UNIVERSIDAD
DE CHILE

UNIVERSIDAD DE CHILE
PONTIFICIA UNIVERSIDAD CATÓLICA DE CHILE
FACULTAD DE MEDICINA

CHILDREN'S SOCIOEMOTIONAL DEVELOPMENT AT 12 AND 30 MONTHS AND ITS RELATIONSHIP WITH MOTHERS' MENTALIZATION: COMPARISON OF CHILEAN AND U.S. MOTHERS

THESIS TO OPT TO THE DEGREE OF DOCTOR IN PSYCHOTHERAPY

NANCY ALEJANDRA ESPINOSA DÍAZ

THESIS SUPERVISOR:
CHAMARRITA FARKAS KLEIN, PH. D.

CO-TUTOR:
JUAN WILSON ALCALDE, PH. D.

THESIS COMMITTEE:
MARÍA PÍA SANTELICES ÁLVAREZ, PH. D.
CLAIRE D. VALLOTTON, PH. D.

SANTIAGO
2018

To Humberto, for his love and unconditional support in all my adventures and challenges.

To Benjamín, who with his light illuminates my way and motivates me to be better ever day.

To my father, for his immense wisdom and for being a fundamental pillar in my life.

To my siblings for accompanying me in this feat that life is.

INDEX

ACKNOWLEDGEMENTS

First, although they were secondary data, I want to thank the mothers and children who participated in this research, and who generously shared the intimacy of their way of relating to their children.

I want to thank my thesis committee in a very special way for their help and guidance. Mainly my thesis director, Chamarrita Farkas, a great person and a great teacher, who with her patience, availability, generosity and wit has encouraged me to grow in my way of seeing, relating, understanding and analyzing the multiple levels in which phenomena connect and allow to generate knowledge; María Pía Santelices, for her support throughout the doctoral process, and her valuable interventions in this research; Juan Willson for his availability and suggestions; Claire Vallotton, for how she welcomed me during my stay in Michigan, for her very important contributions to this research, as well as for her availability in sharing knowledge.

I also wish to thank Vania Martínez, for her constant concern and energy in the doctoral process; the research team of Chamarrita Farkas who constantly gave me feedback during the process, as well as my friends and colleagues Catalina Sieverson, María José León, Javier Morán and Anita Gallardo.

Finally, I thank Universidad Católica del Maule for the opportunity to go on with my academic career through the Improvement Grant and CONICYT, since this research was supported by a PhD scholarship.

Abstract

Socio-emotional development refers to the ability of infants to regulate their emotions and behavior in order to adapt to the world in which they live. It is a complex process that requires the conjugation of biological mechanisms of the infant him/herself, and the context where development unfolds. In order to achieve an adequate socio-emotional development, the quality of the primary bond relationships is fundamental. However, a competence that has not been studied is the capacity of mothers to perceive their children, at 12 months, as individuals with minds, through the mentalizing language that they use in the interaction, and the impact they have on their children's socio-emotional development at 12 and 30 months, in different contexts.

The objective of this research was to describe the relationship between the socio-emotional development of infants at 12 and 30 months of age and the mentalization capacity of mothers in Chilean and US dyads. In order to achieve the proposed objective, a quantitative methodology, with a non-experimental and longitudinal design, was used. The sample consisted of 142 mother-child dyads, 90 Chilean and 52 US. The instruments used were the assessment standard of Mentalization in the adult and The Bayley Scales of Infant and Toddler Development, Third Edition. The results showed that there are significant differences in the increment of socio-emotional child development according to country; however, the maternal educational level mediates these differences. Significant differences were observed between the type of mentalizing language used by Chilean and US mothers, that is, the study suggests the existence of specificity related to the context. Finally, the relationship between mentalizing language and socio-emotional development is confirmed, finding that talking about emotions at 12 months is significantly associated with socioemotional development at 30 months.

Introduction

Child socio-emotional development is defined as the capacity of the child to distinguish, manage and express a range of positive and negative emotions, develop close and satisfactory relationships with other infants and adults, and actively explore his/her environment (Cohen, Onunaku, Clothier & Poppe, 2005). These capacities are fundamental throughout life, as they have an impact on the ability to learn, to make friends, to express feelings, as well as to cope with frustration (Cohen, et. al. 2005), which allows the child to get involved with others in a positive way (Perner, 1994), and adapt to the demands and expectations of the social environment (Greenspan, DeGangi & Wieder, 2001; Greenspan & Shanker, 2004).

Social and emotional competence appears in a transcendental period of the human being, between the first and third year of life (Brownell & Kopp, 2007), however, for this to happen, it requires the contribution of other areas of development, such as the physical, neurological, cognitive ones (Greenspan & Shanker, 2004), as well as, that of early relationships (Cohen et al., 2005).

During this period, the evolving immaturity with which babies are born has potentially important consequences for development (Rochat, 2004, 2014), reason for which the relationship of the mother-baby dyad transcends sole support for survival, since, in order to reach an adequate level of emotional and social development, the quality of the early bonds and the mutual exchanges between the babies and their caregivers is essential (Fogel, 1993). This interactive process of co-regulation, during which the infant uses the physical and emotional state of the adult to organize his/her experience (Feldman, Greenbaum, & Yirmiya,

1999; Sroufe 1996) is fundamental for the optimization of the results in social, emotional and cognitive development (Page, Wilhelm, Gamble & Card, 2010).

Considering the above, this study focused on the mother-baby interaction when infants are 12 months old and the influence of this interaction some months later, understanding that it is a critical period of human development, in terms of extreme sensitivity to the adverse conditions in which the infants are found, but it is also a period that offers an opportunity to strengthen the bonding conditions that favor bio-psychosocial maturation (Schore, 2001). This is shown by several investigations that have pointed out the relevance of this interaction in the baby's mental health (Schore, 1997), for example, studies on affective synchrony, emotion regulation and socio-emotional communication (Beebe & Lachmann, 2002; Gergely & Watson, 1999; Trevarthen, 1993) have been linked to the mental organization of the baby. Other studies have focused on the relationship of maternal sensitivity with cognitive and socio-emotional development (Farkas, Vallotton, Strasser, Santelices & Himmel, 2017; Page, Wilhelm, Gamble, & Card, 2010), however, adult competence, which has not been studied in terms of its relationship with socio-emotional development at this age, is the capacity for maternal mentalization.

Maternal mentalization can be defined as the ability of the mother to treat her child as a psychological agent, that is, as a system that can reason about any explicit objective of her own or others, with intentions and beliefs (Baron-Cohen, Tager-Flusberg, & Cohen, 1993; Perner, 1994) which allows the infant to understand his/her own mental states and that of others. Therefore, it has transcendental intrapersonal effects such as emotion regulation and interpersonal ones such as productive social relationships (Fonagy, Target, Steele & Steele, 1998; Fonagy, Gergely, Jurist, & Target, 2002; Slade, 2005).

One way in which the mother's perception of her child as a mental agent is reflected is through the use of mentalizing language in the interaction she establishes with him/her (Ruffman, Slade & Crowe, 2002; Meins, et al., 2012). There is evidence that refers to the frequency of references to mental states, desires and emotions, in the discourse of mothers, at early stages of development, which would facilitate the social and emotional understanding of infants (Ruffman, et al., 2002; Taumoepeau & Ruffman, 2006, 2008).

Interesting research has studied the mentalizing language used by the mother and has related it, among other things, with the prediction of security in mother-infant attachment (Meins, et al., 2002; Meins Fernyhough, Fradley, & Tuckey, 2001; Meins, et al., 2012), the relationship with the child's theory of mind (Ruffman et al., 2002; Meins et al., 2002; Meins, Fernyhough, Arnott, Leekam, & Rosnay, 2013) and the facilitation of language and symbolic play (Meins, et al., 2013). However, as mentioned above, no studies have been found that relate the mothers' capacity of mentalization with the infants' SED, therefore, in response to this research gap, the following questions emerged: Is there a relationship between the maternal mentalization, measured through mentalizing language, at 12 months and the SED of its infants at 12 and 30 months of age? And does maternal mentalization, measured through the mentalizing language at 12 months of their children, predict socio-emotional development at 30 months of age?

On the other hand, child socio-emotional development is influenced by social interactions and relationships, that is, infants in different societies differ in their socio-emotional functioning (Stevenson-Hinde 2011). From this perspective, mother-baby interaction offers a context where the care provided by the mother is understood as practices located in a particular environment (Keller, 2007), and they influence and are influenced by the beliefs, values and norms of that context (Chen & Rubin, 2011).

Given that a way through which the infant gives meaning to cultural values, is the mother tongue (Laible, Murphy, & Augustine, 2013) the third question that enriches this study arises: does the relationship between the mentalizing language used by mothers in the interaction with their child and their child's SED behave in the same way in different contexts?

The general objective of the research, which is to describe the relationship between the socio-emotional development of infants at 12 and 30 months with the mothers' capacity of mentalization in Chilean and US dyads, emerged as of the questions posed.

The present investigation was framed in Fondecyt project No. 1160110, called "Mentalization of guardians and educational personnel and its relation with socio-emotional and linguistic competencies of 12 and 30-month old children that attend day care centers and kindergartens" (2016-2018). A quantitative methodology, with a non-experimental and longitudinal design, was used in order to achieve the general objective. Likewise, it was an exploratory, descriptive, comparative, and explanatory design. The sample consisted of 142 mother-child dyads, 90 Chilean dyads obtained from 30 day care centers in the city of Santiago and 52 US ones obtained from 6 cities in the state of Michigan. The instruments used were the assessment guidelines for Mentalization in the adult and the Bayley Scales of Infant and Toddler Development, Third Edition. The proposal sought to explore, which aspects of the mentalizing language used in the mothers' discourse at 12 months of age, was better related to aspects of infant SED at 12 and 30 months and what aspects can predict a better SED.

Finally, in terms of prevalence, it is suggested that between 14% and 26% of the infants between 18 and 60 months have mental health problems (Rescorla et al., 2011), this is even more

significant if we consider that emotional, social and behavioral problems at an early age persist and predict problems in later life (Briggs-Gowan, Carter, Bosson- Heenan, Guyer, & Horwitz, 2006; Mathiesen & Sanson, 2000). From this perspective, the theoretical relevance of this study is that it allowed us to contribute in the first place to the dyadic look of the SED, allowing us to go deeper into this interaction in the context where it develops, secondly, it allowed us to advance in the understanding of the variables that promote child socio-emotional development, which from a practical point of view, allows contributing towards relieving child mental health, to develop a context sensitive to specificities and to specify in interventions, managing to contribute to professional work linked to early childhood.

This project is organized as follows. First, the theoretical and empirical backgrounds that support the proposal of this thesis are reviewed. Secondly, the objectives and hypotheses of the study are exposed. Subsequently, the methodological aspects of the study are explained, pointing out aspects related to the design, the sample, the procedure, the instruments used, the data analysis strategy, as well as the ethical considerations. Then, the results of the study are described, starting with the descriptive analysis, to then present the findings regarding the contrast of the hypotheses raised. Finally, the main results of the research are synthesized and discussed, based on the theoretical background available. The clinical implications of this study, the limitations of this study and possible future lines of research are also indicated.

Theoretical and empirical background

The main concepts that make up this research as well as their theoretical and empirical relevance are developed in this chapter. They have been organized into three thematic groups with subtitles to differentiate the topics addressed, which are described below.

First, the subject of socio-emotional development (hereinafter, SED) is addressed as a way to render account of its relevance in child mental health. The following subtitles are presented within the section: revision of the SED in the first three years of life, with the purpose of contextualizing the age and the main developmental milestones that accompany the process that allows the acquisition of emotional and social skills. Then, an analysis of the interpersonal and intrapersonal scopes is made as a way to deepen the understanding of children's SED as well as making a link with the skills that the mentalization capacity grants, which theoretically supports the relationship of the variables. In addition, the relevance of the mother-child interaction is reviewed, exposing the results of studies that have examined this interaction, with the purpose of deepening the understanding of the dyadic look in children's SED. And finally, the relevance of variables of the mother, the infant and the context that influence the SED is presenting, showing empirical evidence that supports the importance of including them in the study.

Secondly, mentalization, its definition and its relevance in human beings are addressed. As a sub-section, mentalization is developed as a maternal competence, establishing ways of conceptualizing and measuring it, reviewing in depth the form of measurement used in this study, that is, mentalizing language, and also exposing studies that have related this variable to various fields of the life of the infant. Finally, it goes deeper into the theoretical relationship of infant SED and maternal mentalization.

In the third place, the subject of the context and its influence in infant SED is developed and theories that allow understanding how it intervenes in parenting, as well as the main findings, are presented. It concludes in a section where that which is previously reviewed is related to the objectives and hypotheses that allow basing the study, as well as proposals that can be taken into consideration in the discussion of the results.

1.1. Socio-emotional development

Child socio-emotional development, hereinafter (SED), is understood as a process through which social and emotional skills are acquired, which allow the child to adapt to the demands and expectations of the social environment (Greenspan, et al., 2001; Greenspan, & Shanker, 2004), being effective in achieving goals (Campos, Mumme, Kermoain, & Campos, 1994), and participating in the proper social interaction with their peers, siblings, parents and other people (Raver & Zigler, 1997). These skills include the child's ability to regulate his/her emotions and behavior, understand his/her own emotional states and those of others, and engage with others in positive interactions (Perner, 1994). Therefore, an adequate SED allows the child to better express ideas and feelings, show empathy towards others, manage positive or negative feelings, and feel self-reliance, among other advantages (Voinea & Damian, 2014).

Research results suggest that in order for an infant to develop fully, his/her socio-emotional development is fundamental (Farkas, et al., 2017). This is because small children who obtain adequate social and emotional development are able to adequately express their emotions, to communicate better with their peers (Bayley, 2006; Thompson, 1991), they are perceived in a more positive way by their parents (Vallotton, 2008, 2012), and they have better adaptation to the school system (Rhoades, Warren, Domitrovich & Greenberg, 2011). On the other hand,

children with difficulties in the socio-emotional sphere exhibit disruptive behavior from an early age, show a greater frequency of tantrums, and show difficulties in parent-child communication (Farkas, 2007).

Similarly, the converging evidence from several lines of research suggests that balance and emotional regulation are associated with the quality and stability of social relationships (Caspi, 2000; Eisenberg, Fabes, Guthrie, & Reiser, 2000; Kagan, 1998 quoted in Lopes, et al., 2011). Children who show more intense negative emotions have more difficulty to regulate them, they get frustrated or become irritated more easily (Parkinson, 2011) and interact with their peers with less competence than their better-regulated counterparts (Eisenberg, Fabes, Bernzweig, Poulin, & Hanish, 1993).

SED is a dynamic process that is achieved progressively through stages, which progressively become more complex, because the new skills that are acquired are based on those previously acquired, which are strengthened and perfected in the extent that development evolves (Greenspan, et al., 2001).

1.1.1. First three years of life.

The first three years of life is a fundamental stage of human development, since it is here that social and emotional competence appears (Brownell & Kopp, 2007). Early childhood, as this period is called (Mares, Warren & Newman, 2011) is considered a critical moment of development due to its extreme sensitivity to damage and adverse conditions; however, it is also a period where the strengthening of bonding conditions favor bio-psychosocial maturation (Sroufe, 2000).

This research aims to contribute in highlighting the importance of this stage of development, since many studies show that early intervention benefits a better development of

children and increases care behaviors and sensitive responses of mothers-fathers to their children (Bakermans-Kranenburg, Van IJzendoorn & Juffer, 2003). On the other hand, the significant economic savings that are produced by contributing in this period is relevant, since by providing interventions and services at this stage, it is possible to prevent later difficulties and their effects have impact on the adaptive capacities of subjects in the long run (Schore, 2001).

In the trajectory of human development, the organism develops as a whole (Fogel, 1993), this means that for there to be an adequate SED, there must be an integration of the capacities of other domains of development (Sroufe, 2000) such as: physiological, cognitive, motor, language, spatial and sensory (Greenspan & Wieder, 2006). In fact, from the first moments of life, even the simplest physical experiences have emotional valence. The sound of the mother's voice is not a neutral auditory sensation, but is experienced as tranquilizing or aversive, according to the emotional tone of the mother and the infant's innate sensitivity to sound. Thus the sensory function is essential to learn to calm down and respond emotionally to the environment (Greenspan & Wieder, 2006).

During the first months of life the infant learns to regulate his/her physiological states to maintain interaction with the other, while getting pleasure from such interaction, the early regulation of excitatory states is fundamental for a successful adaptation to the environment (Greenspan & Wieder, 2006), however, self-regulatory mechanisms are complex processes and develop as a result of physiological maturation, the ability of the caregiver to respond and the baby's adaptation to environmental demands (Lyons-Ruth & Zeanah, 1993).

As of two months, babies are able to coordinate their responses to the behavior of their caregiver (Crown, Feldstein, Jasnow, Beebe & Jaffe, 2002) they begin to be more awake, are motivated to communicate and make contact through the exchange of smiles and cooing with

their mothers, experience a deep sense of intimacy, which is explained by their innate ability to focus on human faces and voices and to process sensory information (Meltzoff, 1985 in Greenspan & Wieder, 2006). Therefore, from a very early age, they are able to participate in dyadic interactions through visual contact, smiles, gestures and vocalizations in a contingent manner in response to the affective signals of other people (Beebe et al., 2010), showing their capacity to regulate themselves inter-subjectively with the mother, through a coherent and highly developed motivational socio-affective system (Traverthen & Aitken, 2001).

Once the baby has reached a certain capacity for self-regulation and interest in the world, he/she has a greater capacity to respond to his/her environment and form relationships. Thus, at around 6 months babies can focus their attention on a specific object or person (Hobson, 2002), there appears playing that is more adapted and subject to communication and human connection (Lecannelier, 2006), they begin to discriminate their emotional states and interpret the voices and facial expressions of the adult, appearing a certain inference of intentionality. This experience is the cornerstone of functioning as part of a family, group or community and then in a whole culture and society (Greenspan & Wieder, 2006).

At approximately 9 months, they are already able to participate in joint care (Brooks & Meltzoff 2005), which refers to the ability of babies to follow the direction of the gaze and gestures of other people to have a common point of reference. This is essential for learning, language acquisition, the sophisticated social competencies needed throughout human life (Mundy & Newell, 2007) and emotion regulation (Yoon, Kelso, Lock & Lyons - Ruth, 2014). Also around this age appears the social reference where the baby learns to give meaning to events of his/her life, according to a process of reading or inferring the affective states of his/her mother, through her facial or motor expression upon those events (Sorce, Emde, Campos &

Klinnert, 1985).

Thus, during the first twelve months of life, the foundations are laid for the most human of achievements: receiving and responding to the emotional, social and communicative behavior of adults (Brownell & Kopp, 2007). At 12 months, the infant is able to acquire greater control of his/her own emotional excitement (Brownell & Kopp, 2007) through the remarkable development of memory that allows the infant to anticipate what is coming, that is, past experience helps to predict what is coming, by making explicit signals to the mother in search of regulation. This intentionality of the infant makes emotional life become more free-flowing, guides the interpretation of events and motivates learning, the social behavior of the baby appears as he/she begins to establish truly reciprocal relationships with the mother (Sroufe, 2000).

Although the relationship of attachment is consolidated between six and twelve months, it is based on the interaction history of the preceding months. During these months, the baby repeatedly experiences that when the excitement exceeds its modulation capabilities, his/her mother will intervene in order to restore balance, based on this cumulative experience and on his/her cognitive abilities, the baby can recognize the role of his/her mother in the regulation of affect and his/her own role, insofar as he/she must make this person available and help him/her (Sroufe, 2000). When the baby feels distressed, he/she shows it to his/her caregiver; a sensitive and receptive caregiver reads the baby's signals and responds by helping him/her reach a state of calm and regulation.

Attachment was described by Bowlby (1969,1973, 1980, 1988) as the emotional bond between a baby and his/her main caregiver and refers to the fact that human beings have a tendency to establish affectional bonds with other people, bonds that make the baby's survival

possible (Bowlby 1969) since all newborns depend on a constant and available caregiver to respond to a variety of needs including fatigue, hunger, discomfort, fear, among others (Mares, et al., 2011). The attachment figure not only has the function of protection and care, but also has the function of being a safe base to explore (Ainsworth 1973 in Sroufe, 1996), the infant is biologically prepared to use the main caregiver as a secure base while exploring the environment, returning to the caregiver to feel comfortable when he/she has problems (Sroufe, 1996).

The concept of attachment has been expanded to include the ability of the infant to regulate emotions and levels of excitement within the context of the mother-child relationship, evidencing that this is not a characteristic of the baby, but rather a dyadic process that evolves (Sroufe 1996).

Then, also independent walking around appears at around twelve months of age, with which the infants are able to dominate the wider physical and social world. In addition, his/her conscious individuality grows, thanks to the autonomy he/she is achieving and the greater variety of people with whom he/she socializes, especially siblings and peers. In relation to this change, their participation in cultural practices becomes broader and their acceptance of adult behavior norms increases, along with the growth of regulatory strategies to align their own behavior to such norms (Brownell & Kopp, 2007).

Object permanence is a developmental achievement of the second year of life that marks a relatively sophisticated conceptual understanding that objects (and people) continue to exist when they are out of sight, based on enduring mental representations of objects through variations in time and space (Brownell & Kopp, 2007). Object permanence is one of the basic foundations of social relationships, since immature infants must come to understand that others

who provide care continue to exist and are available whether visible or not, that surface appearances may change but the fundamental existence and identity of caregivers remain constant. It is important to note that it is in this period that this fundamental capacity to represent the permanence of the physical and social world begins to develop, which substantiates the formation of multiple and complex interpersonal relationships and the ability to communicate about this world with others (Brownell & Kopp, 2007).

During the second year of life, interactions established by infants become more complex. Although communication remains at a preverbal level, infants develop greater capacity to use and respond to social signals, developing a feeling of competence as an autonomous being in a relationship with other significant persons, considering adults and peers (Lester, Hoffman, & Brazelton, 1985). This is based on the continuous, increasingly complex and emotionally charged chains of interaction that infants establish with their caregivers, who provide tacit signals and comments that inform them about what is good, bad, acceptable and unacceptable. This information allows infants to make predictions, increase their sense of competence and distinguish emotions in a more sophisticated way, managing to respond to others according to the emotional tone observed in the interaction (Greenspan & Wieder, 2006).

With the emergence of language, infants acquire the ability to attribute meaning to their experiences. This allows them to share meanings with others, which reinforces their ability to describe themselves, their desires and feelings (Shatz, 2007 cited in Brownell & Kopp, 2007); and understand the difference between themselves and others. Regarding emotions, this stage is culturally characterized as "the terrible two", alluding to the fact that the child still has much to learn about emotional self-control and the strategies involved to anticipate, regulate and enlist emotional expressions in competent social functioning (Brownell & Kopp, 2007). During the last

part of the second year and the first months of the third year, there is an increase in self-awareness, which includes personal space and a sense of ownership (Hay, 2007), which allows the beginning of self-regulation (Brownell & Kopp, 2007). The infants' awareness of "self" and "not me" coincides with the first stages of empathy and prosocial behavior (Meltzoff, 1990; Stern, 1983, both cited in Greenspan & Wieder, 2006). As the infant's social world expands, the appearance of symbolic communications and play, which arise from the reciprocal and cooperative social support and coupling beyond the dyad and beyond the immediate observable behavior, also arise to include things remembered or foreseen, and things that do not look like mental states or imaginary phenomena. These developments have both intrapersonal and interpersonal impacts (Brownell & Kopp, 2007).

According to that which has been revised, between the first and third year of life, is where the psychological transition from infancy to childhood occurs, in particular, the young infants develop a sense of their own personal agency with the combination of walking, self-awareness, search for autonomy and emotional turbulence that occur in this period (Mascolo & Fischer, 2007). This newly emerging agency awareness partly derives from cognitive advances, including those related to executive functions (Zelazo & Müller, 2002), and it permits self-initiated, goal-defined activities that lead to a sense of mastery (Bullock & Lütkenhaus, 1988) and social interactions with others that involve intentionality (Tomasello Carpenter, Call, Behne & Moll, 2005). The third year reflects culturally mediated socialization, as well as an increasingly complex and sophisticated sharing of the child's own experiences with others, testing the limits of his/her own agency and accommodating to behavior and the feelings of others; it is a short period that is characterized by a rapid, profound and penetrating evolutionary change that includes the emergence of social and emotional competence (Brownell & Kopp, 2007).

1.1.2. Intrapersonal and interpersonal process.

SED has two spheres that develop in an interconnected way: the emotional sphere and the social sphere, which respond to intrapersonal and interpersonal processes respectively. In this line, within the intrapersonal sphere is the emotional process. Here, there are different positions to define emotion, however, for most of authors, it includes physiological changes, facial, postural or behavioral modifications, as well as recognizing an experiential component. For this study, it was defined as "a subjective reaction to an outstanding event, characterized by physiological, experiential and patently behavioral changes" (Sroufe, 2000, p.18). In this definition, the term subjective reaction implies considering the interdependence that exists with the cognitive development that the evaluation and meaning between the person and the event implies (Sroufe, 2000), and in the same way, with the context where the development unfolds. Emotions, from this point of view, require a coordinated set of behavioral, experiential and physiological response preferences that together influence how to respond to perceived challenges and opportunities (Gross, 2002).

Within the interpersonal sphere, the individual progresses through a series of phases, from the little initial awareness of him/herself and of others, towards reciprocal relationships. In this process, one of the most significant aspects is the transition from the baby's initial dependence, to the person's subsequent autonomous functioning (Sroufe, 2000).

The progress of emotional development is linked to advances in social development, this because emotions are deployed in a social context, the basis for the subsequent exchange of relationships mental and affective with others and with the world are formed through the first affective exchanges with others (Brownell & Kopp, 2007).

From this point of view, Traverthen (2011) states that the function of emotions consists in expressing and communicating through gestures, vocalizations, smiles, frowns, pouting, etc. to other mental states, that is, emotions have the function of regulating and coordinating people. Babies are born with emotions to participate in human inter-subjectivity communication, which is why all emotion is an expression of and in the relationship.

At the beginning, little babies depend almost exclusively on their caregivers to regulate their emotions and gradually, during the first years of life, they achieve emotional self-regulation (Eisenberg, Spinrad & Eggum, 2010). Thus, emotion regulation occurs within primary care relationships (Sroufe, 2000) and can be applied to both positive and negative emotions, and includes decreasing, increasing or maintaining levels of emotional arousal, (Brownell & Kopp, 2007), can be defined as the process by which individuals influence the emotions they have, when they have them, and how they experience and express these emotions (Gross & Thompson, 2007). This process manifests itself as a movement between the baby and the main caregiver from dyadic regulation to the self-regulation of emotion and has effects on the infant's emotional excitement, on the behavioral level, on the expression, modulation and flexible control of emotions (Sroufe, 2000), reason for which the effectiveness of emotion regulation strategies must be evaluated in the context of the individual's objectives for the situation (Brownell & Kopp, 2007).

The attachment theory formulated by Bowlby (1969, 1973, 1980, 1988), which is one of the most relevant theoretical models in the study of interpersonal relationships throughout the life cycle (Cassidy & Shaver, 1999), is a theory that explains how dyadic regulation happens. It is based on the history of predictable and receptive care interactions between the baby and caregiver, as well as the development of the child's cognitive abilities, a bond of attachment, that

allows him to reach a state of calm and regulation to explore the world, is gradually developed (Sroufe, 2000).

Schore (2001) proposes that the mother, in an unconscious and intuitive way, regulates a series of physiological and emotional activations of the baby, which when transformed into predictable and receptive, give rise to characteristic patterns of behavior in the infant, for example, when a distressed baby calms down with the familiar, warm and positive voice of the mother it is because he/she has managed to anticipate the caregiver's response capacity, and then he/she cries less. These regulatory encounters begin to develop in the infant a set of abilities and mechanisms to face and regulate stress, emotions, novel or unpredictable situations, learning and later mental states (Schore, 2001). This sequence of interactions allows the infant to organize his/her behaviors around the person who takes care of him/her, which gives way to the dyadic regulation of emotion (Sroufe, 2000), and biological and social self-regulation (Anders, Goodlin-Jones & Sadeh, 2000) and is the mechanism through which secure attachment influences the socio-emotional development of infants (Kobak & Sceery, 1988).

On the other hand, social influences are an important characteristic of evolutionary growth in emotion regulation through which skills for management of emotions are socialized, cultural values are appropriated and gender differences are promoted in emotionality (Thompson & Meyer, 2007 cited in Brownell & Kopp, 2007), therefore, emotional regulation influences the caregiving environment, the constitutional factors of the baby and the responses of parenting and repeated interactions between the baby and his/her mother (Mares, et al., 2011) (See Figure 1).

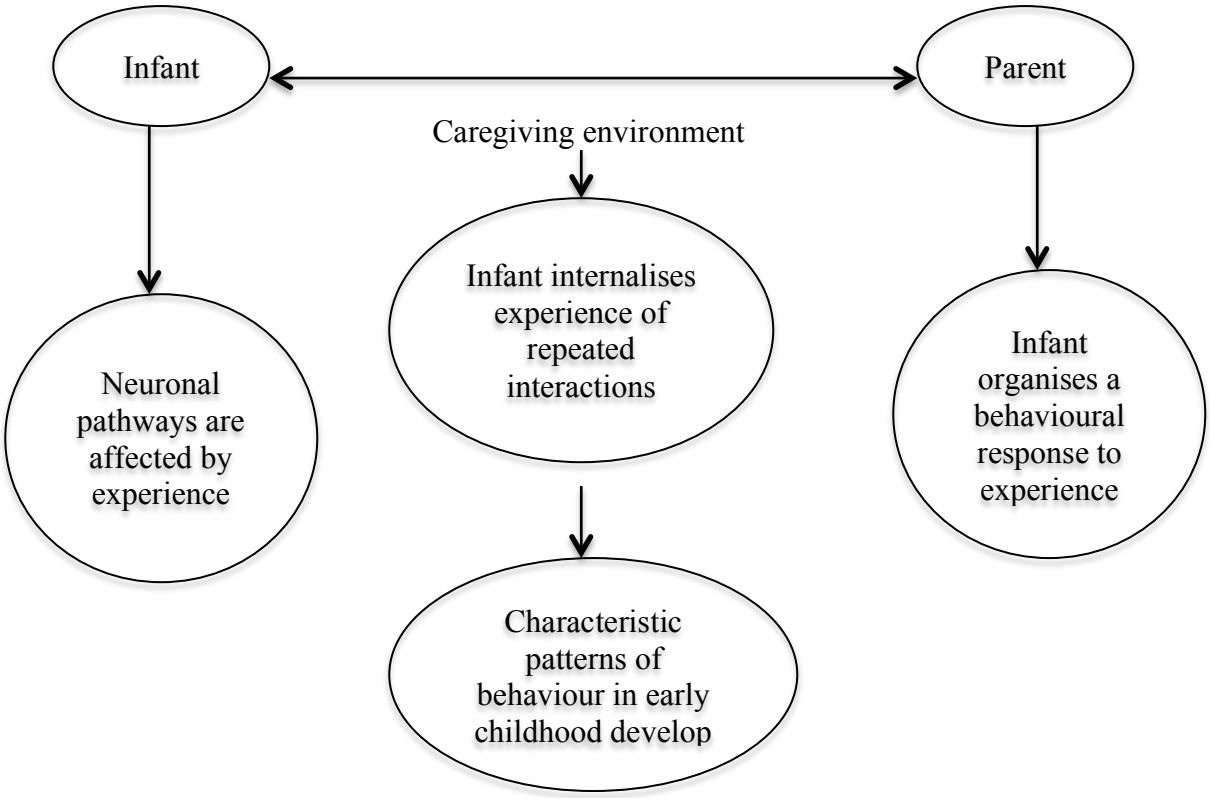


Figure 1. Caregiving environment and regulation. Source: Barton & Robins, 2000 cited in Mares et al., 2011.

Consequently, in infant SED, the intrapersonal and interpersonal fields respond to an interaction between the neurobiological and early psychosocial development processes, as well as the context of baby-caregiver interaction. These different spheres interact with each other, influence each other (Mares et al., 2011) and are relevant in the baby's mental organization (Schore, 2001). Therefore, they must be seen as engines of growth rather than assuming the primacy of one over the other (Brownell & Kopp, 2007).

1.1.3. Interaction with the significant adult.

Literature shows that the foundations of SED are established in a fundamental period of human development –early childhood– which requires the participation of adults who perceive

the needs of the infant, respond to these needs and actively promote this process, which will favor his/her adaptation (Sroufe, 1996). In order to achieve an adequate level of emotional and social development, the quality of early bonds and mutual exchanges between babies and their caregivers is essential (Fogel, 1993); it is a process in which parents play a critical role in the emotional commitment of small infants and in their environments (Spinrad, Stiffer, Donelan – Mc. Call, & Turner, 2004). The attachment theory (Bowlby 1969, 1973, 1980, 1988) has made great contributions in this area, introducing the importance of the relationship between mother and child and the influence of secure attachment in the infant's SED (Smeekens, Riksen-Walraven & Van Bakel, 2009).

In this way, the mother's role during early childhood is very relevant, since it is a critical or sensitive stage, where the participation of certain elements is vital for appropriate development (Schore, 2001). Although since the infant is born, he/she is prepared to be interested in his/her world, he/she requires a relationship to achieve this potential, that is, the emerging social, psychological and biological capabilities of the baby can not be understood separately from his/her relationship with the mother (Schore, 2001).

Several investigations have shown the importance of the quality of early bonds in the development of a person, and the mutual exchange of the baby and whoever takes care him/her, for an adequate emotional and social development (Fogel, 1993; Sroufe, 2000). This is an interactive co-regulation process, during which the infant uses the physical and emotional state of the mother to organize his/her experience (Feldman et al., 1999; Sroufe 1996), through gazes, play, touching each other, facial expressions, which allow mutually coordinated generating patterns of communication and regulation (Schore, 1994). This series of sensory and affective

encounters between the mother and her baby model the baby's mental organization (Schore 1994).

Consequently, with the foregoing, this study focuses on mother-baby interaction, understanding that the quality of this relationship is fundamental, since it provides a relational context in which positive interactions between adults and infants make it possible to optimize the results of social, emotional and cognitive development (Spinrad et al., 2007; Page, et al., 2010), favoring the development of regulatory processes (Davidov & Grusec, 2006; Raikes, Robinson, Bradley, Raikes & Ayoub, 2007).

1.1.4. Variables of the mother, the infant and the context that contribute to infant socioemotional development.

When addressing infant SED, the influence of variables of the mother, the infant and the context in which the development unfolds is distinguished.

According to that which has been previously reviewed, several studies have shown the relation of mother-associated variables with the in their children's SED. For example, the sensitive maternal response, defined as the appropriate, contingent, rapid and reliable reactions to the signals of the babies (Ainsworth, 1979), is a key aspect of high-quality mother-child interactions (Svanberg, Barlow & Tigbe, 2013). Sensitivity predicts cognitive and socio-emotional development, promoting the optimal development of early skills that will have a long-term influence on the development trajectory of the infant (Fivush, Haden, & Reese, 2006; Page, et al., 2010), less probability of negative reactions and greater use of regulatory behaviors in the infant (Cohn & Tronick, 1983; Raikes, et al., 2007); just as the capacity of maternal sensitive response to their three-month old children has been related to the baby's simultaneous and future

response ability in interactions, which in turn facilitates the participation of the baby in social interactions (Bigelow & Power, 2014).

Another variable of the mother-related one that has been related to infant SED is the maternal educational level, observing better levels of infantile development in those with a higher educational level (Dodge, Pettit & Bates, 1994).

Within the variables of the infant, gender is an aspect that has been studied; although there are few studies that have found differences, these indicate that delays in early socio-emotional development tend to be more common in males, whereas in girls, greater emotional reactivity appears more commonly (Bradley, Codispoti, Sabatinelli, & Lang, 2001). At six months of age, boys show more difficulties in maintaining their emotional regulation and show greater negative effects compared to girls (Wienberg, Tronick, Cohn & Olson, 1999). Differences in self-regulation between boys and girls continue between the first and second years of age, with girls increasingly regulated and boys less regulated during this period; later, the boys begin to catch up at three years of age (Vallotton & Ayoub, 2011).

In contrast, other authors point out that there are few differences between men and women in early childhood and that they can not be explained by the sex of the infants, but by the socialization of gender roles and social interaction, which leads them to conclude that the magnitude of these differences depends on cultural processes and socialization (Else-Quest, Hyde, Goldsmith, & Van Hulle, 2006).

Precisely, understanding that SED begins to develop in the first affective exchanges, in which babies and young infants gradually give meaning to the physical world and forge the first social bonds (Bornstein & Putnick, 2012) and for the first time learn to read and respond to the

emotional and social signals that allow them to organize their experience (Greenspan & Wieder, 2006) is that the context where these exchanges are deployed becomes relevant.

Thus, from the perspective of the context, the interactions and relationships that the infant establishes influence and are influenced by beliefs, values and cultural norms. Therefore, the functioning and patterns of socio-emotional development are configured through personal traits, socialization and cultural factors (Chen & Rubin, 2011) since parents socialize their children according to the values and norms established in their culture (Bronfenbrenner, 1979; Super & Harkness, 1986).

Several studies on infant SED have focused on contrasting different cultures, especially from Eastern and Western countries; for example, a study reported that Asian infants are less expressive of positive emotions, such as smiling, than their Western counterparts (Camras, et al., 1998). There is also evidence that infants in China, South Korea and some countries in South America are more cooperative in their social interactions than infants in North American countries (Farver, Kim & Lee, 1995). Another study found that infants in Australia, in some Asian countries such as China, Korea, Thailand and in some European nations such as Sweden and the Netherlands, seem to show less aggressive and opponent behaviors than the infants of North America (Bergeron & Schneider, 2005). Also, a longitudinal study in China showed that shyness in early childhood later predicted the socio-metric state, social and academic competence and psychological well-being indexes. This pattern contrasts with negative associations in the West, where shyness is linked to characteristics such as negative mood and problematic behavior with peers (Stevenson-Hinde, 2011). In this sense, researchers have come to the conclusion that it is essential to carefully describe sociocultural contexts in order to establish clear bonds with development (Chen, 2011).

The socioeconomic level of the parents is another context variable that has been studied, with better levels of child development at medium and high socioeconomic levels being observed (Dodge, et al., 1994).

Finally, comprehending the relevance of infant SED and the need to contribute in the understanding of the variables that may or may not favor it, maternal mentalization ability is a competence of the adult that is deployed in the context of parenthood and that has been studied very little. Although some studies have related this ability to children's social and emotional understanding (Ruffman, et al., 2002, Taumoepeau & Ruffman, 2006, 2008) the main interest of the researchers is the relationship that exists with the theory of mind, reason for which the studies have focused on infants between 3 and 4 years of age. Addressing this research gap, it was decided to study the relationship of infant SED with maternal mentalization capacity of when infants are 12 months old.

1.2. Mentalization

Mentalization is a process by which the mind mediates the experience of the world, through a self-reflective mechanism that allows reaching a complex perception of the internal world, so it is a capacity that is intrinsically related to the development of the self (Fonagy, et al., 2002). At the same time, it allows to differentiate between significant intrapersonal and interpersonal mental and emotional processes such as emotion regulation and productive social relations (Fonagy, et al., 1998, Fonagy, et al., 2002, Slade, 2005). In this sense, a series of representational capacities and inferential abilities are included, which form a specialized interpretative mechanism, dedicated to the task of explaining and predicting one's own and others' behavior through the ability to infer and attribute the action of the subject, that is, certain intentional mental states that account for their behavior (Gergely, 2003). Consequently, it refers

to the causal explanations that are constructed automatically and unconsciously to interpret and predict one's own actions and those of other people during everyday interactions. Mentalization then consists in the ability to go beyond the observable actions; it is to understand behaviors in terms of underlying mental states (Fonagy, Gergely, & Target, 2007; Fonagy et al., 2002).

1.2.2. Mentalization as maternal competence.

According to mentalization theorists, the ability of the infant to develop a mentalizing posture depends on the parents' capacity for mentalization; the parents conforming the creation of a world for the infant in which they can experience themselves as a being with feelings, thoughts and desires (Target & Fonagy, 1996). This implies taking the perspective of the infant and treating him/her as a psychological agent, understanding that his/her actions are motivated by mental states, while recognizing the inherent separation of the mind populated by different contents (Koren-Karie, Oppenheim, Dolev, Sher, & Etzion-Carasso, 2002; Sharp & Fonagy, 2008; Slade, 2002). Thus, the adult has the capacity to function as a mirror by reflecting the infant's inner states and making it clear that these states represent the infant's internal states and not those of the adult (Katznelson, 2014), infants eventually internalize this representation of the parents in themselves as intentional beings, recognizing that behavior is motivated by ideas, by the understanding that feelings or thoughts determine action, and by the appreciation of how others respond to their mental states (Fonagy et al, 2007; Rochat, 2007). Therefore, the development of understanding of children's mental states is embedded in the social world of the interaction between parents and children (Carpendale & Lewis, 2004).

It is then understood that it is an innate competence that develops early in the dyadic interaction (Ha, Sharp & Goodyer, 2011) and that it depends on the quality of the care received by the infant (Katznelson, 2014). Precisely, in recent years, the ability of mothers to develop a

mental model of the experience of the infant and thus relate his/her behavior to their mental states has been included in the approach of parenting (Zucchi, Huerin, Duhalde, Raznoszczyk de Schejtman, 2006).

This competence of the mother has been conceptualized and assessed from different perspectives, there are authors who understand it as a representation that the mothers have of their children as beings with mind, here we find the term Parental Reflective Functioning (PRF) introduced by Slade (2005), which refers to the ability of parents to think reflexively about their child, about themselves as a parent and about the relationship between them (Fonagy, et al., 1998). In order to achieve this goal, it is necessary that parents be contextualized in the development stage of the children, since without this it is not possible to infer correctly with regard to the mental states of the infant (Slade, 2005).

In addition, the parent must recognize that mental states are diffuse, that is, they cannot be fully known and therefore cannot be inferred with complete precision (Fonagy, et al., 1998; Slade 2007). Likewise, the parents' understanding that their own and the child's mental states influence each other is relevant (Fonagy, et al., 1998; Rosenblum McDonough, Sameroff & Muzik, 2008). In the same line, upon reviewing the concept of PRF, Ordway, Sadler, Dixon, and Slade, (2014) include in the aforementioned elements the curious attitude of the parents towards their child, non-compulsive reflection, recognition of the perspective of the one who reflects on the mental states of the other and the confidence regarding the mental states of the child. Supposedly, it is the internal working models about their child and the mental experience of the adult that facilitates the adult's mentalization capacity, and allows him/her to represent and show the infant his/her mental states and thus, the infant can make sense to his/her own internal experience (Fonagy, et al., 2002).

From the representational perspective, Meins, Fernyhough, Russell and Clark-Carter (1998) and Meins et al. (2001) coins the term mind-mindedness (MM), to refer mothers' ability of to infer, precisely, the mental states that govern the behavior of their children. MM is defined as mothers' proclivity to treat their children as an individual with a mind, rather than merely as a creature with needs that must be met (Meins, et al., 2001). This ability implies understanding that the infant is capable of having representations of the world and different positions or points of view that can be had in the face of reality and that the adult must first form a mental representation of the infant, to then comment on their mental states (Meins, et al., 2001).

Then it is the appropriate comments related to the infant's mind, which can be seen as an index of the mother's ability to read the internal states of her baby; for example: comment that the infant is happy while playing with a toy (Meins, et al., 2002). This ability of the mother to "read" the mental states that underlie the behavior of an infant has been related to maternal sensitivity and the promotion of secure attachment (Laranjo, Bernier, & Meins, 2008), as it has also been seen to favor the understanding of the theory of mind (Meins, et al., 1998).

When the infants are very small and the language skills are very rudimentary, the mother's conversation about mental states can give them the first opportunity to start thinking explicitly about mental states, such as desires or emotions and internal experiences associated with their desires or emotions (Taumoepeau & Ruffman, 2006). In this way, language is one of the mechanisms through which an adult transmits mentalization to an infant during the interaction (Fonagy et al., 2002). This process begins to develop long before an infant can speak, and it develops naturally and spontaneously through the interactions between parents and children, beginning in the first months of life (Main, 1991). In this way, one way in which the mother's perception of her child as a mental agent is evident is through the use of mentalizing language

that she uses, when she interacts with him/her (Meins, et al., 2012; Ruffman, et al., 2002; Taumoepeau & Ruffman, 2008).

This perspective, which is the one to which this study adheres, includes the direct conversation that the mother establishes with her child. There is evidence that has reported, among other things, that the language that the mother uses in direct interaction with her child is a key component in the subsequent social cognition of the infant (Taumopeau & Ruffman, 2008), as well as the mothers who use more concepts related to mental states in their descriptions have infants with a more advanced theory of mind (Ruffman, et al., 2002). The section that follows is developed in order to deepen this way of accessing maternal mentalization.

1.2.3. Mentalizing language and its relevance.

Speaking about mental state has been defined in a series of studies as talking about mental language and social understanding (Jenkins, Turrell, Kogushi, Lollis, & Ross, 2003; Ruffman, et al., 2002). Mental language is verbal speech that refers to internal states (Frampton, Perlman & Jenkins, 2009) through the use of specific terms of mental state characterized by the use of emotional words (happy, angry, sad), words of desire (for example, want, like), affirmative modulations (for example, perhaps, maybe), and cognitive words (for example, believe, think, know) in interaction with the infant (Brophy Herb, Stansbury, Bocknek, & Horodynski, 2011).

In most studies, there are different categorizations regarding mentalizing language types; for example, King and La Paro (2015) considered four categories (emotions, desires, cognitions and perceptions) in a study. In another study by Garner and Dunsmore (2011), references to emotional states (needs, desires and intentions) and references to actions that are logical consequences of the behavior of an infant (causal language) were divided. A study by Kristen, Sodia, Licata, Thermer and Poulin-Dubois (2012) included references to perception, references

to physiological states, references related to volition and ability, references to emotions, to moral and obligation terms and references to cognitive terms.

The conceptualization of Ruffman et al. (2002) is more complete and is divided into references to mental states (desire, emotion, modulation of affirmation, thought and knowledge, and other terms for mental states) and non-mental states (descriptions, development of a topic, causal language, factual language, connections with the life of the infant, not possible to know, physical states, guided interactions, repetition after others and self-repetition). According that which has been reviewed, it can be concluded that in most investigations desires, emotions and cognitions are used as mental references and only some researchers consider references to non-mental states as relevant in the mentalization process (Farkas, Strasser, Badilla & Santelices, 2017).

On the other hand, a fundamental aspect of the adult's mentalization capacity, in terms of the sensitivity with which it responds to the needs of the infant, is to distinguish and consider the infant's cognitive and maturational processes as he/she grows, to thus, introduce new mental states in the discourse. Studies reveal that the understanding of desires seems to precede the understanding of beliefs (Bartsch & Wellman, 1995; Wellman & Liu, 2004). It is deduced that this happens because the revealing facial expressions and actions make the babies' wishes stand out and, therefore, easier to infer for the mothers than the knowledge or beliefs of the babies, for example, babies cry because their desires are not satisfied, not because their thoughts or knowledge are wrong (Bretherton & Beeghly, 1982). Another explanation is based on the notion that mothers can try to focus on desires because they detect that infants "understand" the goals (either as relationships with objects or mentally). Mothers perceive subtle signals that babies

understand some goals, in terms of actions or behaviors, and then they include references to desire in their talk, which provides the first introduction of babies to mental states.

Speaking of desire (for example, do you want the rattle?) would help provide a common underlying cause (wanting) for different actions (for example, looking for a toy, looking unhappy when the toy is out of reach, crying when the toy falls out of his/her reach). If babies already have some indication of mental states, then the mother's desire conversation helps deepen this understanding (Taumoepeau & Ruffman, 2006). Desires allow people to modulate their own emotions and thoughts to then consider the mental states and behaviors of other people, which requires a greater inferential capacity on the part of an infant (Kristen et al., 2012; Ruffman, et al., 2002). Therefore, in the early stages of development, it has been described that infants acquire the ability to understand that their actions and those of other people are guided by desires and intentions (Tomasello, 1999) before they acquire the ability to evoke beliefs.

For its part, an investigation by Taumoepeau and Ruffman (2008) observed that at 15 months of age of the infant adults include in verbal interaction with him, a greater proportion of contents referred to mental states of desires, with respect to other mental states. Subsequently and after a follow-up, it was observed that between 24 and 33 months of age of the infant the verbalizations of the adult that incorporated mental states related to cognitions and thoughts increased. Gradual incorporation of mental states, from references to desires and then to cognitions, would be related to the mother helping her child to first understand his/her internal states, referring to the states in terms of desires and emotions, since they would be easier for him/her to recognize them in his/her evolutionary stage. Harris (1991) argues that infants require privileged access to their own mental states before that knowledge can be used to predict the mental states of others, then consecutively, the adult introduces thoughts and cognitions that

would be related to other people into the narrative content. Therefore, mothers introduce mental states placing them first within the infant's experiential reference framework (talk about the infant), before extending the reference framework to include others (Taumoepeau & Ruffman, 2008). This progressive incorporation would help the infant to develop appropriate mentalization processes that range from the infant to him/herself and then to others, taking into account his/her own socio-emotional development (Taumoepeau & Ruffman, 2008).

Taking into consideration that conversations about thoughts and feelings help to activate the understanding of the reasons behind people's behavior (Brown, Donelan-McCall, & Dunn, 1996) and that what determines the development of mentalization in the infant is the use, on the part of the adult, of a language about mental states, that is, about desires, emotions or thoughts (Ruffman, et al., 2002), several studies have reported the relevance of mentalizing language with different aspects of the infant's life. Among them there is evidence that has documented associations between conversations about mental states and the capacity of infants to develop the ability to represent and reason about these mental states (Carpendale & Lewis, 2004; Symons, 2004). Likewise, studies that relate that there is a relationship between families' tendency to talk about feelings and causality when the infants are 33 months old and the understanding about the false belief, seven months later have been carried out (Dunn, Brown, Slomkoski, Tesla & Youngblade, 1991).

Another study found a causal link between mothers' use of internal states language during an image description task and the subsequent understanding of infants' minds from 2 to 4 years of age, concluding that it is through references to their children's mental state, as well as of other people's, in the mothers' discourse at early stages of development, which is related to the theory of mind (Ruffman, et al., 2002; Meins et al., 2002) even when this language occurs as of the first

year of life (Meins, 1997). Similarly, verbalizations of mental states made by mothers predict individual differences in infant's theory of mind, independent of initial performance, linguistic abilities, and verbalizations of infant mental states (Ruffman et al., 2002) and of the mothers' socioeconomic level (Ruffman, Slade, Devitt & Crowe, 2006). On the other hand, it has been shown that the frequency with which mothers refer to mental states, desires and emotions is an aspect that facilitates the social and emotional understanding of infants. (Ruffman, et al., 2002; Taumoepeau & Ruffman 2006, 2008).

1.2.4. Socio-emotional development and maternal mentalization.

According to what has been reviewed, the capacity for mentalization as a process by which the mind mediates the experience of the world and is intrinsically related to the development of the self (Fonagy, et al., 2002) would favor the appropriate SED insofar as it allows to differentiate between the intrapersonal and interpersonal mental and emotional processes such as emotion regulation and productive social relations (Fonagy, et al., 1998; Fonagy, et al., 2002; Slade, 2005).

This capacity to experience oneself as a being with feelings, thoughts and desires, that is, as a mental agent, develops from early childhood and depends radically on interactions with other mature minds (Fonagy et al., 2002), that is to say, it is from the mental states of others - usually the mother - where meaning is found for one’s own experiences and mental states (Fonagy, et al., 2007). The capacity to regulate, modulate and finally, symbolize the infant's affective experience is achieved thanks to the mother's own reflexive function or mentalization (Stacks, et al., 2014) and allows her to contain and bond with the affective expression of her child and respond appropriately to him/her, that is, in an organized, coherent and meaningful

way, in addition to providing a secure base where the infant can discover a sense of him/herself connected and separated from her (Slade, 2005).

Finally, this sensitive and mother-adequated manner is closely related to the infant's emotion regulation, since it muffles the increase of negative affects when due to their quantity they can not be counteracted or placated (Zucchi, et al., 2006), which has influence in the different dimensions of the quality of the social relations that the infant establishes (Lopes, et al., 2011). On the contrary, low levels of mentalization of the adult jeopardize the development of the infant's mentalization processes and the possibility of an appropriate regulation of emotions, which increases the risk of psychopathology (Fonagy & Allison, 2012; Katznelson, 2014).

In addition, the recognition of characteristics of the mental states linked to development is a particularly important feature of the adult's capacity, since, if a parent constantly fails to provide the infant with representations of his/her inner world and mind, or ignores his/her anxiety or represents back with distortion or without modification, his/her socio-emotional development is endangered (Fonagy et al, 2002). On the contrary, by deploying appropriate mentalization processes that go from the infant to him/herself and then to others, his/her own socio-emotional development is favored (Pascal, Aguardo, Sotillo, & Masdeu, 2008; Taumoepeau et al., 2008).

Studies report that the mothers' capacity to develop a mental model of the infant's experience and thus relate his/her behavior with his/her mental states (Zucchi, et al., 2006), has been related to attachment security and emotional and behavioral self-regulation (Fonagy et al., 2002); with sensitivity and inversely with negative parentality (Stacks, et al., 2014); low mentalization is associated with the development of insecure attachment on the part of the infant (Slade, Grienenberger, Bernbach, Levy, & Locker, 2005). Also, mentalization has been shown to

predict attachment security beyond maternal sensitivity, suggesting that parental mentalization underlies the capacity to responsibly respond to their baby (Grienenberger, Kelly, & Slade, 2005; Koren -Karie, et al., 2002; Laranjo, et al., 2008) and with emotional understanding and theory of mind (De Rosnay, Harris & Pons, 2008; Ruffman et al., 2002; Taumopeau & Ruffman, 2008).

Maternal language in interaction can provide an entry input, in that the infant can receive language that includes references to mental states in a natural way (Dunn et al., 1991), in addition, the type of mother language used in the interaction has nuances that respond to the sociocultural context, that is, it can have different functions depending on the context; for example, in western culture it has the function of transmitting ideas, meanings, thoughts and concepts, and in traditional Chinese culture language has a regulating function that guides behavior and coordinates social interactions (Doan & Wang, 2010).

According to that which has been revised, SED is also influenced by the context where it is deployed, however, it is not known if there is a relationship between mentalizing language and infant SED, and if this relationship is manifested in the same way in different contexts. In order to address this knowledge gap, this study compared a sample of Chilean mother-child dyads with US mother-child dyads.

1.3. Different contexts and infant socioemotional development: Chile and the United States

1.3.1. Theoretical perspectives.

All cultures have ideas about what is valuable and desirable; representing ideals or conceptions about what is good or bad. These notions underlie social practices, norms and institutions, and contribute to fix preferences, attitudes and behaviors that individuals see as

legitimate or illegitimate - and that are stimulated or discouraged - in different social contexts (Schwartz, & Shalom, 2009).

According to this, in order to study cultural differences, researchers have suggested proposals (Matsumoto & Juang, 2013). One of the traditional approaches is that of cultural values developed by Hofstede (1980, 2001), who classifies 40 countries in terms of their degree of individualism-collectivism and distance of power, among others. Individualist orientation emphasizes individual goals and rights, autonomy, self-sufficiency, goal orientation and competitiveness. Collectivism, on the other hand, emphasizes collective goals and rights, interdependence, affiliation, cooperation and harmony (Kulkarni et al., 2010). Chile has been defined as a collectivist culture, while the United States has been identified as individualistic (Hofstede, 1980); however, Chile has been changing towards individualism, which means that the country is formed by a mixture of individualist and collectivist elements (Kolstad & Horpestad, 2009). The dimension of power distance is defined as the degree to which the less powerful members of organizations in a country expect and accept an unbalanced power distribution; that is, inequality is approved by both followers and leaders (Hofstede, 2009). A low power distance characterizes the United States; that is, information is shared, informal, direct and participatory, and equal distribution of power is valued. Relationships are more symmetrical and interaction has a horizontal base. In this context, parents are expected to provide a mutual framework where the infant can exercise control over the interaction, thus reinforcing his/her sense of autonomy and the experience of being a different person (Keller, et al., 2004). On the other hand, in countries like Chile that tend to preserve a greater power distance, it is common for the upbringing to be hierarchical and authoritarian, with parents who teach infants to follow a specific set of rules without challenging them; in this context, the opinions of the infants are not

considered and unquestioning obedience is expected (Calzada, 2010) which can be related to the tendency to control negative emotions and promote the emotional regulation of infants (Chen & Rubin, 2011).

Schwartz is another researcher who proposed a theory of cultural differences centered on cultural values (2006), identifying seven orientations that form three dimensions of cultural values that have their opposite, generating a map where 76 countries are classified. Chile is placed in the egalitarian dimension where its opposite is cultural hierarchy; egalitarianism seeks to induce people to recognize each other as equals morally, they socialize to internalize the commitment to cooperate and care for the welfare of all. Important values in such cultures include equality, social justice, responsibility, help and honesty. On the other hand, the USA is located at the end of the domain dimension and its opposite is harmony, domain encourages directing and changing the natural and social environment to achieve group or personal goals. Values such as ambition, success, boldness and competence are especially important in domain cultures (Schwartz, 2006).

On the other hand, Markus and Kitayama (1991) make reference to that fact that people in different cultures have different conceptions of the self, of others and of the relationship of oneself with others. The importance and the functional role that the person gives to the other, when defined, depend on culturally shared assumptions about the separation or connectivity between oneself and others. From this perspective, collectivist cultures favor the construction of an interdependent self, characterized by feeling connected to the social environment, giving prominence to public features and worrying about the effect of one's behavior on others. Individualist cultures, on the other hand, would contribute to the construction of an independent self, characterized by a sense of separation from the social environment and the prioritization of

one's own thoughts and feelings.

Consistent with the above, but focusing on parenting, Keller (2003) identifies two parenting styles: proximal and distal. The first style privileges the development of an interdependent self, with larger family networks (Keller, et al., 2006) with body contacts and interactions that support the acceptance of norms, family values and obedience, both proximal care and the obedience of small infants are highly valued in interdependent sociocultural contexts (Keller, 2007). Meanwhile, the distal style supports the development of an independent self privileging the achievement of the autonomy of children over relationships and perceives them with their own will, desires and needs (Keller, 2007), through face-to-face contact and games with objects linked to autonomy and separation (Keller & Greenfield, 2000), as well as cognitive and intellectual development (Keller, Voelker & Yovsi, 2005). Parents who adopt this style want their children to become aware of their uniqueness and encourage emotional expression. On the contrary, mothers in relationship-oriented cultures encourage the regulation of emotional expressions as an important value for social wellbeing (Keller & Kärtner, 2013). In this sense, depending on the context where the infant is developed, specific forms of socio-emotional development can be encouraged.

1.3.2. Socioemotional development in different contexts.

Human development is culturally situated; that is, infants from different cultures follow different development trajectories (Dassen & Mishra, 2000 cited en Greenfield, Keller, Fuligni & Maynard, 2003). More specifically, development tasks are manifested differently according to the socio-cultural contexts in which they are implemented (Greenfield, et al., 2003).

Psychological development, on the other hand, is a complex process influenced by multiple factors linked to the ecological context where this development occurs (Bronfenbrenner, 2005).

Precisely, infants living in different societies differ considerably in aspects related to socio-emotional functioning, such as freedom of expression, cooperation, responsibility, aggression and shyness (Chen & Rubin, 2011). For example, one study revealed that compared to US infants; Chinese infants tend to show a more timid and more inhibited behavior in a variety of novel situations. Researchers concluded that traditional Chinese society values prudence and self-control, in contrast to Western society, which promotes assertiveness and self-expression (Chen, Wang & DeSouza, 2006, cited in Chen & Rubin, 2011).

Super and Harkness (1997) cited in Chen and Rubin, (2011) clarify that the interface between child development and the cultural context focuses on the role of parents and their cultural belief system, what they called parental ethnotheories, which as of the first interactions begin to socialize the behavior of the infant. Parental ethnotheories include parents' beliefs about the nature of children's competition, the means by which infants acquire those competencies, and the appropriate ways in which caregivers can encourage them (Chen & Rubin 2011).

In this way, early social experiences lay the foundations for psychological development where infants construct and co-construct internal representations of social relationships and a primary concept of the self. Contextually relevant information that allows the infant to adapt to a specific environment is transmitted as of birth, through the exchanges between the caregivers and the baby (Brownell & Kopp, 2006; Keller, 2012). Thus, the bonds that are developed are influenced, among other things, by the established form of care, which is constituted by practices located in a cultural model of a specific environment and are implemented in the context of raising children (Keller, et al.,2004). In this way, the exercise of upbringing is a variable strongly linked to culture (Matsumoto & Juang, 2013), since it transmits norms, values and practices from one generation to the next.

Consequently, during early childhood infants' emergent abilities and the sociocultural context in which these abilities are nurtured have consequences in the long-term development of the infants' socio-emotional functioning (Brownell & Kopp, 2006). For example, in terms of emotional regulation, as of the first months of age, babies have some rudimentary regulation strategies such as deviating their gaze, self-stimulation and proximity seeking (Cole, Martin & Dennis, 2004), however, their adequate development depends on emerging cognitive skills, such as the support of more experienced social partners, and is subject to socialization practices that vary with the broader cultural context (Brownell & Kopp, 2006). See figure 2.

Research suggests that development of emotional regulation is a process intervened by culture since it influences both the way in which emotional competence is defined and the way in which individuals experience and express emotions (Friedlmeier, 2005; 2010 in Friedlmeier, Corapci & Cole, 2011).

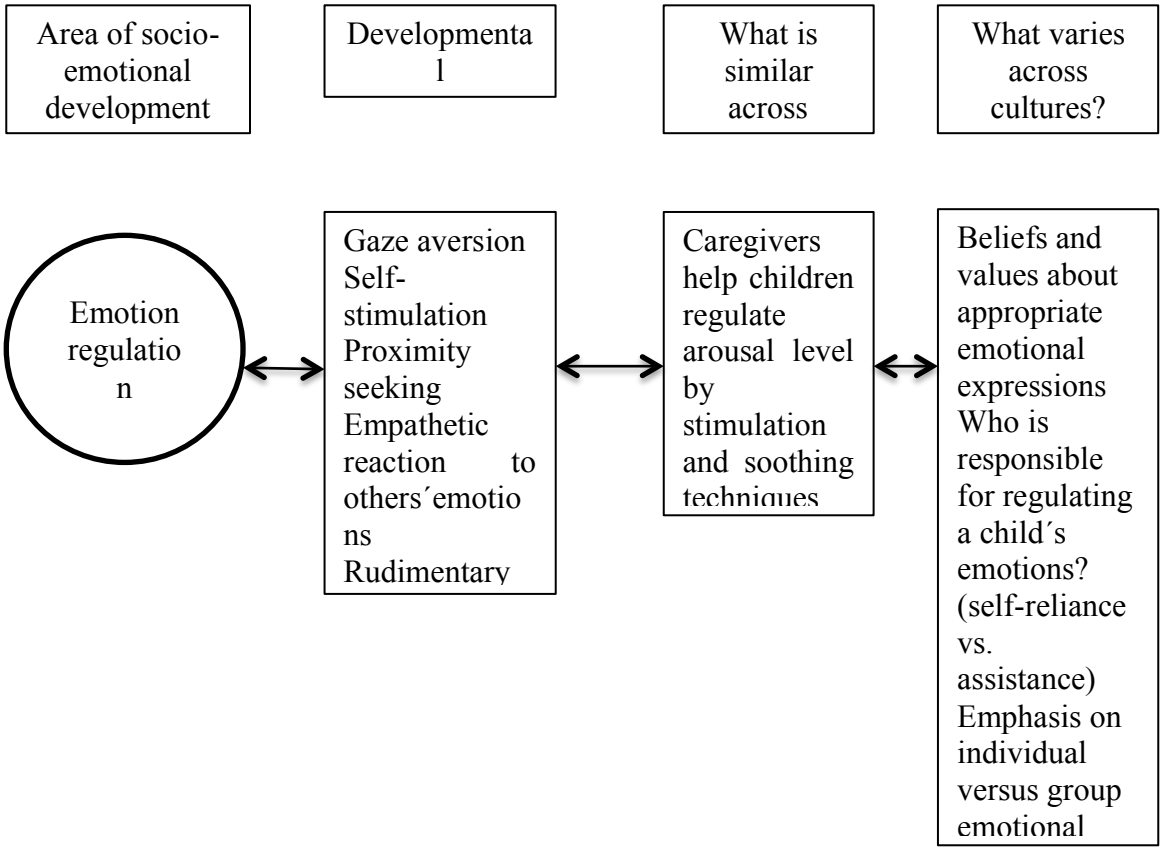


Figure 2. Regulation of emotion as developmental milestone similarities and cultural variations. In Brownll & Kopp, 2006

Regarding emotion regulation, cultural value systems include ideas about the extent and type of emotional expressions that are appropriate, even for very young infants (Whiting & Edwards, 1988). Thus, there are studies that refer that infants raised within an independent sociocultural orientation, compared to those raised in an interdependent orientation, tend to be encouraged to regulate their emotions independently from an earlier age and regulate emotions verbally or seek support through eye contact instead of contact (Friedlmeier and Trommsdorf, 1999, Keller et al., 2004).

Specifically for this study, when comparing the infant SED between Chile and the USA, a research carried out by Barata (2011) compared Chilean and US preschools concluding that Chilean infants show greater capacity for self-regulation than those from the USA. This same result was confirmed in a study carried out by Farkas and Vallotton (2016) in one-year old infants. It has been suggested that this result is associated with Chile's cultural emphasis on obedience and self-control in early childhood (Barata, 2011). In the same line, a study by Muzard, Kwon, Espinosa, Vallotton and Farkas (2017) showed that US infants express pleasure and discomfort more intensely, specifically through corporal expressions, compared to Chilean infants. It is concluded that Chilean parents aim to socialize their children to regulate their emotional expressions according to social expectations and to limit their extremely intense social behaviors, which may annoy other people (Tamis-LeMonda et al., 2008).

1.3.3. The present study

Given the reviewed information, it can be concluded that although previous investigations on SED and mentalizing language have produced relevant knowledge, they pose questions that are intended to be taken in the present investigation.

Understanding that socio-emotional development is a fundamental aspect of the development of all children (Greenspan & Shanker, 2004) and that it can be influenced as much by characteristics of the infant as of the context (Chen & Rubin, 2011), as the first objective of this study, it was considered relevant to compare the SED of Chilean and US infants, in order to contribute to the deepening of SED in the light of the context in which it is deployed. Based on what Super and Harkness (1986) refer to on how specific contexts can help shape the infant's development, it was hypothesized that there would be differences between the infants of 12 and 30 months, since expectations regarding child development can vary between both ages. Also,

considering that the USA has been classified as an individualistic country (Hofstede, 1980), with a distal parenting style (Keller, 2007), focused on domain (Schwartz, 2006); and that regarding Chile we know that it is located in a mixed dimension between individualism and collectivism (Kolstad & Horpestad, 2009), it was hypothesized that there will be differences according to the country of residence.

On the other hand, from the contextual point of view, the educational level of the mothers was a relevant variable to control, since the Program of International Student Assessment (PISA, 2015) carried out by the Organization for Economic Cooperation and Development (OECD) showed that Chile's scores at the educational level are below average and the USA is within the expected averages, which reveals differences between these two countries and, therefore, between the contexts where the infants develop.

In the second place, considering that one way to access maternal mentalization is through the mentalizing language that the mother uses in direct interaction with her child (Meins, et al., 2012; Ruffman, et al., 2002; Taumoepeau & Ruffman, 2008) and that there are researches where cultural differences have been observed in the type of mentalizing language used by mothers, being a way through which infants understand and give meaning to the appropriate cultural values (Laible, et al., 2013) it was decided to evaluate the type of mentalizing language used by mothers in different contexts; because the mentalizing language can be influenced by the educational level (Ruffman et al., 2002), resolving to control it by comparing the Chilean and US sample.

Fivus & Wang (2005) report that US mothers focus their mentalizing language on the understanding of the emotional experiences of their children, discussing and negotiating how and what their children feel in long conversations, and even though there are no studies that show

how mentalizing language in Chilean mothers is, it is possible to hypothesize that the discourse of Chilean mothers will be focused on regulating their behavior.

In the third place, mentalizing language has been widely studied with other aspects of the infant as a prediction of security in mother-infant attachment (Meins et al., 2001;Meins et al., 2002; Meins et al., 2012), the relationship with the theory of mind of infants (Ruffman et al., 2002; Meins et al., 2002; Meins et al., 2013), and the facilitation of language and symbolic play (Meins et al., 2013). However, there are no studies that have considered the mentalizing language emitted by the mothers in direct interaction with the infant at 12 months of age and the relation that it has on the SED when they are older. For this reason, it has been decided to consider a longitudinal design that allows evaluating mentalizing language at 12 months and its impact on SED at 12 and 30 months. Based on the theory, it is possible to hypothesize that there will be a relationship between mentalizing language and infant SED, and this relationship will show up differently in the Chilean and US sample.

Finally, in the fourth place, given that infant SED is strongly related to the primary bonds that develop in the context of parenthood, and that maternal mentalization is a capacity that is deployed in this same context, it is considered relevant to contribute to the understanding of these variables in light of the environment where they are expressed. It is hypothesized that the mentalizing language that the mother performs in the interaction with her child at 12 months, as well as the country of residence, will have a predictive weight in infants' SED at 30 months of age.

According to the aforementioned background, it is intended that the results of this research may contribute to the understanding of SED variables and mentalizing language, in light of the context in which they are developed, identifying what may or may not be explained by the place

of residence. In the same sense, it is expected that the results serve as an input to carry out interventions to prevent and promote child mental health considering the particularity of the context.

OBJECTIVES

2.1 General Objective:

Describe the relationship between the socio-emotional development of infants at 12 and 30 months and the mothers' capacity of mentalization in Chilean and US dyads.

2.2 Specific Objectives:

1. Describe and compare the level of socio-emotional development of Chilean and US children at 12 and 30 months of age, as well as the change that occurs between both ages.

2. Describe and compare the maternal mentalization (considering *proportion* of 10 references of content and mental support, the *heterogeneity* and *complexity* of mentalizing language) in Chilean and US mothers with their children when they are 12 months old.

3. Identify the possible associations between maternal mentalization when infants are 12 months old and the socio-emotional development of infants at 12 and 30 months of age in Chilean and US dyads.

4. Analyze the predictive capacity of maternal mentalization (measured at 12 months) on the socio-emotional development of children at 30 months of age, once the mother's educational level, and the children's sex and socio-emotional development at 12 months have been controlled in both samples.

HYPOTHESES

1. Differences will be observed in the level of socio-emotional development of Chilean and US children, both at 12 and 30 months of age, and in the change between both ages.

2. Differences will be observed in the mothers' mentalization (in *specific references*, in the *heterogeneity* and *complexity* of mentalizing language) between the Chilean and US sample when their children are 12 months old.

3. Associations will be observed between the maternal mentalization, measured when the mothers' children are 12 months old and the socio-emotional development of children at 12 and 30 months of age; being this different in both samples.

4. It will be evident that maternal mentalization (measured when the mothers' children are 12 months old) and the country of residence predict the socio-emotional development of children at 30 months of age; being this different in both samples.

METHOD

4.1. General Design of the Investigation

The present investigation used a quantitative methodology, with a non-experimental design, since the variables were not manipulated, and longitudinal since the children's socio-emotional development was evaluated at two different times at 12 and then at 30 months. It is also an exploratory design, since the objective was to examine the relationship between SED and mothers' mentalization capacity, which is a subject that has not been researched much; descriptive, since it was sought to describe socio-emotional development and mentalization capacity; comparative, since the variables were compared to test the hypotheses; and explanatory, since the interest was to explain the weight of aspects of mentalization measured at 12 months, as well as country of origin, on SED at 30 months. The variables studied were:

- **Dependent Variable:** The infant's socio-emotional development was considered a dependent variable.
- **Independent Variable**: The mentalizing language used by the mothers and the country of residence of the dyad were considered independent variables.
- **Co-variables**: the sex of the children and the educational level of the mothers are considered co-variables.

4.2 Participants

A non-probabilistic and intentional sample was used. It was composed of 142 mother-child dyads, 90 Chilean dyads obtained from 17 day care centers in the city of Santiago, where 61.1% are public centers and 38.9% are private centers and 52 US dyads obtained from 5 cities of the State of Michigan, 50% are public centers and the other 50% are private centers. All cases

belong to the main sample of Fondecyt Project No. 1110087 (2011-2014).

In the initial measurement, the Chilean children were placed in a range of 10 and 15 months of age, with a mean age of 11.9 months (*S.D.* = 1.370) and of a total of 90 infants 56.7% were boys and 43.3% were girls. In relation to their mothers, they were located in an age range between 15 and 44 years of age, with a mean age of 27.79 years (*S.D.* = 6.738), and 47.8% were in a technical and / or university educational level. In the USA the children were also found in a range of 10 to 15 months of age, with a mean age of 12.17 months (*S.D.* = 1.438), out of a total of 52 infants, 44.2% were boys and 55.8% girls. As for the mothers, they were located in an age range of 19 and 48 years of age, with a mean age of 32.44 years (*S.D.* = 5.84), 86.6% was found to be at a technical and / or university educational level (see Tables 1 and 2).

In the second measurement, Chilean children were in a range of 27 to 33 months, with a mean age of 27.79 months (*S.D.* = 6.738) while US children were in a range of 28 to 37 months with an age range of 32.44 (*S.D.* = 5.849).

Table 1

Descriptive statistics of the age of children and mothers in both samples

	CHILE				USA			
	Range		*M*	*SD*	*Range*		*M*	*SD*
Infants' age (months)	10	15	11.99	1.370	10	15	12.17	1.438
Mothers' age (years)	15	44	27.79	6.738	19	48	32.44	5.849

Table 2

Descriptive statistics of the distribution of the mothers' educational level and the child's gender in both samples

		CHILE		USA	
		f	%	*f*	%
Education	Elementary and middle school (incomplete)	2	2.2	0	0
	Elementary and middle school (complete)	3	3.3	0	0
	High school (incomplete)	12	13.3	1	1.9
	High school (complete) and education in a technical center (incomplete)	30	33.3	6	11.5
	Education in a technical center (complete) or associate degree	14	15.6	3	5.8
	Bachelor's degree	21	23.3	17	32.7
	Postgraduate degree	8	8.9	25	48.1
Child's gender					
	Male	51	56.7	23	44.2
	Female	39	43.3	29	55.8

The following criteria were used in order to select the participants:

With the objective of homogenizing the sample and be able to control factors that could influence the study, the inclusion criteria used were: a) that the child attended a day care center, public or private, b) that the mothers were the main caregiver of the child, and live with him/her and c) that at the beginning of the assessment the child were between 10 and 15 months of age. Regarding the exclusion criteria that the child were to have some type of severe pathology in terms of development.

When comparing if both samples were equivalent according to the children's sex and age, and the mothers' age and educational level, significant differences were found in the mothers' educational level and age, the US mothers having a significantly higher educational level than Chilean mothers (X^2 (6, N = 142) = 39.245, p = .000), and the Chilean mothers (X = 27,79 years ($S.D.$= 6,74) are significantly younger than US mothers ($t_{(129)}$ = -7.148, p < .000); while there were no differences between the two samples in the distribution of the children's sex or age.

4.3 Data collection procedure

This study was part of a Fondecyt Project, in which the first thing that was done was to establish contact with the directors of the day care centers to explain the project and to get them to agree to participate, authorizing the execution of the assessments in their facilities. Then, the parents were contacted through the day care teacher or when they took the children to the day care center; in this instance, they were invited to a group meeting to explain what the project consisted of, their participation and if they agreed, they went on to sign the informed consent and schedule the assessment.

The assessment was carried out at the facilities of the day care centers and exceptionally in the houses. The instruments were applied in a questionnaire format for the mother, (Child Development Scale, specifically the Bayley Social Emotional Skills Scale and the Socio-demographic Questionnaire) and then the course of action was the application of the mentalization assessment Guideline, which is filmed. Then, at 30 months of age, the Social Emotional Skills Scale from Bayley's Scales of Infant Development was reapplied. Finally, the filming was transcribed, as of this transcription the course of action was to make two types of encodings, which were carried out by previously trained coders.

4.4 Information-collection instruments

4.4.1. Adult Mentalization Assessment Guidelines (Farkas, Strasser, Badilla & Santelices, 2017).

An instrument developed to evaluate mentalization in significant adults that interact with children between 0 and 48 months of age. The evaluation considers a structured situation, in a context of shared reading. It consists of 2 forms (A and B), depending on the child's age, form A includes the interaction of the adult with children between 0-23 months and form B, the interaction with children of 24-48 months. In the first form, the adult, who can be the child's parent (father-mother) or the day care teacher, tells the story using puppets, while in the second one he/she does it using pictures. The stories are specific to interpersonal situations that occur between the child and his/her parents or the day care teacher, as well as to the age (See Annex 5).

The assessment does not require a time limit. The initial instruction for the mother in form A is as follows:

> I invite you to tell 2 stories to _____ [child's name]. Each story goes with a set of puppets and objects. The peculiarity of these stories is that they are not finished, and you must complete them using ideas that you create. You may take the time you consider necessary to finish the story.

In the stories, there are situations of interaction between adult-child who face a problem, what is thought is to reflect their own age-related conflicts. The whole situation is filmed, transcribed and then encoded. In this study, parent version Form A, which considers the interaction with children 0-23 months of age, was used. The bullets for parent version Form A, which was the one used in this investigation, are the following:

Parent story 1: The keys: "Tomás / Antonia are playing with the house keys and approached the door. He/She tried to insert the keys again and again, but he/she could not!

Parent story 2: The time to go to sleep: "Andrea / Juan is with his/her mom. He/She was very sleepy and they started looking for his/her favorite pacifier / teddy bear for bedtime ... but they could not find it ....

The coding of the information is carried out by analyzing the speech, the first thing that is done once the mother's speech is transcribed is to mark the 10 categories of mental references according to the following classification: six references of mental content (desires, cognitions, emotions, psychological attributes, states of consciousness and physiological states) and four of mental support: (causal thinking, factual thinking, link with the child's life and physical expressions) which although they are not mental references are considered as references of mental support. Within some categories there are subcategories. Table 3 shows the explanation and example of each one.

Table 3

Types of references in discourse in terms of content and mental support

Type	Category	Description	Subcategories	Examples
Content Mental content	Desires Code: 11	Adult uses words or phrases that refer to desires, preferences and intentions; what people want or wish or like	Desires Code: 111	Want (something), "wanna", wish, hope (hope for something), hopefully
			Preferences related to the person Code: 112	Love (something), like, attract, prefer, need
			Preferences related to the object Code: 113	Favorite, wanted (adjective, for example your desired toy or your wanted toy)
	Cognitions Code: 12	Adult uses words refer to mental/cognitive processes.	Attentional processes Code: 121	Attend, concentrate, pay attention
			Memory processes Code: 122	Remember, forget, memorize, recognize
			Thinking processes Code: 123	Wonder, think, know, believe, thought, mean, be sure, be unsure
			Complex cognitive processes; rational Code: 124	Understand, learn, teach, realize, to reason, comprehend, figure out, decide
			Complex cognitive processes; creative Code: 125	Dream, imagine, suppose, pretend. "An idea popped up", "do you have a guess?", guess ("guess what"), "I bet"
	Emotions Code: 13	Adult makes explicit references to	Primary emotions	Happy, happiness, glad, unhappy, anger,

		feelings, emotions and moods, or mention the word "feeling"	Code: 131	angry ("mad", "grumpy"), upset, dislike, disgusted, scared, afraid, fear, sad, sadness, surprised, surprise, frustrated, excited, good mood.
			Secondary emotions Code: 132	Shame, ashamed, embarrassed, guilty ("feel bad"), proud, worried, stressed, anxious, hopeful ""she feels hopeful"), relief, relieved, feel sorry, jealous
			Emotional processes Code: 133	Feel, love, like (somebody), I'm sorry
	Psychological attributes Code: 14	Adult makes references to child´s characteristics, him/herself or from the story character, related with personality characteristics or ways of being (how the person "is")	General psychological attributes Code: 141	Be: Kind, nice, good, nervous, loving, determined, smart, curious, uninterested, silly, independent, creative, turkey, chicken, funny, sweet, goofy
			Psychological attributes related with regulation Code: 142	Regulation: Obedient, patient, mature ("he's a big boy"), careful, safe
			Psychological attributes related with dysregulation Code: 143	Dysregulation: Disorderly, impatient, disturbed, naughty, messy, loose, restless, hyperactive, loud, disobedient, dangerous

	State of consciousness Code: 15	Adult makes references to states of consciousness related to the child's emotional commitment, the story character, or his/herself (how the person feels)	Code: 151	Have or Feel: Calm, bored, entertained, motivated.
	Physiological states Code: 16	Adult makes references to physiological states of the child, the story character, or his/herself (how the person feels)	Code: 161	Tired, sleepy, in pain, cold, hot, hungry, thirsty, ill, sick, hurt
Support Support for mental work	Causal talk Code: 21	Adult explains why something happens (cause-effect relation), or makes reference to associations or two-event sequence (there is a "before" and an "after", there are two events, related in time). Implies the presence of a connector.	Code: 211	Now, and, but, because, after, so, so then, if, why, afterwards, when, while, without, and then, instead, and so.
	Factual talk Code: 22	Adult makes reference to some fact, like an object function or a fact of nature	Code: 221	The orange is a fruit, and grows on trees. Hens lay eggs.
	Links with the child's life Code: 23	Adult makes a link between what happens in the story or in the actual moment, and something from the child's life	Link with emotion. If linked with both, emotion and experience, is observed, include it here	"Andy is sad, like you the other day" "Andy is sad, like you the other day when you lost your teddy bear"

			Code: 231	
			Link with experience or behavior Code: 232	"Andy's mother called him for lunch, like I called you today" "Here is a pacifier. Look, it's like your pacifier".
			Imprecise bond (can't tell if it is emotion or experience) Code: 233	"Look this… like you the other day"
	Physical expressions Code: 24	Adult makes references to physiological states or sensations related to the child, the story character, or his/herself	Code: 241	Observable physical expressions: cry, smile, laugh, shivering, frown, frowning, sleeping

Source: Fondecyt No. 1160110

The following information was obtained from these data:

a) *Proportion of references*: it is calculated based on the proportion of each of the categories and subcategories according to the number of words (100 words) emitted by the mother; this is done to control the verbosity of the adult. Then they are added up giving an indicator of: a) Total proportion of references, b) Proportion of categories and subcategories, c) Proportion of content references and mental support.

b) *Heterogeneity:* it is calculated based on the number of concepts used by the mother. For example, if within the desire category the mother uses "did you like the toy?", "would you like to play?", "do you want this toy?", "do you like this book?", there are 4 concepts of the

desire category. However, two concepts are considered (like and want), which gives an indicator of heterogeneity or variability in discourse. The sum gives an indicator of:

a) *Total* number of concepts b) Number of concepts in categories and subcategories c) Number of concepts of content and mental support.

c) *Complexity:* For this indicator, it is analyzed if the mother combines one or more mental references in the same statement. For example: "are you happy?" (emotion), "why did you like (desire) the toy?" and a score is given indicating the level of complexity of each statement. Complexity can refer to (a) a combination of concepts: one or more concepts in the same statement, or (b) a combination of categories: one or more categories and total concepts used. For example: "are you happy or sad because we are playing?" Here we find a combination of concepts = 3, combination of categories = 2 (emotion and causal language) and total of concepts = 3. It gives an indicator of the variability (or heterogeneity) of the mental references considered in the discourse.

d) *Categories of Maternal Mentalization:* the type of categories incorporated in the discourse gives a final classification of mentalization according to what the theory refers to, where a classification "high" belongs to the presence of 5 or more different categories, a classification "adequate" indicates at least the presence of two different categories and that include causal language and desires, and the classification "low" refers to the presence of one or no category, or that causal language and desires are not present.

Mentalization categories were not used due to the fact that the objective of this research is to study the maternal mentalization through the mentalizing language used by the mother.

The instrument reports an adequate content validity and a Cronbach's Alpha coefficient of .70. Six (6) previously trained independent coders, whose inter-rater consistency was .914 to .994 (Correlations with *Master Code*), encoded the filming.

4.4.2. Social-Emotional Scale, Third Version (Bayley, 2006).

This scale evaluates the development of infants and young children through the identification that parents make of socio-emotional milestones that are normally obtained at certain ages. Therefore, the information that it provides is the maternal perception about the infant socio-emotional development of her child. It is applied to infants from 2 weeks, up to 42 months of age and it includes 35 items that the main caregiver responds, through a Likert scale related to the frequency with which he/she observes each behavior of his/her infant. The reported reliability is adequate: from 0.83 to 0.94 in US children (Bayley, 2006) and 0.95 in a sample of 210 Chilean children with socio-demographic characteristics similar to those of the infants included in this study (Farkas, Santelices & Himmel, 2013). In this sample, the reliability reached 0.84 and it was evaluated with Cronbach's alpha. The sum of the scores for each item gives a raw score, which is transformed into standard scores according to the infant's age and in percentiles, with US standards. The standard scores range from 1 to 19 points, with a mean of 10 and a standard deviation of 3. For this study, work was carried out with the raw scores, since the instrument is not standardized in Chile (See Annex 5).

4.4.3. Socio-demographic Questionnaire.

The research team developed the Socio-demographic Questionnaire used in this study with the objective of obtaining information to characterize the sample. The data that was used were: educational level and country of residence of mothers, age and sex of the infants (See Annex 5).

4.5 Data Analysis Procedure

In order to analyze the collected information, different analysis techniques were used according to the characteristics of the data proposed through the SPSS software, version 2.4 and R, version 3.4. Descriptive statistics and frequency analysis were used to describe the variables. Chi-square was used to compare both samples in terms of descriptive statistics.

In order to test the hypothesis related to SED, when working with the raw data of the SED instrument, it was necessary to apply a test that considered controlling the age of the children, since they were evaluated during a range of 6 months, which is why analysis of covariance (ANCOVA) was used; since this type of analysis allows controlling variables such as age, comparing categorical and continuous variables, as well as including co-variables, such as sex and maternal educational level.

Subsequently, a DELTA SED was created, subtracting the raw score of SED obtained after 12 months from the raw score obtained after 30 months in order to analyze the change in SED between both ages. ANCOVA was carried out, controlling the age, sex and educational level of the mother.

Then, in order to know the predictive value of the country variable on SED at 30 months, a hierarchical regression analysis, in which the control variables were entered first, was performed: SED in the first measurement (model 1), age of the infant at 12 and 30 months (model 2); then, the variable educational level of the mother was added (model 3), to finally include the variable country of residence (model 4).

The successive models in the regression analysis revealed that the educational level variable provides a significant amount of additional variance (third model) and when entering the country (4th model), it is not statistically significant. For its part, the maternal educational level

remains a significant predictor in model 4 it. Examining these data, it was proposed to analyze the possible mediating role of the maternal educational level variable; for this, the Sobel test was carried out. The variables of infant SED at 12 months and Age at 30 months were controlled.

In order to test the hypotheses that included the maternal mentalization, the first thing that was done was to verify the assumptions. Here it was evidenced that the data do not fulfill the assumption of normality, reason for which an analysis that would consider this situation to compare the two samples was used; so the Poisson regression was performed.

Then, in order to examine the potential associations between the variable maternal mentalization measured at 12 months and the SED measured at 12 and 30 months, partial correlations were made between the data provided by the mentalization instrument (proportion of references, heterogeneity and complexity) and both measurements of the SED, controlling the educational level of the mother and segmenting by the country variable.

Hierarchical regressions were performed with each of the data thrown by the mentalization instrument (proportion of references, heterogeneity and complexity) in order to analyze the influence of the maternal mentalization (measured at 12 months) and the country of residence on the SED at 30 months, controlling the SED variables at 12 months, both ages of the infants and the maternal educational level.

4.6 Ethical Considerations

Both the day care centers and the mothers involved in this study signed an informed consent in which the purpose of the research, the confidentiality of the data and the voluntariness of their participation were explained to them (See Annex 4).

Each file contains a folio number that seeks to protect the confidentiality of the cases, reason for which the members of the research team, in charge of transcribing and coding the videos, did not know the names of the people involved.

The information obtained only serves research purposes, therefore, no individual feedback is given to the dyads. Due to the fact that in this study work was carried out with secondary data, the main project was reviewed by the ethics committee of the School of Psychology of the Pontificia Universidad Católica de Chile and the ethics committee of Fondecyt. Nevertheless, the Human Research Ethics Committee of the School of Medicine of the Universdad de Chile also evaluated this study (See Annex 2 and 3).

RESULTS

The main findings of the study are developed in this chapter. First, the preliminary analysis of the data is presented, where the verification of the assumptions for each performed analysis is presented. Then, the descriptive statistics for the study variables are shown.

Subsequently, the analysis performed for each proposed objective is exposed, reviewing the compliance or not of the projected hypotheses. This includes the comparison of the variables between both samples, the proposal of a mediation model, as well as the association found between the variables. Finally, the results obtained from the regression analysis, which respond to the fourth objective, are presented.

5.1. Preliminary Data Analyses

The first thing that was done was to verify the assumptions for each of the analyzes carried out. The following assumptions were evaluated for ANCOVA: the perfect non-multicollineality between the independent variables, through the variance inflation factor (VIF) test, where the results must be less than 10 (Fox & Monette, 1992), the homoscedasticity along the entire regression line, Barltett test, the independence of the errors that estimates the non-existence of relationships between the residuals with the Durbin & Watson test, which provides information on the degree of independence between the residuals, where the residuals must not present any systematic pattern with respect to the independent variables, values in this case should be within a range between 1.5 and 2.5 (Hair, Anderson, Tatham & Black., 1999)

When performing the analysis of the assumptions for ANCOVA, the assumption of normality of the Shapiro Wilk data $W = .98$, $p = .02$ is violated, the Bartlett test that measures the homogeneity of the variances refers that the *K-squared* = .77, $df = 1$, $p = .4$ violation is not so

big. However, regarding the independence of the covariates with the Independent Variable, it was found that the age and the country are related to an $F_{(1,111)} = 23.36 < .001$; and the country with the educational level also with an $F_{(1,140)} = 44.49 < .001$. This is a limitation of the study.

Then, a hierarchical regression analysis, in which the control variables were entered first, was performed in order to analyze the predictive value of the country variable on the SED at 30 months: SED in the first measurement (model 1), age of the infant at 12 and 30 months (model 2); then, the variable educational level of the mother was added (model 3), to finally include the variable country of residence (model 4). It was verified in each of the regressions that the multicollinearity assumptions of the model, the normality of the residuals and the independence of the errors were significant, which are reported in each of the regressions. The assumptions for each model were reviewed; in model 1, it was noticed that the assumption of normality of the Shapiro Wilk data is violated, ($W = .97$, $p = .003$). As for the non-perfect multicollinearity between the independent variables, $VIF = 1.54$, it is within the accepted range.

For model 2, the assumption of normality of the Shapiro Wilk data is within the expected ranges, ($W = .98$, $p = .19$) reason for which this assumption is fulfilled. Regarding the non-perfect multicollinearity of the independent variables, it was found that the SED variable at 12 months showed a $VIF = 1.02$, the age of the infants at 12 months showed a $VIF = 1.07$, the age at 30 months showed a $VIF = 1.05$, and finally in the same model, the independence of the errors yielded a $DW = 1.58$, fulfilling all the expected ranges.

In the third model, the assumption of normality of the Shapiro Wilk data, ($W = .98$, $p = .07$), regarding the non-perfect multicollinearity between the independent variables, it was found that the SED variable at 12 months showed a $VIF = 1.06$, the age of the infants at 12 months showed a $VIF = 1.07$, the age at 30 months showed a $VIF = 1.11$, maternal educational level yielded a

VIF = 1.10 and the independence of the errors yielded a *DW* = 1.68, fulfilling all the expected ranges. In the fourth model, the assumption of normality of the Shapiro Wilk data, (*W* = .98, *p* = .06), in the non-perfect multicollinearity between the independent variables, it was found that the SED variable at 12 months presented a *VIF* = 1.08, the age of the infants at 12 months showed a *VIF* = 1.08, the age at 30 months showed a *VIF* = 1.28, the maternal educational level showed a *VIF* = 1.39, the country variable presented a *VIF* = 1.55 and the independence of the errors yielded a *DW* = 1.67, also fulfilling all the expected ranges.

Upon examining the data, it was proposed to analyze the possible mediating role of the maternal educational level variable in the 30 months SED; in order to do this, the Sobel test was carried out, the variables of infant SED at 12 months and Age at 30 months were controlled. Before carrying out the PATH, the multivariate normality assumption was verified, through Mardia's test, yielding the following data (bias = .64, $X^{2} =$ 12.68, *p* = .24; kurtosis = 13.47, *Z*= -1.52, *p* = 0.12), the data refer that none is significant, therefore, it can be noted that there is multivariate normality, which allows the PATH to be performed.

In order to test the hypotheses that included maternal mentalization, the first thing that was done was to verify the assumptions; here it was evidenced that the data do not fulfill the assumption of normality, reason for which an analysis was used that would consider this situation to compare the two samples, so that the Poisson regression was carried out, controlling the co-variables. The assumptions of multicollinearity, independence of the residuals and dispersion of variance of the Dependent Variable were verified. When verifying the assumptions, the following data were found: in the maternal educational level variable (*VIF* = 1.35) and for the country of residence (*VIF* = 1.35), where values less than 10 indicate no perfect multicollinearity, therefore, this assumption is fulfilled. Regarding the independence of the

residuals, it showed a $DW = 1.93$, the values in this case must be within a range between 1.5 and 2.5, with which this assumption is also fulfilled. And finally the assumption of over dispersion of the variance yielded a ($Z = .51$, $p = .30$), this indicator has to be non-significant, with which this assumption is also verified. In all the Poisson regressions, these same variables were included, so this assumption is not reported again, since it is the same data. The data of the other variables included in the regression are reported in the results.

Then, the following assumptions were assessed for the correlations: The assumptions for the correlations were then evaluated finding that the assumption of normality is not fulfilled in any of the variables, since the Shapiro Wilk that must present a *p* value not significant (Field, Miles, & Field, 2012), gave the following indicators: total reference proportion (*W =. 79 - .85, p <.001*) concept total (*W = .94 - .97, p <.001*), proportion of categories (*W = .20 - .90, p <.001*) proportion of subcategories (*w = .09 - .89, p <.001*), number of concepts in the categories (*W = .22 - .89, p <.001*) number of concepts in subcategories (*W= .09 - .76, p <. 001*) all the variables that include complexity (*W = .79 - .83, p <.001*) as well as in SED 12 months (*W = .98, p = .03*) and SED 30 months (*W = .97, p = .004*). However, Pearson's correlation is relatively robust to the violation of this assumption (Field, et al., 2012). Anyway, the results obtained in this section of the study should be taken with caution and need future studies to replicate the results to determine and confirm the robustness of the findings.

Finally, for the hierarchical regression, the assumptions of multicollinearity, homoscedasticity, independence of the errors, normality of the errors that are also reported in the results were verified.

5.2. Descriptive Analyzes of the Study Variables

When the infants in the study were located at 12 months of age, their socio-emotional development mean was 74.59 points (*S.D.*= 7.843, range 50-99). When separating by country, it is appreciated that the infants of the Chilean sample presented a mean of 74.46 points (*S.D.* = 7,542) at 12 months, and of 74.48 points (*S.D.* = 8,408) for the children of the US sample (see Table 4). At 30 months, the complete sample obtained a mean of 130.09 points (*S.D.* = 19.191, range 78-174), while the mean for children in the Chilean sample was 124.57 points (*S.D.* = 17,533), and for children of the US sample the mean was 137.98 (*S.D.* = 18.855) (See table 4).

The descriptive statistics of the SED change delta between 12 and 30 months of age in the total sample and by country were also presented (See Table 5).

Table 4

Descriptive statistics of infant SED - 12 and 30 months, total sample and by country

	N	*Range*	*Mean*	*SD*
Total SED 12 months	142	50-99	74.59	7.843
Chile SED 12 months	90	50-85	74.46	7.542
US SED 12 months	52	59-99	74.83	8.408
Total SED 30 months	119	78-174	130.09	19.191
CHILE SED 30 months	70	80-170	124.57	17.533
US SED 30 months	49	78-174	137.98	18.855

Note: the total SED score is expressed in raw scores

Table 5

Descriptive statistics of the change delta between 12 and 30 months, both samples

	Range	*M*	*S.D.*
Total	*9-102*	*56.11*	*18.89*
Chile	9-94	49.86	15.27
US	13-102	65.04	20.11

Regarding the maternal mentalization variable, the descriptive statistics are presented first for the *proportion of references*, which includes total proportion of references, proportion of content and mental support, and proportion of categories and subcategories.

Here it can be observed that in the total sample the mean of the total of references was 3.93 (*S.D.* = 2.48); as for the proportion of mental content, they obtained a mean of 2.17 (*S.D.* = 1.69). In the mental support proportion, the mean was 1.76 (*S.D.* = 1.45).

The proportion in each category and subcategory, as well as the data by country are shown in Tables 6 and 7 respectively.

Secondly, the descriptive statistics of the *Heterogeneity* of the mentalizing language are presented including: number of concepts in the categories and subcategories used, the number of concepts used (total concepts, total content concepts and mental support), as well as the *Complexity* (See Table 8). Here we find that the mothers of the total sample obtained a mean of the number of categories used of 4.16 (*S.D.* = 1.81) based on 10 categories, and in the number of subcategories the mean was 4.82 (*S.D.* = 2.28) based on 17 subcategories. It is important to mention that in the total sample, the subcategory link with the emotion was not mentioned, therefore, this variable was not used in the analyzes. This also happened in the US sample in the subcategories of attentional processes, memory processes, emotional processes, general

psychological attributes, attributes of regulation and dysregulation. The descriptive analyzes are shown in Table 8.

Regarding the number of concepts used, mothers in the total sample obtained a mean of 7.1 (*S.D.* = 3.97) in the total number of concepts, in the total of content concepts they presented a mean of 3.6 (*S.D.* = 2.45) and in the total of support concepts they obtained a mean of 3.5 (*S.D.* = 2.36). The country analyzes are shown in Table 9.

Regarding the *complexity* of the references used which include: the combination of concepts, combination of categories and the total of concepts found in the maternal discourse, it was found that in the total sample: in combination of concepts they presented a mean of 1.12 (*S.D.* = 1.12), in combination of categories they showed a mean of 1.12 (*S.D.* = 1.12) and in the total of concepts they obtained a mean of 1.13 (*S.D.* = 1.13) (See Table 10).

Table 6

Descriptive Statistics Total Proportion of References, Proportion of Content and Mental Support, and the Proportion of Categories in the total sample and by country

		TOTAL = 142			CHILE = 90			US=51		
		Range	*M*	*S.D.*	*Range*	*M*	*S.D.*	*Range*	*M*	*S.D.*
Total References		0 - 21.3	3.93	2.48	0 - 21.3	3.86	2.72	0 -12.2	4.06	2.01
Content Ref.		0 -12.6	2.17	1.69	0 - 12.8	1.85	1.54	0 - 11.1	2.74	1.79
Support Ref.		0 - 9.0	1.76	1.45	0 - 9.0	2.01	1.63	0 - 3.9	1.32	0.94
Categories										
Content	Desires	0 - 5.9	1.13	0.95	0 - 3.1	1.04	0.81	0 - 5.9	1.29	1.14
	Cognitions	0 - 3.9	0.50	0.69	0 - 1.6	0.28	0.39	0 - 3.9	0.89	0.90
	Emotions	0 - 8.5	0.30	0.86	0 - 8.5	0.31	1.02	0 - 1.9	0.30	0.50
	Attributes	0 - 0.8	0.08	0.18	0 - 0.8	0.10	0.20	0 - 0.4	0.05	0.12
	St. of Consc.	0 - 1.8	0.06	0.21	0 - 1.8	0.09	0.26	0 - 0.2	0.00	0.00
	Physiol. St.	0 - 1.7	0.09	0.24	0 - 0.5	0.02	0.09	0 - 1.7	0.21	0.35
Support	Causal Lang.	0 - 6.8	1.02	1.07	0 - 6.8	1.15	1.24	0 - 2.5	0.79	0.061
	Factual Lang.	0 - 0.6	0.01	0.07	0 - 0.3	0.01	0.06	0 - 0.6	0.01	0.09
	Links	0 - 1.9	0.08	0.23	0 - 0.9	0.07	0.18	0 - 1.9	0.10	0.30
	Physical Ex.	0 - 2.8	0.65	0.65	0 - 2.9	0.78	0.67	0 - 1.9	0.42	0.54

Nota: Ref. =references; St.= state; Consc.=consciousness; Physiol.=physiological; Lang.=language; Ex.=expressions

Table 7

Descriptive statistics of the proportion of subcategories in the total sample and by country

			TOTAL=142			CHILE=90			US=52		
			Range	*M*	*S.D.*	*Range*	*M*	*S.D.*	*Range*	*M*	*S.D.*
	Categories	Subcategories									
Content	Desires	Desires	0-3.73	0.78	0.71	0-2.84	0.82	0.70	0-3.73	0.71	0.72
		Person Pref.	0-4.80	0.29	0.60	0-2.46	0.16	0.38	0-4.80	0.52	0.81
		Object Pref.	0-1.10	0.06	0.20	0-1.10	0.06	0.19	0-1.05	0.07	0.22
	Cognition	Att. Proc.	0-0.66	0.02	0.08	0-0.66	0.03	0.10	0-0.00	0.00	0.00
		Memory Proc.	0-1.57	0.02	0.14	0-1.57	0.03	0.17	0-0.00	0.00	0.00
		Th. Proc.	0-3.69	0.38	0.60	0-1.42	0.19	0.32	0-3.69	0.72	0.80
		R. Cog. Proc.	0-1.01	0.03	0.13	0-0.63	0.03	0.10	0-1.01	0.05	0.17
		C. Cog. Proc.	0-1.31	0.05	0.20	0-0.33	0.01	0.05	0-1.31	0.12	0.31
	Emotion	Primary	0-8.51	0.29	0.85	0-8.51	0.29	1.01	0-1.88	0.28	0.47
		Secondary	0-0.41	0.01	0.06	0-0.41	0.01	0.06	0-0.26	0.01	0.06
		Em. Proc.	0-0.43	0.01	0.05	0-0.43	0.01	0.06	0-0.00	0.00	0.00
	Attributes	G. Ps. At.	0-0.78	0.05	0.15	0-0.78	0.06	0.16	0-0.42	0.05	0.12
		Reg. At.	0-0.21	0.00	0.02	0-0.21	0.00	0.03	0-0.00	0.00	0.00
		Dysreg. At.	0-0.66	0.03	0.11	0-0.66	0.04	0.13	0-0.00	0.00	0.00
Support	Links	Emotion	0-0.00	0.00	0.00	0-0.00	0.00	0.00	0-0.00	0.00	0.00
		Experience	0-1.97	0.07	0.21	0-0.82	0.06	0.15	0-1.97	0.09	0.29
		Undetermined	0-0.93	0.01	0.10	0-0.93	0.02	0.11	0-0.50	0.01	0.01

Nota: Pref.= preference; Att.=attentional; Proc.= processes; Th.=thinking; R.= Rational; Cog.=cognitive; Em.=emotional; G.= general Ps.=psychological; At.=attribute; Reg.=regulation; Dysreg.=dysregulation.

Table 8

Descriptive statistics of total categories and subcategories; total concepts, concepts of content and mental support, total concepts categories, in the total sample and by country

		TOTAL = 142			CHILE = 90			US=51		
		Range	*M*	*S.D.*	*Range*	*M*	*E.D.*	*Range*	*M*	*S.D.*
Total categories		0-9	4.16	1.81	0- 8	4.10	1.87	0-9	4.29	1.70
Total subcategories		0-11	4.82	2.28	0-11	4.60	2.30	0-11	5.22	2.19
Total Concepts		0-19	7.10	3.97	0-19	6.80	4.10	0-18	7.49	3.79
Total C of Content		0-11	3.60	2.45	0-9	3.10	2.33	0-11	4.47	2.42
Total C. of Support		0-11	3.50	2.36	0-11	3.70	2.40	0-10	3.02	2.23
Categories										
Content	Desires	0-4	1.40	0.87	0 - 3.1	1.20	0.79	0 - 5.9	1.70	0.93
	Cognitions	0-5	0.99	1.10	0 - 1.6	0.77	1.02	0 - 3.9	1.40	0.15
	Emotions	0-3	0.15	0.45	0 - 8.5	0.53	0.94	0 - 1.9	0.76	0.17
	Attributes	0-3	0.27	0.53	0 - 0.8	0.32	0.58	0 - 0.4	0.18	0.43
	St. of Consc.	0-3	0.15	0.45	0 - 1.8	0.22	0.54	0 - 0.2	0.02	0.14
	Phys. St.	0-2	0.22	0.46	0 - 0.5	0.08	0.27	0 - 1.7	0.47	0.61
Support	Causal Lang.	0-7	2.00	1.66	0 - 6.8	2.10	1.71	0 - 2.5	2.00	1.58
	Factual Lang.	0-2	0.06	0.26	0 - 0.3	0.07	0.25	0 - 0.6	0.04	0.28
	Links	0-6	0.28	0.73	0 - 0.9	0.22	0.49	0 - 1.9	0.37	1.02
	Physical Ex.	0-4	1.10	0.94	0 - 2.8	1.37	0.98	0 - 1.9	0.61	0.64

Nota: C.=concepts; St.= state; Consc.= consciousness; Phys.= physiological; Lang.=language; Ex.=expressions

Table 9

Descriptive statistics of total concepts in subcategories in the total sample and by country

			TOTAL=142			CHILE=90			US=52		
			Range	*M*	*S.D.*	*Range*	*M*	*S.D.*	*Range*	*M*	*S.D.*
	Categories	Subcategories									
Content	Desires	Desires	0-2	0.78	0.43	0-2	0.79	0.44	0-1	0.76	0.43
		Person Pref.	0-3	0.46	0.63	0-3	0.29	0.53	0-3	0.76	0.68
		Object Pref.	0-1	0.11	0.32	0-1	0.11	0.32	0-1	0.12	0.33
	Cognition	Att. Proc.	0-2	0.06	0.26	0-2	0.09	0.32	0-0	0.00	0.00
		Mem. Proc.	0-2	0.06	0.26	0-2	0.09	0.32	0-0	0.00	0.00
		Th. Proc.	0-4	0.66	0.77	0-3	0.44	0.62	0-4	1.04	0.87
		R. Cog. Proc.	0-2	0.11	0.38	0-2	0.12	0.42	0-1	0.10	0.30
		C. Cog. Proc.	0-2	0.11	0.33	0-1	0.02	0.15	0-2	0.25	0.48
	Emotion	Primary	0-5	0.56	0.95	0-5	0.48	0.88	0-4	0.71	1.10
		Secondary	0-1	0.04	0.20	0-1	0.03	0.18	0-1	0.06	0.24
		Em. Proc.	0-1	0.01	0.12	0-1	0.02	0.15	0-0	0.00	0.00
	Attributes	G. Ps. At.	0-2	0.17	0.41	0-2	0.17	0.40	0-0	0.00	0.00
		Reg. At.	0-1	0.01	0.12	0-1	0.02	0.15	0-0	0.00	0.00
		Dysreg. At.	0-2	0.09	0.33	0-2	0.13	0.40	0-0	0.00	0.00
Support	Links	Emotion	0-0	0.00	0.00	0-0	0.00	0.00	0-0	0.00	0.00
		Experience	0-6	0.26	0.72	0-2	0.20	0.48	0-6	0.35	1.20
		Undetermined	0-1	0.02	0.15	0-1	0.02	0.15	0-1	0.02	0.14

Nota: Pref.= preference; Att.=attentional; Proc.= processes; Th.=thinking; R.= Rational; Cog.=cognitive; Em.=emotional; G.= general Ps.=psychological; At.=attribute; Reg.=regulation; Dysreg.=dysregulation.

Table 10

Complexity of mentalizing language in the total sample and by country

	TOTAL =141			CHILE =90			US = 51		
	Range	*M*	*S.D.*	*Range*	*M*	*S.D.*	*Range*	*M*	*S.D.*
C. of Concept	1-2	1.12	1.12	1-1.5	1.11	0.13	1-2	1.15	0.16
C. of Categories	1-1.75	1.12	1.12	1-1.5	1.10	0.13	1-1.75	1.14	0.13
Total concepts	1-2	1.13	1.13	1-1.5	1.11	0.13	1-2	1.17	0.18

Nota: C.= combination

5.3. Analysis of Objectives:

The first objective posed alludes to describing and comparing the level of socio-emotional development of Chilean and US infants at 12 and 30 months of age, as well as the change that occurs between both ages.

5.3.1. Comprised Analyses.

In order to compare the SED study variable between Chilean and US children at 12 and 30 months, an analysis of covariance (ANCOVA) was conducted, controlling the age and sex of the infant and the maternal educational level. The results presented in Tables 9 and 10 indicate that there are no significant differences by country at 12 and 30 months. The variable that explains the differences in the SED is the educational level of the mothers, at 12 months ($F_{(1, 137)}$ = 4.447, p = .037) and at 30 months ($F_{(1, 108)}$ = 10.940, p =.001); as well as the age of the infants at 12 months ($F_{(1, 137)}$ = 6.4, p =.013) and at 30 months ($F_{(1, 108)}$ = 11.212, p =.001). These results confirm the relevance of including these variables as a control in this study. The aforementioned allows us to affirm that SED is greater as the educational level of the mothers increases and the age of the infants increases (See Tables 11 and 12).

Table 11

Analysis of covariance of infants' SED at 12 months

Variables	*df*	*MS*	*F*	*Sig.*
Age 12 months	1	371.8	6.37	0.013**
Infant's sex	1	0.357	0.01	0.938
Maternal Ed. level	1	259.5	4.45	0.037*
Country	1	51.24	0.88	0.350

**< 0.01; *<0.05

Table 12

Analysis of covariance of infants' SED at 30 months

Variables	*df*	*MS*	*F*	*Sig.*
Age 30 months	1	3148.7	11.21	0.001**
Infant's sex	1	78.755	0.280	0.598
Maternal Ed. level	1	3072.5	10.9	0.001**
Country	1	126.1	0.45	0.504

**< 0.01; *<0.05

In order to compare the change in SED of infants between 12 and 30 months, through the delta of change (subtraction between infants' SED at 30 months and SED at 12 months), their means are compared first. What stands out in these results is that there are statistically significant differences between Chilean and US children ($F_{(1,117)} = 15.84$, $p < .001$) in terms of the change they present among these ages in their SED, being in the USA where there is a greater increase in the change of SED (See Table 13).

Table 13

Comparison of the SED delta of change between 12 and 30 months, both samples

	Range	*M*	*S.D.*
Total	*9-102*	*56.11*	*18.89*
Chile	9-94	49.86	15.27
USA	13-102	65.04	20.11
F		15.84**	

**< 0.01

Then, in the second place, an analysis of covariance, ANCOVA, is carried out to compare the change in SED of infants between 12 and 30 months, controlling the age and sex of the infants and the maternal educational level. The results show that there are significant differences between the infants of the Chilean and US sample, regarding the change of SED between both ages ($F_{(1, 107)} = 3.944$, $p < .004$), once the age and sex of the infant and the maternal educational level have been controlled, being in the USA where a greater increase is observed (See Table 14).

Table 14

Covariance analysis of the SED change between 12 and 30 months

Variables	*df*	*MS*	*F*	*Sig.*
Age 12 months	1	101	.370	.544
Age 30 months	1	7806	28.564	<.000***
Sex of the infant	1	239	.873	.352
Maternal Ed. Level	1	2519	9.218	.0003**
Country	1	1078	3.944	0.04*

***<0.001; **< 0.01; *<0.05

Given that the sex of the infant variable did not provide statistically significant information in the analyzes reported, it was decided to exclude it from the analyzes that followed.

5.3.2. Additional Analyses.

According to the results obtained, and not being part of the objectives of this study, it was decided to carry out two complementary analyzes in order to enrich the research.

5.3.2.1. First Additional Analysis.

It was resolved to analyze the predictive value of the country variable over SED at 30 months, for which a hierarchical regression analysis was performed, in which the control variables were entered first: SED at 12 months (model 1), age of the child at 12 and 30 months (model 2); then, the variable educational level of the mother was added (model 3), followed by the country of residence (model 4). This process yielded four regression models (see Table 15). The complete model explains 29.4% of the SED variance of infants at 30 months and is statistically significant ($F = 10.318$; $p = .000$).

The first model, which only includes SED at 12 months as a predictor, reveals that this variable has a positive effect on SED at 30 months ($\beta = .253$, $t = 2.755$, $p = .007$), explaining 6% of the variance and remaining as a significant predictor after all the variables have been added to the model. This indicates that the higher the SED score of an infant at 12 months of age, the higher it will be at 30 months. This was an expected result and contributes to the stability of the construct.

The second model, which includes the age of the children at 12 months, was not a significant predictor, while the age of the children at 30 months (model 2) helps to explain infant SED at 30 months ($\beta = .419$, $t = 4.894$, $p = .000$), contributing 15.9% of the variance explained.

This is consistent with the fact that the infants in the sample were ages within a range of 6 months (28 to 33 months), which is a wide range at this stage; in addition, taking into account that the raw scores of the variable were used, it was logical that the infants obtained higher scores on the SED scale as they grew (30 months).

In the third model, the level of maternal education variable (model 3) explains 7.6% of the variance (β = .298, t = 3.581, p = .001) of the SED at 30 months, and remains as a significant predictor in the final model. When entering the country of residence variable (model 4), it does not explain variance in the SED at 30 months, once the other variables have been controlled (See table 17).

Table 15

SED regression model at 30 months

Model	1			2			3			4		
	B	*SE B*	*B*	*B*	*SE B*	*β*	*B*	*SE B*	*β*	*B*	*SE B*	*β*
Intercept	84.076	16.719		82.459	15.392		87.122	14.677		83.747	14.935	
SED 12 months	.616	.224	.253**	.658	.206	.270**	.524	.200	.215**	.555	.201	.228**
Age 12 months				-.368	1.23	-.026	-.082	1.17	-.006	.034	1.17	.002
Age 30 months				5.78	1.18	.419***	4.75	1.16	.345**	4.23	1.24	.307**
Maternal Ed. Lev.							4.08	1.14	.298**	3.4	1.28	.248**
Country										4.586	3.93	.115
F		7.590**			11.197***			12.515***			10.318***	
R^2 adjusted		.056			.215			.291			.294	

***<0.001; **< 0.01; *<0.05

5.3.2.1. *Second Additional Analysis*.

The regression analysis indicated that the country of residence does not provide significant variance in SED at 30 months, however, educational level, which was a control variable, explains significant variance over SED at 30 months. It was considered interesting to analyze therefore the possible mediating role of the mother's educational level variable on the SED of the infants at 30 months through a path analysis. The Sobel test was used in order to do this; controlling the SED variables at 12 months and the Age of the infants at 30 months.

As shown in Figure 3, the proposed model was confirmed with the country of residence, maternal educational level and SED variables at 30 months. Regarding the adjustment indicators, which provide information about the degree to which the covariance matrix reproduces the proposed model, it was found that the chi-square goodness of fit statistic (X^2) should ideally be non-significant, which indicates that the data fit the theoretical model. A chi-square equal to zero would indicate that the sample represents a perfect fit to the theoretical model. In this case it yielded a value of ($X^2 = 3.67$, $gl = 2$, $p = 0.16$); which would indicate a good adaptation to the proposed model (Byrne, 2006).

Another additional indicator is the Comparative Fit Index (CFI) that compares the fit of the existing model with a base model, which assumes that the latent variables are not correlated. Its values fluctuate between 0 and 1, considering that values over .95 are indicators of good fit (Byrne, 2006). In this case, the CFI (1.00) and the TLI (1.01) indicate a good adjustment with values higher than 0.95; another indicator is the Root Mean Square Error of Approximation (RMSEA), which considers the error in the approach to the population and answers the question regarding the degree to which the model, with unknown parameters, but optimally chosen, could adjust to the covariance matrix of the population if available (Brown & Cudeck, 1993, cited in

Byrne, 2006), the use of confidence intervals is suggested to assess the accuracy of the estimate, with narrower intervals indicating better estimate of the RMSEA (Byrne, 2006). In this case, the RMSEA was (0.000 [90% CI = 0-0.243]). The SRMR (0.022), which is also an indicator of good fit of the model, showed values lower than .88. All these indicators together show that the confirmatory model fits well with the observed correlation matrix.

In this way, we can confirm that the country of residence variable does have an effect on the SED at 30 months, however, it is indirect, since this effect is through the mother's educational level (β = .157, *SE* = 2.021, $p < .001$). Therefore, the analyzes reveal that maternal educational level, which is also a context variable, is the one that explains the differences in the SED of both samples.

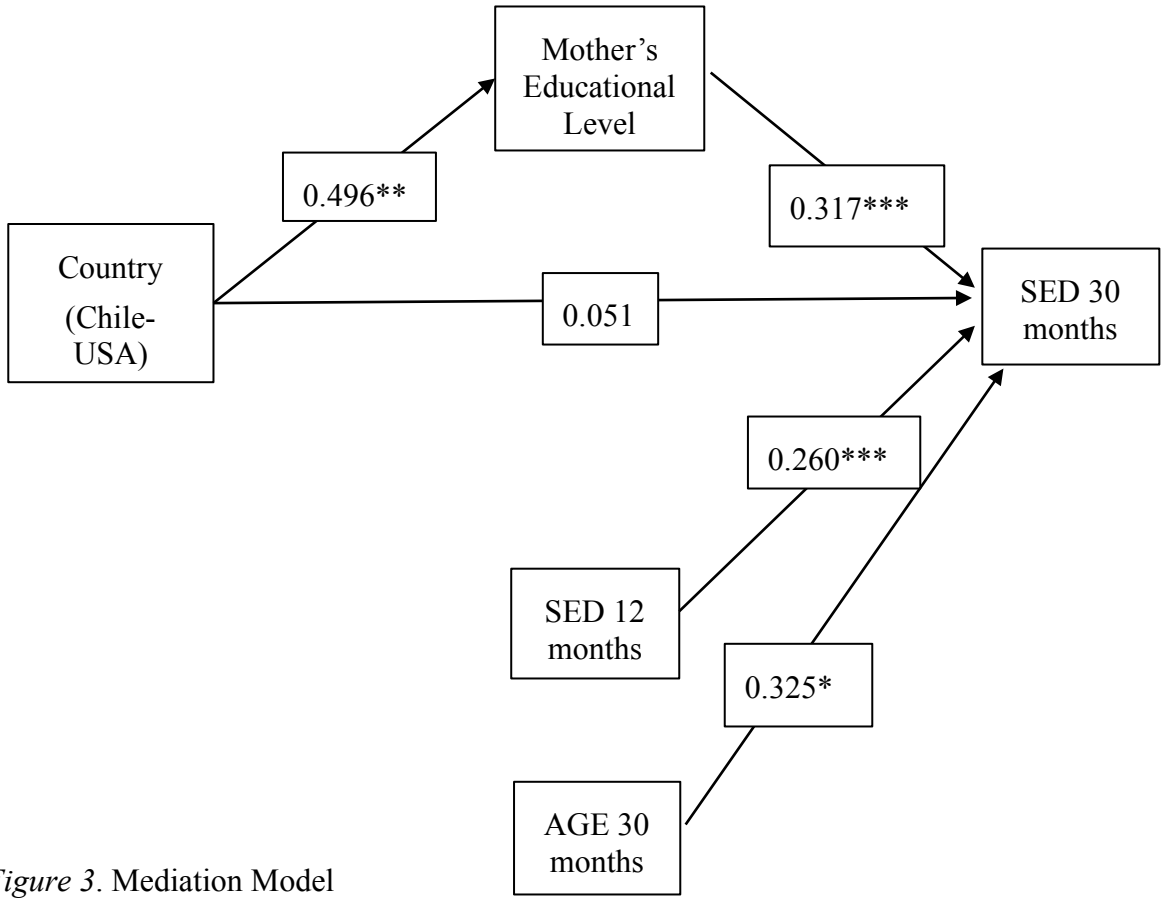


Figure 3. Mediation Model

***<0.001; **< 0.01; *<0.05

Note: ms= months

In contrasting the hypothesis for this objective, it was proposed that differences would be observed in the socio-emotional development of the infants of the Chilean and US sample between 12 and 30 months, as well as in the change between both ages, which was partially supported by the data, since the results that were presented indicate that there are no significant differences by country at 12 and 30 months. The variable that explains the differences in SED is the mothers' educational level at 12 months and at 30 months.

Then, when the change in the SED of infants between 12 and 30 months was compared through the DELTA change (subtraction between the SED of the infants at 30 months and the SED at 12 months), the results show that there are significant differences between infants in the

Chilean and US sample, in terms of the change of SED between both ages, with US children presenting the greatest increase.

A hierarchical regression analysis was performed in order to analyze the predictive value of the country variable on SED at 30 months; here the data indicate that the maternal educational level variable (model 3) explains 7.6% of the variance of the SED at 30 months, and upon entering the country of residence variable (model 4), this does not explain variance in the SED at 30 months, however, the educational level remains a significant predictor. The final model explains 29.4% of the total variance. The successive regression models indicated that the country of residence does not provide significant variance in the SED at 30 months, however, the educational level, which was a control variable, explains significant variance on the SED at 30 months. In light of these data, a mediational model is carried out in order to test the hypothesis.

In this way, the results offer support in the direction of the proposed parameters, but also provide additional information, which is that the country of residence variable does have an effect in the SED at 30 months, however, is indirectly, since this effect is through the mother's educational level (β = .157, *SE* = 2.021, $p < .001$). Therefore, the analyzes reveal that the level of maternal education, which is also a context variable, is what explains the differences in the SED of both samples.

The second objective referred to describing and comparing maternal mentalization (considering a *proportion* of 10 references of content and mental support, the *heterogeneity* and *complexity* of mentalizing language) in Chilean and US mothers with their infants when they are 12 months old.

Poisson regression was performed in order to compare the maternal mentalization variable measured at 12 months between Chilean and US mothers, remembering that this regression was chosen since this analysis considers the non-normality of the data.

The results show that in terms of: In *proportion of total references,* content and mental support, US mothers report a statistically significant higher proportion of mental contents than mothers in Chile ($B = 0.37$, $Z = 2.77$, $p = .006$), after controlling the maternal educational level. No significant differences were found between the proportion of support, nor in the total proportion of references (See Table 16 and Figure 4).

Table 16

Regression of the mental content proportion

	Total			*Content*			*Support*		
	B	*SD*	*Z*	*B*	*SD*	*Z*	*B*	*SD*	*Z*
Intercept	0.56	0.16	9.73	0.60	0.08	7.26***	0.76	0.08	9.84
Edu. level	-0.05	0.03	-1.36	0.013	0.05	.284	-0.11	0.05	-2.27*
Country	0.12	0.10	1.20	0.38	0.14	2.77**	-0.25	0.16	-1.51

***<0.001; **< 0.01; *<0.05

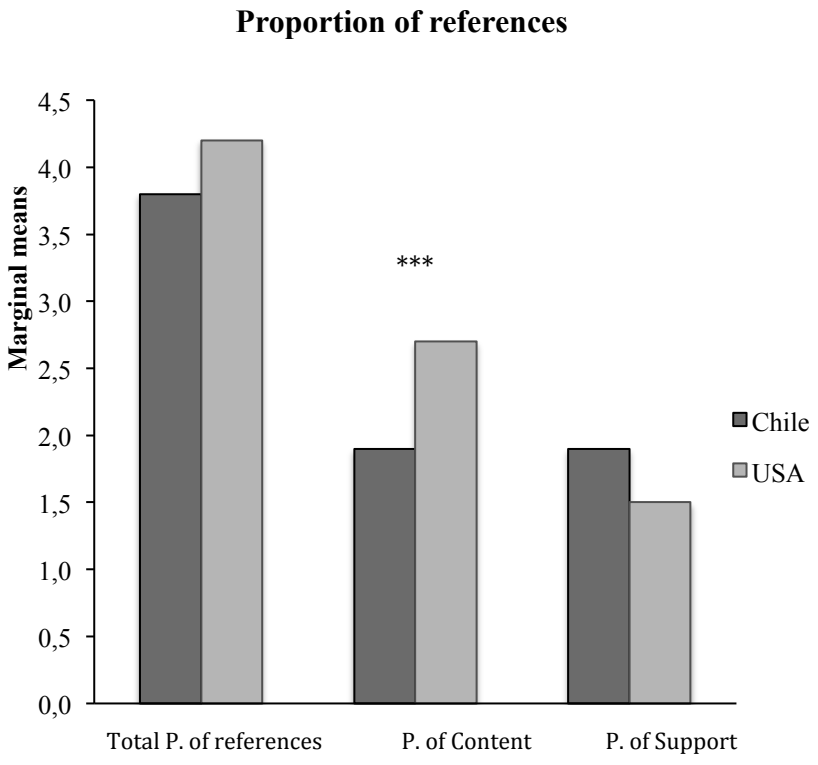


Figure 4. Marginal mean comparison of the total proportion of references, from the total contents and mental support between Chilean and US mothers.

***<0.001;**<0.01;*<0.05

In *Proportion of Specific Mental Categories*, it is observed that when the Poisson analysis was carried out, it was only found that US mothers report a significantly higher proportion of cognitions than Chilean mothers *(B* = 0.99*, Z* = .29*, p* = .000) (See Table 17 and Figure 5).

When verifying the assumptions, it was found that the Durbin & Watson error independence test is within the expected values (*DW* = 2.22), since the values in this case must be within a range between 1.5 and 2.5, with which this assumption is also fulfilled. And finally, the assumption of over dispersion of the variance yielded (*Z* = -3.9, *p* = 1), this indicator must be non-significant, with which this assumption is also verified.

Table 17

Regression of the proportion of cognitions

	B	*SD*	*Z*
Intercept	-1.34	0.22	-6.19***
Educational level	0.10	0.11	1.01
Country	0.99	0.29	3.38***

***<0.001; **< 0.01; *<0.05

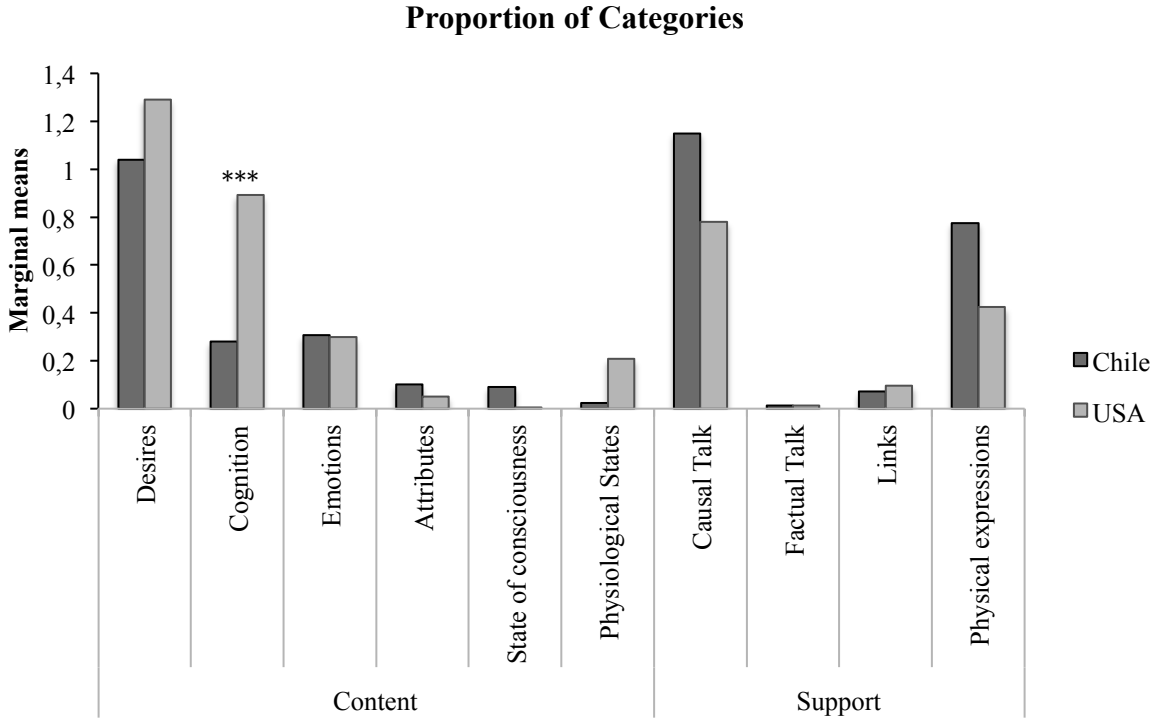


Figure 5. Comparison of the marginal means of the proportion of content and mental support categories between the samples of Chile and the USA.

*****<0.001**

In *Proportion of Subcategories*, the analyzes showed that US mothers report their speech in a statistically significant way, a greater proportion of the subcategory preference to the person

(*B* = 0.75, *Z* = .38, *p* = .047), with *DW* = 2.24, and (*Z* = -.11, *p* = .55), thinking processes (*B* = 1.12, *Z* = .34, *p* = .000), with *DW* = 2.05, and (*Z* = -3.9, *p* = 1), and creative cognitive processes (*B* = 3.38, *Z* = 2.34, *p* = .019) with *DW* = 2.28, and (*Z* = -1.6, *p* = .95). The assumptions are within the expected ranges (See Table 18 and Figure 6).

Table 18

Regression of the proportion of preferences to the person, thinking processes and creative cognitive processes subcategories

	Pref. to the person			Thinking Proc.			Creative Cognitive Proc.		
	B	*SD*	*Z*	*B*	*SD*	*Z*	*B*	*SD*	*Z*
Intercept	-2.12	0.32	-6.59***	-1.77	0.27	-6.63***	-4.87	1.26	-3.86***
Ed. Lev.	0.31	0.15	2.01*	0.14	0.13	1.1	-.3	0.32	-.91
Country	0.75	0.38	1.98*	1.12	0.34	3.28**	3.38	1.44	2.34*

Note: Country of reference USA

Ed.= educational; Lev.= level; Proc.=processes

***<0.001; **< 0.01; *<0.05

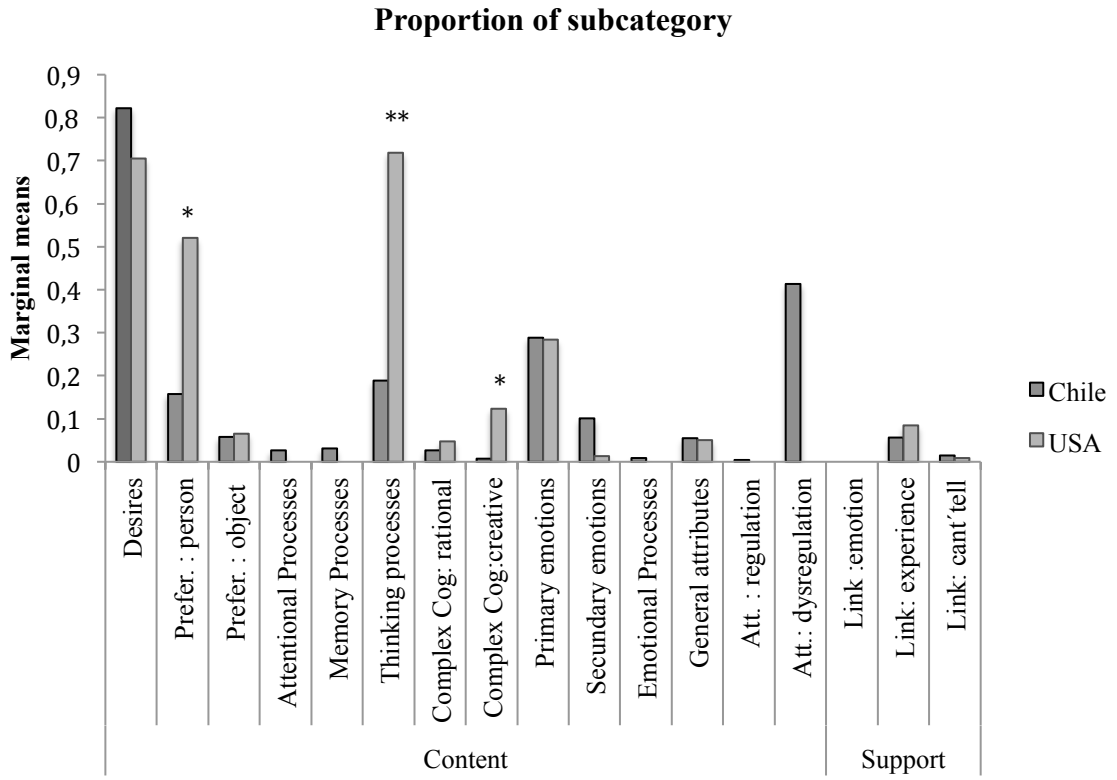


Figure 6. Comparison of the marginal means of the proportion of subcategories between the samples of Chile and the USA.

**< 0.01; *<0.05

In *Heterogeneity of mentalizing language,* the Poisson regression, which did not show statistically significant differences in the total number of concepts, total content concepts, or mental support, was also performed for these analyzes.

Regarding: *Total Concepts in the specific mental categories*, US mothers refer a greater number of concepts related to the physiological states categories in their discourse (B = 1.32, Z = 2.72, p = .000) with DW = 2.1, and (Z = -2.5, p = .99), and the mothers in Chile report a greater number of concepts related to the psychological attributes categories (B = -.93, Z = -2.22, p =

.03) with *DW* = 1.68, and (*Z* = -.34, *p* = .63), states of consciousness (*B* = -2.36, *Z* = -2.24, *p* = .03) with *DW* = 1.81, and (*Z* = 1.0, *p* = .15), and physical expressions (*B* = -.81, *Z* = 3.62, *p* = .000) with *DW* = 2.1, and (*Z* = -4.1, *p* = 1). All assumptions are within acceptable ranges (See Tables 19 and 20 and Figure 7).

Table 19

Regression of the concept number in the physiological states category

	B	*SD*	*Z*
Intercept	-287	0.44	-6.43***
Educational level	0.34	0.19	1.77
Country	1.33	0.49	2.72**

Note: Country of reference USA ***<0.001; **< 0.01; *<0.05

Table 20

Regression of the concept number in the psychological attribute, states of consciousness and physical expressions categories

	Ps. Attributes			States of Consc.			Physical Exp.		
	B	*SD*	*Z*	*B*	*SD*	*Z*	*B*	*SD*	*Z*
Intercept	-1.32	0.23	5.74***	-1.48	0.24	-6.2***	.313	0.09	3.21**
Ed. Lev.	0.23	0.13	1.74	-.04	0.16	-.26	-.00	0.1	-.03
Country	-.93	0.42	-2.22*	-2.36	1.06	-2.24*	-.81	.22	-3.62***

Note: Country of reference CHILE ***<0.001; **< 0.01; *<0.05
Ps. = psychological; Consc.= consciousness; Exp.= expressions.

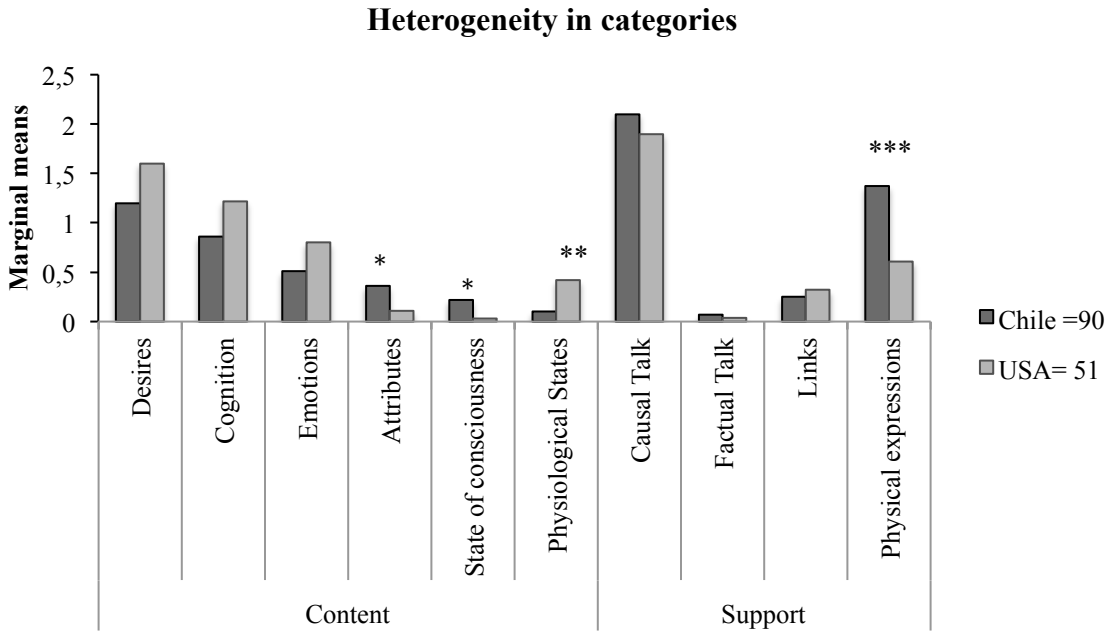


Figure 7. Comparison of the marginal means of Number of Concepts in the Categories between the samples from Chile and the USA ***<0.001; **< 0.01; *<0.05

Regarding the *Total of Number of Concepts in Subcategories*, the analysis showed that US mothers refer a greater number of related concepts of thinking processes in their discourse (B = .60, Z = 2.47, p = .014) with DW = 2.0, and (Z = -1.33, p = .91) creative cognitive processes (B = 2.32, Z = 2.73, p = .006) with DW = 2.2, and (Z = -0.89, p = .81) and primary emotions (B = .59, Z = 0.27, p = .03) with DW = 1.74, and does not fulfill the assumption of over dispersion, reason for which a quasi-Poisson is carried out and assumption is achieved with this analysis (See Table 22 and Figure 7).

Table 21

Regression of the concept number in subcategories: thinking processes, creative cognitive processes and primary emotions

	Thinking Proc.			Creative Cog. Proc.			Primary Emotions		
	B	*SD*	*Z*	*B*	*SD*	*Z*	*B*	*SD*	*Z*
Intercept	-.94	0.18	-5.22***	-3.86	0.73	-5.26***	-.68	0.16	4.33***
Ed. Lev.	.17	0.09	1.81	.1	0.25	.29	-.13	0.08	-1.44
Country	.60	0.25	2.44*	2.32	0.85	2.74**	.59	0.27	2.21*

Note: Country of reference USA ***<0.001; **< 0.01; *<0.05
Proc. = processes, Cog.= cognitive; Ed.=educational; Lev.= level.

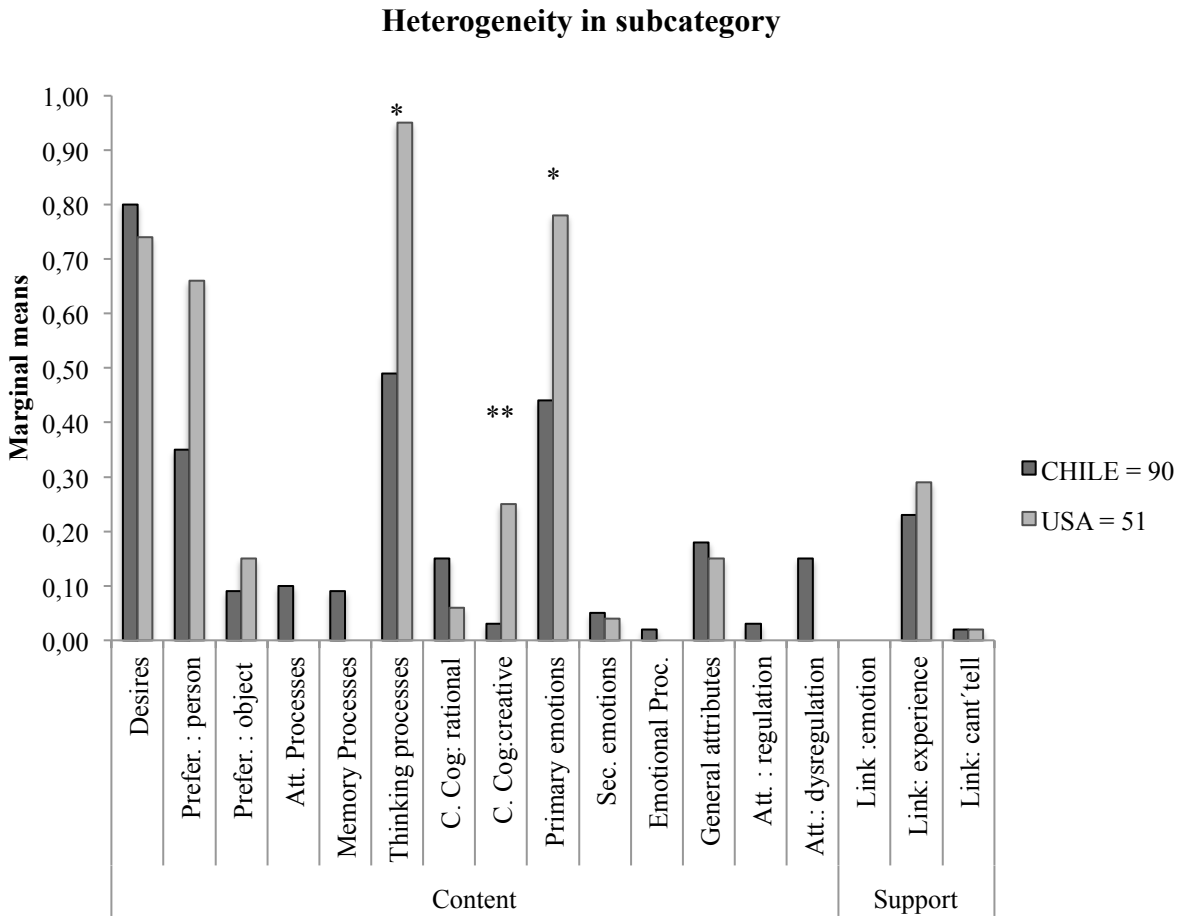


Figure 8. Comparison of the marginal means of Concept Number in the subcategories between the samples of Chile and the USA **< 0.01; *<0.05

Regarding *the complexity of the references*, no statistically significant differences were found between the combination of concepts, nor in combination of categories, nor in the total concepts between both samples.

In this objective, it was proposed that differences would be found in the mentalizing language that mothers refer with their children at 12 months between both Chilean and US samples. This was supported by the data, since the US mothers reported a statistically significant higher *proportion of mental contents* than the mothers in Chile, as well as significantly higher

proportion of category-specific mental cognition than the mothers in Chile. Regarding the *Proportion of Subcategories*, the analysis showed that the US mothers refer their speech a greater proportion of the *preference to the person*, *thinking processes* and *creative cognitive processes* subcategories in a statistically significant way.

Regarding *Total of concepts in the categories*, the mothers of the USA refer in their speech a greater number of concepts related to the *physiological states* category and the mothers in Chile report a greater number of concepts related to the *psychological attributes*, *states of consciousness* and *physical expressions* categories.

Regarding the *Total Concepts in the Subcategories*, the analysis showed that the US mothers refer a greater number of concepts related to *thinking processes, creative cognitive processes* and *primary emotions* in their discourse.

In the third objective, which was to identify the possible associations between the infants' maternal mentalization at 12 months and the infants' socio-emotional development at 12 and 30 months of age in the Chilean and US dyads, partial correlations were made between the data thrown by the mentalization instrument (proportion of references, heterogeneity and complexity) and both moments when infant SED was evaluated, 12 and 30 months.

Correlational analyzes were estimated only with the cases that had complete data in both variables, using the pairwise method of treatment of lost data (Field, et al., 2012).

Correlational analyzes showed that there was no relationship between the *proportion* of references (total proportion, of content and mental support, as well as in the categories and subcategories) with SED in any of the two instances in the total sample (See Table 22 a la 26).

Table 22

Correlation of the proportion of total references in the total sample

	1	2	3	4
Prop. Content				
Prop. Support	0.30***			
Prop. Total	0.84***	0.77***		
SED 12 months	-0.13	-0.10	-0.14	
SED 30 months	0.03	-0.02	0.00	0.22**

Note: Prop.= proportion
***<0.001; **< 0.01

Table 23

Correlation of the proportion of total references in the Chilean sample

	1	2	3	4
Prop. Content				
Prop. Support	0.49***			
Prop. Total	0.86***	0.87***		
SED 12 months	-0.12	-0.12	-0.14	
SED 30 months	-0.17	0.01	-0.10	0.41***

Note: Prop.= proportion ***<0.001

Table 24

Correlation of the proportion of total references in the US sample

	1	2	3	4
Prop. Content				
Prop. Support	-0.06			
Prop. Total	0.89***	0.40***		
SED 12 months	-0.09	0.06	-0.05	
SED 30 months	0.04	0.03	0.05	0.05

Note: Prop.= proportion
***<0.001

Table 25

Correlation of the proportion of categories in total sample

	1	2	3	4	5	6	7	8	9	10	11
1. Desires											
2. Cognition	.16										
3. Emotion	.04	.15									
4. Attribute	.17*	-.01	-.05								
5. State of Cons.	-.06	-.02	-.02	.22*							
6. Phys. State	.29***	.05	-.02	.04	.02						
7. Causal Talk	.02	.07	.43***	.06	.37***	.09					
8. Factual Talk	.15	.04	-.06	.05	-.05	-.04	-.04				
9. Link	-.01	-.08	.02	-.09	-.02	-.10	.09	-.02			
10. Physical Exp.	-.04	-.02	.34***	.00	.12	-.01	.30***	.11	-.03		
11. SED 12 ms.	.04	-.14	-.16	-.07	-.04	-.05	-.13	.06	-.08	.01	
12. SED 30 ms	.01	-.02	.11	.01	-.09	-.07	-.04	-.05	-.13	.10	.22**

Note: Cons.= consciousness; Phys.=Physical; Exp.= expressions
*p<.05 ** p<.01 ***p<.001

Table 26

Correlation of the proportion of subcategories in total sample

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Desires																	
2. Pref. person.	.07																
3. Pref. object	-.09	-.07															
4. Att. Proc.	-.04	-.09	-.05														
5. Memory Proc.	-.03	-.06	.17	.04													
6. Think. Proc.	-.03	.40***	-.01	-.08	-.06												
7. C. Cog. Rat.	-.13	-.05	-.06	.02	-.02	.06											
8. C. Cog. Creat.	.00	.02	.12	-.05	-.03	.15	.09										
9. Prim. Emot.	.10	-.04	-.04	-.03	-.04	.20*	-.04	.01									
10. Second. Emot.	-.01	-.10	-.05	.07	.04	.07	.04	-.04	.06								
11. Emot. Proc.	.07	-.01	-.03	-.03	-.02	-.10	-.04	-.04	.10	-.03							
12. Psych. Att.	.18*	.14	.13	-.05	-.04	.00	-.07	.03	-.03	-.08	.22*						
13. Att. Reg.	-.07	.02	-.03	-.02	.05	-.03	.07	-.03	.01	-.03	-.02	-.05					
14. Att. Dysreg.	-.04	-.03	.01	.22*	.37***	-.11	.08	-.06	-.06	.02	-.03	-.09	.24***				
15. Link: exp	-.14	.10	.04	.01	-.02	-.10	.01	-.06	.03	-.05	-.05	-.04	-.04	-.04			
16. Link: cant´tell	.03	.07	-.04	-.03	-.02	.01	.26***	-.04	.01	-.03	-.02	-.05	-.02	-.03	-.05		
17. SED 12 ms	.06	-.01	.01	-.05	-.09	-.11	-.07	-.01	-.16	.02	.07	-.06	-.03	-.02	-.06	-.04	
18. SED 30 ms	-.02	.01	.04	-.05	-.11	-.02	.08	.04	.12	.01	-.10	.05	.00	-.04	-.15	.01	.22*

Note: Pref.= preference; Att. =attenttional; Proc. = processes; Think.= thinking; C.= complex; Cog.= cognitive; Rat.= rational; Creat.= creative; Prim.= primary; Second. = Secondary; Emot.= emotional ; Psych.= psychological; Reg.= regulation; Dyserg. = dysregulation; Exp.= expressions

*p<.05 ** p<.01 ***p<.001

Regarding the *heterogeneity* of mentalizing language in total sample, it was found that the references to the total of emotion concepts (r = .22, p = .01) and the primary emotions concepts subcategory (r = .25, p = - .001) are related in a statistically significant way with the SED at 30 months (See table 27 and 28). Regarding the *complexity* (combination of categories, combination of concepts and total of concepts) of the references, it was found that there is a relationship with the SED at 30 months in the total sample (See table 29).

Table 27

Correlation of the heterogeneity of category in the total sample

	1	2	3	4	5	6	7	8	9	10	11
1. Desires											
2. Cognition	.08										
3. Emotion	.05	.17*									
4. Attribute	.22*	.18*	.11								
5. State of Cons.	.14	.11	.11	.20*							
6. Phys. State	.26***	.05	.20*	.06	.02						
7. Causal Talk	.13	.26***	.28***	.15	.20*	.16					
8. Factual Talk	.14	.06	-.05	.05	-.02	-.04	.06				
9. Link	.16	.07	.02	.02	.02	.06	.15	.00			
10. Physical Exp.	.00	.12	.17	.14	.18*	.00	.29***	.15	.01		
11. SED 12 ms.	.09	-.06	-.03	-.04	-.02	-.06	.06	.08	-.05	.08	
12. SED 30 ms.	-.01	-.01	.22*	.05	-.10	.01	.08	-.05	-.10	.15	.22***

Note: Consc.= consciousness; Phys.=Physical; Exp.= expressions

*p<.05 ** p<.01 ***p<.001

Table 28

Correlation of the heterogeneity of subcategory in the total sample

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Desires																	
2. Pref. person.	.24***																
3. Pref. object	-.07	-.05															
4. Att. Proc.	.05	-.13	.01														
5. Memory Proc.	.05	-.05	.09	.16													
6. Think. Proc.	.01	.09	-.04	-.01	.05												
7. C. Cog. Rat.	-.03	.01	-.04	.15	.09	.13											
8. C. Cog. Creat.	.06	.19*	.11	-.07	-.06	.06	-.06										
9. Prim. Emot.	.04	.07	.00	.02	.04	.20*	.00	.04									
10. Second. Emot.	.02	-.10	-.06	.09	.10	.10	.11	.01	.18*								
11. Emot. Proc.	.06	.09	-.04	-.03	-.02	-.13	-.04	-.05	.25***	-.03							
12. Psych. Att.	.09	.26***	.13	.04	-.02	.00	-.04	.11	.10	-.10	.24***						
13. Att. Reg.	-.08	.00	-.04	-.03	.21*	.13	.12	-.04	.12	-.03	-.02	-.05					
14. Att. Dysreg.	.08	-.01	-.03	.36***	.19*	-.08	.39***	-.08	.01	.06	-.03	-.11	.34***				
15. Link: exp	-.03	.18*	.17*	.04	.08	-.03	.12	.04	.03	-.05	-.05	.06	-.05	.00			
16. Link: cant´tell	-.15	.06	-.06	-.03	-.03	.01	.09	-.04	.02	-.03	-.02	-.06	-.02	-.04	-.05		
17. SED 12 ms	.06	.07	.03	-.03	-.01	-.05	-.04	-.02	-.04	-.02	.07	-.05	-.04	.02	-.04	-.06	
18. SED 30 ms	-.04	.01	-.01	-.05	-.09	-.02	.05	.07	.25***	.02	-.10	.04	.00	.03	-.12	.08	.22*

Note: Pref.= preference; Att. =attenttional; Proc. = processes; Think.= thinking; C.= complex; Cog.= cognitive; Rat.= rational; Creat.= creative; Prim.= primary; Second. = Secondary; Emot.= emotional ; Psych.= psychological; Reg.= regulation; Dyserg. = dysregulation; Exp.= expressions

*p<.05 ** p<.01 ***p<.001

Tabla 29

Correlation of the complexity in the total sample

	1	2	3	4
1. Combination concepts				
2. Combination categories	.98***			
3. Total concept	.98***	.97***		
4. SED 12 months	-.01	-.03	-.05	
5. SED 30 months	.21*	.19*	.22*	.23*

*p<.05 ** p<.01 ***p<.001

When analyzes are done by country, in the sample of US mothers, as regards the *proportion* of references (categories and subcategories), it was found that a higher reference of the emotion categories (r = .31, p = .03) and physical expressions (r = .30, p = .03) are significantly related to higher SED scores at 30 months. Likewise, it was found that a greater proportion of the primary emotions subcategory is related in a statistically significant way with the higher scores of SED at 30 months (r =. 31, p = .02) (see table 30 and 31).

Table 30

Correlation of the proportion of categories in US sample

	1	2	3	4	5	6	7	8	9	10	11
1. Desires											
2. Cognition	.18										
3. Emotion	-.14	.05									
4. Attribute	.33*	.14	.08								
5. State of Cons.	.17	-.08	-.01	.42***							
6. Phys. State	.41***	-.05	-.08	.07	.24						
7. Causal Talk	-.02	.03	.12	-.06	-.01	.11					
8. Factual Talk	.11	.11	-.09	.30*	-.02	-.08	.11				
9. Link	-.14	-.18*	-.10	.00	.05	-.14	.18	-.04			
10. Physical Exp.	-.10	-.08	.25	.08	.09	-.12	-.02	.23	-.02		
11. SED 12 ms.	.06	-.12	-.23	-.08	-.07	.00	.00	.17	.00	.08	
12. SED 30 ms.	.08	-.15	.31*	.05	.08	-.15	-.18	.02	-.08	.30*	.05

Note: Consc.= consciousness; Phys.=Physical; Exp.= expressions

*p<.05 ** p<.01 ***p<.001

Table 31

Correlation of proportion of subcategories in the US sample

	1	2	3	4	5	6	7	8	9	10	11	12
1. Desires												
2. Pref. person	.15											
3. Pref. object	-.13	-.13										
4. Think. Proc.	-.11	.45***	-.08									
5. C. Cog. Rat.	-.15	-.09	-.06	.05								
6. C. Cog. Creat.	.04	-.02	.18*	.09	.12							
7. Prim. Emot.	-.14	-.10	.12	.07	.01	-.02						
8. Second. Emot.	-.03	-.10	-.08	-.01	-.08	-.04	.45***					
9. Psych. Att.	.04	.33*	.38**	.13	-.07	.12	.10	-.12				
10. Link: exp.	-.15	-.07	.14	-.19	-.05	-.06	-.11	-.08	.01			
11. Link: cant`tell	-.14	.00	-.04	-.13	.81***	-.06	.06	-.03	-.06	-.04		
12. SED 12 ms	.12	-.03	.04	-.11	-.04	-.05	-.23	-.10	-.08	.01	-.04	
13. SED 30 ms	.08	.03	.06	-.17	.10	-.02	.31*	.11	.05	-.14	.23	.05

Note: Pref.= preference; Proc. = processes; Think.= thinking; C.= complex; Cog.= cognitive; Rat.= rational; Creat.= creative; Prim.= primary; Second. = Secondary; Emot.= emotional ; Psych.= psychological; Att= atributte; Exp.= experience

*p<.05 ** p<.01 ***p<.001

Regarding the *heterogeneity* in the US sample, it was found that a greater reference to the concept of emotions (r = .29, p = .04) and the concept of physical expressions category (r = .31, p = .02), and the concept of primary emotions subcategory (r = .31, p = .03) are associated in a statistically significant way with the SED at 30 months. The subcategory of thinking processes is negatively related to the SED at 30 months, (r = -.29, p = .04) (See tables 32 and 33). Regarding the *complexity* in this sample, an association was found between the total of concepts and SED at 30 (r = .28, p = .04) (See table 34).

Table 32

Correlation of heterogeneity of categories in US sample

	1	2	3	5	6	7	8	9	10	11	12
1. Desires											
2. Cognition	.01										
3. Emotion	-.04	.16									
4. Attribute	.44***	.06	.10								
5. State of Cons.	.35**	-.06	.05	.60***							
6. Phys. State	.30*	.00	.24	.19	.34***						
7. Causal Talk	.25	.11	.25	.10	.07	.13					
8. Factual Talk	.21	.21	-.10	.28	-.02	-.11	.19				
9. Link	.11	-.16	-.03	.11	.08	-.02	.14	-.05			
10. Physical Exp.	.09	.07	.33*	.01	.06	.04	.00	.10	.16		
11. SED 12 ms.	.15	-.12	-.17	-.08	-.07	.00	.19	.17	.01	.07	
12. SED 30 ms.	-.13	-.24	.29*	.02	.08	-.04	-.06	.02	-.11	.31*	.05

Note: Consc.= consciousness; Phys.=Physical; Exp.= expression

*p<.05 ** p<.01 ***p<.001

Table 33

Correlation of heterogeneity of subcategories in US sample

	1	2	3	4	5	6	7	8	9	10	11	12
1. Desires												
2. Pref. person	.35**											
3. Pref. object	-.08	-.14										
4. Think. Proc.	-.08	-.06	-.02									
5. C. Cog. Rat.	-.30*	-.11	.09	.21								
6. C. Cog. Crea.	.10	.25	.19	-.02	-.04							
7. Prim. Emot.	-.01	-.04	.04	.17	.06	.00						
8. Sec. Emot.	-.07	-.06	-.09	.18	-.10	.04	.50***					
9. Psych. Att.	.11	.40***	.28	-.07	.00	.26	.14	-.12				
10. Link: exp.	-.13	.05	.42***	-.22	.01	.06	-.02	-.10	.12			
11. Link: cant`t	-.25	.06	-.05	-.17	.44***	-.07	.03	-.03	-.06	-.05		
12. SED 12 ms	.06	.10	.15	-.11	-.06	-.04	-.17	-.13	-.08	.01	-.04	
13. SED 30 ms	-.03	-.14	-.04	-.29*	-.04	.02	.31*	.11	.02	-.14	.23	.05

Note: Pref.= preference; Proc. = processes; Think.= thinking; C.= complex; Cog.= cognitive; Rat.= rational; Creat.= creative; Prim.= primary; Second. = Secondary; Emot.= emotional ; Psych.= psychological; Att= atributte; Exp.= experience

*p<.05 ** p<.01 ***p<.001

Tabla 34

Correlation of complexity in US sample

	1	2	3	4
1. Combination concepts				
2. Combination categories	0.98***			
3. Total concept	0.96***	0.96***		
4. SED 12 months	0.04	0.00	0.00	
5. SED 30 months	0.25	0.25	0.28*	0.03

*p<.05 ** p<.01 ***p<.00

The hypothesis proposed for this objective referred that associations would be observed between maternal mentalization, measured at 12 months of the children and the socio-emotional development of the children at 12 and 30 months of age, and that this was going to appear in a different way in both samples. This is consistent with the proposed background, since the total sample in terms of the *heterogeneity* of mentalizing language showed that the references to the total of emotion concepts and the concepts of primary emotions subcategory is related in a statistically significant way with the SED at 30 months. Likewise, a greater complexity of language that is, a greater combination of references was significantly related to higher SED scores at 30 months.

When analyzes were done by country, no significant associations were found between the indicators of mentalizing language (proportion, heterogeneity and compeljidad) in the Chilean sample.

In the sample of US mothers, in terms of *proportion* of references it was found that a greater reference to emotions and physical expressions categories is significantly related to higher scores of SED at 30 months. Likewise, it was found that a greater proportion of the primary emotions subcategory is related in a statistically significant way with the higher SED scores at 30 months. Regarding *heterogeneity*, it was found that in US mothers a greater reference to the to the concept of emotion and physical expressions category, and the concept of primary emotions subcategory are associated in a statistically significant way with SED at 30 months. And the subcategory of thinking processes is related to a lower SED scores at 30 months. Likewise, regarding the *complexity* in this sample, an association was found between the total of concepts and SED at 30

Finally, the fourth objective was to analyze the predictive capacity of maternal mentalization (measured at 12 months) on the socio-emotional development of children at 30 months of age, once the mother's educational level and the socio-emotional development of the children at 12 months in both samples were to have been controlled.

In order to comply with this last required objective, it was proposed to analyze the predictive capacity of maternal mentalization (measured at 12 months) on SED at 30 months through hierarchical regressions, where all the language mentalizing indicators that render account of the proportion, heterogeneity and complexity of the language, were examined one by one controlling the SED variables, both ages of the children and the maternal educational level, at 12 months. The sex of the child was not included since in the previous analyzes did not provide relevant information. Only those regressions that were found to be statistically significant are reported. As to:

The proportion. The analysis showed that, of the 10 categories, significant results were only found in the reference to emotions. In this way, the results show that mothers who talk about emotions when their children are 12 months old, have a significant effect on SED at 30 months, however, the country moderates this relationship, being in the USA where it is significant and positive. SED was included in a first model at 12 months, at the age of 12 months, age of 30 months and the maternal educational level in this regression; the country and the emotions category are included in a second model. The third model included the interaction between the emotions category and country.

The first model, which includes the SED at 12 months as a predictor, reveals that this variable has a positive effect on the perception of SED at 30 months (β = -. 22, t = 2.6, p = .013)

also includes both ages 12 and 30, being only the age at 30 months the one that provides significant variance (β = .35, t = 4.1, p <.002), the educational level of the mother is also included in this model and provides significant variance (β = .29, t = 3.6, p <.01), this model that includes the control variables explains 29% of the variance. Then, in the second model, where the emotions category is included, it is not a significant predictor, nor is the country. Then in the third model, where the interaction between the emotions category * country is included, it yields significant variance in the SED at 30 months (β = .31, t = 2.8, p < .007). The total model contributes 33% of the variance (See Table 35).

Table 35

Hierarchical regression of the SED at 30 months, considering the references to emotions and the country

Model	1			2			3		
	B	*SE B*	*β*	*B*	*SE B*	*β*	*B*	*SE B*	*β*
Intercept	-14.5	3.4	0.000	-12.8	3.6	0.000	-12.4	3.5	.00
SED 12 months	0.21	.08	0.22**	0.24	0.08	.24**	0.26	.08	.26**
Age 12 months	-0.00	.06	-0.00	0.00	0.06	.00	0.00	.06	.00
Age 30 months	0.25	.06	0.35***	0.22	0.07	.29**	0.21	.06	.29**
Maternal Ed. Lev.	0.21	.05	0.29***	0.18	0.07	.24*	0.16	.07	.22*
Emotions				0.13	0.16	.07	-0.20	.20	-.10
Country				0.24	0.21	.11	0.02	.22	.01
Emotion * Country							0.88	.32	.31**
F		12.51			8.6			8.9	
Adjusted R^2		0.29			0.29			0.33	

Nota: Ed. = educational; Lev.= level; Emo.=emotional.

***<0.001; **< 0.01; *<0.05

Given that the interaction between emotions and country ended up being significant, it was necessary to perform a simple slopes analysis in order to verify how the interaction between the two variables occurs. The analysis showed that references to emotions in the maternal discourse at 12 months of age of children have a positive and significant effect on infants' socio-emotional development at 30 months (β = .37, t = 2.8, p <.007) in the US sample, the model explains 33% of the variance (See Table 36 and Figure 9).

Table 36

Simple slopes analysis for the SED at 30 months, considering the interaction between the proportion of emotions and the country

Model	1		
	B	*SE B*	*β*
Intercept	-12.38	3.6	
SED 12 months	.26	.08	.26**
Age 12 months	.00	.06	.00
Age 30 months	.21	.06	.29***
Educational level	.15	.07	.22*
Emotions	.68	0.25	.34**
Country	-.03	0.22	-.01
Emotions * Country	-.88	0.32	-.37**
F		8.9***	
Adjusted R2		.33	

***<0.001; **< 0.01; *<0.05

The evaluation of multicollinearity was evaluated through the VIF factor, which must be less than 10 (Fox & Monette, 1992) for this regression. The data shows that in the SED at 12 months, the age at 12 months, age at 30 months, maternal educational level, proportion of

emotions, country and interaction, the ranges go from 1.07 to 2.79, with which this assumption is fulfilled. The Shapiro Wilk Test evaluates the normality of the residuals (W = .98, p = .01) and the independence of the errors (DW = 1.64), which are within the expected ranges.

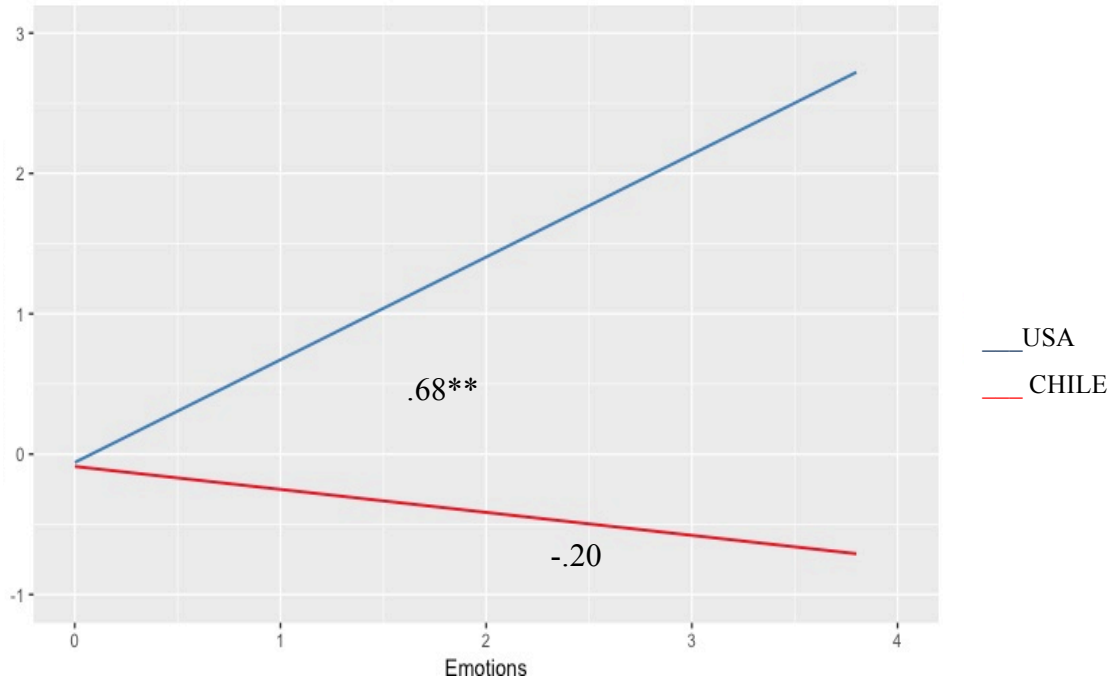


Figure 9. Simple slopes analysis in the emotions category for both samples.

**< 0.01

Then, in *proportion of subcategories*, the analysis showed that the mothers who talked about the primary emotions subcategory at 12 months of their children, had a significant effect on the SED at 30 months, however, again the country moderates this relationship, being in USA where it is significant and positive. In this regression, the control variables such as SED at 12 months,

age 12 months, age 30 months and the maternal educational level were included in the first model. The second model includes the primary emotions and country subcategories. The third model included the interaction between the primary emotions subcategory * country.

The first model, which includes the SED at 12 months as a predictor, reveals that this variable has a positive effect on the SED at 30 months (β = -. 22, t = 2.6, p = .009); it also includes both ages 12 and 30, being only the age at 30 months the one that provides significant variance (β = .35, t = 4.1, p < .001). The educational level of the mother is also included in this model and provides significant variance (β = .3, t = 3.5, p < .000); this model that includes the control variables explains 29% of the variance. Then, in the second model, where the primary emotions subcategory and country were included, neither of them provided meaningful variance and finally, in the third model, where the interaction between the primary emotions subcategory * country is included, they do help explain the variance of the SED at 30 months (β = .3, t = 2.7, p < .008). The total model contributes 33% of the variance (See Table 37).

Table 37

Hierarchical regression of the SED at 30 months, considering the primary emotions subcategory and country

Model	1			2			3		
	B	*SE B*	*β*	*B*	*SE B*	*β*	*B*	*SE B*	*β*
Intercept	-14.5	3.4	.000	-12.8	3.6	.000	-12.2	3.5	.00
SED 12 months	0.21	.08	.22**	.24	.08	.24**	.26	.08	.26**
Age 12 months	-0.00	.06	-0.00	.00	.06	.00	.00	.06	.00
Age 30 months	0.25	.06	.35***	.22	.07	.3**	.21	.06	.29**
Maternal Ed. Lev.	0.21	.05	.3***	.18	.07	.25*	.16	.07	.22*
Primary Emotions				.16	.17	.07	-.16	.20	-.08
Country				.23	.21	.11	.02	.22	.01
Prim. Emotions * Country							.89	.33	.30**
F		12.51			8.6			8.9	
Adjusted R^2		.29			.29			.33	

***<0.001; **< 0.01; *<0.05

Given that the interaction between the primary emotions subcategories and country was significant, it was necessary to perform a simple slopes analysis in order to verify how the interaction between the two variables occurs. The analysis showed that the references to emotions in the maternal discourse at 12 months of age of the infants have a positive and significant effect on infants' socio-emotional development at 30 months (β = .37, t = 2.8, p < .007) in the US sample. The model explains 33% of the variance (See Table 38 and Figure 10).

Table 38

Simple slopes for the SED at 30 months, considering the interaction between the primary emotions subcategory and country

Model	1		
	B	*SE B*	*β*
Intercept	-12.25	3.6	
SED 12 months	.26	.08	.26**
Age 12 months	.00	.06	.00
Age 30 months	.21	.06	.29**
Educational level	.16	.07	.22*
Emotions Prop.	.73	.27	.34**
Country	-.03	.22	-.01
Em. Prop. * Country	-.9	.33	-.37**
F		8.9***	
Adjusted R^2		.33	

****< 0.01; *<0.05**

The evaluation of multicollinearity was evaluated through the VIF factor, which must be less than 10 (Fox & Monette, 1992), for this regression. The data shows that in the SED at 12 months, the age at 12 months, age at 30 months, maternal educational level, proportion of emotions, country and the interaction, the ranges go from 1.07 to 2.0, with which this assumption is fulfilled. The Shapiro Wilk Test evaluates the normality of the residuals (W= .98, p = .01) and the independence of the errors (DW = 1.63), which are within the expected ranges.

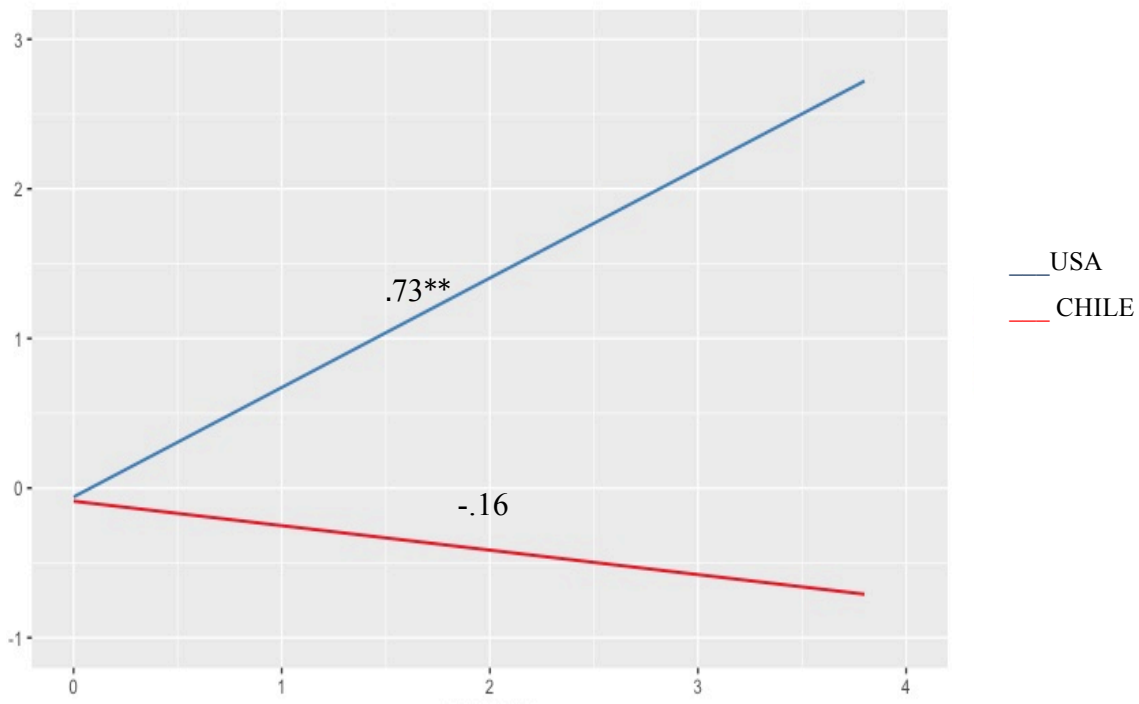


Figure 10. Simple slopes analysis in the primary emotions subcategory.

**< 0.01

Regarding *heterogeneity*, the analyzes showed the following results:

As for the categories: the mothers, who talk about concepts referred to the emotions category at 12 months of their infants, have a significant effect on the SED at 30 months. The first model, which includes SED at 12 months as a predictor, reveals that this variable has a positive effect on the SED at 30 months (β = -. 22, t = 2.6, p = .009), it also includes both ages 12 and 30, being only the age at 30 months the one that provides significant variance (β = .35, t = 4.1, p < .001), the educational level of the mother is also included in this model and provides variance significant (β = .29, t = 3.5, p < .000); this model that includes the control variables explains 29% of the variance. Then in the second model, where emotion concepts were included,

it can be seen that it does provide significant variance in the SED at 30 months (β = .16, t = 1.9, p < .05) and country that is also in this model, is not a contributing variable. In the third model, where the interaction between emotions * country concept is included, this interaction does not provide significant variance (See Table 39).

Table 39

Hierarchical regression of the SED at 30 months, considering number of concepts of the emotions categories and country

Model	1			2			3		
	B	*SE B*	*β*	*B*	*SE B*	*β*	*B*	*SE B*	*β*
Intercept	-14.5	3.4	.000	-12.5	3.6	.000	-12.5	3.5	.00
SED 12 months	.21	.08	.22**	.23	.08	.24**	.26	.08	.26**
Age 12 months	-.0	.06	-.00	.00	.06	.00	-.00	.06	-.00
Age 30 months	.25	.06	.35***	.21	.06	.29**	.21	.06	.3**
Maternal Ed. Lev.	.21	.05	.29***	.17	.07	.24**	.17	.07	.23*
Emotions Concept				.17	.09	.16*	-.03	.15	-.02
Country				.19	.21	.09	.02	.22	-.01*
Emotions C. * Country							.31	.19	.26
F		12.51			9.39			8.9	
Adjusted R^2		.29			.31			.32	

***<0.001; **< 0.01; *<0.05

For this regression, the evaluation of multicollinearity was evaluated through the VIF factor, which must be less than 10 (Fox & Monette, 1992), was in a range between 1.07-1.43 for all the variables, reason for which this assumption is fulfilled. The Shapiro Wilk Test evaluates the normality of the residuals (W = .98, p = .01) and the independence of the errors (DW = 1.58) fulfilling the assumptions.

Another regression analysis showed that mothers who talk about concepts of physical expressions category when their infants are 12 months, have a significant effect on the SED at 30 months. In this regression, the variables of control, SED at 12 months, age 12 months, age 30 months and the maternal educational level were included again in the first mode; in the second model, the number of physical expressions concepts and country are included. The third model included the interaction between number of concepts of physical expressions * country.

In the first model, which includes the SED at 12 months as a predictor, it is revealed that this variable has a positive effect on the perception of SED at 30 months (β = -. 21, t = 2.6, p = .00). It also includes both ages 12 and 30, being only the age at 30 months the one which provides significant variance (β = .35, t = 4.1, p < .002). The educational level of the mother is also included in this model and provides significant variance (β = .29, t = 3.5, p <.000) in this model that includes the control variables explains 29% of the variance. Then, in the second model, where concepts of physical expressions were included, it can be observed that it does provide significant variance in the SED at 30 months (β = .18, t = 2.1, p < .04) and country, which is also found in this model, is not a contributing variable. In the third model, where the interaction between physical expressions concept * country is included, this interaction does not provide significant variance (See Table 40).

Table 40

Hierarchical regression of the SED at 30 months, considering number of concepts of the physical expressions categories and country

Model	1			2			3		
	B	SE B	β	B	SE B	β	B	SE B	β
Intercept	-14.5	3.4	.000	-12.6	3.6	.000	-12.7	3.6	.00
SED 12 months	.21	.08	.22**	.20	.08	.21*	.22	.08	.22**
Age 12 months	-.0	.06	-.00	.02	.06	.03	-.00	.06	-.00
Age 30 months	.25	.06	.35***	.20	.06	.28**	.21	.06	.29**
Maternal Ed. Lev.	.21	.05	.29***	.18	.07	.24*	.16	.07	.22*
Physical exp. Conc.				.20	.09	.18*	.12	.11	.11
Country				.42	.22	.20	.16	.29	.08*
Physical exp. * Country							.34	.25	.17
F		12.51			9.5			8.5	
Adjusted R^2		.29			.31			.32	

Note: Ed.= educational; Lev. = level; exp. =expression; conc. = concepts.
***<0.001; **< 0.01; *<0.05

For this regression, the evaluation of multicollinearity was evaluated through the VIF factor which must be less than 10 (Fox & Monette, 1992); for all the variables it was in a range between 1.09 - 1.81, so this assumption is fulfilled. The Shapiro Wilk Test evaluates the normality of the residuals (W = .98, p = .012) and the independence of the errors (DW = 1.66). All these data show that the assumptions are fulfilled.

Subsequently, regarding the *subcategories*, the analyzes refer that mothers who talk about concepts of the primary emotions subcategory when their infants are 12 months old, have a significant effect on the SED at 30 months. In this regression, the control, SED at 12 months, age 12 months, age 30 months and maternal educational level variables were included again in the first model. The second model includes the number of concepts of primary emotions

subcategories and country. The third model included the interaction between the number of concepts of the primary emotions subcategory * country.

In the first model, which includes SED at 12 months as a predictor, it is revealed that this variable has a positive effect on SED at 30 months (β = -. 22, t = 2.6, p = .00). It also includes both ages 12 and 30, being only the age at 30 months the one which provides significant variance (β = .35, t = 4.1, p < .000). The educational level of the mother is also included in this model and provides significant variance (β = .3, t = 3.5, p < .000); this model, which includes the control variables, explains 29% of the variance. Then, in the second model where concepts of the primary emotions subcategory were included, it can be observed that it does contribute significant variance in the SED at 30 months (β = .18, t = 2.3, p < .03) and country, which is also found in this model, is a variable that does not contribute. In the third model, where the interaction between physical expressions concept * country is included, this interaction does not provide significant variance (See Table 41).

Table 41

Hierarchical regression of the SED at 30 months, considering number of concepts of the primary emotions and country subcategories

Model	1			2			3		
	B	SE B	β	B	SE B	β	B	SE B	β
Intercept	-14.5	3.4	.000	-12.6	3.6	.000	-12.4	3.6	.00
SED 12 months	.21	.08	.22**	.24	.08	.24**	.26	.08	.26**
Age 12 months	-.0	.06	-.00	.00	.06	.00	-.00	.06	-.00
Age 30 months	.25	.06	.35***	.21	.06	.3**	.21	.06	.29**
Maternal Ed. Lev.	.21	.05	.3***	.18	.07	.26**	.17	.07	.24*
Primary Emotions Concept				.21	.09	.18*	.03	.15	.02
Country				.16	.21	.08	.02	.22	.00
P. Emotions conc. * Country							.30	.20	.23
F		12.51			9.8			8.6	
Adjusted R^2		.29			.32			.33	

***<0.001; **< 0.01; *<0.05

For this regression, the evaluation of multicollinearity for all the variables was in a range between 1.07 - 1.66, none is greater than 10, reason for which this assumption is fulfilled. The Shapiro Wilk Test evaluates the normality of the residuals (W = .98, p = .07), and the independence of the errors (DW = 1.59). All these data show that the assumptions are fulfilled.

For this regression, the evaluation of multicollinearity was evaluated again through the VIF factor, which must be less than 10 (Fox & Monette, 1992). For all the variables it was in a range between 1.07 - 1.66, reason for which this assumption is fulfilled. The Shapiro Wilk Test evaluates the normality of the residuals (W = .98, p = .07) and the independence of the errors (DW = 1.59). All these data show that the assumptions are fulfilled.

Finally, in *complexity*, specifically in *total of concepts*, it was found that mothers, who use more amounts of concepts of mental content and support in a same statement when their infants

are 12 months old, have a significant effect in the SED at 30 months. In this regression, the control, SED at 12 months, age 12 months, age 30 months and the maternal educational level variables were included again in the first model. In the second model, the total concepts and country are included. The third model included the interaction between total concepts * country.

In the first model, which includes SED at 12 months as a predictor, it is revealed that this variable has a positive effect on the SED at 30 months (β = -. 22, t = 2.6, p = .00); it also includes both ages 12 and 30, being only the age at 30 months which provides significant variance (β = .35, t = 4.1, p < .000). The educational level of the mother is also included in this model and provides significant variance (β = .3, t = 3.6, p < .000); this model that includes the control variables explains 29% of the variance. Then in the second model, where the total of concepts are included, it can be observed that it does provide significant variance in the SED at 30 months (β = .16, t = 2, p <.05) and country, which is also found in this model, is a variable that does not contribute. In the third model, where the interaction between the total of concepts * country is included, this interaction does not provide significant variance (See Table 42).

Table 42

Hierarchical regression of the SED at 30 months, considering total concept and country

Model	1			2			3		
	B	*SE B*	*β*	*B*	*SE B*	*β*	*B*	*SE B*	*β*
Intercept	-14.5	3.4	.000	-12.8	3.6	.000	-12.4	3.6	.00
SED 12 months	.21	.08	.22**	.23	.08	.23**	.24	.08	.24**
Age 12 months	-.00	.06	-.00	-.00	.06	-.01	-.00	.06	-.01
Age 30 months	.25	.06	.35***	.20	.06	.27**	.19	.06	.27**
Maternal Ed. Lev.	.21	.06	.3***	.17	.07	.24*	.17	.07	.23*
Total concepts				1.1	.54	.16*	.76	.15	.12
Country				.25	.21	.12	-.37	1.2	-.18
Total concepts* Country							.6	1.1	.32
F		12.51			9.8			8.4	
Adjusted R^2		.29			.33			.33	

***<0.001; **< 0.01; *<0.05

For this regression, in the evaluation of multicollinearity, the VIF factor was in a range between 1.07 - 1.61, none greater than 10 (Fox & Monette, 1992), reason for which this assumption is fulfilled. The Shapiro Wilk Test evaluates the normality of the residuals (W = .97, p = .02) and the independence of the errors (DW = 1.63). All these data show that the assumptions are fulfilled. It is important to mention that the assumption of normality of the residuals is violated, however, there are authors who say that the regression is robust upon the non-fulfillment of this assumption when the violation is not dramatic, as in this case (Field, et al.,, 2012).

For this objective, the hypothesis posed was that maternal mentalization (measured at 12 months of the mothers' infants) and the country of residence were going to predict the socio-emotional development of the children at 30 months of age, and this was going to be shown differently in both samples. Such presumption was confirmed by the data, as far as maternal

reference proportion to emotions when infants are 12 months old have a positive and significant effect on infants' socio-emotional development at 30 months; however, the country moderates this relationship, being in the USA where it is significant and positive. Similarly, the analyzes revealed that mothers who spoke of primary emotions when their infants were 12 months old, had a significant effect on the SED at 30 months; however, again the country moderates this relationship, being in the USA where it is significant and positive.

Regarding *heterogeneity*, the analyzes showed that mothers who talk about emotion concepts, as well as physical expressions and primary emotions concepts when their infants are 12 months old, have a significant effect on SED at 30 months.

Regarding *complexity*, the data refer that mothers who combine more mentalizing concepts in their speech have a significant effect on the SED of their children at 30 months. Consequently, the results allow supporting this hypothesis.

DISCUSSION

The first objective of the study considered the comparison of infant social-emotional development of children in Chile and in the USA at 12 and 30 months of age, as well as the change produced in the social-emotional development between both ages. Based on what the literature says, in that children who live in different societies differ considerably in aspects related to social-emotional functioning, such as freedom of expression, cooperation, responsibility, aggression and shyness (Chen & Rubin, 2011), it was expected to find differences in the social-emotional development between both samples, as well as in the change between ages. This was partially supported by the data, since no differences were found in the social-emotional development of the infants at 12 or 30 months between the Chilean and US sample. One possible explanation is that the data were intentionally collected in specific regions of Chile and the USA, only children who live in the city and who attend day care centers are included, this allows to hypothesize that these samples may not be so different from each other and this could influence the results obtained. Another possible hypothesis is that the children who participated in this study were still small, too young for differences to appear in response to greater exposure to socialization and culture, which happens at an older age (Else-Quest, et al., 2006).

The second part of the objective was to compare the change in social-emotional development between both ages, that is, to compare the expected increase that naturally occurs between 12 and 30 months of age of the children between both samples. The results, wich is part of the same objective, indicated that there are significant differences, being in the USA where children have a greater increase in their social-emotional development. This can be explained in the light of what Super and Harkness (1986) say as to how specific contexts can help shape the

infant's development, through the cultural values with which parents socialize their children (Bronfenbrenner 1979). Thus, in a context of development such as the USA, which has been classified as an individualist country (Hofstede, 1980) and focused on domain (Schwartz, 2006), the socialization objectives defined as the beliefs and expectations of the parents regarding the ideal development for children (Darling & Steinberg, 1993), influence the social-emotional development of children through a less strict discipline exercised by US mothers since they are not concerned about the conformity of the group (Schwab, 2013); self-expression and open communication of ego-centered emotions are encouraged, which supports self-assertion (Markus & Kitayama, 2001). In addition, parenting style is characterized by being distal (Keller, 2007) with independent orientation (Markus & Kitayama, 1991), which favors children to be encouraged to regulate their emotions from an earlier age verbally or through visual contact instead of physical contact (Friedlmeier & Trommsdorf, 1999, Keller et al., 2004). From this perspective, from the emotional sphere, mothers tolerate and encourage negative emotions such as anger, pride and disgust more easily, providing comfort, assistance and anchoring the self-regulation of anxiety (Schwab, 2013). That is, these mothers encourage the expression of internal states as autonomous individuals who depend on themselves to achieve goals and whose states are not easily understood by others without the individual expressing them (Markus & Kitayama, 2001).

Likewise, it is known that in this context relations are more symmetrical and the interaction has a horizontal base (Keller, et al., 2004), as Lewin (cited in Wang & Leichtman, 2000) points out when explaining that the natural relationship of an adult and a child in the United States is not considered as a superior to subordinate, but as two individuals with the same right, consequently the parents tend to the unique attributes and idiosyncrasy of their child and strive to meet needs

and individual predilections (Fiske et al., 1998 cited in Wang & Leichtman, 2000), which influences children's development of self-sufficiency, assertiveness and self-esteem (Greenfield, et al., 2003). According that which has been pointed out, the children of the USA show less demands related to the context, which would help explain the greater increase in their social-emotional development, since it is accepted in a better way and therefore individual particularities are favored.

Chile, on the other hand, has been defined as a collectivist culture (Hofstede, 1980) although in recent years it has migrated to a mixture of individualist and collectivist elements (Kolstad & Horpestad, 2009), the values that are socialized are those related to internalizing the commitment to cooperate and care for the well-being of all (Schwab, 2006), the parenting style is characterized by being proximal (Keller, 2007) where contact and body stimulation is emphasized, as a way of supporting an interdependent self, where interactional warmth supports the development of acceptance of family norms and values (Keller et al., 2004). Similarly, appropriate behavior in hierarchical relationships (for example, respect for elders and loyalty to family), social harmony and group interests are prioritized (Matsumoto, 1991). In this sense, parents do not worry about helping children express their feelings and emotions (Chao, 1995), they rather refuse, reject, criticize or minimize negative emotions, with a clear tendency to control negative emotions and promote children's emotional regulation (Chen & Rubin, 2011). Thus, it is common for parenting to be hierarchical and authoritarian, as parents teach children to follow a specific set of standards without challenging them. In this context, children's opinions are not considered and unquestioning obedience is expected (Calzada, 2010) as well as for children to meet the expectations of adults (Wang & Leichtman, 2000), so in these interdependent contexts (Markus & Kitayama, 1991) caregivers promote knowledge of the rules

of exposure of emotions and teach the importance of interpersonal sensitivity (Chan, Bowes & Wyver, 2009). From this point of view, children must learn to consider the context as a background of their behavior (Wang & Leichtman, 2000), rather than their needs, tastes, preferences or internal states, which influences a lesser increase in social-emotional development when considering what is adaptive for the context rather than the individualities and characteristics of age.

In this way, reflecting on the evolutionary period in which children are (between one and three years) it is observed that it is a stage where they are faced with various changes in different areas that are providing him/her with new skills. Among them are the capacity of locomotion, language, memory, self-control, emotional expressions and social understanding, which empower him/her with greater autonomy that comes together with the growing need to extend and test the limits of these new skills, often using them in a way that they are considered socially inappropriate (Brownell & Kopp, 2006). During the second year of life, there are great advances in development. Literature calls this period "the terrible two" characterizing this phase where the child constantly challenges the mother due to his/her need for autonomy, in response to her attempts to control (Belsky, Woodworth & Crnic, 1996). In this sense, a possible explanation for less social-emotional development is to consider that in an interdependent context like Chile, ego-centered emotional expressions are considered potentially disruptive of interpersonal relationships and, therefore, must be strictly controlled (Wang, 2003) and since this stage of development is a period of constant adjustment between the mother and her baby, where she presents the challenge of guiding the new skills that emerge considering how adaptative the context is, and that the child has the demand to regulate his/her new behaviors (Brownell & Kopp, 2006), it is expected to be a more complex process for these mothers, since the

expectations of further development are related to what is valued by the context, in this case obedience, without considering the normative in evolutionary terms and the individualities of each child, where non-compliance is considered as immaturity (Levine, in the press cited in Keller et al., 2004), contrary to what happens in the USA where training and social control is considered an interference in the child's behavior, as a violation of the child's freedom, and as such, a pathological condition for children's development (Keller, et al., 2004).

The additional analyzes carried out were aimed at complementing the findings. From this perspective, it was decided to analyze the predictive value of the country of residence variable on social-emotional development at 30 months. The results add additional information: that the country of residence variable does have a predictive effect on social-emotional development at 30 months, however, it is indirect, since this effect is through the mother's educational level. Therefore, the analyses reveal that the maternal educational level, which as it has been said, is a context variable, is what explains the differences in social-emotional development between the Chilean and US sample. Several studies have shown how the educational level of the mother is predictive of the quality of the interaction between mother and child (Klebanov, Brooks-Gunn & Duncan, 1994; Olhaberry & Santelices, 2013) and how a higher educational level has been related to higher levels of social-emotional development (Bornstein & Bradley, 2003), this is linked to the fact that mothers with a more extensive education are less likely to consider their children as difficult and have a greater ability to deal with the tensions linked to parenting, since they have more confidence, knowledge and strategies thanks to their education (Fox, Platz & Bentley, 1995). Likewise, they feel better able to handle the support that children need to solve problems (Neitzel & Stright, 2004), they have better and more complex scaffolding strategies, they show a more positive parenting style and are more receptive to their children (Carr & Pike,

2012; Lowe, Erickson, MacLean, Schrader, & Fuller, 2013; Mermelshtine & Barnes, 2016), teaching them effective strategies of emotional regulation and coping skills (Denham, Mitchel-Copeland, Strandberg, Auerbach & Blair, 1997).

Complementing the above, and given that in the Chilean sample mothers have a significantly lower educational level, the upbringing can become a major challenge and lead to high levels of stress (Koeske & Koeske, 1990), since mothers with less education not only have less strategies to face upbringing and solve the needs of their children, or as the literature refers to making a good scaffolding (Mermelshtine & Barnes, 2016), but also at being pressured to guide their children according to that which is valued in the context of interdependent development they tend to put aside the characteristics inherent to age, being less receptive to the individual differences of children, which does not allow optimizing social-emotional development.

Integrating the above, and considering that in this study social-emotional development was evaluated through the mothers' perception about the social-emotional milestones that are normally obtained at certain ages and not through the direct observation of the child, these results could be influenced by the maternal educational level, since this influences the beliefs or maternal expectations related to the behavior of their children (Duncan & Brooks-Gunn, 1997), reason for which it is suggested in future studies to evaluate the social-emotional development in a direct way in the child, allowing this to corroborate these results.

The second objective of the study was to describe and compare the mentalizing language used between Chilean and US mothers with their children when they were 12 months old, given that a way through which the child gives meaning to cultural values is the mother tongue (Laible et al., 2013) differences were expected to be found between both samples.

This was supported by the data, since, in terms of *proportion of references*, US mothers reported in a statistically significant way a greater use of mental content in their discourse than Chilean mothers, while in references to mental support no differences were found. In addition, in relation to the mental contents, they reflect specificity of the context, since differences were observed between both mothers in the references to cognitions, where the mothers of the USA reached a higher frequency than the mothers of Chile. This could be related to the fundamental values that are fostered in the USA, that is, success, competition (Schwartz, 2006), and cognitive and intellectual development (Keller, et al., 2005). When looking at the subcategories in detail, there were also differences between both mothers, specifically in the preference to the person subcategory, mothers of the USA obtained a greater frequency, this can be linked with the fact that the use of a mentalizing language designated to what the child wants or likes or prefers, focuses on the child's own internal states, that is, it is related to the satisfaction of goals and immediate actions of children, with individual needs, which is also consistent with the idea presented above as to the fact that the USA is a context that encourages individualism.

Regarding the references of mental support, those related to the scaffolding that mothers make to support the mental content, these do not show differences according to the context, that is, the culture and the objectives of socialization of the upbringing do not influence the mental support references, these being more universal.

Regarding the above, it can be concluded that differences were found between both samples only in the proportion of references to cognitions and preferences to the person, which reflect coherence with the characteristics of each context. However, when analyzing the heterogeneity of the mentalizing language, a greater amount of differences between both samples was observed. Said *heterogeneity* is reflected in a greater variability in the use of concepts related

to a certain category, for example, if in the desires category the mother mentions the word "want" three times, the frequency is three, but the variability is one. On the other hand, if she uses "like", "want", and "prefer" the frequency is three, and the variability - measured by different concepts - is also three.

In this way, it was observed that US mothers refer in their speech greater heterogeneity in the references associated to physiological states, and subcategories related to thinking processes, creative cognitive processes and primary emotions. In this sense, it can be observed that in US mothers the variability of concepts is focused on those related to physiological states (sleep, warmth, hunger), in cognitions (thinking, knowing, believing, imagining, supposing) and in primary emotions (happiness, anger, rage), which is consistent with the values that this context fosters such as competition (Schwartz, 2006), cognitive and intellectual development (Keller, et al., 2005) and with the tendency of US mothers to help their children in emotional regulation, by connecting the internal processes in order to achieve self-regulation, since the discourse focuses on what the child feels physically and emotionally and then on what he/she thinks.

On the other hand, it is observed that Chilean mothers report greater heterogeneity in the references associated with psychological attributes, states of consciousness and physical expressions, which accounts for greater variability of concepts in what is observed in the child, be they personality attributes (you are naughty, obedient, curious), emotional commitment (you are tired, amused) and physical expressions, which can be associated with an emotional state (laughing, crying, sleeping), which suggests that in their discourse Chilean mothers use more concepts that are aimed at regulating the child's behavior, which is consistent with the literature regarding the tendency of collectivist contexts, with greater distance of power and interdependent to promote the control of negative emotions and emotional regulation of the infants (Chen &

Rubin, 2011; Markus & Kitayama, 1991) and consequently infants tend to regulate their behavior in order to comply with the adults' expectations as of a very early age (Farkas & Vallotton, 2016).

In conclusion, this study provides evidence on the specificity of mentalizing language according to the context of development and the different assessment that each context has of this period - early childhood - since the US sample identifies an emphasis on Individuality and agency in the mother's discourse, where children are encouraged to express their thoughts and emotions, which in turn helps them achieve an autonomous sense of themselves. And in the Chilean sample an emphasis on the control and regulation of behavior is identified in the mother's discourse, where children are encouraged to control negative emotions and strengthen group harmony, consolidating the interrelation.

Regarding the third objective, which was to identify the possible associations between maternal mentalization at 12 months and the social-emotional development of infants at 12 and 30 months, the data refer that mentalizing language is related to the social-emotional development of infants at 30 months, not so at 12 months, which suggests that mentalizing language has an effect in the medium and long term.

When the analyzes are carried out by country, specifically in proportion of reference in the sample of US mothers, it was found that a greater reference to emotions (and specifically primary emotions), and to physical expressions (crying, laughing) were significantly related to higher scores of social-emotional development at 30 months. In light of the theory, physical expressions (laughing) are associated with an emotional state (being happy) (Ruffman, et al., 2002), so that when mothers talk to their children at 12 months of physical expressions and then their emotional correlate, can be linked to scaffold-making from the observable physical manifestation, to then connect it with the internal processes of the infant, that is, with his/her own mental states, which

would favor the infant's social-emotional development. This is also consistent with studies that indicate that, in countries focused on independence, expression of emotion symbolizes individuality, and therefore, the fact that US mothers talk about emotions is likely to support their infants' autonomous agency (Raval, Raval, Salvina, Wilson, & Writer, 2013). In addition, this sample shows that a greater variability of concepts related to thinking processes is related to lower SED scores, which can be associated with what various authors mention at this age, on the relevance of introducing mental references focused on internal experiences of children, to then focus on more abstract mental concepts, such as thoughts and knowledge (Taumopeau et al., 2006).

Regarding *heterogeneity*, both Chilean and US samples show that the greater variability of emotion concepts, as well as primary emotions in maternal discourse at 12 months is associated with greater social-emotional development of their children at 30 months. Likewise, a greater *complexity*, that is, a mentalizing language where several mental states are connected in a statement is also related to a better SED at 30 months in the total sample.

These results confirm the relationship between maternal mentalizing language and infant social-emotional development and are consistent with a large body of research that reports how the mother's conversation about emotions in early childhood supports infants' social-emotional competencies by helping them understand emotions in context, to interpret and better handle emotional situations (Taumopeau & Ruffman, 2006). Such a process of emotional scaffolding can support young children's early self-regulation and, subsequently, the demonstration of fewer behavioral problems (Brophy-Herb, et al., 2015) that is related to the subsequent ability to regulate negative emotions (Spinrad, et al., 2004), as well as to emotional understanding in the preschool age (Farrant, Maybery & Fletcher, 2013).

In conclusion, regarding this objective, this study connotes, on the one hand, the relevance of using a complex mentalizing language, that is, that connects mental states, from an early age, and on the other hand it provides evidence that refers specifically that a greater heterogeneity of concepts referring to emotions at 12 months, more than their frequency, is what is associated with greater social-emotional development of infants at 30 months.

Finally, in relation to the fourth objective focused on verifying the predictive capacity of maternal mentalization (measured at 12 months) on the social-emotional development of infants at 30 months of age. In the total sample it was observed that the number of concepts of emotions emitted by mothers, as well as primary emotions and physical expressions, predict a greater social-emotional development in infants at 30 months.

The results obtained, although they complement the previously reported, about the frequency of references to mental states at 12 months of the children not being what is associated with a greater social-emotional development, but rather that it is their heterogeneity which allows to predict greater social-emotional development, add fundamental information, including the complexity of mentalizing language, that is, when in a statement mothers connect more than one mental state, as another indicator that is related to a better prognosis of social-emotional development at 30 months.

In this way, it does make a difference to repeat concepts associated with emotions, but rather the diversity of the language of emotions, and specifically primary emotions (for example "happy", "cheerful", "glad") and their physiological correlation at 12 months of children (for example "laughing"), is what is related to greater social-emotional development at 30 months. In the same sense, when the mentalizing language is more complex, that is, when mental states are

connected, (for example "you laugh because you are happy or because you like that toy"), greater social-emotional development is predicted at 30 months.

When analyzing the data by country, evidence was found only specifically in the *proportion of references*, where it is observed that, in the USA consistently with the previous analyzes, maternal references to emotions, specifically to primary emotions at 12 months, predicts greater social-emotional development of children at 30 months of age. These findings confirm previous evidence that connotes the relationship between mothers' conversations with their children about emotions and behavior, infants' emotional comprehension (Dunn et al., 1991; Thompson, 1998), and security of attachment (Raikes & Thompson 2006).

Limitations

Although this study provides an important first step on the influence of maternal mentalizing language on infant social-emotional development, it has several limitations that must be considered when interpreting the results.

The first limitation is the size of the sample, which is small; in addition they are not representative data of the country of residence and only infants who attended day care were evaluated, which does not allow generalizing the results. Jointly, there are significant differences between both samples, such as the age of the mothers, the age of the children in the second measurement and the maternal educational level, this means that the samples are not equivalent. In addition, there are assumptions of Ancova and correlations analyzes that were not met, therefore, we must take these results with caution.

Another limitation that is necessary to consider is the instrument used to assess infant social-emotional development; although it is widely used in various investigations, the

information that provides is the infants' social-emotional development assessed through the perception of mothers. Studies report that perception may be influenced by the beliefs and expectations they have about social-emotional development, as well as the marital situation in which they find themselves (Hosowaka & Katsura, 2017), which are variables that were not considered in this study. In future studies it would be interesting to be able to observe social-emotional development directly.

Finally, it is important to take into account that this study, being of an exploratory nature, did not consider other variables that could influence infant social-emotional development, so it would be interesting in future research to supplement the information with other adult variables, such as parenting style, co-parenting, or other parental skills such as attachment, as well as examining other variables of the infant such as temperament.

Future studies

Although this study was not intended to be a cross-cultural study, it does give an insight how the context influences social-emotional development, reason for which it would be interesting to consider culturally representative samples in future research that allow cross-cultural analysis of infant social-emotional development, even more so upon envisaging that most of the studies carried out have contrasted Western and Eastern countries (Camras, et al., 2006, Pettenati, Sekine, Congestrí & Volterra, 2012) which can not necessarily be extrapolated to other contexts.

This research was centered on the mother - child relationship, although relevant knowledge was generated in order to elucidate how the capacity of mentalization, in terms of parental competence, is related to child development, future studies could be interested in including the

father, since his socialization goals, as well as the kind of mentalizing language he uses, can be different and therefore the way to contribute in the social-emotional development also.

Regarding mentalizing language, it would be enriching to extend this research in older children, for example, in pre-school and school age where there is a greater influence of the context, especially in order to know how the mentalizing language used by mothers at this age is, in order to understand the continuities and the changes in the development pathways, that is, what it changes in and what is maintained, which would allow examining the long-term effects. Similarly, and closely related to the above, in future studies it would be interesting to clarify what kind of references to emotions are most used by mothers, in their mentalizing language, for example, if they talk more about positive or negative emotions or how secondary emotions, which are more dependent on the context, are introduced. In the same sense, focused on the complexity of mentalizing language, it would be interesting to extend the study by reviewing which are the mental references that mothers connect most, and if this changes according to the context and age of the children.

Regarding social-emotional development, literature points out that it includes various areas of infant development, future research should include other variables that are associated with social-emotional development, such as cognitive development, language, theory of mind and if this were so it would be interesting to be able to approach it in samples from different contexts that allow to contribute towards that niche of development from the normative. Closely related to the above, and considering that maternal educational level can influence the perception of infant social-emotional development, it would be interesting to assess social-emotional development with other instruments that directly accessed the infant or focused on the infant's interaction with his/her mother and in this way be able to complement these findings.

Implications

Although this study has several limitations, the findings reported here are a contribution to knowledge, since it sheds light on the not addressed relationship between a parental competence - maternal mentalization - and social-emotional development in childhood. In this way, this study not only found a relationship between maternal mentalization capacity and infant social-emotional development, but also provides information on how a varied and more complex mentalizing language, specifically of emotions at 12 months, predicts greater social-emotional development at 30 months.

From a practical perspective, these results provide several possible ways through which one could intervene, since all the findings emphasize the importance of interventions during this stage of development (Bakermans-Kranenburg, et al., 2003), and according to what various authors suggest, this would prevent later difficulties and enhance the long-term adaptation capabilities of the subjects (Schore, 2001).

It is important to consider, in the first instance, that for a mother to use a mentalizing language she must understand that her child is a being with a mind, reason for which it would be advisable in terms of public policies to educate the population about the importance of considering children as beings with intentions, desires, emotions and beliefs that allow mothers, fathers, educators, adults in general, to take into account this situation when relating to them. This focused on bringing about a change in what is meant by infancy or childhood.

Closely related to the above, these result make evident the relevance of carrying out focused strategies to promote a communication based on a mentalizing language, in the mother-child relationship, referring to emotions from a very young age, and which is also varied, that is

to say, that the words used to refer to mental states are changing, for example: say happy, cheerful, glad.

In the same way, explaining the importance of including what the child wants, feels and thinks in a gradual way, where little by little it helps him to understand the connection between internal and external states. As some researchers suggest, providing information on how when speaking of mental language mothers work within the zone of proximal development, introducing in their talk a more advanced level than the level of independent capacity of the child, but of course, not so advanced as to confuse the child about the mind (Meins et al., 2002).

The results of this research show that the variability of mentalizing language such as complexity, that is, connecting several references to each other, are relevant to obtain greater social-emotional development; special attention should be given to work with mothers who have some limitation that can influence their ability to communicate with their child through language, such as decreased vocabulary, a more introverted personality style, postpartum depression etc. Linked to this, in the psychotherapeutic context, the clinician can work on this with the parents, as well as with children who have social-emotional maladjustment by introducing mentalizing language that allows them to understand their own mental states.

According to the results obtained, and related to what is conceived as a childhood, it would be relevant to educate Chilean mothers in the normative stages of the development process and their influence on social-emotional development, emphasizing that there are normative characteristics during this period related to the nascent autonomy that children have. In this way, normalizing certain infantile behaviors together with granting management strategies to mothers that allow them to feel more competent in parenting will allow to diminish the negative

consequences that impact on the mother-child relationship and consequently improve results in the social-emotional development of their children.

Finally, this study considered two samples from different contexts, in terms of the implications for knowledge, although it does not respond to an intercultural study, it has the merit of contributing to the broadening of the understanding of infant socioemotional development, evidencing that there is not just one trajectory that is "normal" or "healthy", this is rather determined by the context where development unfolds; in line with what Keller and Kärtner (2013) propose, the concepts of health, normality and well-being can be defined only from a cultural perspective. Such knowledge can lead to more appropriate and beneficial interactions with the result of better development and infant welfare.

References

Ainsworth, M. S. (1979). Infant–mother attachment. *American Psychologist, 34*(10), 932. doi:10.1037/0003-066X.34.10.932

Anders, T.F., Goodlin - Jones, B., & Sadeh, A. (2000). Sleep disorders. In C. H. Zeanah (Ed.), *Handbook of infant mental health* (2nd ed) (pp. 326-338). New York: Guilford Press.

Bakermans-Kranenburg, M., Van IJzendoorn, M., Juffer, F. (2003). Less is more: meta-analyses of sensitivity and attachment interventions in early childhood. *Psychological Bulletin*, *129* (2), 195-215.

Barata, C. (2011). *Executive function skills in Chilean preschool children (Doctoral Dissertation)*. Retrieved from ProQuest information & learning, 2012.AAI3486021. Harvard Graduate School of Education, Cambridge, MA.

Baron-Cohen, S., Tager-Flusberg, H., & Cohen, D. J. (1993). *Understanding other minds: Perspectives from autism*. Oxford: Oxford University Press.

Bartsch, K., &Wellman, H. M. (1995). *Children talk about the mind*. New York: Oxford University Press.

Bayley, N. (2006). *Bayley Scales of Infant and Toddler Development--Third Edition*. San Antonio: TX--Harcourt Assessment.

Bebee, B., Jaffe, J., Markese, S., Buck, K., Chen, H., Cohen, P.,...Feldstein, S. (2010). The origins of 12-month attachment: A microanalysis of 4-month mother-infant interaction. *Attachment & Human Development*, *12* (1-2), 3-141.

Beebe, B., & Lachmann, F. (2002). *Infant research and adult treatment: Co-constructing interactions.* Hillsdale, NJ: The Analytic Press.

Belsky, J., Rovine, M., & Taylor, D. (1984). The Pennsylvania infant and family development Project, III: the origins of individual differences in infant-mother attachment: maternal and infant contributions. *Child Development, 55*, 718-728.

Belsky, J., Woodworth, S., & Crnic, K. (1996). Troubled family interaction during toddlerhood. *Development and Psychopathology*, *8*, 477– 495.

Bergeron, N., & Schneider, B. H. (2005). Explaining cross-national differences in peer-directed aggression: A quantitative synthesis. *Aggressive Behavior*, *31,* 116-137. doi: 10.1002/ab.20049

Bigelow, A. & Power, M. (2014). Effects of maternal responsiveness on infant responsiveness and behavior in the still-face task. *Infancy, 19* (6), 558-584. doi: 10.111/infa.12059

Bornstein, M. H. & Bradley, R. H. (2003). *Socioeconomic status, parenting, and child development.* New York : Routledge.

Bornstein, M., & Putnick, D. (2012). Cognitive and socioemotional caregiving in developing countries. *Child Development, 83*(1), 46–61. http://dx.doi.org/10.1111/j. 1467-8624.2011.01673.x

Bowlby, J. (1969). Attachment and loss: volume 1. *Attachment*. New York: Basic Books.

Bowlby, J. (1973). Attachment and loss: volume 2. *Separation, anxiety and anger*. New York: Basic Books.

Bowlby, J. (1980). Attachment and loss: volume 3. *Loss*. New York: Basic Books.

Bowlby, J. (1988). *A secure base*. London: Routledge.

Bradley, P., Codispoti, M., Sabatinelli, D. & Lang, P. J. (2001). Emotion and motivation II: Sex differences in picture processing. *Emotion, 1*(3), 300–319. http://dx.doi.org/10.1037/1528-

3542.1.3.300

Bretherton, I., & Beeghly, M. (1982). Talking about internal states: The acquisition of an explicit theory of mind. *Developmental Psychology, 18*, 906 – 921.

Briggs-Gowan, M.J., Carter, A S., Bosson- Heenan, J., Guyer, A.E., & Horwitz, S.M. (2006). Are infant- toddler social- emotional and behavioral problems transient?. *J.AM. ACAD. Child and adolescent Psychiatry*. *45*(7), 849-858. doi: 10.1097/01.chi.0000220849.48650.59

Brooks, R., & Meltzoff, A. (2005). The development of gaze following and its relations to language. *Developmental Science*, 8 (6), 535-543.

Bronfenbrenner, U. (1979). Contexts of child rearing Problems and prospects. *American Psychologist*, *34*, 844-850.

Bronfenbrenner, U. (2005). *Making Human Beings Human. Bioecological Perspectives on Human Development*. Sage.

Brophy-Herb, H. E., Bocknek, E. L., Vallotton, C. D., Stansbury, K. E., Senehi, N., Dalimonte-Merckling, D., & Lee, Y. E. (2015). Toddlers with early behavioral problems at higher family demographic risk benefit the most from maternal emotion talk. *Journal of Developmental and Behavioral Pediatrics*, *36*(7), 512–520. https://doi.org/10.1097/DBP.0000000000000196

Brophy-Herb HE, Stansbury K, Bocknek E, Horodynski (2011). Modeling emotion- related parenting in a low-income sample: relations with toddlers' self-regulation. *Early Child Research Quarterly*. *27*, 352–364.

Brown, J. R., Donelan-McCall, N., & Dunn, J. (1996). Why talk about mental state? The significance of children´s conversations with friends, siblings, and mothers. *Child Development, 67*, 836-849.

Brownell, C. & Kopp, C. (2007). *Socioemotional development in the toddler years. Transitions and transformations*. New York: Guilford Press.

Brownell, C. A., & Kopp, C. B. (2007). Transitions in toddler socioemotional development: Behavior, understanding, relationships. In C. A. Brownell, & C. B. Kopp (Eds.), *Socioemotional development in the toddler years* (pp. 1–42). New York: Guilford.

Bullock, M., & Lütkenhaus, P. (1988). The development of volitional behavior in the toddler years. *Child development, 59,* 664-674.

Byrne B.M. (2006). *Modelado de ecuaciones estructurales con EQS: Conceptos básicos, aplicaciones y programación*. Nueva York: Mahwah.

Calzada, E.F. (2010). Incorporating the cultural value of respect into a frameworkof Latino parenting. *Cultural Diversity and Ethnic Minority Psychology 16* (1), 77-86.

Campos, J.J., Mumme, D.L., Kermoain, R. & Campos, R.G. (1994). A functionalist perspective on the nature of emotion. In N.A. Fox (Ed.). The development of emotional regulation (pp. 284-303). Biological and behavioral considerations. *Monographs of the Society of Research in Child Development*. *Development Review, 8*, 1-51.

Camras, L., Oster, H., Campos, J., Campos, R., Ujiie, T., Miyake, K., & Wang, L. et.al (1998). Production of emotional facial expression in European American, Japanese, and Chinese infants. *Developmental Psychology*, *34*, 616-628.

Carpendale, J. I. M., & Lewis, C. (2004). Constructing an understanding of mind: The development of children's social understanding within social interaction. *Behavioral and Brain Sciences*, *27*, 79–151.

Carr, A., & Pike, A. (2012). Maternal scaffolding behavior: Links with parenting style and

maternal education. *Developmental Psychology, 48*(2), 543. doi:10.1037/a0025888

Cassidy, J., & Shaver, P. (1999). *Handbook of attachment: Theory, research and clinical applications*. New York: Guildford Press.

Caspi, A. (2000). The child is father to the man: Personality continuities from childhood to adulthood. *Journal of Personality and Social Psychology*, *78,* 158–172.

Cohen, J., Onunaku, N., Clothier, S., & Poppe, J. (2005). Helping young children succeed. Strategies to promote early childhood social and emotional development. National Conference of State Legislatures. Extracted from el 17 de Mayo de 2018 de https://www.zerotothree.org/resources/136-helping-young-children-succeed-strategies-to-promote-early-childhood-social-and-emotional-development

Cohn, J. & Tronick E. (1983). Three-month-old infants' reaction to simulated maternal depression. *Child Development, 54*, 185-193.

Cole, P. M., Martin, S. E., & Dennis, T. A. (2004). Emotion regulation as a scientific construct: Methodological challenges and directions for child development research. *Child Development, 75*, 317-333.

Crown, C., Feldstein, S., Jasnow, M., Beebe, B., & Jaffe, J. (2002). The cross-modal coordination of interpersonal timing: Six-week-olds infants' gaze with adults' vocal behavior. *Journal of Psycholinguistic Research*, *31*, 1–23.

Chan, S. M., Bowes, J., & Wyver, S. (2009). Parenting style as a context for emotion socialization. *Early Education and Development, 20*, 631–656.

Chao, R.K. (1995). Chinese and European American cultural models of the self reflected in mothers' childrearing beliefs. *Ethos, 3*, 328-354.

Chen, X. (2011). Culture, peer interaction and social-emotional development. *Child Development*

Perspectives, *6*, 27-34. http://dx.doi.org/10.1111/j.1750- 8606.2011.00187.x

Chen, X. & Rubin, K. (2011). *Socioemotional development in cultural context.* New York: The Guilford Press.

Darling, N., & Steinberg, L. (1993). Parenting style as context: An integrative model. *Psychological Bulletin*, *113*, 487-496.

Davidov, M., & Grusec, J. (2006). Untangling the links of parental responsiveness to distress and warmth to child outcomes. *Child Development*, *77,* 44–58.

Denham S, Mitchel-Copeland J, Strandberg K, Auerbach S, Blair K. (1997). Parental contribution to preschoolers' emotional competence: Direct and indirect effects. *Motiv Emotion 21*:65–86.

De Rosnay, M., Harris, P.L., & Pons, F. (2008). Making links between emotion understanding and developmental psychopathology in young children: Normative patterns and the case of maltreatment. In C. Sharp, P. Fonagy, & I. Goodyer (Eds.) *Social cognition and developmental psychopathology* (pp. 343-385). Oxford England: Oxford University Press.

Doan, S., & Wang, Q. (2010). Maternal discussions of mental states and behaviors: relations to emotion situation knowledge in European American and immigrant Chinese children. *Child development, 81*(5), 1490-1503.

Dodge, K. A., Pettit, G. S., & Bates, J. E. (1994). Socialization mediators of the relation between socioeconomic status and child conduct problems. *Child Development*, *65*(2), 649–665. http://dx.doi.org/10.2307/1131407

Duncan, G. J., & Brooks-Gunn, J. (1997). Income effects across the life pan: Integration and interpretations. In G. J. Duncan, & J. Brooks-Gunn (Eds.), *Consequences of growing up poor* (pp. 596–620). New York, NY: Russell Sage Foundation.

Dunn, J., Brown, J., Slomkowski, Ch., Tesla, C. & Youngblade, L. (1991). Young Children´s understanding of other people's feelings and belief: individual differences and their antecedents. *Child Development*, *62*, 1352-1366.

Eisenberg, N., Fabes, R. A., Bernzweig, M.K., Poulin, R., & Hanish, L. (1993). The relations of emotionality and regulation to preschoolers' social skills and sociometric status. *Child development*, *64,* 1418-1438.

Eisenberg, N., Fabes, R. A., Guthrie, I. K., & Reiser, M. (2000). Dispositional emotionality and regulation: Their role in predicting quality of social functioning. *Journal of Personality and Social Psychology, 78,* 136–157.

Eisenberg, N., Spinrad, T., & Eggum, N. (2010). Emotion-related self-regulation and its relation to children´s maladjustment. *Annu Rev Clin Psychol, 6,* 495-525. doi: 10.1146/annurev.clinpsy.121208.131208

Else-Quest, N., Hyde, J., Goldsmith, H., & Van Hulle, C. (2006). Gender differences in temperament: A meta- analysis. *Psychological Bulletin, 132*(1), 33-72. http://dx.doi.org/10.1037/0033-2909.132.1.33

Farkas, C. (2007). Comunicación gestual en la infancia temprana: Una revisión de su desarrollo, relación con el lenguaje e implicancias de su intervención. *Psykhe, 16*(2), 107-115. http://dx.doi.org/10.4067/S0718-22282007000200009

Farkas, C., Santelices, M. P., & Himmel, E. (2013). Análisis desde una perspectiva evolutiva y cultural del uso de la comunicación gestual en infantes y pre-escolares, en la expresión y comprensión de los estados internos y su impacto en el desarrollo socio-emocional de los niños(as): Informe año 2 [Developmental and cultural perspective analysis of gestural communication use in infants and toddlers in the expression and comprehension of internal

states and its impact in children's socioemotional development: Year 2 report]. (FONDECYT Project N 1110087. Psychology School, Pontificia Universidad Católica de Chile, Santiago, Chile.

Farkas, C., Strasser, K., Badilla, M. G., & Santelices, M. P. (2017). Mentalization in Chilean educational staff with 12-month-old children: Does it make a difference in relation to what children receive at home? *Early Education and Development, 28*(7), 839-857. doi:10.1080/10409289.2017.1287994

Farkas, C. & Valloton, C. (2015). Cultural differences in parents' and teachers' mentalization. In Congreso SRCD, *Society for research in child development.* Biennal meeting, Philadelphia, USA.

Farkas, C., & Vallotton, C. (2016). Differences in infant temperament in Chile and the US. *Infant Behavior & Development*, *44*, 208–218. doi:10.1016/j.infbeh.2016.07.005

Farkas, C., Vallotton, C., Strasser, K., Santelices, M. y Himmel, E. (2017). Socioemotional skills between 12 and 30 months of age on Chilean children: When do the competences of adults matter?. *Infant Behavior and Development, 49*, 192-203. http://dx.doi.org/10.1016/j.infbeh.2017.09.010.

Farrant, B., Maybery, M., & Fletcher, J. (2013). Maternal attachment status, mother-child emotion talk, emotion understanding, and child conduct problems. *Child Development Research, 2013*. 1-9 http://dx.doi.org/10.1155/2013/680428

Farver, J. A. M., Kim, Y. K., & Lee, Y. (1995). Cultural Differences in Korean‐ and Anglo‐American Preschoolers' Social Interaction and Play Behaviors. *Child Development*, *66*(4), 1088–1099. https://doi.org/10.1111/j.1467-8624.1995.tb00924.x

Feldman, R., Greenbaum, C., & Yirmiya, N. (1999). Mother – infant affect synchrony as an antecedent of the emergence of self-control. *Development Psychology*, (1), 223.

Field, A., Miles, J., & Field. (2012*). Discovering statistics using R*. Sage publications.

Fivush, R. Haden, C. & Reese, E. (2006) Elaborating on elaborations: Role of maternal reminiscing style in cognitive and socioemotional development. *Child Development, 77* (6), 1568-1588. http://dx.doi.org/10.1111/j.1467-8624.2006.00960.x

Fivus, R. & Wang, Q. (2005). Emotion talk in mother-child conversations of the shared past: The effects of culture, gender, and event valence. *Journal of Cognition and development, 6* (4), 489-506.

Fogel, A. (1993). *Developing through relationships: Origins of communication, self, and culture*. Chicago, IL: University of Chicago Press.

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* (pp. 11–34). New York: Routledge.

Fonagy, P., Gergely, G., Jurist, E., & Target, M. (2002). *Affect regulation, mentalization and the development of the self*. New York: Other Press.

Fonagy, P., Gergely, G., & Target, M. (2007). The parent–infant dyad and the construction of the subjective self. *Journal of Child Psychology and Psychiatry*, *48*, 288–328. doi: 10.1111/j.1469-7610.2007.01727.x

Fonagy, P., & Target, M. (1997). Attachment and reflective function: Their role in self-organization. *Development and psychopathology*, *9*(04), 679-700. http://dx.doi.org/10.1017/S0954579497001399

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. http://doi:10.1080/14616730500269278

Fonagy, P., Target, M., Steele, H. & Steele, M. (1998). *Reflective-Functioning Manual, version 5.0, for Application to Adult Attachment Interviews*. London: University College London.

Fox, J., & Monette, G. (1992). Generalized collinearity dignostics. *Journal of the American Statiscal Association, 87*(417), 178-183. doi: 10.1080/01621459.1992.10475190

Fox, R., Platz, D., & Bentley, K. (1995). Maternal factors related to parenting practices, developmental expectations, and perceptions of child behavior problems. *The Journal of Genetic Psychology*, *156* (4), 431-441.

Frampton, K. L., Perlman, M., & Jenkins, J. M. (2009). Caregivers' use of metacognitive language in childcare centers: Prevalence and predictors. *Early Childhood Research Quarterly*, *24*, 248–262. doi: 10.1016/j.ecresq.2009.04.004

Friedlmeier, W., Corapci, F., & Cole, P. (2011). Emotion socialization in cross-cultural perspective. *Social and personality psychology compass*. *5*, 410-427. doi: 10.1111/j.1751-9004.2011.00362.x

Friedlmeier, W., & Trommsdorff, G. (1999). Toddler's emotion regulation in stressful situations: A cross-cultural comparison between Japanese and German children. *Journal of Cross-Cultural Psychology, 30*, 684–711.

Garner, P. W., & Dunsmore, J. C. (2011). Temperament and maternal discourse about internal states as predictors of toddler empathy- and aggression-related behavior. *Journal of Early Childhood Research*, *9*(1), 81–99. https://doi.org/10.1177/1476718X10366778

Gergely, G. (2003). The development of teleological versus mentalizing observational learning strategies in infancy. *Bulletin of the Menninger clinic*, *67*(2), 113-131.

Gergely, G., & Watson, J. (1999). Early socio-emotional development: Contingency perception and the socio-biofeedback model. In P. Rochat (Ed.), *Early social cognition: Understanding others in the first months of life* (pp. 101–136). Mahwah, NJ: Erlbaum.

Greenfield, P.M., Keller, H., Fuligni, A., & Maynard, A. (2003). Cultural pathways through universal development. *Annual Review of Psychology, 54*, 461-490. doi: 10.1146/annurev.psych.54.101601.145221

Greenspan, S.I., DeGangi, G.A., & Wieder, S. (2001). *The functional emotional assessment scale (FEAS) for infancy and early childhood: Clinical and research applications.* Bethesda, MD: Interdisciplinary Council of Developmental and Learning Disorders.

Greenspan, S.I., & Shanker, S. (2004). *The first idea: How symbols, language, and intelligence evolved from our primate ancestors to modern humans*. Reading, MA: Perseus Books.

Greenspan, S. I., & Wieder, S. (2006). *Infant and early childhood Mental Health. A comprehensive development approach to assessment and intervention.* Washington, DC: American Psychaitric Publishing.

Grienenberger, J., Kelly, K., & Slade, A. (2005). Maternal reflective functioning, mother-infant affective communication, and infant attachment: Exploring the link between mental state and observed caregiving behavior in the intergenerational transmission of attachment. *Attachment & Human Development*, *7*, 299-311. http://dxdoi.org/10.1080/14616730500245963

Gross, J. J. (2002). Emotion regulation: Affective, cognitive, and social consequences. *Psychophysiology*, *39*, 281-291. doi: 10.1017.S0048577201393198

Gross, J. J., & Thompson, R. A. (2007). Emotion regulation: Conceptual foundations. In J.J. Gross (Ed.), *Handbook of emotion regulation* (pp. 3-24). New York: Guilford Press.

Ha, C., Sharp, C., & Goodyer, I. (2011). The role of child and parental mentalizing for the development of conduct problems over time. *Eur Child Adolesc Psychiatry 20*, 291-300. doi: 101007/s00787-011-0174-4

Hair, J., Anderson, R., Tatham, R. & Black., W. (1999). *Análisis multivariante.* Madrid: Prentice Hall Iberia.

Harris, P. (1991). The work of the imagination. In A. Whiten (Ed.), Natural theories of mind (pp. 283 – 304). Oxford, UK: Basil Blackwell.

Hay, D. F., & Cook, K. V. (2007). The transformation of prosocial behavior from infancy to childhood. In C. A. Brownell, & C. B. Kopp (Eds.), *Socioemotional development in the toddler years* (pp. 100–131). New York: Guilford.

Hazan, C. & Shaver, P. (1994). Attachment as an organizational framework for research on close relationships. *Psychological Inquiry, 5 (1), 1-22.*

Hobson, R.P. (2002). *The cradle of thought*. London: Macmillan, and New York: Oxford University Press.

Hofstede, G. (1980). Culture's consequences: International differences in work-related values. Beverly Hills, CA: Sage.

Hofstede, G. (2001). *Culture's consequences: Comparing values, behaviors, institutions and organizations across nations* (2nd ed.). Thousand Oaks, CA: Sage.

Hofstede, G. (2010, December). Cultural Dimensions. *Itim International.* Retrieved from: http://www.geert-hofstede.com

Hosokawa, R., & Katsura, T. (2017). Marital relationship, parenting practices, and social skills development in preschool children. *Child and Adolescent Psychiatry and Mental Health*, *11*, 2. http://doi.org/10.1186/s13034-016-0139-y

Jenkins, J., Turrell, S., Kogushi, Y., Lollis, S., & Ross, H. (2003). A longitudinal investigation of the dynamics of mental state talk in families. *Child Development*, *74* (3), 905-920.

Katznelson, H. (2014). Reflective functioning: A review. *Clinical Psychology Review*, *34*(2), 107–117. doi:10.1016/j.cpr.2013.12.003

Keller, H. (2003).Socialization for competence Cultural models of infancy. *Human Development, 46*, 288 – 311.

Keller, H. (2007). *Cultures of infancy*. Mahwah, NJ: Psychological Press.

Keller, H. (2012). *Cultures of Infancy.* New York. Psychology Press.

Keller, H., & Greenfield, P. (2000). History and future of development in cross –cultural psychology. *Journal of Cross-Cultural Psychology*, (1), 52.

Keller, H. & Kârtner, J. (2013). Development. The cultural solution of universal development tasks. In Gelfand, Chiu & Hong (Eds.) *Advances in culture and psychology* (p. 63-116) doi. 10.1093/acprof:oso/9780199930449.003.0002.

Keller, H., Lamm, B., Abels, M., Yovsi, R., Borke, J., Jensen, H. & … Chaudhary, N. (2006). Cultural models, socialization goals, and parenting ethnotheories: a multicultural analysis. *Journal of Cross-Cultural Psychology, 37*, 155–172.

Keller, H., Voelker, S., & Yovsi, R. D. (2005). Conceptions of parenting in different cultural communities: The case of west African Nso and Northern German women. *Social Development, 14* (1), 158-180.

Keller, H., Yovsi, R., Borke, J., Kärtner, J., Jensen, H., & Papaligoura, Z. (2004). Developmental consequences of arly parenting experiences: Self- recognition and self-regulation in three cultural communities. *Child Development, 75* (6), 1745-1760.

King, E., & La Paro, K. (2015). Teachers' Language in Interactions: An exploratory examination of mental state talk in early childhood education classrooms. *Early education and development*, *26*(2), 245–263. https://doi.org/10.1080/10409289.2015.989029

Klebanov, P. K., Brooks-Gunn, J., & Duncan, G. J. (1994). Does neighborhood and family poverty affect mothers' parenting, mental health, and social support? *Journal of Marriage and Family, 56,* 441–455.

Kobak, R. R., & Sceery, A. (1988). Attachment in late adolescence: Working models, affect regulation, and representations of self and others. *Child Development*, *59*, 135–146.

Koeske G, Koeske R. (1990). The buffering effect of social support on parental stress. *American Journal of Orthopsychiatry 60*, 440–451.

Kolstad A. & Horpestad S. (2009) Self-construal in Chile and Norway: implications for cultural differences in individualism and collectivism. J Cross Cult Psychol, *40*(2), 275-81.

Kopp, C. (1989). Regulation of distress and negative emotions: A developmental view. *Developmental Psychology*, *25*, 343–354.

Koren-Karie, N., Oppenheim, D., Dolev, S., Sher, E., & Etzion-Carasso, A. (2002). Mothers' insightfulness regarding their infants' internal experience: relations with maternal sensitivity and infant attachment. *Developmental Psychology*, *38*(4), 534-42. http://doi.org/10.1037/0012-1649.38.4.534

Kulkarni, S., Hudson, T., Ramamoorthy, N., Marchev, A., Georgieva-Kondakova, P. & Gorskov, V. (2010). Dimension of individualism-collectivism: a comparative study of five cultures. *Current issues of business and law. 5*, 93-109.

Kristal, J. (2005). *The temperament perspective. Working with children's behavioral styles.* Baltimore: Paul H. Brookes Publishing Co.

Kristen, S., Sodia, B., Licata, M., Thoermer, C. & Poulin-Dubois, D. (2012). The development of internal state language during the third year of life: A longitudinal parent report study. *Infant and Child Development 21*, 634-645.

Laible, D. Murphy, T, & Augustine, M. (2013). Constructing emotional and relational understanding: The role of mother-child reminiscing about negatively valences events. *Social development*, *22* (2), 300-318. doi: 10.1111/sode.12022

Laranjo, J., Bernier, A. & Meins, E. (2008). Associations between maternal mind-mindedness and infant attachment security: Investigating the mediating role of maternal sensitivity. *Infant Behavior & Development, 31*, 688-695. doi:10.1016/j.infbeh.2008.04.008

Lecannelier, F. (2006). *Apego e Intersubjetividad*. Santiago de Chile: Serie Universitaria. LOM Ediciones.

Lester, B. M., Hoffman, J., & Brazelton, T.B. (1985). The rhythmic structure of mother-infant interaction in term and preterm infants. *Child development, 56,* 15-27.

Lopes, P., Nezlek, J., Extremera, N., Hartel, J., Fernández-Berrocal, P., Schutz, A., & Salovey, P. (2011). Emotion regulation and quality of social interaction: does the ability to evaluate emotional situations and identify effective responses matter. *Journal of Personality 79*(2), 429-467. doi: 10.1111/j.1467-6494.2010.00689.x

Lowe, J. R., Erickson, S. J., MacLean, P., Schrader, R., & Fuller, J. (2013). Association of maternal scaffolding to maternal education and cognition in toddlers born preterm and full term. *Acta Paediatrica, 102*(1), 72–77. doi:10.1111/apa.12037

Lyons-Ruth K, Zeanah C, (1993). The family context of infant mental health, I: affective development in the primary caregiving relationship, in *Handbook of Infant Mental Health*. Eds. by Zeanah C. (pp. 14–37), New York: Guilford Press.

Main, Mary. (1991). Metacognitive knowledge, metacognitive monitoring, and singular (coherent) vs. multiple (incoherent) model of attachment. Findings and directions for future research. In C.M. Parkes, J.S. Hinde, & P. Marris. *Attachment across the life cycle* (pp. 127-159) London: Routledge.

Mares, S., Warren, B., & Newman, L. (2011). *Clinical skills in infant mental health: The first three years.* Victoria, Australia: ACER Press.

Markus, H., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion and motivation. *Psychological Review, 98*, 224–253.

Mascolo, M. F., & Fischer, K. W. (2007). The co-development of self and socio-moral emotions during the toddler years. In C. A. Brownell, & C. B. Kopp (Eds.), *Socioemotional development in the toddler years* (pp. 196–296). New York: Guilford.

Matsumoto, D. (1991). Cultural influences on facial expressions of emotion. *Southern Communication Journal, 56*, 128-137.

Matsumoto, D., & Juang, L. (2013). *Culture & psychology*. Belmont. USA: Wadsworth, Cengage Learning.

Mathiesen KS., & Sanson, A. (2000). Dimensions of early childhood behavior problems: stability and predictors of change from 18 to 30 months. *J Abnorm Child Psychol* 28, 15-31.

Meins, E. (1997). *Security of attachment and the social development of cognition*. Hove, UK: Psychology Press.

Meins, E., Fernyhough, C., Arnott, B., Leekam, S. & Rosnay, M., (2013). Mind- Mindedness and theory of mind: mediating roles of language and perspectival symbolic play. *Child development*, 84 (5) 177-1790. doi: 10.1111/cdec.12061

Meins, E., Fernyhough, C., Fradley, E. & Tuckey, M. (2001). Rethinking maternal sensitivity: Mothers' comments on infants' mental processes predict security of attachment at 12 months. *Journal of Child Psychology and Psychiatry, 42*, 637-648. doi:10.1111/1469-7610.00759

Meins, E., Fernyhough, C., Rosnay, M., Arnott, B., Leekam, S. & Turner, M. (2012). Mind-Mindedness as a multidimensional construct: Appropriate and nonattuned mind –related comments independently predict infant-mother attachment in a socially diverse sample. *Infancy 17*(4). 393-415. doi: 10.1111/j.1532-7078.2011.00087.x

Meins, E., Fernyhough, Ch., Russell, J. & Clark-Carter D. (1998). Security of attachment as a predictor of symbolic and mentalizing abilities: A longitudinal study. *Review of social development*, *7* (1). 1-24.

Meins, E., Fernyhough, C., Wainwright, R., Das Gupta, M., Fradley, E. & Tuckey, M. (2002). Maternal mind-mindedness and attachment security as predictors of theory of mind understanding. *Child Development, 73*, 1715-1726. doi:10.1111/1467-8624.00501

Mermelshtine, R. & Barnes, J. (2016). Maternal responsive-didactic caregiving in play interactions with 10 month olds and cognitive development at 18 months. *Infant and child development 25,* 296-316. doi: 10.1002/icd.1961

Mundy, P., & Newell, L., (2007). Attention, joint attention, and social cognition. *Association for Psychological Science, 16*- 269-274.

Muzard, A., Kwon, A., Espinosa, N., Vallotton, C., Farkas, C. (2017). Infants' emotional expression: Differences in the expression of pleasure and discomfort between infants from Chile and the United State. *Inf Child Dev.* 1-12. https://doi.org/10.1002/icd.2003

Neitzel, C., & Stright, A. D. (2004). Parenting behaviours during child problem solving: The roles of child temperament, mother education and personality, and the problem-solving context. *International Journal of Behavioral Development, 28*, 166–179. doi:10.1080/01650250344000370.

Olhaberry, M., & Santelices, M. P. (2013). Presencia del padre y calidad de la interacción madre-hijo: Un estudio comparativo en familias chilenas nucleares y monoparentales. *Universitas Psychologica, 12*(3), 833–843. http://dx.doi.org/10.11144/Javeriana.UPSY12-3.ppci

Ordway, M. R., Sadler, L. S., Dixon, J., & Slade, A. (2014). Parental reflective functioning: analysis and promotion of the concept for pediatric nursing. *Journal of clinical nursing*, *23*(23-24), 3490-3500. http:// doi: 10.1111/jocn.12600

Page, M., Wilhelm, M.S., Gamble, W.C., & Card, N.A. (2010). A comparison of maternal sensitivity and verbal stimulation as unique predictors of infant social- emotional and cognitive development. *Infant Behavior Development, 33*(1), 101- 110. http://dx.doi.org/10.1016/j.infbeh.2009.12.001

Parkinson, B. (2011). How social is the social psychology of emotion?. *British Journal of Social Psychology*, *50*, 405-413. doi: 10.1111/j.2044-8309.2011.02034.x

Pascal, B., Aguardo, G., Sotillo, M., & Masdeu, J.C. (2008). Acquisition of mental state language in Spanish children: A longitudinal study of the relationship between the production of

mental verbs and linguistic development. *Developmental Science* 11, 454–466. doi.org/10.1111/j.1467-7687.2008.00691.x

Perner, J. (1994). *Comprender la mente representacional*. Buenos Aires: Paidós.

Pettenati, P., Sekine, K., Congestrì, E. & Volterra, V. (2012). A comparative study on representational gestures in Italian and Japanese Children. *Journal of Nonverbal Behavior, 36*(2), 149-164. doi:10.1007/s10919-011-0127

PISA (2015). Resultados claves. Recovered from: https://www.oecd.org/pisa/pisa-2015-results-in-focus-ESP.pdf

Raikes, H., Robinson, J. L., Bradley, R. H., Raikes, H. H., & Ayoub, C. C. (2007). Developmental trends in self-regulation among low-income toddlers. *Social Development*, *16*, 128–149.

Raikes, H. A., & Thompson, R. A. (2006). Family emotional climate, attachment security and young children's emotion knowledge in a high risk sample. *British Journal of Developmental Psychology, 24*, 89–104.

Raval, V.V., Raval, P.H., Salvina, J.M., Wilson, S.L., & Writer, Sh. (2013). Mothers` socialization of children`s emotion in Indian and the USA: a cross- and within –culture comparison. *Social Development, 22*(3), 467-484, doi: 10.1111/j.1467-9507.2012.00666.x

Raver, C., & Zigler. E. (1997). Social competence: An untapped dimension of Head Start's success. *Early Childhood Research Quarterly 12*, 363–85.

Rescorla, L.A., Achenbach, T.M., Ivanova, M.Y., Harder, V.S, Otten, L., Bilenberg, N.,… Verlhulst, F. C. (2011). International comparison of behavior 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

Rhoades, B. L., Warren, H. K., Domitrovich, C. E., & Greenberg, M. T. (2011). Examining the link between preschool social–emotional competence and first grade academic achievement: The role of attention skills. *Early Childhood Research Quarterly*, 26, 182–191. http://dx.doi.org/10.1016/j.ecresq.2010.07.003

Rochat, P. (2004). The Infant´s world. Madrid: Ediciones Morata.

Rochat, P. (2007). Intentional action arises from early reciprocal exchanges. *Acta Psicológica, 124*, 8–25.

Rochat, P. (2014). *Early Social Cognition: understanding others in the first months of life.* New Jersey, Mahwah: Psychology Press.

Rosenblum, KL., McDonough, SC., Sameroff, AJ., & Muzik, M. (2008). Reflection in thought and action: maternal parenting reflectivity predicts mind-minded comments and interactive behavior. *Infant Mental Health Journal 29*(4)*,* 362–376. http://doi: 10.1002/imhj.20184

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*, 734-751. doi.org/10.1111/1467-8624.00435

Ruffman, T., Slade, L., Devitt, K., & Crowe, E. (2006). What mothers say and what they do: The relation between parenting, theory of mind, language and conflict/cooperation. *British Journal of Developmental Psychology, 24*, 105-124. doi:10.1348/026151005X82848.

Schore, A.N. (1994). *Affect regulation and the origin of the self: the neurobiology of emotional development*. Mahwah, NJ: Erlbaum.

Schore, A. N. (1997). Early organization of the nonlinear right brain and development of a predisposition to psychiatric disorder. *Development and psychopathology, 9* (4), 595-631.

Schore, A. N. (2000). Attachment and the regulation of the right brain. *Attachment and Human Development*, 2 (1), 23-47. http://dx.doi.org/10.1080/146167300361309

Schore, A. N. (2001). Effects of a secure attachment relationship on right brain development. Affect regulation, and infant mental health. *Infant mental Health Journal. 22* (1-2). 7-66.

Schwartz, Shalom H. (2006). A Theory of Cultural Value Orientations: explication and applications, *Comparative Sociology*, *5* (2-3), 136-182.

Schwartz, Shalom H. (2009). Culture matters: National value cultures, sources, and consequences. In Hong, Y., Chiu, C., & Wyer, R. (Eds.), *Understanding Culture,* (pp. 127-50.). New York: Psychology Press.

Scwab, K. W. (2013). Individualism-collectivism and power distance cultural dimensions: How each influences parental disciplinary methods. *Journal of international education and leadership, 3*, 1-8.

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*, 737–754. doi:10.1111/j.1467-9507.2007.00457.x

Slade, A. (2002). Keeping the baby in mind: A critical factor in perinatal mental health. *Zero to Three*, *22* (6), 10–16.

Slade, A. (2005). Parental reflective functioning: An introduction. *Attachment Human Development, 7*(3), 269-281. http://doi.org/10.1080/14616730500245906

Slade, A. (2007). Reflective parenting programs: Theory and development. *Psychoanalytic Inquiry*, *26*(4), 640-657. http://dx.doi.org/10.1080/07351690701310698

Slade, A., Grienenberger, J., Bernbach, E., Levy, D., & Locker, A. (2005). Maternal reflective functioning, attachment, and the transmission gap: A preliminary study. *Attachment and Human Development, 7*(3), 283–298. http://dx.doi.org/10.1080/14616730500245880

Smeekens, S., Riksen-Walraven, M., & Van Bakel, H. (2009). The predictive value of different infant attachment measure for socioemotional development at age 5 years. *Infant Mental Health Journal*, *30*(4), 366-383. doi: 10.1002/imhj.20219

Sorce, J., Emde, N., Campos, J. & Klinnert, M.D. (1985). Maternal emotional signaling: Its effect on the visual cliff behavior of one year olds. *Developmental Psychology*, *21,* 185-200.

Spinrad, T. L., Stifter, C. A., Donelan-McCall, N., & Turner, L. (2004). Mothers' regulation strategies in response to toddlers' affect: Links to later emotion self-regulation. *Social Development*, *13*, 40–55.

Sroufe A. (1996*). Emotional development. The organization of emotional life in the early years*. Cambridge: Cambridge University Press.

Sroufe, A. (2000). *Desarrollo emocional*. México: Oxford University Press.

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. http:// doi: 10.1080/14616734.2014.935452

Stevenson-Hinde, J. (2011). Culture and Socioemotional development, with a focus on fearfulness and attachment. In Chen, X., Rubin, K. (Eds). *Socioemotional development in cultural context.* (pp.11-28). New York : Guilford Press.

Super, C. M., & Harkness, S. (1986). The developmental niche: A conceptualization of the interface of child and culture. *International Journal of Behavioral Development*, *9*, 546–569.

Svanberg, P. O., Barlow, J., & Tigbe, W. (2013). The parent–infant interaction observation scale: Reliability and validity of a screening tool. *Journal of Reproductive and Infant Psychology*, *31*(1), 5–14. doi:10.1080/02646838.2012.751586.

Symons, D. (2004). Mental state discourse, theory of mind, and the internalization of self –other understanding. *Developmental Review 24*, 159-188.

Tamis-LeMonda, C. S., Way, N., Hughes, D., Yoshikawa, H., Kalman, R. K., & Niwa, E. Y. (2008). Parents' goals for children: The dynamic coexistence of individualism and collectivism in cultures and individuals. *Social Development, 17,* 183–209.

Target, M., & Fonagy, P. (1996). Playing with reality: II. The development of psychic reality from a theoretical perspective. *The International Journal of Psychoanalysis, 77,* 459–479.

Taumoepeau, M., & Ruffman, T. (2006). Mother and infant talk about mental states relate to desire language and emotion understanding. *Child Development*, *77*, 465–481.

Taumoepeau, M. & Ruffman, T. (2008). Stepping Stones to Others 'Minds: Maternal talk relates to child mental state language and emotion understanding at 15, 24, and 33 Months. *Child Development*, *79*, 284–302.

Thompson, R. (1991). Emotional regulation and emotional development. *Educational Psychology Review, 4*, 269-307. http://dx.doi.org/10.1007/BF01319934.

Thompson, R. A. (1998). Early sociopersonality development. In W. Damon (Series ed.), & N. Eisenberg (Vol. ed.), *Handbook of child psychology: Social and personality development* (Vol. 3, pp. 25–104.). New York: Wiley.

Tomasello, M. (1999). *The cultural origins of human cognition*. Cambridge, MA: Harvard University Press.

Tomasello, M., Carpenter, M., Call, J., Behne, T., & Moll, H. (2005). Understanding and sharing intentions: The origins of cultural cognition. *Behavioral and brain sciences*, 28, 675-691.

Trevarthen, C. (1993). The self-born in intersubjectivity: The psychology of infant communication. In U. Neisser (Ed.), *The perceived Self: ecological and interpersonal sources of self-knowledge*. New York: Cambridge University Press.

Traverthen, C. (2011). What is it like to be a person who knows nothing?. Defining the active intersubjective mind of a newborn human being. *Infant and Child Development*, 20 119-135. doi: 10.1002/icd.689

Traverthen, C., & Aitken, K. (2001) Infant Intersubjectivity: Research, theory, and clinical applications. *J. Child Psychol. Psychiat., 42* (1). 3-48.

Vallotton, C. D. (2008). Signs of emotion: What can preverbal children "say" about internal states? *Infant Mental Health Journal*, *29*, 234-258. http://dx.doi.org/10.1002/imhj.20175.

Vallotton, C. D. (2012). Infant signs as intervention? Promoting symbolic gestures for preverbal children in low-income families supports responsive parent-child relationships. *Early Childhood Research Quarterly*, *27*, 401-415. http://dx.doi.org/10.1016/j.ecresq.2012.01.003D

Vallotton, C. D., & Ayoub, C. (2011). Use your words: The role of language in the development of toddlers' self-regulation. *Early Childhood Research Quarterly*, *26*, 169-181. http://dx.doi.org/10.1016/j.ecresq.2010.09.002

Voinea, M. & Damian, M. (2014). The role of socio-emotional development in early childhood. *Journal Plus Education*. *1151*, 388-392.

Wang, Q. (2003). Emotion situation knowledge in American and Chinese preschool children and adults. *Cognition and emotion*, *17,* 725-746.doi: 10.1080/02699930244000156

Wang, Q. & Leichtman, M. (2000). Same beginnings, different stories: A comparison of American and Chinese children´s narratives. *Child Development, 71*, 1329-1346.

Wellman, H. & Liu, D. (2004). Scaling of theory of mind tasks. *Child Development*, *75* (2), 523-541.

Weinberg, M. K., Tronick, E. Z., Cohn, J. F., & Olson, K. L. (1999). Gender differences in emotional expressivity and self-regulation during early infancy. *Developmental Psychology, 35*(1), 175–188.

Whiting B.B., Edwards C.P. (1988). *Children of Different Worlds: The formation of social Behavior*. Cambridge, MA: Harvard Univ. Press.

Yoon, S. A., Kelso, G. A., Lock, A., & Lyons - Ruth, K. (2014). Mother-infant joint attention and sharing: relations to disorganized attachment and mental disrupted communication. *The journal of genetic psychology, 175(6),* 494-510. doi: 101080/00221325.2014.964170

Zelazo, P.D., & Müller, U. (2002). Executive function in typical and atypical development. In U. Goswami (Ed), *Handbook of childhood cognitive development* (pp.445-469). Malden, MA: Blackwell.

Zucchi, A., Huerin, V., Duahlde, C., Raznoszczyk de Schejtman, C. (2006). Aproximación al estudio del funcionamiento reflexivo materno. *Anuario de investigaciones UBA*. 215-221.

ANNEXES

ANNEX 1

UNIVERSIDAD DE CHILE
FACULTAD DE MEDICINA
ESCUELA DE POSTGRADO
GRADOS ACADÉMICOS

CARTA-COMPROMISO DIRECTOR DE TESIS

Quien suscribe, Prof. Dr. Chamarrita Farkas Klein

acepta dirigir la Tesis de D. Nancy Espinosa Díaz

alumno(a) del **PROGRAMA DE**: Doctorado en Psicoterapia

Titulada: "Desarrollo socioemocional en niños de 12 y 30 meses y su relación con la mentalización materna: comparación de madres chilenas y norteamericanas", durante el tiempo que demore en realizarla y a proporcionarle todos los medios necesarios para el adecuado desarrollo de la misma. También, se hace responsable que las actividades realizadas durante la ejecución del proyecto cuenten con la aprobación de las comisiones de ética o bioseguridad de la Facultad de Medicina.

Atentamente,

Firma

ANNEX 2

PONTIFICIA UNIVERSIDAD CATÓLICA DE CHILE
FACULTAD DE CIENCIAS SOCIALES / ESCUELA DE PSICOLOGÍA

24 de septiembre, 2013

Señores
Comité Asesor de Bioética de FONDECYT
Presente

Estimados Señores:

El Comité de Ética de la Escuela de Psicología de la Pontificia Universidad Católica de Chile, conformado por los académicos Christian Berger, Pablo De Tezanos-Pinto, María Rosa Lissi y Eugenio Rodríguez, ha revisado los antecedentes requeridos del proyecto titulado "Desarrollo socioemocional y expresividad gestual de emociones en niños(as) que asisten a sala cuna y su relación con variables de apoderados y personal educativo", postulado al concurso FONDECYT Regular 2014, cuya investigadora responsable es la Profesora Chamarrita Farkas.

Tras haber revisado el proyecto en profundidad, declaramos que el protocolo del mismo se ajusta a los criterios de bioética y ética de investigación científica vigentes en FONDECYT en relación a los requerimientos de estudios con humanos y a la Ley N°20120. Adicionalmente, damos constancia de que la investigadora responsable ha considerado detenidamente las dimensiones éticas de su proyecto y ha generado una reflexión acerca de cómo asumir responsablemente las potenciales consecuencias de su trabajo de investigación. A continuación se señalan las principales razones en que se basa esta certificación.

En primer lugar, la relevancia de este proyecto radica en su eventual contribución a la comprensión de la relación entre el desarrollo socioemocional y la expresividad emocional de los niños, tomando a su vez en cuenta variables de los adultos con los que ellos se relacionan y variables culturales. Esto a su vez, podría contribuir al diseño de intervenciones orientadas a potenciar el desarrollo

AV. VICUÑA MACKENNA 4860 - MACUL - TELÉFONOS (56-2) 23545980 - 23544636 - 23544639 - 23544631 - 23544840 - 23544844 - 23544846
www.psicologia.uc.cl

socioemocional de los niños y niñas, en sus interacciones con sus familias y el personal educativo en el espacio de sala cuna y jardín infantil.

En segundo lugar, respecto de la evaluación de riesgos para los participantes del estudio, cabe indicar que este estudio no realizará nuevas recolecciones de datos, por lo cual no existirían procedimientos que pongan en riesgo a los participantes. Las bases de datos a utilizar corresponden a datos que fueron recolectados anteriormente, siguiendo los procedimientos aprobados en su oportunidad por los comités de ética de la UC y de Fondecyt.

En tercer lugar, respecto de la protección de los participantes de los estudios anteriores, la identidad de los mismos se encuentra resguardada por la ausencia de datos de identificación en las bases. Es importante señalar que la investigadora ha fundamentado adecuadamente los procedimientos que le permitirían resguardar la confidencialidad de toda la información obtenida.

Sin otro particular, se despide cordialmente,

P. UNIVERSIDAD CATOLICA DE CHILE
COMITE DE ETICA
ESC. DE PSICOLOGIA

María Rosa Lissi
Secretaria Ejecutiva
Comité de Ética
Escuela de Psicología
Pontificia Universidad Católica de Chile

CC. Sr. Diego Cosmelli, Subdirector de Investigación y Postgrado.
Archivo Comité de Ética EPUC.

ANNEX 3.

UNIVERSIDAD DE CHILE - FACULTAD DE MEDICINA
COMITÉ DE ÉTICA DE INVESTIGACIÓN EN SERES

ACTA DE APROBACIÓN DE PROYECTO

FECHA: 26 de Julio de 2016. 26 JUL. 2016

PROYECTO: "CHILDREN'S SOCIOEMOTIONAL DEVELOPMENT AT 12 AND 30 MONTHS AND ITS RELATIONSHIP WITH MOTHER`S MENTALIZATION: COMPARISON OF CHILEAN AND NORTHAMERICAN MOTHERS" (DESARROLLO SOCIOEMOCIONAL DE NIÑOS/AS DE 12 Y 30 MESES Y SU RELACIÓN CON LA MENTALIZACIÓN MATERNA: COMPARACIÓN DE MADRES CHILENAS Y ESTADOUNIDENSES)".

INVESTIGADOR RESPONSABLE: SRTA. NANCY ESPINOZA.

INSTITUCIÓN: PROYECTO DE TESIS PARA OPTAR AL GRADO DE DOCTORADO EN PSICOTERAPIA. TUTOR DRA. CHAMARRITA FARKAS. ESCUELA DE PSICOLOGÍA, FACULTAD DE CIENCIAS SOCIALES, PONTIFICIA UNIVERSIDAD CATÓLICA DE CHILE

Con fecha 26 de Julio de 2016, el proyecto ha sido analizado a la luz de los postulados de la Declaración de Helsinki, de la Guía Internacional de Ética para la Investigación Biomédica que involucra sujetos humanos CIOMS 1992, y de las Guías de Buena Práctica Clínica de ICH 1996.

Sobre la base de la información proporcionada en el texto del proyecto el Comité de Ética de Investigación en Seres Humanos de la Facultad de Medicina de la Universidad de Chile, estima que el estudio propuesto está bien justificado y que no significa para los sujetos involucrados riesgos físicos, psíquicos o sociales mayores que mínimos.

En virtud de las consideraciones anteriores el Comité otorga la aprobación ética para la realización del estudio propuesto, dentro de las especificaciones del protocolo.

Este comité también analizó y aprobó el correspondiente documento de Consentimiento Informado en su versión original de fecha 23 de Junio de 2016.

Se extiende este documento por el periodo de un año a contar desde la fecha de aprobación prorrogable según informe de avance y seguimiento bioético.

LUGAR DE REALIZACIÓN DEL ESTUDIO:
ESCUELA DE MEDICINA, FACULTAD DE MEDICINA, UNIVERSIDAD DE CHILE.

Teléfono: 29789536 - Email: comiteceish@med.uchile.cl

INTEGRANTES DEL COMITÉ DE ÉTICA DE INVESTIGACIÓN EN SERES HUMANOS

26 JUL. 2016

NOMBRE	CARGO	RELACIÓN CON LA INSTITUCIÓN
Dr. Manuel Oyarzún	Presidente	Sí
Dr. Hugo Amigo	Miembro	Sí
Dra. Lucía Cifuentes	Miembro	Sí
Dra. Gricel Orellana	Miembro	Sí
Sra. Gina Raineri	Miembro	Sí
Dra. María Ángela Delucchi	Miembro	Sí
Dr. Miguel O'Ryan	Miembro	Sí
Sra. Claudia Marshall	Miembro	Sí

Santiago, 26 de Julio de 2016.

Prof. Gina Raineri B.
Secretaria Ejecutiva CEISH

GRB/mfp.
c.c.: - Proyecto Nº 132-2016
-Archivo Acta nº 63

ANNEX 4.

PONTIFICIA UNIVERSIDAD CATÓLICA DE CHILE
ESCUELA DE PSICOLOGÍA

18/10/2011
COMITE ASESOR DE BIOÉTICA FONDECYT

P. UNIVERSIDAD CATOLICA DE CHILE COMITE DE ETICA ESC. DE PSICOLOGIA

CARTA DE AUTORIZACIÓN
(Directivos/as de los establecimientos educacionales)

Usted ha sido invitado(a) a participar en el estudio "Análisis desde una perspectiva evolutiva y cultural del uso de la comunicación gestual en infantes y pre-escolares, en la expresión y comprensión de los estados internos y su impacto en el desarrollo socio-emocional de los niños(as)" a cargo de las investigadoras Chamarrita Farkas, Maria Pía Santelices y Erika Himmel, docentes de la Escuela de Psicología y Facultad de Educación de la Pontificia Universidad Católica de Chile. El objeto de esta carta es ayudarlo(a) a tomar la decisión de participar en la presente investigación, la cual tiene la aprobación de la Escuela de Psicología de la UC.

El propósito general del estudio es estudiar la comunicación gestual de infantes y preescolares desde una mirada evolutiva, individual e intercultural, y su impacto en el desarrollo socioemocional de los niños y niñas. Los resultados y conclusiones de este estudio permitirán apoyar los programas de las salas cuna y jardines infantiles en términos del desarrollo más integral de los niños(as).

Aún cuando no obtendrá beneficios directos participando en este estudio, los resultados obtenidos en esta investigación podrían aportar al desarrollo del conocimiento científico y al diseño de estrategias para favorecer el desarrollo integral de la infancia temprana en nuestro país.

A través de la presente se le solicita la autorización para la participación de la sala cuna o jardín infantil, del cual usted es director(a). Esta participación es voluntaria. Tiene el derecho a decidir abandonar el estudio sin necesidad de dar ningún tipo de explicación y sin que ello signifique ningún perjuicio para usted en el establecimiento educacional. Además tiene el derecho a no responder preguntas si así lo estima conveniente. Su autorización al estudio como directivo no obliga a la participación en el mismo de apoderados y personal educativo, quienes serán consultados para participar de manera voluntaria e independiente. La participación de la sala cuna o jardín infantil consiste en lo siguiente: Luego de informar al equipo profesional acerca del estudio y de solicitar su consentimiento a participar de la investigación, se requiere que el personal educativo se reúna con los padres y apoderados y les explique a grandes rasgos el estudio. En esta misma reunión se solicitará un espacio para que un miembro del equipo de investigación explique más en detalle el estudio y solicite la firma de la carta de consentimiento a los apoderados.

Además se requiere que la institución educacional facilite el espacio para realizar las entrevistas iniciales con los padres (45 minutos de duración aproximadamente) y luego, que facilite el espacio para las filmaciones con sus hijos, las cuales tendrán una duración de aproximadamente 30 minutos. Estas filmaciones se repetirán cada 6 meses (en 3 ocasiones adicionales) así como la entrevista de los padres al finalizar el estudio (durante el horario de funcionamiento del centro). Al personal educativo se le solicitará ser filmados en interacción de juego con el niño al inicio y término del estudio (2 filmaciones, 15-20 minutos de

duración aproximadamente) y luego se les aplicará una evaluación individual (20-30 minutos de duración). Todas estas mediciones se realizarán dentro de la sala cuna o jardín infantil en una sala anexa y durante el horario de funcionamiento regular.

Toda la información generada por la sala cuna o jardín infantil será confidencial, para lo cual las respuestas de los participantes serán identificadas solamente con un número de folio y los nombres no serán escritos en ningún cuestionario. Además, la información será discutida en privado y no será conocida por personas ajenas a la investigación. Al finalizar el proyecto se entregará información global de los resultados del estudio, pero no información individual de los participantes de la investigación. Las bases de datos con la información del estudio serán conservadas durante un período de 5 años.

Si tiene preguntas respecto a esta investigación, puede contactarse con la investigadora responsable, Chamarrita Farkas (fono 354-7067). Si tiene preguntas respecto de sus derechos como participante puede contactarse con el Comité de Ética de la Escuela de Psicología de la P. Universidad Católica de Chile, E-mail comité.etica.psicologia@uc.cl, Fono 354-5883, secretario ejecutivo profesor Edmundo Kronmüller.

Declaro que he leído el presente documento, se me ha explicado en que consiste esta investigación y mi participación en el mismo, he tenido la posibilidad de aclarar mis dudas y tomo libremente la decisión de participar en el estudio. Además se me ha dado entrega de un duplicado firmado de este documento.

Acepto participar en el presente estudio

_____ _____

(Nombre) **(Firma)**

Fecha: _____

R 19/10/2011
COMITE ASESOR DE BIOÉTICA
FONDECYT

P. UNIVERSIDAD CATOLICA DE CHILE
COMITE DE ETICA
ESC. DE PSICOLOGIA

Nombre Sala Cuna/Jardín infantil: _____

PONTIFICIA UNIVERSIDAD CATÓLICA DE CHILE
ESCUELA DE PSICOLOGÍA

R 10/14/2011
COMITE ASESOR DE BIOETICA FONDECYT

COMITE DE ETICA ESC. DE PSICOLOGIA

CARTA DE CONSENTIMIENTO
(Apoderados)

Usted y su hijo(a) han sido invitados(as) a participar en el estudio "Análisis desde una perspectiva evolutiva y cultural del uso de la comunicación gestual en infantes y pre-escolares, en la expresión y comprensión de los estados internos y su impacto en el desarrollo socio-emocional de los niños(as)" a cargo de las investigadoras Chamarrita Farkas, María Pía Santelices y Erika Himmel, docentes de la Escuela de Psicología y Facultad de Educación de la Pontificia Universidad Católica de Chile. El objeto de esta carta es ayudarlo(a) a tomar la decisión de participar en la presente investigación, la cual tiene la aprobación de la Escuela de Psicología de la UC y de la presente sala cuna y/o jardín infantil.

El propósito de la investigación es estudiar los gestos que usan niños y niñas de 1 a 3 años en su comunicación con otros, entender cómo se van desarrollando en el tiempo, sus diferencias y su impacto en el desarrollo socioemocional. Sus resultados permitirán apoyar los programas de los centros educativos y así lograr un desarrollo más integral de los niños(as).

Al participar en esta investigación se le pedirá que responda un cuestionario sobre características de su hijo(a). Ello se realizará en dos ocasiones; al inicio y al término del estudio y durará alrededor de 45 minutos. También se le pedirá responder una evaluación individual de unos 15 minutos y que esté presente durante la evaluación de lenguaje de su hijo(a), lo cual durará unos 20 minutos. También será filmado en una situación de juego libre con su hijo(a). Dicha filmación tomará unos 15 minutos y se repetirá cada 6 meses (4 filmaciones en total). Cada vez su hijo(a) será invitado a participar de la actividad, y si se niega no será forzado de ninguna manera.

Aún cuando no obtendrá beneficios directos por su participación, los resultados obtenidos en esta investigación podrán aportar al desarrollo del conocimiento científico y del diseño de estrategias para favorecer el desarrollo de los niños en nuestro país.

Su participación en el estudio es voluntaria y tiene derecho a abandonarlo sin necesidad de dar explicaciones y sin que ello signifique ningún perjuicio para usted o para la educación de su hijo(a) en el establecimiento educacional. Además tiene el derecho a no responder preguntas si así lo desea.

Toda la información generada por usted o de la evaluación de su hijo(a) será confidencial, para lo cual sus respuestas serán identificadas solamente con un número de folio y ni su nombre ni el de su hijo o hija será escrito en ningún cuestionario o documento. Además, la información será discutida en privado y no será conocida por personas ajenas a la investigación. Las bases de datos del estudio serán conservadas durante un período de 5 años.

Si tiene preguntas respecto a esta investigación, puede contactarse con la investigadora responsable, Chamarrita Farkas (fono 354-7067). Si tiene preguntas respecto de sus derechos como participante puede contactarse con el Comité de Ética de la Escuela de Psicología de la P. Universidad Católica de Chile, E-mail comité.etica.psicologia@uc.cl, Fono 354-5883, secretario ejecutivo profesor Edmundo Kronmüller.

Declaro que he leído el presente documento, se me ha explicado en que consiste esta investigación y mi participación en el mismo, he tenido la posibilidad de aclarar mis dudas y tomo libremente la decisión de participar en el estudio. Además se me ha dado entrega de un duplicado firmado de este documento.

Acepto participar en el presente estudio

_____ _____

(Nombre) **(Firma)**

_____ **Fecha:** _____

(Nombre de su hijo o hija)

P. UNIVERSIDAD CATÓLICA DE CHILE
COMITE DE ETICA
ESC. DE PSICOLOGIA

R 18/10/2011
COMITE ASESOR DE BIOÉTICA
FONDECYT

PONTIFICIA UNIVERSIDAD CATÓLICA DE CHILE
ESCUELA DE PSICOLOGÍA

18/10/2011
COMITE ASESOR
DE BIOÉTICA
FONDECYT

P. UNIVERSIDAD CATOLICA DE CHILE
COMITE
DE
ETICA
ESC. DE PSICOLOGIA

CARTA DE CONSENTIMIENTO
(Personal Educativo)

Usted ha sido invitado(a) a participar en el estudio "Análisis desde una perspectiva evolutiva y cultural del uso de la comunicación gestual en infantes y pre-escolares, en la expresión y comprensión de los estados internos y su impacto en el desarrollo socio-emocional de los niños(as)" a cargo de las investigadoras Chamarrita Farkas, María Pía Santelices y Erika Himmel, docentes de la Escuela de Psicología y Facultad de Educación de la Pontificia Universidad Católica de Chile. El objeto de esta carta es ayudarlo(a) a tomar la decisión de participar en la presente investigación, la cual tiene la aprobación de la Escuela de Psicología de la UC y de la presente sala cuna y/o jardín infantil.

El propósito de la investigación es estudiar los gestos que usan de niños y niñas de 1 a 3 años en su comunicación con otros, entender cómo se van desarrollando en el tiempo, sus diferencias y su impacto en el desarrollo socioemocional. Sus resultados permitirán apoyar los programas de los centros educativos y así lograr un desarrollo más integral de los niños(as).

Al participar en esta investigación se le pedirá ser filmado en una situación de juego libre con el niño(a). Dicha filmación tomará unos 15 minutos. Luego se le evaluará de manera individual, lo cual tomará unos 15-20 minutos. Cada vez el niño(a) será invitado a participar de la actividad, y si se niega no será forzado de ninguna manera. Las mediciones se realizarán en la sala cuna, en una sala anexa y luego volverán a sus actividades habituales.

Aún cuando no obtendrá beneficios directos por su participación, los resultados obtenidos en esta investigación podrán aportar al desarrollo del conocimiento científico y al diseño de estrategias que apoyen el desarrollo de los niños en nuestro país.

Su participación en el estudio es voluntaria, y tiene derecho a abandonarlo sin necesidad de dar explicaciones y sin que ello signifique ningún perjuicio para usted en el establecimiento educacional. Además tiene el derecho a no responder preguntas si así lo desea.

Toda la información generada por usted será confidencial, para lo cual sus respuestas serán identificadas solamente con un número de folio y su nombre no será escrito en ningún cuestionario o documento. Además, la información será discutida en privado y no será conocida por personas ajenas a la investigación. Las bases de datos del estudio serán conservadas durante un período de 5 años.

Si tiene preguntas respecto a esta investigación, puede contactarse con la investigadora responsable, Chamarrita Farkas (fono 354-7067). Si tiene preguntas respecto de sus derechos como participante puede contactarse con el Comité de Ética de la Escuela de Psicología de la P.

Universidad Católica de Chile, E-mail comité.etica.psicologia@uc.cl, Fono 354-5883, secretario ejecutivo profesor Edmundo Kronmüller.

Declaro que he leído el presente documento, se me ha explicado en que consiste esta investigación y mi participación en el mismo, he tenido la posibilidad de aclarar mis dudas y tomo libremente la decisión de participar en el estudio. Además se me ha dado entrega de un duplicado firmado de este documento.

Acepto participar en el presente estudio

_____ _____

(Nombre) **(Firma)**

Fecha: _____

18/10/2011
COMITE ASESOR DE BIOÉTICA
FONDECYT

P. UNIVERSIDAD CATOLICA DE CHILE
COMITE DE ETICA
ESC. DE PSICOLOGIA

ANNEX 5.

EVALUACIÓN DE LA MENTALIZACIÓN DEL ADULTO
MANUAL DE CODIFICACIÓN DE LAS RESPUESTAS

FONDECYT 1110087

Autoras: Chamarrita Farkas, Claire Vallotton, Claudia Carvacho, Patricia Mahias, Gabriela Badilla.

Instrucciones Generales

El objetivo de este Manual es explicar el sistema de codificación de la mentalización del adulto durante una actividad de contar historias con un niño(a).

En la primera parte se presentan las instrucciones para la transcripción de los cuentos y para la codificación. En la segunda parte se presentan las tablas con la información para codificar estados no mentales y mentales incluidos en esta codificación, considerando el descriptor, autor(es) que los avalan, descripción y ejemplos.

Finalmente se presenta la tabla a llenar para cada cuento, a usarse en la codificación de las respuestas, y que consisten en la hoja de respuestas de esta codificación.

En el Anexo 1 se encuentra la Hoja de Respuestas para codificación, y en el Anexo 2 los cuentos y las respectivas láminas.

PRIMERA PARTE: INSTRUCCIONES PARA TRANSCRIPCIÓN Y CODIFICACIÓN

Instrucciones para la Transcripción

- Transcriba el discurso tanto del adulto como del niño(a) durante la tarea, identificando el discurso de cada uno por separado.

  Ejemplo:

  Mamá: Andrés está jugando con su auto favorito. Mira, escúchame, está jugando con un auto, en el patio.

  Niño: yo no no auto
- Comience a transcribir cuando el adulto comience la historia, o comience la actividad de contar cuentos (ej. Le dice al niño que se siente en sus brazos porque ella le va a contar un cuento).
- Si el adulto hace comentarios sobre algo que no se relaciona directamente con la historia, pero que se relaciona con la actividad de contar un cuento, igual transcriba su discurso.
  - Por ejemplo, si el adulto dice "Veo que no estás interesado en el cuento, pero cuando lo terminemos vamos a jugar a otro juego". Igual transcriba este tipo de comentarios.
- Si el adulto hace comentarios sobre algo no relacionado con la historia o con la actividad de leer o contar un cuento, no lo transcriba.

  Ejemplos:
  - Si el niño pide algo para beber o necesita ir al baño, y el adulto comienza a atender a esto, deje de transcribir.
  - Reinicie la transcripción cuando el adulto vuelva a la actividad de leer la historia.
  - Cuando usted pare de transcribir, haga un comentario indicando lo que el adulto está haciendo (por ejemplo, "el niño quiere jugo, el adulto le da jugo").
- Si el adulto hace una relación entre algunos aspectos de la historia y la vida del niño, continúa la transcripción. En todo caso, si el adulto comienza a distraerse y

comienza simplemente a hablar acerca de la vida del niño, y ya no sigue hablando del cuento o relacionándolo con la vida del niño, deje de transcribir.

Alternativa de transcripción:

- Se sugiere usar la modalidad CHAT para la transcripción (y facilitar luego otros análisis por ejemplo con software CLAN).
- Códigos para la transcripción:
  - Se inicia siempre la codificación con @Inicio (@Begin)
  - En segunda línea va el idioma @Lenguajes: es (@Languages: eng)
  - Luego sigue el nombre de los participantes de lo transcrito: @Participantes: NIÑO niño, MAMA madre (@Participants: CHI child, MOT: mother)
  - Luego sigue nombre del transcriptor: @Transcriptor: Ana (@Transcriber: Anna)
  - A cada transcripción de lo que dice el adulto o el niño, le precede "*" y su identificador, por ejemplo: *NIÑO: yo quiero….. (*CHI: I want…)
  - Cuando se describe lo que pasa en la situación, se empieza con %com: Por ejemplo: %com: la madre le da jugo al niño (%com: mather gives juice to the child)
  - Se termina la transcripción con @Fin (@End)

Ejemplo:

En español	En inglés
@Inicio	@Begin
@Lenguajes: es	@Languages: eng
@Participantes: NIÑO niño, MAMA madre	@Participants: CHI child, MOT: mother
@Transcriptor: Ana	@Transcriber: Anna
*MAMA: El niño estaba jugando con el auto	*MOT: The child was playing with the car
*NIÑO: El auto	*CHI: the car
*MAMA: Si, el auto, y la mamá lo llamó a comer	*MOT: Yes, the car, and the mother call him for lunch time
%com: la mamá apunta la lámina	%com: mother shows the page
*MAMA: y el cuento se acabó	*MOT: and the story finish
@Fin	@End

Usos de otros códigos en la transcripción:

Nombre del código	Código	Ejemplo
Discurso no comprensible	xxx (para frase completa) xx (para una palabra)	*NINO: xxx. *MAMA: qué dijiste? *NIÑO: dije que quiero xx.
Pausa	(.)	*MAMA: me parece que (.) podríamos ir a pasear.
Adivinación de lo que probablemente se dijo	[?]	*NIÑO: yo quiero un sapo [?].
Sobreposición que sigue a algo que dijo el otro	[>]	*MAMA: no Marta, tú tienes que <para de hacer eso> [>]!
Sobreposición que antecede a lo que dijo el otro	[<]	*NINO: <Mami, no me gusta esto> [<].
Reformulación	[///]	*NINO: todos mis amigos tienen [///] eh, decidimos ir todos a la casa a almorzar.
Error	[*]	*NIÑO: Estaba jugando con el ten [: tren] [*].
Reemplazo	[:]	*NIÑO: Estaba jugando con el papú [: auto]
No completación de la palabra	Texto(texto) texto	*NIÑO: Escondió (el) auto atrás del árbol.

Instrucciones generales para la Codificación

- **Identificación archivo:**
  Ponga al archivo un nombre que indique:
  - N° de folio
  - Edad del niño
  - Adulto que contesta
  - Iniciales codificadora

  Ejemplo: "108002 13m mamá CF"
- **Llenado primera página**: Llene los datos requeridos de identificación en la primera hoja de Hoja de Respuestas (ver Anexo 1): Folio, edad del niño, adulto que contesta (relación con el niño), nombre del codificador, fecha de la codificación.
  Luego aparece la tabla resumen con los puntajes asignados una vez finalizada la codificación, que debe llenar al finalizar la misma.
- Una vez que haya transcrito el relato de cada cuento, traspáselo a la primera columna, **"Transcripción Completa"** de la tabla del cuento correspondiente. En esta columna se inserta la transcripción completa de lo que dice el adulto y el niño, con comentarios entre paréntesis, etc.
- Luego limpie el relato en la segunda columna **"Solo Relato Adulto"**, eliminando el inicio del texto "Madre: ", lo dicho por el niño, comentarios entre paréntesis del transcriptor, etc. Este proceso es de suma importancia ya que debe contarse las palabras dichas por el adulto, SOLO en aquello dicho por él o ella.
- Vaya codificando el texto de acuerdo a las categorías que se describen más adelante. Para ello, cuando encuentre una categoría, seleccione la palabra o frase y agregue un comentario, indicando la categoría observada (por ejemplo, "estado físico").
- Una vez haya finalizado de marcar el texto completo, identificando las categorías presentes, agregue el resumen en la tercera columna "**Datos**", donde debe llenar el número total de palabras (de la segunda columna), y número de menciones de las siguientes categorías: Lenguaje Causal, Lenguaje Factual,

Vínculo con el Niño, Estado Físico, Deseos, Emociones, Cogniciones y Atributos.

- Cuide de que el número de comentarios calce con el número de menciones consideradas en esta parte.
- Una vez codificados ambos cuentos, llene la tabla de la primera hoja, con los datos finales.

Códigos Estados No Mentales

Aunque esta codificación busca evaluar la mentalización del adulto, y por tanto las referencias a estados mentales en la interacción con el niño, se consideró importante incluir algunas categorías no mentales, pero que aportan a un discurso más elaborado por parte del adulto; específicamente se incluyeron las categorías Lenguaje Causal, Lenguaje Factual, Vínculo con el Niño y Estado Físico.

Códigos Estados Mentales

Las categorías consideradas como mentales son Deseos, Emociones, Cogniciones y Atributos. No se incluyeron dentro de esta codificación las siguientes categorías:

- Metacognición (debido a que en los análisis preliminares no se observó ninguna mención a dicha categoría).
- Modulación de la aserción (debido a que el aporte de dicha categoría al análisis de la mentalización del adulto se consideró poco clara, en relación a las demás categorías).

Cada palabra o frase debe codificarse en base a UNA sola categoría.

Consideraciones

- Cuando la categoría sea parte del relato o texto, NO la incluya en el análisis (por ejemplo si el texto dice que el niño está cansado y el adulto lee esa frase diciendo que el niño está cansado, NO lo incluya en la codificación).
- Debe codificarse la presencia de la categoría, tanto en forma afirmativa, de pregunta, o forma negativa. Sólo no codifique en aquellos casos cuando la pregunta y lo siguiente dicho por el adulto no permiten identificar a qué se refiere (por ejemplo, "¿y ella como se siente"?, puede indicar un estado físico o una emoción).
    - Forma afirmativa: "Él se puso a llorar" (estado físico).
    - Forma negativa: "Él no quería salir a jugar" (deseos/preferencias).
    - Forma de pregunta: "¿Por qué él hizo eso?" (lenguaje causal)
- Hay algunas palabras que pueden referirse a estados mentales o no mentales, dependiendo del contexto. Por ejemplo, la palabra "sentir" o "estar" puede referirse a un estado fisiológico (ej. Yo siento frío, yo estoy cansado) o un estado emocional (ej. Yo siento pena, yo estoy contento). En casos como éste, debe chequear el contexto de la palabra para ver si usted puede determinar si es una categoría mental o no mental, y la categoría correspondiente. Si no puede determinarlo, entonces no lo incluya en la codificación.
- No busque interpretar la intención del adulto en su discurso; codifique sólo lo que éste dice, lo que es verbalizado explícitamente.
- Cuando el adulto formula preguntas, resulta difícil en ocasiones asignar la categoría correspondiente; a veces ello logra resolverse al continuar revisando el discurso del adulto, en caso contrario, no se codifica.
- En las historias donde se utilizan títeres, se produce un fenómeno diferente al contexto de evaluación mediante cuentos. En la historia de títeres se generan diálogos entre los personajes y entre éstos y el niño(a) o el adulto. Por lo mismo, hay que considerar que el diálogo también es parte de la codificación.
- RECUERDE que no debe codificar aquellas referencias a ciertas categorías pero que están incluidas en el texto del cuento, al menos, la primera vez que

aparecen en el discurso del adulto. Es decir, la primera vez no se cuenta, pero sí las veces siguientes, si aparece incorporado dentro del relato elaborado del cuento.

- Cuando se produce una auto-repetición del adulto, la categoría se tabula una sola vez; considere la repetición como un solo segmento.
  Por ejemplo: "Él está triste, ves, está triste". Aunque se menciona "triste" dos veces, es una auto-repetición, por lo que sólo se consigna una vez.
- Cuando el adulto incorpora canciones conocidas o frases típicas (ej. "Pasó por un zapatito roto y mañana te cuento otro"), **NO** se codifican. Solo relato producido espontáneamente por el adulto.

SEGUNDA PARTE: TABLAS ESPECÍFICAS PARA LA CODIFICACIÓN

En esta segunda parte se presentan las tablas con la información para codificar estados no mentales y mentales y sus respectivas categorías, considerando el descriptor, autor(es) que los avalan, descripción y ejemplos.

Categorías de Estados No Mentales

Categoría/código	Autores	Descripción	Ejemplos
Lenguaje Causal/ Referencias/ Asociaciones	Ruffman, Slade, & Crowe; Meins	El adulto: - explica por qué algo sucede, Relación Causa-Efecto - o hace referencia a asociaciones o secuencias entre dos eventos (se explicita un antes y un después). Hay dos eventos, asociados en el tiempo. Para que sea asociación, debe haber un conector: LUEGO, DESPUÉS, ANTES, POSTERIORMENTE, CUANDO, PORQUE, POR QUÉ, PARA QUE. Debe estar la asociación o causalidad EN EL DISCURSO, no algo que atribuya el codificador Ejemplo: "Se le cayeron los huevos y se puso a llorar": no es causal "Cuando se le cayeron los huevos, se puso a llorar": Sí es causal.	"El se cayó **porque** no miró el camino". "La madre lo castigó **porque** no se comió toda la comida" Son ejemplos de lenguaje causal, porque una acción es causada por otra. "¿**Por qué** él se cayó?" "Si tú terminas tu almuerzo, **entonces** puedes salir a jugar afuera" (Causal. Porque un evento es condicional de otro). "Vamos a ir a comprar huevos **para luego** ir a visitar a la abuela"
Lenguaje Factual	Ruffman, Slade, & Crowe	Cuando el adulto hace referencia a algún hecho, como la función de un objeto o un hecho de la naturaleza.	"La madre de Andrés le dio una naranja para almorzar, y la naranja es un tipo de fruta, que crece en los árboles" (Factual). "Las gallinas ponen huevos".
Vínculo con la vida del niño(a)	Ruffman, Slade, & Crowe	Cuando el adulto hace un vínculo entre lo que ocurre en la historia y algo de la vida del niño(a).	"La madre de Andrés lo llamó a almorzar, igual como yo te llamé a almorzar hoy día" (Vínculo). Nota: Debe haber un link con la vida del niño y el cuento, para que sea vínculo, Si durante el cuento el adulto le pregunta al niño algo sobre él o ella pero sin relacionarlo con el cuento, NO es vínculo Ejemplo; "aquí se ve un chupete. Quieres tú un chupete?", NO es vínculo. Ejemplo; "aquí se ve un chupete. Mira, se parece a tu chupete", SI es vínculo.
Pensar y Saber / cognición	Ruffman, Slade, & Crowe; Meins	El adulto usa palabras que se refieren a procesos mentales/cognitivos	"¿Tú **sabes** lo que es esto?" "Ella **sabe** que eso iba a pasar". "Ellos están **concentrados**". "Déjame **pensar**". "Yo **creo** que es encantador". "**Recuerdas** cuando lo hicimos la semana pasada?" "Yo **entiendo**". "Ponme **atención**". Adivina, figúrate, supón que, imagina que.
Atributos cognitivos y/o emocionales*	Meins	Cuando el adulto hace referencia a características propias del niño(a), de sí mismo o de los personajes del cuento que se relacionan con descriptores de características de personalidad o maneras de ser (emociones o cognición).	"Es tan mal genio", ser curioso, cariñoso, inteligente, ser inquieto, etc. ES "SER", NO "ESTAR"

(*): Aunque no se ha encontrado referencias de otros autores a esta categoría específica, sí pudo observarse en los relatos de los adultos, por lo que se consideró importante de incluir.

Estados físicos	Ruffman, Slade, & Crowe; Meins	El adulto menciona: a) Estados físicos como tener frío, estar hambriento, tener sueño. b) Expresiones físicas del cuerpo, como llorar, sonreír o reírse.	Estados físicos: Enfermo, duele, dolor, dormido, somnoliento, cansado, hambriento, sediento, equilibrarse, estar tranquilo, estar calmado, estar inquieto, estar aburrido, estar entretenido. Tener sueño. Expresiones físicas: llorar, sonreír, reírse Frío o caliente solo aplica a una persona, no a un objeto.

Categorías de Estados Mentales

NOTAS:

1. Hay algunas referencias a estados mentales en el texto de las historias; no las codifique como referencias a estados mentales, porque son solamente descripciones de la historia.
   Por ejemplo: En la historia "Dónde está mi juguete favorito" el texto dice "Cuando termina de almorzar **recuerda** que…".

2. Recuerde que hay segmentos formulados en forma de pregunta, para los cuales necesitará seguir la historia relatada por el adulto, para poder determinar si hacen referencia o no a estados mentales, o afinar la categoría correspondiente; cuando ello no es posible, no se codifica.

Categoría/código	Autores	Descripción	Ejemplos
Deseos, preferencias y/o intenciones	Ruffman, Slade, & Crowe; Meins	El adulto usa palabras o frases que hacen referencia a lo que las personas quieren o desean o les gusta.	Desear o gustar algo, preferir, querer algo, amar (referido a una cosa). Un juguete favorito o preferido.
Emociones y sentimientos	Ruffman, Slade, & Crowe; Meins	El adulto explícitamente hace referencia a sentimientos o emociones, o menciona la palabra "sentimientos".	Feliz, triste, amar (referido a una persona o animal), infeliz, sentir (referido a emociones), enojado, gruñón. Tener cara triste o de pena, cara de sorpresa, sorprenderse. "¿Cómo él se **siente**?" si el adulto se refiere a un estado interno, no a un estado fisiológico. En caso de dudas, no lo codifique como Emoción.

ANEXO 1

TRANSCRIPCIÓN MENTALIZACIÓN: HOJA DE RESPUESTA

Folio	
Edad niño	
Adulto que contesta	
Nombre codificador(a)	
Fecha codificación	

	Cuento 1	Cuento 2
Número de palabras		
N lenguaje causal		
N lenguaje factual		
N vínculos		
N estados físicos		
N deseos		
N cognición		
N emoción		
N atributos		

CUENTO 1:

Transcripción completa	Sólo relato adulto	DATOS
		N palabras: N lenguaje causal: N lenguaje factual: N vínculos: N estados físicos: N deseos: N cognición: N emoción: N atributos:

CUENTO 2:

Transcripción completa	Sólo relato adulto	DATOS
		N palabras: N lenguaje causal: N lenguaje factual: N vínculos: N estados físicos: N deseos: N cognición: N emoción: N atributos:

ANEXO 2: HISTORIAS MENTALIZACIÓN

VERSIÓN TITERES: 0-23 MESES

Historias Apoderado

1) Las llaves

Andrea/Tomás estaba jugando con las llaves de la casa y se acercó a la puerta. Intentó colocar las llaves una y otra vez ¡pero no podía!

2) La hora del sueño

Andrea / Juan está con su mamá. Tenía mucho sueño y empezaron a buscar su chupete / oso peluche favorito para la hora de dormir… pero no lo encontraban…

Historias Personal Educativo

1) Upa!

Camila/ Pedro está en el suelo y estira los brazos para que su tía regalona la tome… pero la tía no podía porque tenía a otro niño con ella…

2) Se me cayó!

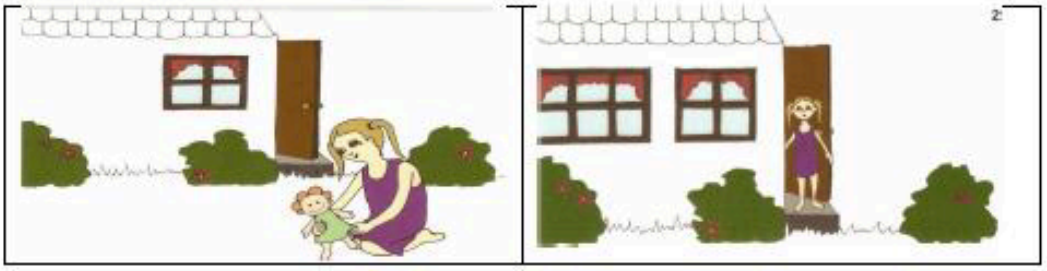
Clarita/ Pedro está jugando en la cuna y se le cae su chupete u oso de peluche favorito al suelo…

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)…



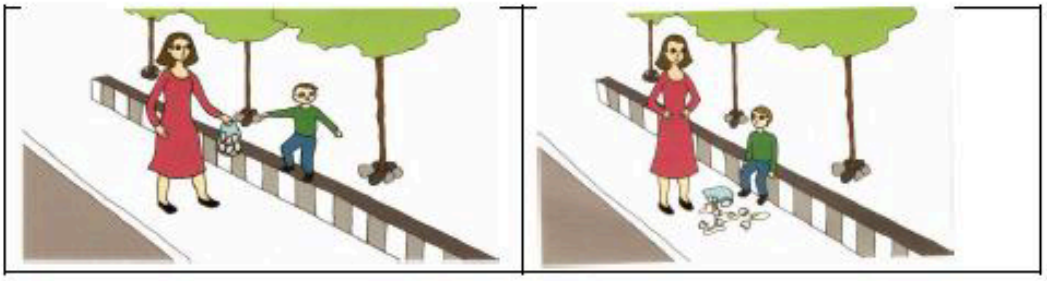
2) Regreso a casa

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!

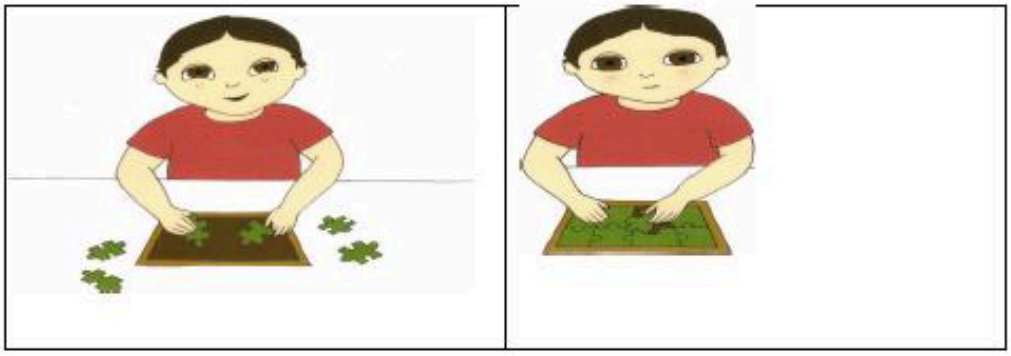
María/Pablo al saltar se tropieza, empujando a la mamá.



Historias Personal Educativo

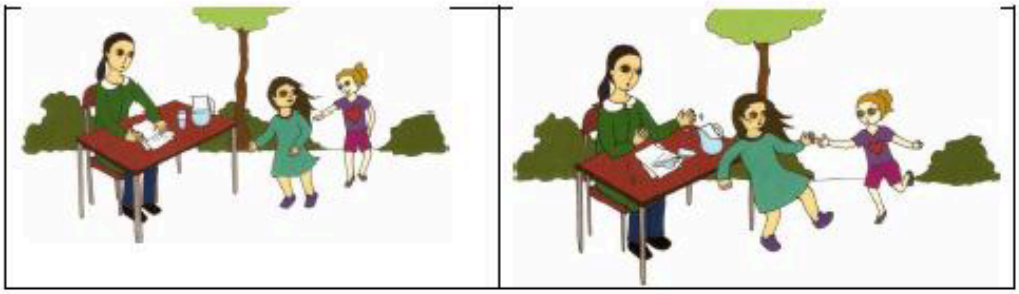
1) ¿Cómo lo hago?

Sofía/ Pedro toma un rompecabezas de la caja de juegos…
Lo intenta varias veces pero no le resulta…



2) Jugando a la pinta

Carolina/Francisco está jugando con su amiga a la pinta en el patio del jardín.
Cuidado niñas(os) con la mesa… que estoy escribiendo…
Carolina /Francisco al pintar a su amiga(o) lo hace muy fuerte y cae sobre la mesa.



Cuestionario Social Emocional y de Comportamiento Adaptativo.

Bayley

Un aspecto importante de la evaluación de su hijo es obtener información acerca de la forma como interactúa con Usted (por ejemplo, si el o ella se comunican con Ud. o si reconocen los sentimientos o emociones de los demás). También es importante conocer las destrezas del día a día que tiene su niño(a) que le ayudan a desenvolverse tanto en el hogar como en otras partes. Porque Ud. conoce tan bien a su hijo(a), es la persona más indicada para proporcionar este tipo de información. La escala Social-Emocional se refiere a las destrezas sociales y emocionales que tiene su niño(a).

Las preguntas abarcan una amplia gama de edad y su hijo no necesariamente tiene todas las destrezas. Es muy importante que Ud. proporcione información, en forma precisa, acerca de las destrezas que su hijo(a) ha logrado o que todavía no la ha logrado. Por favor lea cuidadosamente las instrucciones que se encuentran al comienzo de la tabla.

Como puede darse cuenta las diferentes secciones de la escala se encuentran agrupadas por edad. Los diferentes tramos de edad se encuentran al final de cada grupo de edad. El examinador debe informar cuales son los puntos de término de cada grupo de edad. El examinador debe asegurarse que el adulto a cargo del niño(a) comprenda bien las instrucciones y señalarle que si no entiende alguna pregunta, no dude en pedir una aclaración al examinador.

Calcule la Edad			
	Años	Meses	Días
Fecha aplicación de la escala			
Año de nacimiento del niño(a)			
Edad			
Edad en meses y días	(Edad*12) +días		
Ajuste por prematuro	Ajuste 24 meses		
Edad Ajustada			

Escala Emocional-Social

La escala está diseñada para medir cuan bien su niño(a) ha logrado ciertos hitos característicos para su edad. Por favor fíjese en que esta escala tiene algunas secciones, que corresponden a diferentes edades, responda solo las preguntas que corresponden a la edad de su niño(a). Haga un círculo alrededor del número en la columna "Frecuencia del comportamiento" que mejor describe la frecuencia con la que Ud. observa ese comportamiento en su niño(a). Haga un círculo alrededor de un solo número para cada pregunta. Responda todas las preguntas hasta que llegue a la sección que no corresponde a la edad de su niño(a). Si su niño(a) no ha manifestado el comportamiento, por favor haga un círculo alrededor de "no sé".

	Frecuencia del Comportamiento					
	No lo sé	Nunca	Alguna vez	La mitad de las veces	Casi todo el tiempo	Siempre
1. Disfruta de la mayoría de los sonidos en forma calmada.	0	1	2	3	4	5
2. Usted puede lograr fácilmente la atención de su hijo(a) sin tener que hacer demasiado teatro.	0	1	2	3	4	5
3. Expresa interés en forma tranquila y agradable en la mayoría de las vistas, incluyendo cosas coloridas o brillantes	0	1	2	3	4	5
4. Usted puede lograr fácilmente que su hijo(a) mire cosas (objetos) aunque no sean coloridas o brillantes.	0	1	2	3	4	5
5. Disfruta en forma calmada cuando toca o es tocado por objetos (cosas).	0	1	2	3	4	5
6 Ud. puede lograr fácilmente que su hijo(a) responda cuando Ud. lo(la) toca, sin tener que tocarlo con firmeza (firmemente) para lograr su atención.	0	1	2	3	4	5
7 Le gusta ser columpiado(a), que baile con él(ella) cuando lo(la) tiene en brazos o que lo levantado rápidamente.	0	1	2	3	4	5
8 Ud. puede lograr fácilmente la atención del hijo(a) cuando se acerca a él(ella) o moviéndolo lentamente (despacio).	0	1	2	3	4	5
Para calcular el Puntaje de Procesamiento Sensorial. Sume los puntajes de las preguntas 1–8						/40
9 Ud. puede ayudar a su hijo(a) a calmarse.	0	1	2	3	4	5
10. Mira cosas (objetos) interesantes, tales como su cara o un juguete.	0	1	2	3	4	5
11. Mira o se gira (da vuelta) hacia sonidos interesantes.	0	1	2	3	4	5
Deténgase aquí si su hijo(a) tiene 0 - 3 meses.	Etapa 1					

	Frecuencia del Comportamiento					
	No lo sé	Nunca	Alguna vez	La mitad de las veces	Casi todo el tiempo	Siempre
12 Parece feliz cuando él o ella ve a una de sus personas favoritas (preferidas, familiares) (por ejemplo: Mira o se sonríe, hace(emite) sonidos o estira sus brazos en una forma que expresa alegría o felicidad)	0	1	2	3	4	5
13 Responde a la gente que habla o juega con él o ella haciendo sonidos o poniendo caras (por ejemplo: sonidos de alegría o caras	0	1	2	3	4	5
Deténgase aquí si su hijo(a) tiene 4 - 5 meses.	**Etapa 2**					

14. Trata de alcanzar o indica hacia cosas, o hace sonidos para indicarle lo que él o ella quiere (por ejemplo estira los brazos para ser alzado o indica hacia un juguete).	0	1	2	3	4	5
15 Intercambia dos o más sonrisas, otras miradas, sonidos o acciones (por ejemplo: alcanzando, dando o tomando) con una persona favorita (preferida, familiar)	0	1	2	3	4	5
Deténgase aquí si su hijo(a) tiene 6- 9 meses.	**Etapa 3**					

16. Le muestra que él o ella entiende sus acciones haciendo el gesto apropiado a su vez (por ejemplo: pone una cara divertida hacia Ud., mira algo que Ud. le muestra, para lo que está haciendo porque Ud. mueve la cabeza o le dice con voz forme "¡No!" o se sonría y sigue haciendo algo cuando Ud. asiente con la cabeza con una gran sonrisa y le dice ¡Sí!).	0	1	2	3	4	5
17. Usa acciones consecutivas de ida y vuelta para mostrarle lo que él o ella quieren lo le divierte (por ejemplo: sonríe, estira los brazo para un abrazo, toma su sombrero y se lo coloca en la cabeza de el o ella; y sonríe orgullosamente o toma su mano y le lleva hacia el refrigerador, tironea la manilla y, después de que Ud lo abre, indica hacia algo que le gusta, tal como comida, jugo o leche),	0	1	2	3	4	5
Deténgase aquí si su hijo(a) tiene 10- 14 meses.	**Etapa 4a**					

	Frecuencia del Comportamiento					
	No lo sé	Nunca	Alguna vez	La mitad de las veces	Casi todo el tiempo	Siempre
18. Reproduce (copia) muchos de sus sonidos, palabras o acciones mientras juega con Ud. (por ejemplo si Ud. pone caras divertidas y sonidos, él o ella los copia).	0	1	2	3	4	5
19. Busca algo que él o ella quiere mirando dónde está o consiguiendo que Ud. lo busque.	0	1	2	3	4	5
20. Le muestra lo que él o ella quiere mediante un conjunto de acciones consecutivas. (por ejemplo: le toma de la mano para que le abra la puerta y luego toca o la golpea).	0	1	2	3	4	5
21. Cuando alguien le habla o juega con él o ella usa o trata de usar palabras.	0	1	2	3	4	5
Deténgase aquí si su hijo(a) tiene 15 - 18 meses.	**Etapa 4 b**					
22. Imita o copia juegos familiares (por ejemplo: alimentar o hacer dormir una muñeca).	0	1	2	3	4	5
23. Le dice los que él o ella quiere con una o pocas palabras (por ejemplo: jugo, abrir, beso).	0	1	2	3	4	5
24. Él o ella comprende un deseo simple suyo (por ejemplo: por favor muéstrame tu juguete).	0	1	2	3	4	5
Deténgase aquí si su hijo(a) tiene 19 – 24 meses.	**Etapa 5 a**					
25. Juega juegos imaginarios (por ejemplo: le da la mamadera a un muñeca, juega a la "casa" o imita un personaje de la televisión).	0	1	2	3	4	5
26. Usa palabras o imágenes para decirle en lo que él o ella está interesado(a) (por ejemplo: mira auto).	0	1	2	3	4	5
27. Usa una o más palabras con otros niños de su edad.	0	1	2	3	4	5
28. Usa palabras o imágenes para expresar lo que quiere o le disgusta (por ejemplo: quiere "eso" o "no quiere").	0	1	2	3	4	5
Deténgase aquí si su hijo(a) tiene 25 – 30 meses.	**Etapa 5 b**					

PROYECTO FONDECYT 1110087 2011-2014 N° FOLIO

CUESTIONARIO SOCIODEMOGRÁFICO

Nombre niño		Fecha aplicación	
Nombre persona que responde		Parentesco con el niño	

I. IDENTIFICACIÓN ESTABLECIMIENTO EDUCACIONAL:

1. Tipo establecimiento (marque con una X):

Financiamiento público _____ Financiamiento privado _____

Financiamiento compartido _____ Otros (especificar) _____

2. Edad ingreso del niño(a) a la sala cuna por primera vez : _____

3. Edad de ingreso a esta sala cuna : _____

4. Horas semanales que pasa el niño(a) en sala cuna : _____

II. ANTECEDENTES DE LA FAMILIA:

1. Idioma(s) que se habla al niño(a) en el hogar : _____

2. Número personas que viven en la casa (incluyendo al niño) _____

Anote la información correspondiente para todas las personas que viven en la casa con el niño(a):

Parentesco con el niño(a)	Edad	Parentesco con el niño(a)	Edad
1.		7.	
2.		8.	
3.		9.	
4.		10.	
5.		11.	
6.		12.	

3. Si la madre del niño(a) no vive en la casa, ¿Cuál es el tipo de contacto que tiene con el niño(a)?

____ Diario ____ algunos días a la semana ____ algunos días al mes

____ Algunos días al año ____ no hay contacto ____ NO APLICA

4. Si el padre del niño(a) no vive en la casa, ¿Cuál es el tipo de contacto que tiene con el niño(a)?

____ Diario ____ algunos días a la semana ____ algunos días al mes

____ Algunos días al año ____ no hay contacto ____ NO APLICA

6. ¿Existe **otra** persona o personas a cargo del cuidado diario del niño(a) (mudas, alimentación, cuidado durante enfermedad, etc.), ¿cuáles?

7. ¿Hay otras personas relevantes para el niño(a) que no vivan en el hogar y que tengan contacto frecuente con él o ella? (especifique cuántas personas, y su parentesco o relación con el niño(a))

	Padre	**Madre**	**Adulto principal a cargo del niño(a):** _____ (complete, si no es madre o padre)
Nombre			
Edad			
Nacionalidad			

Nivel educacional (marque con una X el máximo nivel educacional alcanzado por cada persona):

	Madre	Padre	Otro adulto	
0.	____	____	____	No lo sabe
1.	____	____	____	Educación básica incompleta (menor a 8vo básico)
2.	____	____	____	Educación básica completa (8vo básico aprobado)
3.	____	____	____	Educación media o media técnica incompleta (menor a 4to medio)
4.	____	____	____	Educación media o media técnica completa. Educación técnica incompleta.
5.	____	____	____	Educación universitaria, incompleta. Educación técnica completa.
6.	____	____	____	Educación universitaria completa.
7.	____	____	____	Educación de Post Grado (Master, Doctor o equivalente).

Situación ocupacional (Marque con una X solo una opción para cada persona):

	Madre	Padre	Otro adulto	
0.	____	____	____	Cesante, no trabaja, dueña de casa
1.	____	____	____	Estudia
2.	____	____	____	Trabaja

Nivel ocupacional (Se refiere a su trabajo u ocupación principal. Marque con una X sólo una opción para cada persona, si tiene dudas, consulte con el aplicador). **Rellene sólo si marcó la opción 3 "Trabaja":**

	Madre	Padre	Otro adulto	
0.	____	____	____	No lo sabe
1.	____	____	____	Trabajos menores ocasionales e informales (lavado, aseo, servicio doméstico ocasional, "pololos", cuidador de autos, chofer, junior).
2.	____	____	____	Oficio menor, obrero no calificado, jornalero, servicio doméstico con contrato, guardia, carpintero.
3.	____	____	____	Obrero calificado, capataz, micro empresario (kiosco, taxi, comercio menor, ambulante), operador de alimentos, manipulador
4.	____	____	____	Empleado administrativo medio y bajo, vendedor, secretaria, jefe de sección. Técnico especializado. Profesional independiente de carreras técnicas (contador, analista de sistemas, diseñador, músico). Profesor Primario o Secundario.
5.	____	____	____	Ejecutivo medio (gerente, sub-gerente), gerente general de empresa media o pequeña. Profesional independiente de carreras tradicionales (abogado, médico, arquitecto, ingeniero, agrónomo).
6.	____	____	____	Alto ejecutivo (gerente general) de empresa grande. Directores de grandes empresas. Empresarios propietarios de empresas medianas y grandes. Profesionales independientes de gran prestigio.

Su **principal actividad laboral** es: (Marque sólo una opción para cada persona)

	Madre	Padre	Otro adulto	
0.	____	____	____	No trabaja
1.	____	____	____	Fuera del hogar
2.	____	____	____	Dentro del hogar

Su **jornada laboral o de estudio** es: (Marque sólo una opción para cada persona)

	Madre	Padre	Otro adulto	
0.	____	____	____	No trabaja ni estudia
1.	____	____	____	Part time, por horas, o menos de 15 horas semanales.
2.	____	____	____	Media jornada (entre 15 y 34 horas semanales).
3.	____	____	____	Completa (35 horas o más).

III. ANTECEDENTES DEL NIÑO(A)

Embarazo	Marque con una X si madre o niño presentó alguna complicación durante el embarazo ___ Problemas en la madre ____ Problemas en el niño Tipo de problema _____
Parto	Tipo parto (marque con una X): Parto Normal ___ Cesárea programada ___ Cesárea no programada ___ Peso al nacer: _____ Talla al nacer: _____ Edad Gestacional: _____ ¿Presentó alguna complicación médica?. ¿Cuál?.
Lactancia	¿El niño(a) fue amamantado? SI _____ NO : _____ En caso de que sí, por cuánto tiempo: _____

Marque con una X si el niño(a) ha presentado alguno de éstos diagnósticos

Diagnóstico	(X)	¿A qué edad?
a) Obesidad		
b) Desnutrición		
c) TEC con pérdida de conocimiento		
d) Enfermedades respiratorias: bronquitis obstructiva		
e) Enfermedades cardiovasculares		
f) Enfermedades digestivas: diarrea crónica, reflujo grave		
g) Enfermedad hepática		
h) Intoxicaciones graves		
i) Infecciones: meningitis, encefalitis, hepatitis grave		
j) Enfermedades endocrinas: diabetes, hipotiroidismo		
k) Problemas visuales		
l)Enfermedades Urinarias (insuficiencia renal, pielonefritis)		
m) Hematológicas (anemia grave, leucemia, hemofilia)		
n) Orgánicas (epilepsia, daño cerebral, S. de down, encefalitis)		
ñ) Hospitalizaciones mayores a 48 horas		
o) Hospitalizaciones primer mes de vida		

IV. ANTECEDENTES DE OTRO SOSTENEDOR PRINCIPAL

EN CASO que el principal sostenedor económico del hogar no sea el padre ni la madre, identifíquelo en esta sección, considerando que sea una persona que viva en la casa.

1. Parentesco con el niño(a): _____

2. **¿Cuál es el máximo nivel de educación alcanzado?**

3. **¿Cuál es la profesión o trabajo que realiza esta persona?**

V. BIENES FAMILIARES:

1. Para cada uno de los bienes que vienen abajo, por favor escriba la cantidad de cada uno de ellos que tiene la familia del niño(a). Si la familia no tiene uno de esos ítems, por favor escriba "0".

____ Calefón u otro sistema de ducha caliente
____ Automóvil
____Servicio de TV Cable
____ Teléfono celular
____ Horno Microonda
____Cámara de video (no cámara fotográfica)
____ Computador
____ Internet

2. ¿Cuenta con alguien que ayude en las labores domésticas del hogar y/o cuidado del niño(a) y que reciba un pago por ello? (nana o asesora del hogar)
   ____ Sí ____ No

3. Si la respuesta es "SI", indique cuántas horas a la semana esa(s) persona(s) trabaja(n) para la familia
   _____