagy, 2016; Stack et al., 2014) suggesting that the relationship between childhood trauma experiences and parental reflective functioning needs more empirical evidence.

When mothers of Study 1 were divided into two groups –intervention and control group- depending on which preschool center their child attended, in order to evaluate the outcome of an intervention program -Study 2- it is noticeable mothers in the intervention group had higher CTQ scores and at the same time had higher maternal mentalizing. As it was mentioned in before, the relationship between maternal mentalizing and experiences of neglect and abuse during childhood still needs to be further studied.

In the other hand, even though there were not significant differences between dimensions of anxiety and avoidance attachment between groups, mothers in the intervention group also had less secure styles of attachment since most mothers (38.1%) had fearful attachment style compared to the control group with a greater number of secure attachment style (50%).

Having these significant differences between groups prior to the intervention, is due to the fact that scoring and coding of the assessment were made after the inclusion of mothers and their participation in the program, also because the great sampling loss and the low acceptance rate in this study.

Nevertheless, drop-out rate was high in Study 2 it is no rare to have large sampling loss since studies with parents since usually lose from 5 to 50% of the samples (Bakermans 2003; Prinz and Miller, 1994).

High drop-out rates and limited access to parenting programs have made evident the need to develop technology-accessible programs where participants do not have to attend to distant places to benefit from the intervention, making it easy for working parents.

Besides the sample loss, it was unexpected that in Study 2, most mothers -more than two thirds- in the intervention group were coded as having adequate or high maternal mentalizing and this influencing that there were no significant differences after the intervention. At the same time, there were no differences between measurements in control group in *overall maternal mentalizing*.

Although there were no differences in the overall category of maternal mentalizing, the significant increase in the number of words related to *cognitive* mental states in post-test story telling shows an impact of the intervention in maternal mentalizing in the group of mothers who participated at the program.

Moreover, the fact that the only significant improvement ($p < 0.05$) made by mothers were the number of words referent to cognition is in concordance with other studies that show that mothers use at least one category of mental states more than the others (Smith & Wu, 2016).

Furthermore, some other authors have found that mothers use more words relating to cognitions than emotions, desires, or intentions (Ziv et al., 2013). Therefore, since often parents do not give their children explanations about characters' mental states while they tell a story to their children (Ziv, Smadja, & Aram, 2013), so that mothers who attended to this intervention improved this trait is a great starting point.

Additionally, the use of this kind mental verbs (e.g., think, know, remember) allow to understand own and others points of views allows children to have a better understanding of what their thoughts, which helps comprehend behaviors on themselves and others. This

understanding also influence their acquisition of ToM and child emotional development (Adrián et al., 2007; Fenning, Baker, & Juvonen, 2011; Ruffman et al., 2002) so this change is very important in terms of how the child may benefit from it.

In the same line, cognitive states differ greatly from reality and it cannot be pointed or linked to a concrete object so it is difficult for recognize these states. Hence, that after the intervention, mothers talk more to their children about cognitive mental states is a big step in the good direction. Moreover, cognitive state terms may be the foundation for the exploration of the representational world.

Although it was not within the objectives of the intervention to affect attachment dimensions, differences in this factor were studied due to its relation with maternal mentalization. And the significant reduction of attachment anxiety according to the ECR, after mothers attended to the intervention program, contrasting to the scores in the control group whose increased overtime.

This finding exhibits the scope of this intervention program, furthermore since in pre-test the intervention group had the highest scores in *attachment anxiety* and at the same time reported more childhood trauma experiences.

That most mothers in the intervention group presented altered attachment styles -4 out of 5 mothers had altered attachment styles- may be a contributing factor to the differences in attachment anxiety since after it has been shown that caregivers with these attachments styles can benefit from interventions aimed at improving the relationship with their children, reducing anxiety and avoidance of attachment (Cicchetti, Totht & Rogosch 1999). Also, these results could be due to improvement in parental abilities in attachment behavior addressed in the intervention.

Another possible factor could be that mothers who attended to the intervention program found themselves more capable to raise their child; since failures and difficulties in this task are associated with attachment insecurity (Gilbert, 2005).

In addition, this intervention may have helped mothers to better accept their difficulties as parents, as well as the limitations and challenges of their children. Lastly, after the intervention, mothers could have felt less overwhelmed by the needs and discomfort of their child, reducing their own attachment anxiety.

Furthermore, the decrease in attachment anxiety after the intervention may result of the fact that mothers react differently to their children's non-verbal expressions decreasing the response of hyper-activation or the exaggerated emotional response in negative events that is related to this attachment dimension (Fraley, Niedenthal, Marks, Brumbaugh, & Vicary, 2006; Gentzler, Kerns, & Keener, 2010).

It is worth saying that the medium size effect in both variables –number of cognitive words and attachment anxiety- after the intervention is very satisfactory, as the expected effect size for parenting programs is low to high (Bakermans-Kranenburg, van IJzendoorn & Juffer, 2003; Layzer, Goodson, Bernstein & Price, 2001; Sidor et al., 2015). Moreover, since this work has a small sample size, it would be expected that if the sample were increased the size effect would also be higher.

Although there were not other significant differences between pre-test and post-test in the intervention group, there was a marked tendency ($p < 0.09$) to increment the number of *non-mental categories* and *attachment avoidance*. These tendencies were not found in the control group.

Besides, it is interesting to note that there are no significant differences in these two

variables it is possible that these differences may be observable with parametric analyses. For example, the mean of words referent to *emotions* doubled after the intervention in the group who participated in the program.

On the other hand, there are indicators of maternal mentalizing that were significantly reduced or had a marked tendency to decreased overtime in the control group, while in the intervention group either maintained or slightly increased after the intervention such as the *total number of words*, specifically words referent to *emotions* and *causality*.

These results show that although there are no differences in maternal mentalization, this intervention can serve as to protect mothers –and children- from the expected deterioration in emotional well-being, as longitudinal early childhood survey shows that there is a decline in some socio-emotional indicators in both the child and his or her mother over time (Bravo, 2012).

These findings evidence that mothers of vulnerable populations who participated in this intervention were benefited from this program, since it was it influenced the way they talked to their children at story time. In addition, this kind of program affect attachment improving mother-child interaction, an important factor for the emotional health of the child.

Likewise, since this work has a small sample size, one would expect that if the sample were increased the size effect also would grow, further the tendency to increase maternal mentalizing would be significant.

Finally, it would be interesting to study interventions that focus not only on improving maternal awareness but also parenting stress.

Strengths and Limitations

No studies were found which examined the moderating role of parenting stress in maternal reflective functioning, even though some studies have examined the protective factor of reflective functioning as key in resilience and reducing stress (Luyten & Fonagy, 20015), there is also evidence that parenting stress correlates with PRFQ prementalizing scale (Luyten et al. 20017; Rosted & Withtaker, 2016) this would be the first study to demonstrate this moderating role.

On the other hand, fundamental strength of Study 2 is the design of an intervention to improve maternal mentalizing in vulnerable population in Latin-America. A further strength of this study is that it included a control group, few parental interventions have control groups to compare the effectiveness of interventions (Bakermans- Kranenburg et al. 2005) because of ethical issues in having groups of parents who are in need of support without treatment. In the view this was no clinical population, this study was able to compare mothers who had assisted the intervention to those who do not have any intervention.

However, some limitations are noteworthy in both studies, which is why it is important to take these findings with caution. A key limitation is that data was collected with no standardized tests in Chilean population –specially in Study 1- since there is insufficient national validation of psychometric measures. Consequently, there were some difficulties in the use of the PRFQ-1 and the ECR-S as self-report measures of maternal mentalizing and attachment.

Given the time and cost consuming of measuring parental reflective functioning through interviews (PDI) or observational (MST) and the good reliability of the PRFQ - Cronbach's alphas at 0.70 or greater- according to several publications (Luyten et al., 2017; Rostad & Whitaker, 2016; Rutherford et al. 2013; Rutherford et al. 2015) it was decided to use

this self-report for a greater sample in Study 1.

Likewise, a modified version of the ECR-S was used in both studies, despite this measurement has been criticized for lack of reliability so it is possible that a different attachment instrument would have been a better choice. Nevertheless, this self-report was chosen, since it is less time-consuming than others attachment assessment and because it has been used in several works in Chile and third to contribute to MIDAP validation of this instrument.

Also, both studies assessed retrospective assessment of mothers' history of childhood trauma while some critics data obtained with self-report measures because due to social desirability (Widom & Shepard, 1996), mothers may feel that they should not report feelings, thoughts, behaviors or experiences that could show vulnerability. Detractors also argue that questionnaires are more likely to be influenced by the participants' mood. In addition, it can be discussed that they only provide participants' conscious knowledge.

May be appropriate to use other measurements, but CTQ was considered since other tests could be a risk to come around to painful memories or, difficult situations since some of the mothers would only have one contact with trained personnel in the project and it would pass some time without emotional support.

Moreover, a key limitation in Study 2 was the significant differences between intervention and control group in childhood in overall maternal mentalizing category, trauma experiences and attachment anxiety. Thus, the intervention group had higher maternal mentalizing, attachment anxiety and trauma experiences than the control group.

Although was intended to keep intervention and control groups as similar as possible by randomly assign preschool centers to intervention group this could not be achieved. For future studies, it is recommendable to incorporate a between subjects' design.

Not to mention that mothers were not screened for other co-diagnoses (aside of parenting stress, depression or experiences of trauma in childhood) or if these mothers have received psychotherapy or psychological treatment, therefore it cannot be ruled out that there may have been intervening other factors.

It also may have been interesting to take a third measurement in another time point, in order to give more concrete information about durability and actual change of the intervention. However, due to time limitations this was not possible for this thesis.

Regardless, there were several blind coders of the MST ensured inter-rater reliability, it would add much more complete information having other observational assessment (depression, parenting stress, attachment) reducing social desirability and self-report bias.

Also, it would be enriching to have incorporated qualitative elements, this data would have increased the point of view of the effectiveness of the mothers who participated in the intervention group.

Another limitation on Study 2 is the relative small sample size; it is possible that more significant results would have been found if a larger number of the participants, however, this was unexpected since 77 mothers to the intervention group of which only 26 had 60% of attendance to the intervention program, then only 19 completed before and after intervention assessment. As for the control group, 48 mothers were invited and just 26 completed evaluations through time.

Low participation of mothers to this project may due to the fact that most mothers were not directly invited by the researchers, instead the team project talked to the teachers or principals who handed flyers about the intervention program. Additionally, the interventions took place between late fall and winter hence some mothers preferred to stay at home.

Furthermore, former research supports that people who agree to attend to improve their awareness of mental states may have been already had thought about such issues (Demers et al., 2010). For this reason, mothers who needed more this kind of intervention may have been the people that chose not to attend the group.

The fact that mothers were not contacted by the research group, but rather by staff from preschool centers and were they who defined the modality of invitation, could have influenced in the low adherence of the participants to these studies.

Moreover, both studies examined *maternal* mentalizing, but it would equally interesting to analyze parental mentalizing in *fathers* as well as well as the impact of the intervention in *children*.

Although some may think that five sessions would be a short treatment a longer intervention may overload mothers with information besides some studies support that in attachment context short interventions are more effective than longer ones (Bakermans-Kranenburg et al., 2003; Pinquart & Teubert, 2010; van IJzendoorn et al., 1995) and as the reported this intervention managed significant effect.

References

- Abidin, R.R. (1995). *Parenting Stress Index (3rd ed.)*. Odessa, FL: Psychological Assessment Resources.
- Alonso-Arbiol, I., Balluerka, N., Shaver, P., y Gillath, O. (2008). Psychometric properties of the Spanish and American versions of the ECR adult attachment questionnaire. *European Journal of Psychological Assessment*, 24, 9-13.
- Adam, E. K., Gunnar, M. R., & Tanaka, A. (2004). Adult attachment, parent emotion, and

- observed parenting behavior: Mediator and moderator models. *Child Development*, 75(1), 110–122. doi:10.1111/j.1467-8624.2004.00657.x
- Adrián, J. E., Clemente, R. A., & Villanueva, L. (2007). Mothers' use of cognitive state verbs in picture-book reading and the development of children's understanding of mind: A longitudinal study. *Child Development*, 78(4). doi: 1052–1067. doi:10.1111/j.1467-8624.2007.01052.x
- Afifi, T.O., MacMillan, H.L., Boyle, M., Taillieu, T., Cheung, K., & Sareen, J. (2014). Child abuse and mental disorders in Canada. *Canadian Medical Association Journal*, 186(9), 324-332. doi: 10.1503/cmaj.131792
- Ainsworth, M. (1967). *Infancy in Uganda: Infant care and the growth of love*. Oxford: Johns Hopkins Press.
- Ainsworth, M. (1991). Attachment and other affectional bonds across the life cycle. In C. M. Parkes, J. Stevenson-Hinde, & P. Marris (Eds.). *Attachment across the life cycle* (pp. 33–51). New York: Routledge.
- Ainsworth, M. D. S., Bell, S. M., & Stayton, D. (1971). Individual differences in strange situation behavior of one-year-olds. In H. R. Schaffer (Ed.), *The origins of human social relations* (pp. 17-57). London: Academic Press.
- Ainsworth, M. S. (1989). Attachments beyond infancy. *American Psychologist*, 44(4), 709–716. doi:10.1037/0003-066x.44.4.709
- Ainsworth, M., Bell, S., & Stayton, D. (1978). *Patterns of attachment: Assessed in the Strange Situation and at home*. Hillsdale, NJ: Erlbaum.
- Ainsworth, M., Blehar, M. C., Waters, E. and Wall, S. (1978). *Patterns of attachment: A psychological study of the strange situation*. Hillsdale, NJ: Erlbaum.

- Allen, J. (2008). The attachment system in adolescence. In Cassidy J & Shaver P. (Eds.), *Handbook of Attachment second edition: Theory, research, and clinical applications*. The Guilford Press, New York, USA.
- Allen, J. & Land, D. (1999). Attachment in adolescence. In Cassidy, J. (Ed) & Shaver, P. (Eds), *Handbook of attachment: Theory, research, and clinical applications*, (pp. 319-335). NY: Guilford Press.
- Allen, J. G., Lemma, A., & Fonagy, P. (2012). Trauma. In A. W. Bateman & P. Fonagy (Eds.), *Handbook of mentalizing in mental health practice*. Washington, DC: American Psychiatric Publishing.
- Allen, J., Bleiberg, E. & Haslam-Hopwood, E. (N.D.) <http://www.menningerclinic.com/education/clinical-resources/mentalizing>
- Allen, J., Fonagy, P., & Bateman, A. (2008). *Mentalizing in Clinical Practice*. Washington DC: American Psychiatric Publishing, Inc.
- American Psychiatric Association. (2013). Depressive Disorders. In *Diagnostic and statistical manual of mental disorders* (5th ed.). doi:10.1176/appi.books9780890425596.744053
- Ammerman, R. T., Shenk, C. E., Teeters, A. R., Noll, J. G., Putnam, F. W., & Van Ginkel, J. B. (2011). Impact of Depression and Childhood Trauma in Mothers Receiving Home Visitation. *Journal of Child and Family Studies*, 21(4), 612–625. doi:10.1007/s10826-011-9513-9
- Anthony, L. G., Anthony, B. J., Glanville, D. N., Naiman, D. Q., Waanders, C., & Shaffer, S. (2005). The relationships between parenting stress, parenting behavior and preschoolers' social competence and behavior problems in the classroom. *Infant and Child Development*, 14, 133–154. DOI: 10.1002/icd.385
- Atkinson, L., Niccols, A., Paglia, A., Coolbear, J., Parker, K. C. H., Poulton, L., et al. (2000). A meta-analysis of time between maternal sensitivity and attachment assessments: Implications for internal working models in infancy/toddlerhood. *Journal of Social and Personal Relationships*, 17, 791-810. doi: 10.1177/0265407500176005

- Auerbach, J. S., & Blatt, S. J. (2001). Self-reflexivity, intersubjectivity, and therapeutic change. *Psychoanalytic Psychology*, 18(3), 427–450. doi:10.1037/0736-9735.18.3.427
- Baker, B.L., Blacher, J. y Olsson M.B. (2005). Preschool children with and without developmental delay: behavior problems, parents' optimism and well-being. *Journal of Intellectual Disability Research*, 49, 8. doi: 10.1111/j.1365-2788.2005.00691.x
- Bakermans-Kranenburg M. J., van IJzendoorn M.H. & Bradley ,R.H. (2005). Those who have, receive: The Matthew effect in early childhood intervention in the home environment. *Review of Educational Research*, 75(1), 1–26. doi: 10.3102/00346543075001001.
- Bakermans-Kranenburg, M. J., van IJzendoorn, M. H., & Juffer, F. (2003). Less is more: Meta-analyses of sensitivity and attachment interventions in early childhood. *Psychological Bulletin*, 129(2), 195–215. doi:10.1037/0033-2909.129.2.195
- Baldwin, D. A., Baird, J. A., Saylor, M. M., & Clark, M. A. (2001). Infants parse dynamic action. *Child Development*, 72, 708–717. doi:10.1111/1467-8624.00310
- Barrett B. Childhood sexual abuse and adulthood parenting: The mediating role on intimate partner violence. (2010). *Journal of Aggression, Maltreatment & Trauma*, 19, 323–346.
- Barroso, N. E., Hungerford, G. M., Garcia, D., Graziano, P. A., & Bagner, D. M. (2016). Psychometric properties of the Parenting Stress Index-Short Form (PSI-SF) in a high-risk sample of mothers and their infants. *Psychological Assessment*, 28(10), 1331–1335. doi:10.1037/pas0000257
- Bartholomew, K. (1990). Avoidance of intimacy: An attachment perspective. *Journal of Social and Personal Relationships*, 7(2), 147–178. doi:10.1177/0265407590072001
- Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: A test of a four-category model. *Journal of Personality and Social Psychology*, 61 (2), 226-244. doi: 10.1037/0022-3514.61.2.226

- Barudy, J. & Dantagnan, M. (2010). *Los desafíos invisibles de ser madre o padre: Manual de evaluación de las competencias y la resiliencia parental*. Barcelona: Gedisa.
- Bassi, M., & Urzúa, S. (2010). *Educación en Chile: El Desafío está en la Calidad*. Documento de trabajo. Banco Interamericano de Desarrollo.
- Bateman, A., & Fonagy, P. (2013). Mentalization-Based Treatment. *Psychoanalytic Inquiry*, 33(6), 595–613. doi:10.1080/07351690.2013.835170
- Bateman, A., & Fonagy, P. (2016). Assessment of Mentalizing in *Mentalization-Based Treatment for Personality Disorders: A Practical Guide*. Oxford University Press: UK. doi:10.1093/med/9780198570905.003.005
- Beck A., Ward C, Mendelson M, Mock J, & Erbaugh J. (1961). An inventory for measuring depression. *Archive General Psychiatry*, 4, 561-71. doi:10.1001/archpsyc.1961.01710120031004
- Beck, A. T., & Beamesderfer, A. (1974). Assessment of Depression: The Depression Inventory. *Psychological Measurements in Psychopharmacology*, 151–169. doi:10.1159/000395074
- Beeghly, M., & Cicchetti, D. (1994). Child maltreatment, attachment, and the self-system: Emergence of an internal state lexicon in toddlers at high social risk. *Development and Psychopathology*, 6, 5–30. doi: 10.1017/s095457940000585x
- Belsky, J., & Fearon, R. (2002). Infant–mother attachment security, contextual risk, and early development: A moderational analysis. *Development and Psychopathology*, 14(02). doi:10.1017/s0954579402002067
- Bernstein, D. P., Stein, J. A., Newcomb, M. D., Walker, E., Pogge, D., Ahluvalia, T., ... Zule,

- W. (2003). Development and validation of a brief screening version of the Childhood Trauma Questionnaire. *Child Abuse & Neglect*, 27(2), 169–190. doi:10.1016/s0145-2134(02)00541-0
- Berstein, D.P., & Fink, L. (1998). *Childhood Trauma Questionnaire: A retrospective self-report manual*. The Psychological Corporation. San Antonio, Tx.
- Besoain, C., & Santelices, M. P. (2009). Transmisión Intergeneracional del Apego y Función Reflexiva Materna: Una Revisión. *Terapia Psicológica*, Vol. 27, N°1, , 113-118. doi:10.4067/s0718-48082009000100011
- Bifulco, A., Moran, P.M., Baines, R., Bunn, A., & Stanford, K. (2002). Exploring psychological abuse in childhood: II. Association with other abuse and adult clinical depression. *Bulletin of the Menninger Clinic*, 66(3), 241-258. doi: 10.1521/bumc.66.3.241.23366
- Bion, W. R. (1962). *Learning from experience*. London: Heinemann.
- Blatt, S. J. (2004). *Experiences of depression: Theoretical, clinical and research perspectives*. Washington, DC: American Psychological Association.
- Blatt, S. J., Shahar, G., & Zuroff, D.C. (2001). Anaclitic (sociographic) and introjective (autonomous) dimensions. *Psychotherapy*, 38(4), 449-454.
- Bonds, D. D., Gondoli, D. M., Sturge-Apple, M. L. & Salem, L. N. (2002). Parenting stress as a mediator of the relation between parenting support and optimal parenting. *Parenting: Science and Practice*, 2(4), 409 - 435. DOI:10.1207/s15327922par0204_04
- Bouchard, M., Target, M., Lecours, S., Fonagy, P., Tremblay, L., Schachter, A., & Stein, H. (2008). Mentalization in adult attachment narratives: Reflective functioning, mental states, and affect elaboration compared. *Psychoanalytic Psychology*, 25(1), 47-66. doi: 10.1037/0736-9735.25.1.47
- Bost, K. K., Shin, N., McBride, B. A., Brown, G. L., Vaughn, B. E., Coppola, G., ... Korth, B.

- (2006). Maternal secure base scripts, children's attachment security, and mother-child narrative styles. *Attachment and Human Development*, 8, 241–260. doi:10.1080/14616730600856131
- Bowlby, J. (1969). *Attachment and Loss: Vol. 1. Attachment*. New York: Basic Books.
- Bowlby, J. (1975). *Attachment and loss Vol. 2. Separation: Anxiety and anger*. New York: Basic Books. Penguin Books.
- Bowlby, J. (1979). *The making and breaking of affectional bonds*. London: Tavistock.
- Bowlby, J. (1982). *Attachment and loss: Vol. 1. Attachment (2nd ed.)*. New York: Basic Books. (Original work published 1969).
- Bowlby, J. (1988). *A secure base: Clinical applications of attachment theory*. London: Routledge.
- Bravo, D. (2012). *Encuesta Longitudinal de la Primera Infancia: Primeros Resultados 2012. Universidad de Chile*. Recuperado December 19, from www.uchile.cl/documentos/presentacion-del-profesor-david-bravo_89590_0_5020.pdf
- Brennan, K. A., Clark, C. L., & Shaver, P. R. (1998). Self-report measurement of adult attachment: An integrative overview. In J. A. Simpson y W. S. Rholes (Eds.), *Attachment Theory and Close Relationships* (pp. 46-76). New York: Guilford Press.
- Bretherton, I. (1991). Intentional communication and the development of an understanding of mind. In D. Frye & C. Moore (Eds.), *Children's theories of mind: Mental states and social understanding* (pp. 271– 289). Hilldale, NJ: Erlbaum.
- Bretherton, I. (1992). Attachment and bonding: From ethological to representational and sociological perspectives. In V. B. V. Hasselt & M. Herson (Eds.), *Handbook of social development* (pp. 133-155). New York: Plenum.

- Bretherton, I. (2005). In pursuit of the internal working construct and its relevance to attachment relationships. In K. E. Grossmann, K. Grossmann, & E. Waters (Eds.), *Attachment from infancy to adulthood: The major longitudinal studies* (pp. 13–47). New York: Guilford.
- Bretherton, I. & Munholland, K. (1999) Internal Working Models in Attachment Relationship: A construct Revisited”. In J. Cassidy & P.R. Shaver (Eds.), *Handbook of Attachment: Theory, research and Clinical Applications*. The Guilford Press. NW York London.
- Brownell, C. A., & Kopp, C. B. (1991). Common threads, diverse solutions: Concluding commentary. *Developmental Review*, 11, 288–303. doi:10.1016/0273-2297(91)90015-g
- Bryant, R.A. (2010). The complexity of complex PTSD. *The American Journal of Psychiatry*, 167(8), 879-881. doi: 10.1176/appi.ajp.2010.10040606
- Burnette, J. L., Davis, D. E., Green, J. D., Worthington, E. L., & Bradfield, E. (2009). Erratum to “Insecure attachment and depressive symptoms: The mediating role of rumination, empathy and forgiveness” *Personality and Individual Differences* 46, 276–280 doi: 10.1016/j.paid.2010.06.026
- Caravacho, Farkas & Santelices (2012). Mind Mindedness o la capacidad del adulto para tratar al niño(a) como un individuo con mente: Nuevas perspectivas para el estudio de la interacción entre el(la) niño(a) preescolar y sus figuras de apego. *Summa Psicológica*, 9 (2), 69-78.
- Carlson, E. A., & Sroufe, L. A. (1995). Contribution of attachment theory to developmental psychopathology. In D. Cicchetti & D. J. Cohen (Eds.), *Developmental psychopathology: Theory and methods* (Vol. 1, pp. 581-617), New York: Wiley.
- Carter, A. Rokous, E.G., Chazan-Cohen, R., Little, C., & Briggs-Gowan, M.J. (2001). Maternal depression and comorbidity: Predicting early parenting attachment security, and toddler social emotional problems and competencies. *Journal of American Academy of*

Child Adolescent Psychiatry, 40(1), 18-26. doi: 10.1177/1087054715616185

- Cassidy, J. (1999). The nature of the child's ties. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of at- attachment: Theory, research, and clinical applications* (pp. 3–20). New York: Guilford Press.
- Cassidy, J. (2008) The nature of the child's ties. In J. Cassidy & P.R. Shaver (Eds), *Handbook of Attachment: Theory, Research, and Clinical applications*, (pp. 3-22). New York, NY, US: Guilford Press.
- Charman, T., Ruffman, T., & Clements, W. (2002). Is there a gender difference in false belief development? *Social Development*, 11(1), 1–10. doi:10.1111/1467-9507.00183
- Cheng, H.-L., McDermott, R. C., & Lopez, F. G. (2015). Mental health, self-stigma, and help-seeking intentions among emerging adults: An attachment perspective. *The Counseling Psychologist*, 43(3), 463–487. doi:10.1177/0011000014568203
- Cicchetti D, Toth SL and Rogosch FA (1999) The efficacy of toddler–parent psychotherapy to increase attachment security in offspring of depressed mothers. *Attachment & Human Development*, 1, 34–66.
- Cicchetti, D., & Valentino, K. (2006). An ecological-transactional perspective on child maltreatment: Failure of the average expectable environment and its influence on child development. In D. Cicchetti & D. Cohen (Eds), *Developmental psychopathology: Risk, disorder and adaptation* (pp. 129-201). 2nd Ed. Vol. 3. John Wiley & Sons; Hoboken, NJ.
- Cicchetti, D., Ganiban, J., & Barnett, D. (1991). Contributions from the study of high risk populations to understanding the development of emotion regulation. In J. Garber & K. A. Dodge (Eds.), *The development of emotion regulation and dysregulation* (pp. 15-48). New York: Cambridge University Press.

- Cohn, D. A., Cowan, P. A., Cowan, C. P., & Pearson, J. (1992). Mothers' and fathers' working models of childhood attachment relationships, parenting styles, and child behavior. *Development and Psychopathology*, 4, 417 – 431. doi: 10.1017/S0954579400000870
- Collins, N. L. & Read, S. J. (1994). Cognitive representations of attachment: The structure and function of working models. *Advances in Personal Relationships*, 5, 53-90. doi:10.1002/9780470998557.ch3
- Coyl, D., Roggman, L., & Newland, L. (2002). Stress, maternal depression, and negative mother–infant interactions in relation to infant attachment. *Infant Mental Health Journal*, 23, 145–163. doi:10.1002/imhj.10009
- Coyne, L.W., Low, C.M., Miller, A.L., Seifer, R., Dickson, S. (2007). Mothers' empathetic understanding of their toddlers: Associations with maternal depression and sensitivity. *Journal of Child and Family Studies*, 16, 483-497. doi:10.1007/s10826-006-9099-9
- Crittenden, P. M., & Ainsworth, M. (1989). Child maltreatment and attachment theory. In D. Cicchetti & V. Carlson (Eds.), *Child maltreatment: Theory and research on the causes and consequences of child abuse and neglect* (pp. 432–463). England: Cambridge University Press.
- Crnic, K. A., & Low, C. (2002). Everyday stresses and parenting. In M. Bornstein (Ed.), *Handbook of parenting. Practical issues in parenting* (Vol. 5, pp. 243–267). Mahwah, NJ: Lawrence Erlbaum Associates.
- Crouch, J. L. & Behl, L. E. (2001). Relationships among parental beliefs in corporal punishment, reported stress, and physical child abuse potential. *Child Abuse & Neglect*, 25(3), 413-419. doi:10.1016/s0145-2134(00)00256-8
- Crowell, J. A., & Feldman, S. (1988). Mothers' internal models of relationships and children's behavioral and developmental status: A study of mother – child inter- action. *Child Development*, 59, 1273 – 1285. doi: 10.1111/j.1467-8624.1988.tb01496.x

- De la Puente, C. (2009). *Muestreo probabilístico y no probabilístico*. Editorial Complutense, Madrid: España.
- de Wolff, M. & van IJzendoorn, M.H. (1997). Sensitivity and Attachment: A meta-analysis on parental antecedents of infant attachment. *Child Development*, 68(4), 571-591. doi:10.2307/1132107
- Deater-Deckard, K. (2005). Parenting stress and children's development: Introduction to the special issue. *Infant and Child Development*, 14, 111-115. doi: 10.1002/icd.383
- Delgado, O. (2004) Estado actual de la teoría del Apego. *Revista de Psiquiatría y Psicología del Niño y del Adolescente*, 4 (1); 65-81
- Demers, I., Bernier, A., Tarabulsky, G., & Provost, M. (2010). Mind-mindedness in adult and adolescent mothers: Relations to maternal sensitivity and infant attachment. *International Journal of Behavioral Development*, 34 (6), 539–547. doi: 10.1177/0165025410365802
- DeOliveira, C. A., Moran, G., & Pederson, D. R. (2005). Understanding the link between maternal adult attachment classifications and thoughts and feelings about emotions. *Attachment and Human Development*, 7, 153 – 170. doi:10.1080/14616730500135032
- Díaz-Herrero, A., Brito de la Nuez, A., López Pina, J., Pérez-López, J., & Martínez-Fuentes, M. (2010). Estructura factorial y consistencia interna de la versión española del Parenting Stress Index-Short Form. *Psicothema*, 22(4), 1033-1038
- Elwood, L.S., Hahn, K.S., Olatunji, B.O., & Williams, N.L. (2009). Cognitive vulnerabilities to the development of PTSD: A review of four vulnerabilities and the proposal of an integrative vulnerability model. *Clinical Psychology Review*, 29(1), 87-100. doi: 10.1016/j.cpr.2008.10.002
- Ensink, K., Normandin, L., Target, M., Fonagy, P., Sabourin, S., & Berthelot, N. (2014). Mentalization in children and mothers in the context of trauma: An initial study of the

- validity of the Child Reflective Functioning Scale. *British Journal of Developmental Psychology*, 33(2), 203–217. doi:10.1111/bjdp.12074
- Ensink, K., Normandin, L., Plamondon, A., Berthelot, N., & Fonagy, P. (2016). Intergenerational pathways from reflective functioning to infant attachment through parenting. *Canadian Journal of Behavioral Science / Revue Canadienne Des Sciences Du Comportement*, 48(1), 9–18. doi:10.1037/cbs0000030
- Errázuriz, P., Cerfogli, C., Moreno, G., & Soto, G. (2016). Perception of Chilean Parents on the Triple P Program for Improving Parenting Practices. *Journal of Child and Family Studies*, 25(11), 3440–3449. doi:10.1007/s10826-016-0492-8
- Etzion-Carasso, A., & Oppenheim, D. (2000). Open mother pre-schooler communication: Relations with early secure attachment. *Attachment & Human Development*, 2(3), 347–370. doi:10.1080/14616730010007914
- Farkas, Ch., Carvacho, C., Santelices, P., Mahias, P., Badilla, G., Valloton, C. & Himmel, E. (2012). *Medición de la mentalización del adulto significativo en interacción con niños de 0 a 48 meses: Desarrollo y estudio piloto*. Manuscript submitted to publication
- Fearon, R. M. P., van IJzendoorn, M. H., Fonagy, P., Bakermans-Kranenburg, M. J., Schuengel, C., & Bokhorst, C. L. (2006) In search of shared and non-shared environmental factors in security of attachment: A behavior-genetic study of the association between sensitivity and attachment security. *Developmental psychology*, 42(6), 1026-1040.
- Feeney, J. A. (2004). Transfer of attachment from parents to romantic partners: Effects of individual and relationship variables. *Journal of Family Studies*, 10, 220–238. doi:10.5172/jfs.327.10.2.220

- Feeney, J. A., Hohaus, L., Noller, P., & Alexander, R. (2001). *Becoming parents: Exploring the bonds between mothers, fathers, and their infants*. Cambridge, UK: Cambridge University Press.
- Fischer-Kern, M., Fonagy, P., Kapusta, N.D, Luyten, P., Boss, S., Naderer, A., & Leithner, K. (2013). Mentalizing in female inpatients with major depressive disorder. *Journal of Nervous and Mental Disease*, 201, (3) 202–207. doi: 10.1097/nmd.0b013e3182845c0a
- Fonagy, P. (1999). Points of contact and divergence between psychoanalytic and attachment theories: Is psychoanalytic theory truly different. *Psychoanalytic Inquiry*, 19, 448-480. doi:10.1080/07351699909534264
- Fonagy, P. (2001). *Attachment theory and psychoanalysis*. New York: Other Press.
- Fonagy, P. (2006). The mentalization-focused approach to social development. In J. Allen, J. & Fonagy, P. (Eds.), *Handbook of mentalization-based treatment* (pp.53-100 UK: John Wiley.
- Fonagy, P. & Allison; E. (2012). What is mentalization: The concept and its foundations in developmental research. In N. Midgley & I. Vrouva (Eds.), *Minding the child: Mentalization-base interventions with children, young people and their families* (pp.11-34). NY: Routledge.
- Fonagy, P. & Target, M. (2005). Bridging the transmission gap: An end to an important mystery of attachment research? *Attachment & Human Development*, 7(3), 333-343. doi:10.1080/14616730500269278
- Fonagy, P., & Bateman, A. (2008). The development of borderline personality disorder—A mentalizing model. *Journal of Personality Disorders*, 22(1), 4–21. doi:10.1521/pedi.2008.22.1.4
- Fonagy, P., & Luyten, P. (2009). A developmental, mentalization-based approach to the understanding and treatment of borderline personality disorder. *Development and Psychopathology*, 21 (4), 1355-1381. doi:10.1017/s0954579409990198

- Fonagy, P., & Target, M. (1996). Playing with reality: Theory of mind and the normal development of psychic reality. *International Journal of Psychoanalysis*, 77, 217–234.
- Fonagy, P., & Target, M. (1997). Attachment and reflective function: Their role in self-organization. *Development and Psychopathology*, 9 (4), 679-700. doi:10.1017/s0954579497001399
- Fonagy, P., & Target, M. (1998). Mentalization and the changing aims of child psychoanalysis, *Psychoanalytic Dialogues*, 8 (1) 87-114. doi:10.1080/10481889809539235
- Fonagy, P., Bateman, A. & Bateman, A. (2011). The widening scope of mentalizing: A discussion. *Psychology and Psychotherapy: Theory, Research and Practice*, 84 (1) 98-110 doi: 10.1111/j.2044-8341.2010.02005.x
- Fonagy, P., Bateman, A., & Luyten, P. (2012). Introduction and Overview. In A. Bateman & P. Fonagy (Eds.), *Handbook of Mentalizing in Clinical Health Practice* (pp3-42). EEUU: American Psychiatric Publishing, Inc.
- Fonagy, P., Fearon, P., Steele, M., & Steele, H. (1998). Mentalization as a core component of parental sensitivity. *Infant Behavior and Development*, 21, 66. doi:10.1016/s0163-6383(98)91281-4
- Fonagy, P., Gergely, G., Jurist, E. & Target, M. (2002). *Affect regulation, mentalization and the development of the self*, UK: Karnac Books.
- Fonagy, P., Steele, H., & Steele, M. (1991). Maternal representations of attachment during pregnancy predict the organization of infant-mother attachment at one year of age. *Child Development*, 62, 891-905. DOI:10.1111/j.1467-8624.1991.tb01578.x
- Fonagy, P., Steele, H., Moran, G., Steele, M., & Higgitt, A. (1991). The capacity for understanding mental states: The reflective self in parent and child and its significance for security of attachment. *Infant Mental Health Journal*, 13, 200-217. DOI: 10.1002/1097-0355(199123)12:3<201::AID-IMHJ2280120307>3.0.CO;2-7

- Fonagy, P.; Luyten, P. & Strathearn, L. (2011). Borderline personality disorder, mentalization, and the neurobiology of attachment. *Infant Mental Health Journal*, 32 (1), 47-69. doi:10.1002/imhj.20283
- Fossati, A., Acquarini, E., Feeney, J. A., Borroni, S., Grazioli, F., Giarolli, L. E., ... Maffei, C. (2009). Alexithymia and attachment insecurities in impulsive aggression. *Attachment & Human Development*, 11(2), 165–182. doi:10.1080/14616730802625235
- Fraley, R. C., & Davis, K. E. (1997). Attachment formation and transfer in young adults' close friendships and romantic relationships. *Personal Relationships*, 4, 131–144. DOI: 10.1111/j.1475-6811.1997.tb00135.x
- Fraley, R. C., Niedenthal, P. M., Marks, M., Brumbaugh, C. & Vicary, A. (2006). Adult attachment and the perception of emotional expressions: Probing the hyperactivating strategies underlying anxious attachment. *Journal of Personality*, 74(4), 1163–1190. doi:10.1111/ j.1467-6494.2006.00406.x
- Freud, S. (1911). Formulations on the two principles of mental functioning. In J.Strachey (Ed.), *The standard edition of the complete psychological works of Sigmund Freud* (pp. 67-104). London: Hogarth Press.
- Frith, U., & Frith, C. (2003). Development and neurophysiology of mentalizing. *Philosophical transactions of the royal society B: Biological sciences*, 358 (1431), 459–473. doi:10.1098/rstb.2002.1218
- Gamble, S.A., & Roberts, J.E. (2005). Adolescents' perception of primary caregivers and cognitive style: the roles of attachment security and gender. *Cognitive Therapy and Research*, 29, 123-141. doi:10.1007/s10608-005-3160-7
- Gara, M.A., Allen, L.A., Herzog, E.P., & Woolfolk, R.L. (2000). The abused child as parent: The structure and content of physically abused mothers' perceptions of their babies. *Child Abuse & Neglect*, 24(5), 627-639. doi: 10.1016/s0145-2134(00)00130-7
- George, C., Kaplan, N., & Main, M. (1996[1985]). *The Adult Attachment Interview*.

Unpublished manuscript, University of California, Berkeley, CA.

- Gergely, G., & Watson, J. (1996). The social biofeedback model of parental affect-mirroring. *International Journal of Psychoanalysis*, 77, 1181-1212.
- Gergely, G., Nadasdy, Z., Csibra, G., & Biro, S. (1995). Taking the intentional stance at 12 months of age. *Cognition*, 56, 165–193. doi:10.1016/0010-0277(95)00661-h
- Gillath, O., Shaver, P. R., & Mikulincer, M. (2005). An attachment-theoretical approach to compassion and altruism. In P. Gilbert (Ed.), *Compassion: Conceptualizations, research and use in psychotherapy* (pp. 121–147). London: Routledge.
- Goodman, S. H., Rouse, M. H., Connell, A. M., Broth, M. R., Hall, C. M., & Heyward, D. (2011). Maternal Depression and Child Psychopathology: A Meta-analytic Review. *Clinical Childhood and Family Psychology Review*, 14(1), 1–27. doi:10.1007/s10567-010-0080-1
- Gottman, J. M., & Declaire, J. (1998). *Raising an emotionally intelligent child*. New York: Simon & Schuster.
- Gentzler, A. L., Kerns, K. A. & Keener, E. (2010). Emotional reactions and regulatory responses to negative and positive events: Associations with attachment and gender. *Motive and Emotion*, 34, 78–92. doi:10.1007/s11031-009-9149-x
- Griesenberger, J. F., Kelly, K., & Slade, A. (2005). Maternal reflective functioning, mother-infant affective communication, and infant attachment: exploring the link between mental states and observed caregiving behavior in the intergenerational transmission of attachment. *Attachment & Human Development*, 7(3), 299-311. doi: 10.1080/14616730500245963
- Ha, C., Sharp, C., Ensink, K., Fonagy, P., & Cirino, P. (2013). The measurement of reflective function in adolescents with and without borderline traits. *Journal of Adolescence*, 36 (6), 1215–1223. doi:10.1016/j.adolescence.2013.09.008

- Hay, D. F., Nash, A., Caplan, M., Ishikawa, F., & Vespo, J. E. (2011). The emergence of gender differences in physical aggression in the context of conflict between young peers. *British Journal of Developmental Psychology*, 29, 158–175. doi:10.1111/j.2044-835x.2011.02028.x
- Hankin, B. L., & Abramson, L. Y. (2001). Development of gender differences in depression: An elaborated cognitive vulnerability-transactional stress theory. *Psychological Bulletin*, 127(6), 773–796. doi:10.1037/0033-2909.127.6.773
- Hazan, C. & Shaver, P. R. (1987). Romantic love conceptualized as an attachment process. *Journal of Personality and Social Psychology*, 52, 511-524. DOI:10.1037/0022-3514.52.3.511
- Hazan, C. & Zeifman, D. (1994). Sex and the psychological tether. In K. Bartholomew and D. Perlman, *Advances in personal relationships: Attachment processes in adulthood* (Vol. 5, pp. 151-177). London: Jessica Kingsley.
- Hazan, C. & Zeifman, D. (1999). Pair-bonds as attachments: Evaluating the evidence. In J. Cassidy and P. R. Shaver, *Handbook of attachment: Theory, research, and clinical applications* (pp. 336-354). New York: Guildford Press.
- Heinrichs, M., & Domes, G. (2008). Neuropeptides and social behavior: Effects of oxytocin and vasopressin in humans. *Progress in Brain Research*, 170, 337–350. doi:10.1016/s0079-6123(08)00428-7
- Hesse, E. & Main, M. (2006). Frightened, threatening, and dissociative parental behavior in low- risk samples: Description, discussion, and interpretations. *Development and Psychopathology*, 18(2), 309-343. doi: 10.1017/S0954579406060172
- Holmes, J. (2006) Mentalizing from a psychoanalytic perspective: What's new? In. Allen, J. &

- Fonagy, P. (Eds.), *Handbook of mentalization-based treatment* (pp.31-51). UK: Wiley & Sons Ltd.
- Holt, S., Buckley, H., & Whelan, S. (2008). The impact of exposure to domestic violence on children and young people: A review of the literature. *Child Abuse & Neglect*, 32(8), 797-810. doi: 10.1016/j.chiabu.2008.02.004
- Huth-Bocks, A. C., Muzik, M., Beeghly, M., Earls, L., & Stacks, A. M. (2014). Secure base scripts are associated with maternal parenting behavior across contexts and reflective functioning among trauma-exposed mothers. *Attachment & Human Development*, 16(6), 535–556. doi:10.1080/14616734.2014.967787
- Isabella, R. A. (1993). Origins of Attachment: Maternal Interactive Behavior across the First Year. *Child Development*, 64(2), 605-621. doi:10.2307/1131272
- Jackson, A. P., Brooks-Gunn, J., Huang, C. C., & Glassman, M. (2000). Single mothers in low-income jobs: Financial strain, parenting, and preschoolers' outcomes. *Child Development*, 71(5), 1409-1423. doi: 10.1111/1467-8624.00236
- Jewell, T., Collyer, H., Gardner, T., Tchanturia, K., Simic, M., Fonagy P. & Eisler, I. (2016). Attachment and mentalization and their association with child and adolescent eating pathology: A systematic review. *International Journal of Eating Disorders*, 49, 354-373. doi:10.1002/eat.22473
- Johnson, S. C., Dweck, C. S., & Chen, F. S. (2007). Evidence for infants' internal working models of attachment. *Psychological Science*, 18, 501–502. doi: 10.1111/j.1467-9280.2007.01929.x
- Jones, J., Nilsson, Y. (2009) Reflecting around the functions behind depression. A correlational study of depression, mentalization and attachment. Thesis dissertation.

- Karavasilis L, Doyle A B, Markiewicz D. (2003). Associations between parenting style and attachment to mother in middle childhood and adolescence. *International Journal of Behavioral Development*, 27, 153-164. doi:10.1080/0165025024400015
- Karlen, R. (2004). La disociación y el diálogo infanto-parental: Una perspectiva longitudinal a partir de la investigación sobre apego. *Revista Internacional de Psicoanálisis*, 17. Retrived from <http://www.aperturas.org/articulos.php?id=0000290&a=La-disociacion-y-el-dialogo-infanto-parental-una-perspectiva-longitudinal-a-partir-de-la-investigacion-sobre-el-apego>
- Katznelson, H. (2014). Reflective functioning: A review. *Clinical Psychology Review*, 34(2), 107–117. doi:10.1016/j.cpr.2013.12.003
- Laplanche, J. & Pontalis, J-B. (1973) *The Language of Psychoanalysis*. London: Hogarth Press.
- Layzer, J. I., Goodson, B. B., Bernstein, L., & Price, C. (2001). National evaluation of family support programs (Vol. A): The meta-analysis. Cambridge, MA: Abt Associates.
- Lecours, S., & Bouchard, M. A. (1997). Dimensions of mentalization: Outlining levels of psychic transformation. *International Journal of Psychoanalysis*, 78, 855–875.
- Leslie, A. M. (1994). TOMM, ToBy, and agency: Core architecture and domain specificity. In L. Hirschfeld & S. Gelman (Eds.), *Mapping the mind: Domain specificity in cognition and culture* (pp. 119–148). New York: Cambridge University Press.
- Lieberman, M.D. (2007). Social cognitive neuroscience: A review of core processes. *Annual Review of Psychology*, 58, 259–289. doi:10.1146/annurev.psych.58.110405.085654
- Lovejoy, M. C., Graczyk, P. A., O'Hare, E., & Neuman, G. (2000). Maternal depression and parenting behavior. *Clinical Psychology Review*, 20 (5), 561–592. DOI:10.1016/s0272-7358(98)00100-7

- Luyten, P., & Fonagy P. The neurobiology of mentalizing. *Personality Disorders* 6(4), 366–79. <https://doi.org/10.1037/per0000117> PMID: 26436580
- Luyten P., Mayes, L. C., Nijssens, L., & Fonagy, P. (2014). *The parental reflective functioning questionnaire: Development and preliminary validation*, Manuscript submitted for publication.
- Luyten, P., Mayes, L. C., Nijssens, L., & Fonagy, P. (2017). The parental reflective functioning questionnaire: Development and preliminary validation. *Plos One*, 12(5), e0176218. doi:10.1371/journal.pone.0176218
- Luyten, P., Mayes, L. C., Sadler, L., Fonagy, P., Nicholls, S., et al. (2009). Manual for the Parental Reflective Functioning Questionnaire-1 (PRFQ-1). Unpublished manual, Yale Child Study Center, New Haven, CT.
- Lyons-Ruth K., Bronfman E., Parsons E. (1999). Maternal frightened, frightening, or atypical behavior and disorganized infant attachment patterns. *Monographs of Society Research in Child Development*, 64 (3), 67-97. doi:67–96 10.1111/1540-5834.00034
- Main, M. (1991). Metacognitive knowledge, metacognitive monitoring, and singular (coherent) vs. multiple (incoherent) models of attachment: Findings and directions for future research. In C. M. Parkes, J. Stevenson-Hinde, & P. Marris (Eds.), *Attachment across the life cycle* (pp. 127–159). London: Tavistock-Routledge.
- Main, M. (1996). Introduction to the special section on Attachment and Psychopathology: 2. Overview of the Field of Attachment. *Journal of Consulting and Clinical Psychology*, 64 (2), 237-243. doi:10.1037/0022-006x.64.2.237.
- Main, M., & Hesse, E. (1990). Parents' unresolved traumatic experiences are related to infant disorganized attachment status: Is frightened and/or frightening parental behavior the linking mechanism? In M. T. Greenberg, D. Cicchetti, & E. M. Cummings (Eds.), *Attachment in the preschool years: Theory, research, and intervention* (pp. 161– 182). Chicago: University of Chicago Press.

- Main, M. & Solomon, J. (1986). Discovery of insecure-disorganized/disoriented attachment pattern. In: B. Brazelton & M.W. Yogman (Eds.), *Affective Development in Infancy* (95-124). Westport, CT: Ablex Publishing.
- Markiewicz D, Lawford H, Doyle AB, Haggart, N. (2006). Developmental differences in adolescents' and young adults' use of mothers, fathers, best friends, and romantic partners to fulfill attachment needs. *Journal of Youth and Adolescence*, 35, 127-140. doi:10.1007/s10964-005-9014-5
- Martins, C. & Gaffian, E.A. (2000). Effects of Early Maternal Depression on Patterns of Infant- Mother Attachment: A meta-analytic Investigation. *Journal of Child Psychology & Psychiatry*, 41(6), 737-746 doi: 10.1017/s0021963099005958
- Marty, P. (1991) *Mentalization et Psychosomatique*. Paris: Laboratoire Delagrangue.
- Mayes, L.C. (2006). Arousal regulation, emotional flexibility, medial amygdala function, and the impact of early experience: Comments on the paper of Lewis et al. *Annals of the New York Academy of Sciences*, 1094, 178–192. doi:10.1196/annals.1376.018
- Mayseless, O., & Scher, A. (2000). Mother's attachment concerns regarding spouse and infant's temperament as modulators of maternal separation anxiety. *Journal of Child Psychology and Psychiatry*, 41, 917 – 925. doi: 10.1017/s0021963099006113
- MacDonald, K., Thomas, M. L., MacDonald, T. M., & Sciolla, A. F. (2014). A Perfect Childhood? Clinical Correlates of Minimization and Denial on the Childhood Trauma Questionnaire. *Journal of Interpersonal Violence*, 30(6), 988–1009. doi:10.1177/0886260514539761
- McElwain, N. L., & Booth-LaForce, C. (2006). Maternal sensitivity to infant distress and nondistress as predictors of infant-mother attachment security. *Journal of Family Psychology*, 20(2), 247-255. doi:10.1037/0893-3200.20.2.247

- McMahon, C. A., & Meins, E. (2012). Mind-mindedness, parenting stress, and emotional availability in mothers of preschoolers. *Early Childhood Research Quarterly*, 27(2), 245-252. doi:10.1016/j.ecresq.2011.08.002
- Meins, E., & Fernyhough, C. (2010). Mind-mindedness coding manual, version 2.0. Unpublished manuscript, Durham University, Durham, UK.
- Meins, E., Fernyhough, C., Arnott, B., Leekam, S. R. & Turner, M. (2011). Mother- versus infant-centered correlates of maternal mind-mindedness in the first year of life. *Infancy*, 16, 137-165. doi: 10.1111/j.1532-7078.2010.00039.x.
- Meins, E., Centifanti, L. C. M., Fernyhough, C., & Fishburn, S. (2013). Maternal Mind-Mindedness and Children's Behavioral Difficulties: Mitigating the Impact of Low Socioeconomic Status. *Journal of Abnormal Child Psychology*, 41(4), 543–553. doi:10.1007/s10802-012-9699-3
- Mikulincer, M., Shaver, P. R., Gillath, O., & Nitzberg, R. A. (2005). Attachment, caregiving, and altruism: Boosting attachment security increases compassion and helping. *Journal of Personality and Social Psychology*, 89(5), 817–839. doi:10.1037/0022-3514.89.5.817
- Mikulincer, M., & Shaver, P. (2007). Attachment in adulthood: Structure, dynamics, and change. New York, NY US: Guilford Press.
- Mikulincer, M., Shaver, P. (2012). Adult Attachment orientations and relationship processes. *Journal of Family Theory & Review*, 4, 259–274. doi: 10.1111/j.1756-2589.2012.00142.x
- Ministerio de Salud-MINSAL (2011). Encuesta Nacional de Salud.
- Mohaput, H., Holgersen, H., Binder, P., & Nielsen, G. (2006). Affect consciousness or mentalization? A comparison of two concepts with regard to affect development and affect regulation. *Scandinavian Journal of Psychology*, 47(4), 237–244. doi:10.1111/j.1467-9450.2006.00513.x

- Neisser, U. (1991). Two perceptually given aspects of the self and their development. *Developmental Review, 11* (3), 197–209. doi: 10.1016/0273-2297(91)90009-d
- Nelson, J. A., O'Brien, M., Blankson, A. N., Calkins, S. D., & Keane, S. P. (2009). Family stress and parental responses to children's negative emotions: Tests of the spillover, crossover, and compensatory hypotheses. *Journal of Family Psychology, 23*(5), 671–679. doi:10.1037/a0015977
- Nievar, M.A. & Becker, B.J. (2008). Sensitivity as a Privileged Predictor of Attachment: A second Perspective on De Wolff and van IJzendoorn's Meta-analysis. *Social Development, 17*(1), 102-114. doi: 10.1111/j.1467-9507.2007.00417.x
- Nygren, M., Carstensen, J., Ludvigsson, J., & Frostell, A. S. (2012). Adult attachment and parenting stress among parents of toddlers. *Journal of Reproductive and Infant Psychology, 30*, 289–302. doi:10.1080/02646838.2012.717264
- Obegi, J. H., Morrison, T. L., & Shaver, P. R. (2004). Exploring intergenerational transmission of attachment style in young female adults and their mothers. *Journal of Social and Personal Relationships, 21*, 625-638. doi: 10.1177/0265407504045891
- Ordway, M., Sadler, L., Dixon, J., Close, N., Mayes, L., y Slade, A. (2013). Lasting effects of an interdisciplinary home visiting program on child behavior: Preliminary follow-up results of a randomized trial. *Journal of Pediatric Nursing, 29*, 3-13. doi: 10.1016/j.pedhc.2014.12.002
- Ostler, T., Bahar, O. S., & Jessee, A. (2010). Mentalization in children exposed to parental methamphetamine abuse: Relations to children's mental health and behavioral outcomes. *Attachment & Human Development, 12* (3), 193-207. doi: 10.1080/14616731003759666
- Pajulo M, Pyykkonen N, Kalland M, Sinkkonen J, Helenius H, Punamaki R-L, Suchman N. (2012). Substance abusing mothers in residential treatment with their babies: Importance

- of pre- and postnatal maternal reflective functioning. *Infant Mental Health Journal*, 33(1), 70–81. doi: 10.1002/imhj20342.
- Pietromonaco, P.R. & Barrett, L.F. (2000). The internal working models concept: What do we really know about the self in relation to others? *Review of General Psychology*, 4(2), 155-175. doi:10.1037/1089-2680.4.2.155
- Pinquart, M., & Teubert, D. (2010). Effects of parenting education with expectant and new parents: A meta-analysis. *Journal of Family Psychology*, 24(3), 316–327. doi:10.1037/a0019691
- Prior, V., & Glaser, D. (2006). What is attachment? In *Understanding attachment and attachment disorders: Theory, evidence and practice*, (pp.15-23) UK: Jessica Kingsley Publishers.
- Prinz, R. J., & Miller, G. E. (1994). Family-based treatment for childhood antisocial behavior: Experimental influences on dropout and engagement. *Journal of Consulting and Clinical Psychology*, 62(3), 645–650. doi:10.1037/0022-006x.62.3.645
- Raval, V., Goldberg, S., Atkinson, L., Benoit, D., Myhal, N., Poulton, L., & Zwiers, M. (2001). Maternal attachment, maternal responsiveness and infant attachment. *Infant Behavior and Development*, 24(3), 281–304. doi:10.1016/s0163-6383(01)00082-0
- Rescorla, L., Achenbach, T., Ivanova, M., Harder, V., Otten, L., Bilenberg, N., Gudrun, B. et al. (2011). International comparisons of behavioral and emotional problems in preschool children: Parents' reports from 24 societies. *Journal of Clinical Child & Adolescent Psychology*, 40 (3), 456-467. doi: 10.1080/15374416.2011.563472
- Rholes, W. S., Simpson, J. A., & Friedman, M. (2006). Avoidant Attachment and the Experience of Parenting. *Personality and Social Psychology Bulletin*, 32, 275. doi:10.1177/0146167205280910
- Rholes, W. S., Simpson, J. A., Blakely, B. S., Lanigan, L., & Allen, E. A. (1997). Adult attachment styles, the desire to have children, and working models of parenthood. *Journal*

of Personality, 65, 357–385. DOI:10.1111/j.1467-6494.1997.tb00958.x

Rholes, W.S., Simpson, J.A., & Blakely, B. (1995). Adult attachment styles and mothers' relationships with their young children. *Personal Relationships*, 2 (1), 35-54. DOI: 10.1111/j.1475-6811.1995.tb00076.x

Robertson, J., & Bowlby, J. (1952). Responses of young children to separation from their mothers. *Courier of the International Children's Center, Paris*, 2, 131–140.

Rodrigo, M. J., Martín, J. C., Cabrera, E. & Máiquez, M. L. (2009). Las competencias parentales en contextos de riesgo psicosocial. *Intervención Psicosocial*, 18(2), 113-120. Retrived from <http://www.redalyc.org/pdf/1798/179814021003.pdf>

Rosenblum, K. L., McDonough, S. C., & Sameroff, A. J. (2008). Reflection in thought and action: Maternal parenting reflectivity predicts mind-minded comments and interactive behavior. *Infant Mental Health Journal*, 29 (4), 362-376 doi: 10.1002/imhj.20184

Rostad, W.L. & Whitaker, D.J. (2016). The association between reflective functioning and parent-child relationship quality. *Journal of Child and Family Studies*, 25(7), 2164–277. doi:10.1007/s10826-016-0388-7

Rubenstein, C., & Shaver, P. R. (1982). The experience of loneliness. In L. A. Peplau & D. Perlman (Eds.), *Loneliness: A sourcebook of current theory, research, and therapy* (pp. 206–223). New York: Wiley.

Ruffman, T., Slade, L. & Crowe, E. (2002). The relation between children's and mother's mental state language and theory-of-mind understanding. *Child Development*, 73 (3), 734-751. doi: 10.1111/1467-8624.00435

- Rutherford, H. J. V., Goldberg, B., Luyten, P., Bridgett, D. J., & Mayes, L. C. (2013). Parental reflective functioning is associated with tolerance of infant distress but not general distress: Evidence for a specific relationship using a simulated baby paradigm. *Infant Behavior and Development*, 36 (4), 635–641. doi:10.1016/j.infbeh.2013.06.008
- Sable, P. (2007). Accentuating the positive in adult attachments. *Attachment and Human Development*, 9 (4), 361–374. doi:10.1080/14616730701711573
- Sagi-Schwartz, A., van IJzendoorn, M.H., Grossmann, K.E., Joels, T., Scharf, M., Koren-Karie, N., & Alkalay, S. (2003). Attachment and traumatic stress in female holocaust child survivors and their daughters. *The American Journal of Psychiatry*, 160 (6), 1086-1092. doi: 10.1176/appi.ajp.160.6.1086
- Santelices, M. P., Olhaberry, M., Zapata, J., & Valdés, C. Exploring the factor structure of the Parental Reflective Functioning in a Chilean Sample. *In process*.
- Santelices, M.P., Pérez, F., Rivera, C, Gómez, A., Farkas, Ch. (2012). Salud mental materna y adaptación del preescolar al jardín infantil en Chile. *Revista Argentina de Clínica Psicológica*, 21, (1), 75-84.
- Santelices, M.P., Zapata, J., Fischersworring, M.; Pérez, F., Mata, C., Barco, B., Olhaberry, M., y Farkas, Ch. (2016). Intervenciones basadas en la Mentalización para padres y educadores: Una revisión sistemática. *Terapia Psicológica*, 31 (1), 71-80. Doi: 10.4067/s0718-48082016000100008
- Schachner, D. A., Shaver, P. R., & Mikulincer, M. (2005). Patterns of nonverbal behavior and sensitivity in the context of attachment relationships. *Journal of Nonverbal Behavior*, 29, 141 – 169. doi:10.1007/s10919-005-4847-x
- Schaffer, H. R., & Emerson, P. E. (1964). The development of social attachments in infancy. *Monographs of the Society for Research in Child Development*, 1-77. doi:10.2307/1165727

- Schechter, D. S., Coots, T., Zeanah, C. H., Davies, M., Coates, S. W., Trabka, K. A., et al. (2005). Maternal mental representations of the child in an inner-city clinical sample: Violence-related posttraumatic stress and reflective functioning. *Attachment & Human Development*, 7(3), 313–331. doi: 10.1080/14616730500246011.
- Schimmenti, A., & Bifulco, A. (2013). Linking lack of care in childhood to anxiety disorders in emerging adulthood: The role of attachment styles. *Child and Adolescent Mental Health*, 20, 1, 41–48. DOI:10.1111/camh.12051
- Sette, G., Coppola, G., & Cassiba, R. (2015). The transmission of attachment across generations: The state of art. *Scandinavian Journal of Psychology*, 56,, 315–326. doi:10.1111/sjop.12212
- Shah, P. E., Fonagy, P., & Strathearn, L. (2010). Is attachment transmitted across generations? The plot thickens. *Clinical Child Psychology and Psychiatry*, 15(3), 329-345. doi:10.1177/1359104510365449
- Sharp, C. & Fonagy, P. (2008). The Parent's capacity to treat the child as a psychological agent: Constructs, measures and implications for developmental psychopathology. *Social Development*, 17, 3, 737–754. DOI: 10.1111/j.1467-9507.2007.00457.x
- Sharp, C., Fonagy, P., & Goodyer, I. M. (2006). Imagining your child's mind: Psychosocial adjustment and mothers' ability to predict their children's attributional response styles. *British Journal of Developmental Psychology*, 24, 197–214 DOI:10.1348/026151005X82569
- Shaver, P. R., Hazan, C., & Bradshaw, D. (1988). Love as attachment: The integration of three behavioral systems. In R. J. Sternberg & M. Barnes (Eds.), *The psychology of love* (pp. 68–99). New Haven, CT: Yale University Press.

- Sherman, L.; Rice, K. & Cassidy, J. (2015). Infant capacities related to building internal working models of attachment figures: A theoretical and empirical review. *Developmental Review*, 37, 109-141. doi:10.1016/j.dr.2015.06.001
- Sidebotham, P. (2001). Culture, stress and the parent child relationship: A qualitative study of parents' perceptions of parenting. *Child: Care, Health and Development*, 27, 485. doi: 10.1046/j.1365-2214.2001.00229.x
- Sidor, A., Fischer, C., & Cierpka, M. (2015). The effects of the early prevention program "Nobody slips through the net": A longitudinal controlled study in an at-risk sample. *Mental Health & Prevention*, 3(3), 103–116. doi:10.1016/j.mhp.2015.07.003
- Simpson, J. A. (1990). Influence of attachment styles on romantic relationships. *Journal of Personality and Social Psychology*, 59(5), 971-980. doi:10.1037/0022-3514.59.5.971
- Simpson, J. A., Rholes, W. S., & Nelligan, J. S. (1992). Support seeking and support giving within couples in an anxiety-provoking situation: The role of attachment styles. *Journal of Personality and Social Psychology*, 62(3), 434–446. doi:10.1037/0022-3514.62.3.434
- Simpson, J.A. & Rhole, W. S. (2012). Adult attachment orientations, stress, and romantic relationships. In Davies, P. & Plants, A. (Eds.), *Advances in experimental social psychology*, (pp. 279-328). Burlington: Academic Press.
- Simpson, J. A., Winterheld, H. A., Rholes, W. S., & Orina, M. M. (2007). Working models of attachment and reactions to different forms of caregiving from romantic partners. *Journal of Personality and Social Psychology*, 93(3), 466-477. doi: 10.1037/0022- 3514.93.3.466.
- Slade, A. (2005). Parental reflective functioning: An introduction. *Attachment & Human Development*, 7(3), 269–281. doi:10.1080/14616730500245906
- Slade, A. (2006). Reflective Parenting Programs: Theory and Development. *Psychoanalytic Inquiry*, 26(4), 640–657. doi:10.1080/07351690701310698

- Slade, A., Grienberger, J., Bernbach, E., Levy, D., & Locker, A. (2005). Maternal reflective functioning, attachment, and the transmission gap: A preliminary study. *Attachment & Human Development*, 7(3), 283–298. doi:10.1080/14616730500245880
- Smith, C. E., & Wu, I. (2016). Mother–Child Conversations About Thoughts, Desires, and Emotions. In P. Davis-Kean & S. Tang (Eds.), *Socializing Children Through Language*, (pp. 49–80). Elsevier Science. doi:10.1016/b978-0-12-803624-2.00003-5
- Snell, W. E., Jr., Overbey, G. A., & Brewer, A. L. (2005). Parenting perfectionism and the parenting role. *Personality and Individual Differences*, 39, 613 – 624. doi:10.1016/j.paid.2005.02.006
- Sroufe, L. A., & Waters, E. (1977). Heart rate as a convergent measure in clinical and developmental research. *Merrill Palmer Quarterly*, 23, 3-27.
- Stacks, A. M., Muzik, M., Wong, K., Beeghly, M., Huth-Bocks, A., Irwin, J. L., & Rosenblum, K. L. (2014). Maternal reflective functioning among mothers with childhood maltreatment histories: Links to sensitive parenting and infant attachment security. *Attachment & Human Development*, 16(5), 515–533. doi:10.1080/14616734.2014.935452
- Steele, H., & Steele, M. (2001). Attachment and psychoanalysis: Time for a reunion. *Social Development*, 7(1), 92-119. doi:10.1111/1467-9507.00053
- Steele, M., Steele, H., & Murphy, A. (2010). The adult attachment interview and relational trauma: Implications for parent-infant psychotherapy. In T. Baradon (Ed.), *Relational trauma in infancy: Psychoanalytic, attachment and neuropsychological contributions to parent-infant psychotherapy*, (pp. 180-194). London: Routledge.

- Strathearn, L. (2007). Exploring the neurobiology of attachment, In L., Mayes, P., Fonagy & M., Target (Eds.), *Developmental Science and Psychoanalysis: Integration and Innovation* (pp. 117-130). UK: Karnac Books.
- Tarabulsy, G. M., Bernier, A., Provost, M. A., Maranda, J., Larose, S., Moss, E., et al. (2005). Another look inside the gap: Ecological contributions to the transmission of attachment in a sample of adolescent mother–infant dyads. *Developmental Psychology*, *41*, 212 – 224. doi:10.1037/0012-1649.41.1.212
- Toth, S. L., Rogosch, F. A., & Cicchetti, D. (2009). Attachment-theory-informed intervention and reflective functioning in depressed mothers. In H. Steele, & M. Steele (Eds.), *Clinical applications of the adult attachment interview*, (pp. 154–172). New York, NY: Guilford Press.
- Trinke, S. J., & Bartholomew, K. (1997). Hierarchies of attachment relationships in young adulthood. *Journal of Social and Personal Relationships*, *14*, 603–625. DOI:10.1177/0265407597145002
- Valdéz, C. & Errázuriz. (2012). Salud mental en Chile: El pariente pobre del sistema de Salud. *Claves de Políticas Públicas*, *11*.
- van IJzendoorn, M. H., Schuengel C., & Bakermans-Kranenburg, M. J. (1999). Disorganized attachment in early childhood: Meta-analysis of precursors, concomitants, and sequelae. *Development and Psychopathology*, *11*(2), 225–250. doi:10.1017/s0954579499002035
- van IJzendoorn, M.H. (1995.) Adult attachment representations, parental responsiveness, and infant attachment: A meta-analysis on the predictive validity of the adult attachment interview. *Psychological Bulletin*, *117*(3), 387-403. doi:10.1037/0033-2909.117.3.387
- Vásquez, C., & Sanz, J. (1999). Fiabilidad y validez de la versión española del Inventario para

- la Depresión de Beck de 1978 en pacientes con trastornos psicológicos. *Clínica y Salud*, 10(1), 59-81. doi:10.6018/analesps.29.1.130532
- Vásquez, K., Durik, A. M., & Hyde, J. S. (2002). Family and work: Implications of adult attachment styles. *Personality and Social Psychology Bulletin*, 28, 874-886. doi:10.1177/014616720202800702
- Vicary, A. M., & Fraley, R. C. (2007). Choose your own adventure: Attachment dynamics in a simulated relationship. *Personality and Social Psychology Bulletin*, 33, 1279-1291. doi:10.1177/0146167207303013
- Vicente, B., Saldivia, S., de la Barra, F., Kohn, R., Pihan, R., Valdivia, M...Melipillan, R. (2012). Prevalence of child and adolescent mental disorders in Chile: A community epidemiological study. *Journal of Child Psychology and Psychiatry*, 53(10), 1026–1035. doi:10.1111/j.1469-7610.2012.02566.x
- Volling, B. L., Notaro, P. C., & Larsen, J. (1998). Adult attachment styles: Relations with emotional well- being, marriage, and parenting. *Family Relations*, 47, 355–367. doi:10.2307/585266
- Walker, S. (2005). Gender differences in the relationship between young children's peer-related social competence and individual differences in Theory of Mind. *The Journal of Genetic Psychology*, 166 (3), 297-312 doi: 10.3200/GNTP.166.3.297-312
- Ward, M. & Carlson, E.A. (1995). Associations among adult attachment representations, maternal sensitivity, and infant-mother attachment in a sample of adolescent mothers. *Child Development*, 66(1), 69-679. doi:10.2307/1131191
- Waters, E. & Cummings, E. (2000). A secure base from which to explore close relationships. *Child Development*, 71, 164-172. doi:10.1111/1467-8624.00130
- Waters, E., Hamilton, C. E., & Weinfield, N. S. (2000). The stability of attachment security

- from infancy to adolescence and early adulthood: General introduction. *Child Development*, 71(3), 678–683. doi:10.1111/1467-8624.00175
- Waters, E., Merrick, S. Treboux, D., Crowell, J., & Albersheim, L. (2000). Attachment security in infancy and early adulthood: A twenty-year longitudinal study. *Child Development*, 71, 684-689. doi:10.1111/1467-8624.00176
- Wei, M., Russell, D. W., Mallinckrodt, B., & Vogel, D. L. (2007). The Experiences in Close Relationship Scale (ECR)-Short Form: Reliability, validity, and factor structure. *Journal of Personality Assessment*, 88(2), 187–204. doi:10.1080/00223890701268041
- Weinfield, N.S., Sroufe, L.A., & Egeland B. (2000). Attachment from infancy to early adulthood in a high-risk sample: continuity, discontinuity, and their correlates. *Child Development*, 71(3), 695-702. DOI:10.1111/1467-8624.00178
- Weinfield, N.S., Sroufe, L.A., Egeland B. & Carbon, E. (2008). Individual differences in infant-caregiver attachment: Conceptual and empirical aspects of security. In J. Cassidy & P. Shaver (Eds.), *Handbook of attachment: Theory, research and clinical applications*. The Guilford Press: New York.
- Weiss, R. (1998). A taxonomy of relationships. *Journal of Social and Personal Relationships*, 15, 671-683. DOI:10.1177/0265407598155006
- Wellman, H. M. (1993). Early understanding of mind: The normal case. In S. Baron–Cohen, H. Tager–Flusberg, & D. J. Cohen (Eds.), *Understanding other minds: Perspectives from autism* (pp. 40–58). New York: Oxford University Press.
- WHO. (nd). *Mental Health. Chile: Situational analysis*. Retrieved from http://www.who.int/mental_health/policy/country/chile/en/
- Widom, C.S. & Shepard, R.L. (1996). Accuracy of adult recollections of childhood victimization: Part 1. Childhood physical abuse. *Psychological Assessment*, 8(4), 412-421. doi: 10.1037/1040-3590.8.4.412
- Willinger, U., Diendorfer-Radner, G., Willnauer, R., Jorgl, G. & Hager, V. (2005). Parenting

stress and parental bonding. *Behavioral Medicine*, 31(2), 63-69. doi: 10.3200/bmed.31.2.63-72

Winnicott, D. W. (1956). Primary maternal preoccupation. In *Collected papers, through pediatrics to psychoanalysis* (pp. 300-305). London: Tavistock Publications.

Winnicott, D.W. (1962). Ego-integration in child development. In *The maturational processes and the facilitating environment*. London: Hogarth Press and the Institute of Psycho-Analysis.

Winnicott, D. W. (1967). Mirror-role of the mother and family in child development. In P. Lomas (Ed.), *The Predicament of the Family: A Psycho-Analytical Symposium* (. London: Hogarth

Wolfe, D. A., Scott, K., Wekerle, C., & Pittman, A.L. (2001). Child maltreatment: Risk of adjustment problems and dating violence in adolescence. *Journal of the American Academy of Child & Adolescent Psychiatry*, 40(3), 282–289. doi:10.1097/00004583-200103000-00007

Woodward, A. (2003). Infants' developing understanding of the link between looker and object. *Developmental Science*, 6, 297–311. doi: 10.1111/1467-7687.00286

Yarbro, J., Mahaffey, B., Abramowitz, J., & Kashdan, T. B. (2013). Recollections of parent–child relationships, attachment insecurity, and obsessive–compulsive beliefs. *Personality and Individual Differences*, 54(3), 355–360. doi:10.1016/j.paid.2012.10.003

Zeifman, D. & Hazan, C. (2008). Pair bonds as attachments: Re-evaluating the evidence. In J. Cassidy & P. R. Shaver, *Handbook of attachment: Theory research, and clinical applications*, 2nd ed. (pp. 436-455), New York, NY: Guilford Press.

Ziv, M., Smadja, M.-L., & Aram, D. (2013). Mothers' mental-state discourse with preschoolers during storybook reading and wordless storybook telling. *Early Childhood Research Quarterly*, 28(1), 177–186. doi:10.1016/j.ecresq.2012.05.005

Zobel, I., Werden, D., Linster, H., Dykieriek, P., Drieling, T., Berger, M., & Schramm, E. (2010). Theory of mind deficits in chronically depressed patients. *Depression and Anxiety*, 27(9), 821–828. doi:10.1002/da.20713

Appendices

APPENDIX 1. Cuestionario de Función Reflexiva Parental (PRFQ-1)

The Parental Reflective Functioning Questionnaire – 1 (PRFQ-1)-2009
Patrick Luyten^{a,b}, Linda Mayes^b, Lois Sadler^{b,c}, Peter Fonagy^d, Sarah Nicholls^b, Michael Crowley^b, Annie Vesper^b, Alethea Mobley^b, Tiffany Stewart^b, Nancy Close^b, & Arietta Slade^{b,e}

PRFQ-1

A continuación, se enlistan una serie de enunciados concernientes a usted y su hijo/a. Lea cada uno y decida qué tanto usted está de acuerdo o no con el enunciado. Utilice las siguientes puntuaciones, 7 si usted está **completamente de acuerdo**; 1 si está **completamente en desacuerdo** y los puntajes del **medio** en caso de que su respuesta sea **neutral** o **no pueda tomar una decisión** al respecto.

COMPLETAMENTE 1 2 3 4 5 6 7
COMPLETAMENTE
EN DESACUERDO
DE ACUERDO

1. Mi hija/hijo y yo podemos sentirnos de diferente manera sobre la misma cosa.							
2. Cuando me enojo con mi hija/hijo siempre se el porqué.							
3. Muchas veces tengo curiosidad por descubrir cómo se siente mi hija/hijo.							
4. Como yo me siento puede afectar cómo entiendo la conducta de mi hija/hijo.							
5. Mi hija/hijo sabe cuando estoy teniendo un mal día y hace cosas para que el día sea peor.							
6. Me gusta pensar sobre las razones que hay detrás de cómo mi hijo/a se comporta y se siente.							
7. Intento ver las situaciones a través de los ojos de mi hija/hijo.							
8. Siempre se porqué mi hija/hijo se comporta como lo hace.							
9. En ocasiones mi hija/hijo se enferma para evitar que yo haga lo que quiero hacer.							
10. Creo que la forma de pensar sobre mi hija/hijo cambiará a través del tiempo.							
11. Mi hija/hijo puede reaccionar a una situación de una manera muy distinta a lo que yo pensaba.							
12. Me cuesta mucho trabajo participar							

activamente en juegos de imaginación y fantasía con mi hija/hijo.							
13. En ocasiones me toma varios intentos lograr entender lo que mi hija/hijo necesita o quiere.							
14. Cuando mi hija/hijo está malhumorado lo hace sólo para molestarme.							
15. Ahora que soy madre/padre, puedo comprender cómo mis padres pudieron haber mal interpretado mis reacciones cuando era una niña/un niño.							
16. No importa qué tan enfermo esté mi hija/hijo, siempre lo puedo tolerar.							
17. La manera que yo veo a mi hija/hijo cambia a medida que yo voy cambiando.							
18. La conducta hacia mi hija/hijo no se puede explicar por como me criaron.							
19. Siempre puedo predecir qué hará mi hija/hijo.							
20. Me pregunto mucho qué estará pensando y sintiendo mi hija/hijo.							
21. A veces la conducta de mi hija/hijo es tan confusa como para molestar en entenderla.							
22. A veces puedo mal interpretar las reacciones de mi hija/hijo.							
23. Cuando mi hija/hijo se porta mal es señal de que no me quiere.							
24. Creo que la forma en que mis padres me criaron influye en cómo yo crío a mi hija/hijo.							
25. Mi hija/hijo llora en presencia de extraños para avergonzarme.							
26. Le pongo atención a lo que mi hija/hijo está sintiendo.							
27. Puedo leer la mente de mi hija/hijo por completo.							
28. Entender el porqué mi hija/hijo actúa de cierta manera me ayuda a no molestarme con él o ella.							
29. Creo que no sirve de nada tratar de adivinar lo que mi hija/hijo siente.							
30. A menudo pienso en cómo me sentía cuando era una/un niña/niño.							
31. Trato de entender las razones por las que mi hija/hijo se porta mal.							
32. Siempre sé lo que quiere mi hija/hijo.							
33. Odio cuando mi hija/hijo llora y/o me							

habla cuando estoy al teléfono con alguien.							
34. Las únicas ocasiones en las que estoy segura de que mi hija/hijo me ama es cuando me está sonriendo.							
35. Estoy segura que mi hija/hijo sabe que lo amo.							
36. La mejor manera de saber que tu hija/hijo te quiere es cuando se comporta correctamente.							
37. El temperamento de mi hija/hijo es lo que es, y hay poco que yo pueda hacer al respecto.							
38. Siempre se el porqué le hago lo que le hago a mi hija/hijo.							
39. En ocasiones me confundo sobre que está sintiendo mi hija/hijo.							

APPENDIX 2. Experiences in Close Relationships/Short Form (ECR-SF)

ECR-S

Las siguientes afirmaciones se refieren a como usted se siente en las relaciones cercanas. Nos interesa saber cómo vive usted **generalmente** las relaciones con personas significativas para usted y con las cuales tiene un alto grado de intimidad; y no sólo lo que le está ocurriendo en una relación particular actual.

Responda a cada afirmación indicando en qué grado está usted de acuerdo o en desacuerdo con ella.

NOTA ACLARATORIA: El siguiente cuestionario utiliza la palabra “**INTIMIDAD**” como un elemento importante de las relaciones cercanas **Esta *intimidad* incluye distintos aspectos como por ejemplo: la cercanía emocional y física, la comunicación, el compromiso mutuo, la privacidad, etc.**

Marque con una X el número que mejor represente su respuesta de acuerdo a la escala que se presenta a la derecha de cada afirmación.

	Totalmente en desacuerdo	Bastante en desacuerdo	Un poco en desacuerdo	Ni desacuerdo / ni acuerdo	Un poco de acuerdo	Bastante de acuerdo	Totalmente de acuerdo
Ítem	1	2	3	4	5	6	7
1.Me ayuda mucho recurrir a las personas cercanas a mí en épocas de crisis.							
2. Necesito que las personas cercanas a mí me reafirmen constantemente que me quieren							

1Wei, M., Russell, D. W., Mallinckrodt, B., & Vogel, D. L. (2007). The experiences in Close Relationship Scale (ECR)-Short Form: Reliability, validity, and factor structure. *Journal of Personality Assessment*, 88, 187-204.

2La presente versión ha sido traducida y adaptada para los propósitos específicos del Núcleo Milenio Intervención Psicológica y Cambio en Depresión, de indagar sobre relaciones cercanas más allá de las relaciones de pareja.

CONTINÚA EN LA PAGINA SIGUIENTE

	Totalmente en desacuerdo	Bastante en desacuerdo	Un poco en desacuerdo	Ni desacuerdo / ni acuerdo	Un poco de acuerdo	Bastante de acuerdo	Totalmente de acuerdo
3. Quiero acercarme afectivamente a las personas que quiero, pero a la vez pongo distancia entre nosotros.							
4. Creo que las personas que quiero no quieren tener tanta intimidad emocional conmigo como a mí me gustaría.							
5. Recorro a personas importantes para mí para muchas cosas, por ejemplo cuando necesito consuelo y tranquilidad							
6. A veces mi deseo de excesiva intimidad asusta a la gente.							
7. Intento evitar establecer demasiada intimidad con las personas cercanas.							
8. Pocas veces me preocupa la idea de ser abandonado.							
9. Frecuentemente converso sobre mis problemas y preocupaciones con personas cercanas.							
10. Me siento frustrado/a si las personas que quiero no están disponibles cuando las necesito.							
11. Me pongo nervioso/a cuando alguien cercano a mí logra demasiada intimidad emocional conmigo.							
12. Me preocupa que el otro no se interese por mí tanto como yo me intereso por él/ella.							

APPENDIX 3. Beck Depression Inventory (BDI)

Proyecto Fondecyt 130786

Folio

BDI

En este cuestionario aparecen varios grupos de afirmaciones. Por favor, lea con atención cada una. A continuación, señale cuál de las afirmaciones de cada grupo describe mejor cómo se ha sentido **DURANTE ESTA ÚLTIMA SEMANA, INCLUIDO EL DIA HOY**. Rodee con un círculo el número que está a la izquierda de la afirmación que haya elegido. Si dentro de un mismo grupo, hay más de una afirmación que considere aplicable a su caso, puede marcarla también. **Asegúrese de leer todas las afirmaciones dentro de cada grupo antes de efectuar la elección.**

A	F
0. No me siento triste 1. Me siento triste 2. Me siento triste continuamente y no puedo dejar de estarlo 3. Ya no puedo soportar esta pena	0. No siento que esté siendo castigado/a 1. Me siento como si fuese a ser castigado/o 2. Siento que me están castigando o que me castigarán 3. Siento que merezco ser castigado/a
B	G
0. No me siento pesimista, ni creo que las cosas me vayan a salir mal 1. Me siento desanimado/a cuando pienso en el futuro 2. Creo que nunca me recuperaré de mis penas 3. Ya no espero nada bueno de la vida, esto no tiene remedio	0. No estoy decepcionado de mí mismo/a. 1. Estoy decepcionado de mí mismo/a. 2. Estoy muy descontento/a conmigo mismo/a 3. Me odio, me desprecio
C	H
0. No me considero fracasado/a 1. Creo que he tenido más fracasos que la mayoría de la gente 2. Cuando miro hacia atrás, sólo veo fracaso tras fracaso 3. Me siento una persona totalmente fracasada	0. No creo ser peor que otras personas 1. Me critico mucho por mis debilidades y errores 2. Continuamente me culpo de todo lo que va mal 3. Siento que tengo muchos y muy graves defectos
D	I
0. Las cosas me satisfacen tanto como antes 1. No disfruto de las cosas tanto como antes 2. Ya nada me llena 3. Estoy harto/a de todo	0. No tengo pensamientos de hacerme daño 1. Tengo pensamientos de hacerme daño, pero no llegaría a hacerlo 2. Siento que estaría mejor muerto/a o que mi familia estaría mejor si yo me muriera 3. Me mataría si pudiera
E	J
0. No me siento culpable 1. Me siento culpable en bastantes ocasiones. 2. Me siento culpable en la mayoría de las ocasiones. 3. Todo el tiempo me siento una persona mala y despreciable	0. No lloro más de lo habitual 1. Ahora lloro más de lo normal 2. Ahora lloro continuamente, no puedo evitarlo 3. Antes podía llorar, ahora no lloro aunque quisiera

K	Q						
0. No estoy más irritable que normalmente 1. Me irrito o enojo con más facilidad que antes 2. Me siento irritado/a todo el tiempo 3. Ya no me irrita ni lo que antes me irritaba	0. No me canso más de lo normal 1. Me canso más fácilmente que antes 2. Cualquier cosa que hago me cansa 3. Estoy demasiado cansado/a para hacer nada						
L	R						
0. No he perdido el interés por los demás 1. Me intereso por la gente menos que antes 2. He perdido casi todo mi interés por los demás 3. Los demás no me importan en absoluto	0. Tengo el mismo apetito que siempre 1. No tengo tan buen apetito como antes 2. Ahora tengo mucho menos apetito 3. He perdido totalmente el apetito						
M	S						
0. Tomo mis decisiones como siempre 1. Estoy inseguro/a de mi mismo/a y evito tomar decisiones 2. Ya no puedo tomar decisiones sin ayuda 3. Ya no puedo tomar decisiones en absoluto	0. No he perdido peso últimamente 1. He perdido más de 2 kilos 2. He perdido más de 5 kilos 3. He perdido más de 8 kilos Estoy bajo dieta para adelgazar: SI NO						
N	T						
0. No me siento con peor aspecto que antes 1. Me preocupa que ahora parezca más viejo/a o poco atractivo/a 2. Creo que se han producido cambios permanentes en mi aspecto que me hacen parecer poco atractivo/a 3. Creo que tengo un aspecto horrible	0. No estoy más preocupado/a por mi estado de salud que lo habitual 1. Estoy preocupado/a por problemas físicos como dolores, molestias, malestar de estómago, o estreñimiento 2. Estoy preocupado/a por mi salud y me es difícil pensar en otra cosa 3. Estoy tan preocupado/a por mis problemas de salud que soy incapaz de pensar en otra cosa						
O	U						
0. Puedo trabajar tan bien como siempre 1. Tengo que hacer un esfuerzo especial para iniciar algo 2. Tengo que obligarme mucho para hacer algo 3. Soy incapaz de hacer algún trabajo	0. No he notado ningún cambio en mi atracción por el sexo 1. Estoy menos interesado/a en el sexo que antes 2. Actualmente me siento mucho menos interesado/a en el sexo 3. He perdido todo mi interés por el sexo						
P							
0. Duermo tan bien como siempre 1. Me despierto más cansado/a por la mañana 2. Me estoy despertando una o dos horas más temprano de lo habitual y no puedo volver a quedarme dormido/a 3. Me despierto varias horas más temprano todas las mañanas y no logro dormir más de 5 horas	<table border="1"> <tr> <td>Subtotal Página 1</td><td></td></tr> <tr> <td>Subtotal Página 2</td><td></td></tr> <tr> <td>Total</td><td></td></tr> </table>	Subtotal Página 1		Subtotal Página 2		Total	
Subtotal Página 1							
Subtotal Página 2							
Total							

APPENDIX 4. Parenting Stress Index (PSI)

INDICE de TENSION de LOS PADRES: VERSIÓN REDUCIDA (PARENTING STRESS INDEX: SHORT FORM)

Nombre de la persona que completa el cuestionario _____

Relación con el Niño/a: _____

Fecha de nacimiento de la persona que completa el cuestionario: _____

Nombre del Niño/a: _____ Edad: _____

Instrucciones:

Al contestar las siguientes preguntas piense en su niño o niña que más le preocupa.

En cada una de las siguientes preguntas favor de indicar la respuesta que mejor describa sus sentimientos. Si no encuentra una respuesta que exactamente describa sus sentimientos, indique la que mas se parezca a ellos. DEBE RESPONDER DE ACUERDO A LA PRIMERA REACCIÓN QUE TENGA DESPUES DE LEER CADA PREGUNTA.

Las posibles respuestas son:

MD=Muy en desacuerdo D=En desacuerdo NS=No estoy segura A=De Acuerdo MA=Muy de Acuerdo

Ejemplo: Me gusta ir al cine. MD D NS A MA

(Para esta pregunta, si a veces le gusta ir al cine, haga un círculo alrededor de la letra A. Si se equivocó marque la respuesta equivocada con una X y haga un círculo alrededor de la respuesta correcta)

MD=Muy en desacuerdo	D=En desacuerdo	NS=No estoy segura	A=De Acuerdo	MA=Muy de Acuerdo			
			1	2	3	4	5
1.	Muchas veces siento que no puedo manejar las situaciones muy bien.	MD	D	NS	A	MA	
2.	Me encuentro dando más de mi vida para satisfacer las necesidades de mi hijo que lo que esperaba.	MD	D	NS	A	MA	
3.	Me encuentro atrapado/a con las responsabilidades de ser padre/madre.	MD	D	NS	A	MA	
4.	Desde que mi hijo nació no he podido hacer ni cosas nuevas ni cosas diferentes.	MD	D	NS	A	MA	
5.	Desde que tuve a mi hijo encuentro que casi nunca puedo hacer las cosas que desearía hacer.	MD	D	NS	A	MA	
6.	No estoy contenta con la ropa que me compré la última vez.	MD	D	NS	A	MA	
7.	Hay muchas cosas que me molestan acerca de mi vida.	MD	D	NS	A	MA	
8.	Tener un hijo a causado más problemas de lo que esperaba en mi relación con mi esposo/esposa (amigo/amigo).	MD	D	NS	A	MA	
9.	Me siento solo/sola y sin amigos/amigas.	MD	D	NS	A	MA	
10.	Cuando voy a una fiesta usualmente no espero divertirme.	MD	D	NS	A	MA	
11.	No estoy tan interesado/a en la gente como antes acostumbraba a estar.	MD	D	NS	A	MA	
12.	No disfruto tanto las cosas como antes.	MD	D	NS	A	MA	

Adapted and reproduced by special permission of Publisher, Psychological Assessment Resources, INC., 16204 North Florida Ave, Lutz, FL 33549, from the Parenting Stress Index Short Form by Richard R. Abidin, Ed.D., Copyright 1990, 1995 by PAR, Inc. Further reproduction is prohibited without permission from PAR, Inc.

13. Mi hijo casi nunca hace cosas que me hagan sentir bien.	MD	D	NS	A	MA
14. Casi siempre siento que mi hijo no me quiere y no quiere estar cerca de mí.	MD	D	NS	A	MA
15. Mi hijo me sonríe mucho menos de lo que esperaba.	MD	D	NS	A	MA
16. Cuando yo hago algo para mi hijo, tengo la sensación de que mis esfuerzos no son apreciados.	MD	D	NS	A	MA
17. Mientras juega mi hijo en general no se ríe.	MD	D	NS	A	MA
18. Mi hijo no parece aprender tan rápidamente como la mayoría de los niños.	MD	D	NS	A	MA
19. Mi hijo no parece sonreír tanto como los otros niños.	MD	D	NS	A	MA
20. Mi hijo no es capaz de hacer tantas cosas como yo desearía o esperaría.	MD	D	NS	A	MA
21. Mi hijo tarda mucho y le es difícil acostumbrarse a cosas nuevas.	MD	D	NS	A	MA
22. Siento que yo soy	1	2	3	4	5
1. Muy buen padre/ madre.					
2. Mejor que el promedio de los padres/ madres.					
3. Como uno del promedio.					
4. Una persona que tiene alguna dificultad siendo padre/ madre.					
5. No muy bueno siendo padre.					
23. Yo había esperado tener una más estrecha y cálida relación con mi hijo que la que tengo y esto me molesta.	MD	D	NS	A	MA
24. Algunas veces mi hijo hace cosas que me molestan, por el mero hecho de ser malo.	MD	D	NS	A	MA
25. Mi hijo parece llorar y encapricharse más a menudo que la mayoría de los niños.	MD	D	NS	A	MA
26. Mi hijo generalmente se despierta de mal humor.	MD	D	NS	A	MA
27. Yo siento que mi hijo es muy malhumorado y se enoja fácilmente.	MD	D	NS	A	MA
28. Mi hijo hace algunas cosas que me molestan bastante.	MD	D	NS	A	MA
29. Mi hijo reacciona muy fuertemente cuando ocurre algo que no le gusta.	MD	D	NS	A	MA
30. Mi hijo se enoja fácilmente por la menor cosa.	MD	D	NS	A	MA
31. El horario de comer y dormir de mi hijo fue mucho más difícil de establecer de lo que yo esperaba.	MD	D	NS	A	MA
32. He notado que cuando pido a mi hijo que haga algo o que pare de hacer algo es:	1	2	3	4	5
1. Mucho más fácil de lo que yo esperaba.					
2. Algo más fácil de lo que yo esperaba.					
3. Igual a lo que yo esperaba.					
4. Algo más difícil de lo que yo esperaba.					
5. Mucho más difícil de lo que yo esperaba.					
33. Piense cuidadosamente y cuente el número de cosas que su hijo hace y que le molestan. Por ejemplo: pierde el tiempo, no escucha, es demasiado activo, llora, interrumpe, pelea, lloriquea extra. Por favor marque el número que incluya el número de cosas que contó.	1-3	4-5	6-7	8-9	10+
34. Hay algunas cosas que mi hijo hace que realmente me molestan mucho.	MD	D	NS	A	MA
35. Mi hijo ha sido más problema de lo que esperaba.	MD	D	NS	A	MA
36. Mi hijo me exige más de lo que exigen la mayoría de los niños.	MD	D	NS	A	MA

APPENDIX 5. Childhood Trauma Questionnaire (CTQ)

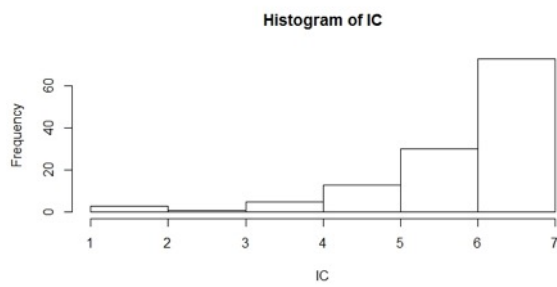
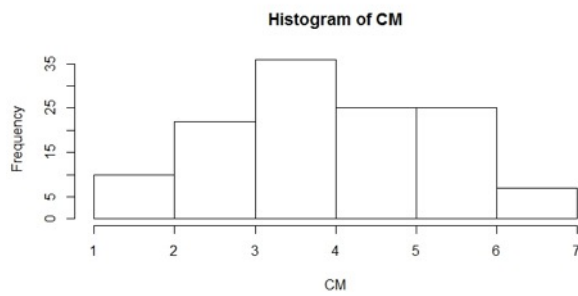
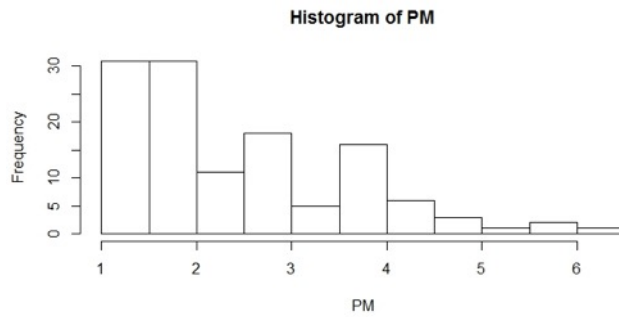
Por favor indique con una cruz la opción que se aplica más a su experiencia.
Mientras iba creciendo...

	Nunca	Rara vez	Algunas veces	Frecuentemente	Muy frecuentemente
1. No tenía suficiente para comer					
2. Yo sabía que había alguien para cuidarme y protegerme					
3. Algunas personas de mi familia me decían cosas como “estúpido/a”, “flojo/a”, o “feo/a”					
4. Mis padres estaban demasiado borrachos o drogados como para cuidar de la familia					
5. Había alguien en mi familia que me ayudaba a sentirme importante o especial					
6. Tenía que usar ropa sucia					
7. Me sentía amado/a					
8. Alguna vez pensé que mis padres desearon que yo jamás hubiese nacido					
9. Alguna o algunas personas de mi familia me pegaron tan fuerte que tuve que ver un doctor o ir al hospital					
10. No hubo nada que haya querido cambiar de mi familia					
11. Algunas personas de mi familia me pegaban/golpeaban tan fuerte que me dejaban marcas o moretones					
12. Era castigado con un cinturón, un palo, un cuerda o algún otro objeto duro					
13. Las personas en mi familia nos cuidábamos lo unos a los otros					
14. Algunas personas de mi familia me decían cosas hirientes o insultos					
15. Yo creo que fui maltratado físicamente					
16. Tuve una infancia perfecta					
17. Fui tan fuertemente golpeado/a por alguien de mi familia que otras personas, como un profesor, un vecino o un médico, se dieron cuenta					
18. Yo sentía que alguien en mi familia me odiaba					
19. Las personas en mi familia se sentían cercanas entre ellas					
20. Alguien intentó tocarme en una forma sexual, o trató que yo lo/la tocara					
21. Alguien me amenazó con hacerme daño o decir mentiras acerca de mí a menos que yo hiciera algo sexual con él o ella.					
22. Yo tenía la mejor familia del mundo.					
23. Alguien intentó que yo hiciera cosas sexuales o que viera cosas sexuales					
24. Alguien me acosaba /incomodaba					
25. Yo creo que fui maltratado emocionalmente					
26. Había alguien para llevarme al doctor si lo necesitaba					
27. Yo creo que fui sexualmente abusado/a					
28. Mi familia era una fuente de fuerza y apoyo.					

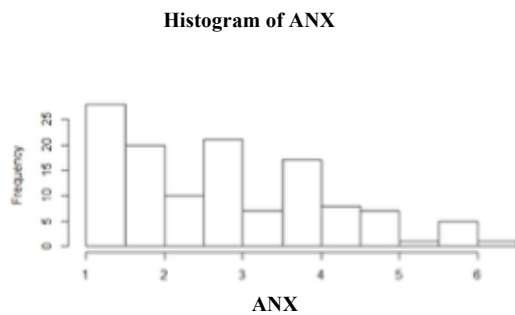
1Bernstein, D. P., Stein, J. A., Newcomb, M. D., Walker, E., Pogge, D., Ahluvalia, T., Zule, W. (2003). Development and validation of a brief screening version of the childhood trauma questionnaire. *Child Abuse & Neglect*, 27(2), 169-190. doi: 10.1016/S0145-2134(02)00541-0 Adaptado para Chile por Leighton, C.; Botto, A.; De la Cerda C.J.; Undurraga, C. (2013).

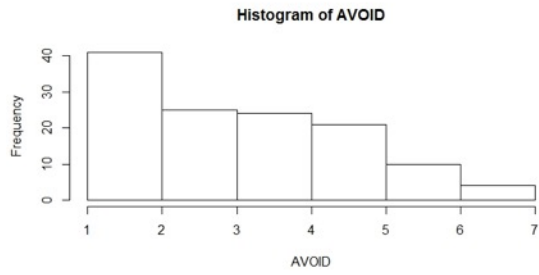
APPENDIX 6. Histograms of Study 1

1. PRFQ

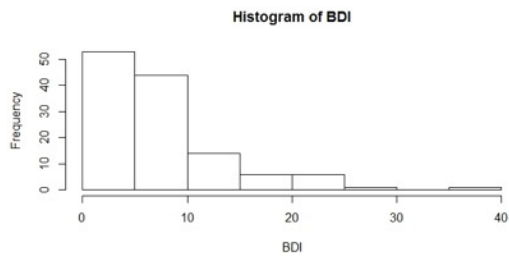


2. ECR

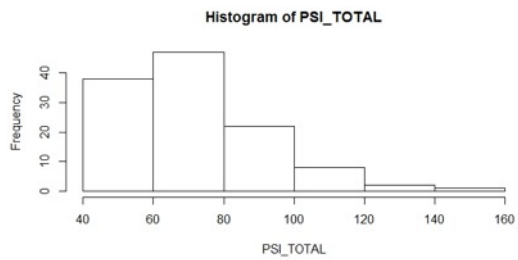




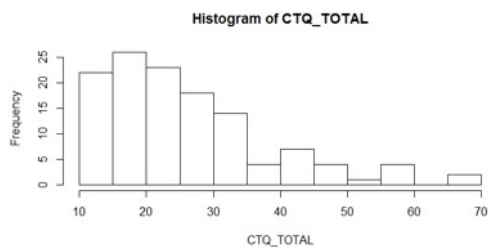
3. BDI



4. PSI



5. CTQ



APPENDIX 7. Mentalizing Storytelling Test (MST)

▶ Historias Apoderado

▶ 1) ¿Dónde está mi juguete favorito?

Josefina/ Andrés está jugando con su muñeca/auto favorito en el patio cuando la(o) llaman a almorzar.

Cuando termina de almorzar recuerda que dejó a su muñeca/auto sola(o) en el patio y regresa a buscarla(o)...



▶ Historias Apoderado

▶ 2) Regreso a casa

María/Pablo acompaña a su mamá de regreso a la casa luego de ir a comprar huevos.

Le gusta ir saltando entre la calle y la vereda.

María/Pablo... cuidado, no te vayas a caer!

María/Pablo al saltar se tropieza, empujando a la mamá.

