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Comparison in Socioemotional Development in Chilean and the U.S. Children

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Comparison in Socioemotional Development in Chilean and the U.S. Children

Abstract

Children's socioemotional development (SED) refers to their ability to regulate emotions and behavior to adapt to the world in which they live. Few studies have examined the impact of cultural differences. This study aims to describe and compare the relationship between socioemotional development in Chilean and U.S. children, analyzing the predictive value of cultural differences. The sample consisted of 142 mother-child dyads. Results showed significant differences in children's socioemotional development between the two countries, mediated by maternal education.

Keywords: socioemotional development, early infancy, different contexs.

Comparación del desarrollo socioemocional en niños chilenos y estadounidenses

Resumen

El desarrollo socioemocional (DSE) de los niños se refiere a su capacidad de regular las emociones y el comportamiento para adaptarse al mundo en el que viven. Pocos estudios han examinado el impacto de las diferencias culturales. Este estudio pretende describir y comparar la relación entre el desarrollo socioemocional en niños chilenos y estadounidenses, analizando el valor predictivo de las diferencias culturales. La muestra consistió en 142 díadas madre-hijo. Los resultados mostraron diferencias significativas en el desarrollo socioemocional de los niños entre ambos países, mediadas por la educación materna.

Palabras clave: desarrollo socioemocional, temprana infancia, diferentes contextos.

Socioemotional Development

SED is defined as the ability to recognize, distinguish, manage, and express emotions, develop close and satisfying relationships as well as the ability to actively explore the environment (Cohen et al., 2005). It is the process through which children learn social and emotional skills, how to apply them in daily life and it is shaped upon the influence by personal traits, socialization, and cultural factors (Chen & Rubin, 2011; Greenspan & Shanker, 2004; Greenspan & Wieder, 2006). These skills include abilities such as understanding own and others' emotional states as well as regulation of emotions and behaviors (Perner, 1994). Additionally, SED enables emotional and behavioral management to achieve goals (Campos et al., 1994) and engage in positive social interactions (Raver & Zigler, 1997). Additionally, children who achieve adequate SED are able to express their emotions properly, communicate better with peers (Bayley, 2006; Thompson, 1991) and are perceived more positively by their parents (Vallotton, 2008, 2012). In contrast, children with socioemotional difficulties engage in more disruptive behaviors, throw tantrums more often and have difficulties communicating with their parents (Farkas, 2007). Thus, SED is fundamental to overall child development, as it allows children to adapt and interact with social environment's demands and expectations (Greenspan et al., 2001; Greenspan & Shanker, 2004; Perner, 1994).

Although research indicates that SED is influenced by children's characteristics, such as communication skills and gender (e.g., Vallotton & Ayoub, 2011), some controversies remain. On one hand, Bradley et al. (2001) reported greater emotional reactivity in girls and a higher frequency of delays in early SED among boys. On the other hand, Else-Quest et al. (2006) found gender-based socioemotional developmental differences in early childhood, attributing the

magnitude of these differences to variations in socialization and cultural processes.

The literature highlights how early experiences with primary caregivers influence SED. Particularly, studies show that caregivers' sensitivity, responsiveness, and co-regulation strategies enhance children's SED (Klebanov et al., 1994; Page et al., 2010; Spinrad et al., 2007). While experiences during a child's first twelve months constitute the foundation of SED (Sroufe, 2000), it is from late infancy that children's social and emotional skills become increasingly evident (Brownell & Kopp, 2007; Vallotton & Ayoub, 2011). Specifically, during toddlerhood, children's participation, understanding, and internalization of cultural practices become more extensive. Simultaneously, regulatory strategies allow children to align their behavior with social and cultural norms, making it possible to predict long-term SED trajectories (Brophy-Herb et al., 2015; Brownell & Kopp, 2007; Tremblay et al., 2004).

Moreover, studies have identified parental education and socioeconomic status (SES) as relevant predictors of mother-child interactions (Klebanov et al., 1994; Olhaberry & Santelices, 2013) and children's SED (Bornstein & Bradley, 2003). Particularly, higher education and middle- to high-SES have been associated with better SED outcomes (Dodge et al., 1994; Klebanov et al., 1994; Metwally et al., 2015). Comprehensively, it has been proposed that as a result of having more education, mothers would exhibit greater confidence, knowledge and strategies to address parenting tensions and conflicts (Fox et al., 1995). Thus, these mothers with more years of education would feel better equipped to support their children in problem-solving (Neitzel & Stright, 2004), employ more complex scaffolding strategies, exhibit a more positive parenting style, respond more sensitively to their children's signs and needs (Mermelshtine & Barnes, 2016), and effectively teach emotion regulation and coping strategies (Denham et al.,

1997). Notably, Chilean mothers have shown significantly lower levels of education when compared to their U.S. counterparts (OCDE, 2016).

Cultural variations in socioemotional development

As previously noted, socioemotional skills begin to develop during an infant's earliest interactions with caregivers. During these exchanges, children learn to interpret and respond to emotional and social cues, which in turn allow them to organize their experiences (Greenspan & Wieder, 2006). Thus, parents socialize their offspring based on its norms and values, fostering knowledge of emotional expression, the importance of interpersonal sensitivity as well as the consideration of the context as a background of their behavior (Bronfenbrenner, 1979; Chan et al., 2009; Keller, 2012; Super & Harkness, 1986; Wang & Leichtman, 2000). Consequently, parenting is a strongly culturebound variable, which conveys norms, values, and practices of specific social groups (Keller et al., 2009; Matsumoto & Juang, 2008), which in turn influence children's SED (Stevenson-Hinde, 2011).

Most research on cultural differences in children's SED has focused on comparisons between Eastern and Western countries (Camras et al., 2006; Pettenati et al., 2012). For example, studies have reported that Asian children are less expressive of positive emotions (e.g., smiling) than their Western counterparts (Camras et al., 1998). Likewise, studies have shown more cooperativeness among Chinese, South Korean, and South American children compared to U.S. children, who exhibit greater aggressiveness and oppositional behavior (Bergeron & Schneider, 2005; Farver et al., 1995).

Historically, intercultural differences have been understood through the lens of individualism and collectivism (Hofstede, 1991, 2001; Singelis et al., 1995). While individualism

emphasizes autonomy, self-sufficiency, goal orientation, competitiveness as well as individual goals and rights, collectivism accentuates interdependence, cooperation, harmony and collective aims and rights (Kulkarni et al., 2010; Markus & Kitayama, 1991). Consequently, children in different societies differ considerably in aspects regarding socioemotional functioning, such as freedom of expression, cooperation, responsibility, aggression, and shyness, highlighting the importance of describing cultural context in studying children's SED (Chen, 2011; Chen & Rubin, 2011). Specifically, the U.S. is characterized as an individualistic culture (Hofstede, 1980) in which caregiver-child interactions are more symmetrical with a horizontal base that promote children's individuality, autonomy and separation (Keller & Greenfield, 2000; Keller et al., 2004). Consequently, parents attend to the unique attributes and needs of their children, tolerating, encouraging and supporting the expression of negative emotions (e.g., anger, pride, disgust), which fosters self-sufficiency, assertiveness, and self-esteem (Fiske et al., 1998; Greenfield et al., 2003). Overall, these characteristics have been described as active promotors of children's SED (Schwab, 2013).

On the other hand, even though Chilean culture has been defined as collectivistic in comparison with the U.S., there is evidence of a current shift towards individualism, with a blend of individualistic and collectivist elements (Kolstad & Horpestad, 2009). Particularly, parents favor the acceptance of norms and obedience, where the main values that are socialized are related with cooperation and care for members of the community (Keller et al., 2004; Markus & Kitayama, 1991; Schwartz, 2006). Particularly, Chilean caregiver-child relationship is characterized by asymmetrical and hierarchical interactions in which interactional warmth supports the development of acceptance of family norms and values (Keller et al., 2004), as well as social harmony and group interests

(Matsumoto, 1991). In this sense, parents do not encourage the expression of feelings and emotions, but rather refuse, reject, criticize and/ or minimize negative emotions, unquestioned obedience is expected and children's opinions are not considered (Calzada, 2010; Chao, 1995; Chen & Rubin, 2011; Wang & Leichtman, 2000). Specifically, a small but growing body of literature has identified differences between Chilean and U.S. children's SED, were the latter expressed pleasure and discomfort with higher intensity and the former exhibit greater self-regulation skills (Barata, 2011; Muzard et al., 2017).

The Present Study

Based on the aforementioned literature, the present study aims to explore children's SED within two western countries: U.S. and Chile. To achieve this goal, the association between Chilean and U.S. children's SED at 12 and 30 months will be described and compared, along with variations between these time points. Furthermore, the predictive value of each country, as well as a possible mediation role of maternal education between countries and children's SED at 30 months, will be analyzed. Based on prior literature, it is hypothesized that significant differences will be observed in children's SED between both countries, as well as a significant change in children's SED from 12 to 30 months. Additionally, it is expected that maternal education will mediate the association between countries and socio-emotional development.

The implications of this study are twofold. First, it aims to enrich existing knowledge on socioemotional development from an evolutionary perspective, recognizing that the early years of life constitute a critical and sensitive period at the neuropsychological level. During this stage, according to the literature, the foundations for later development and mental health are established (Bowlby, 1969; Stern, 2009). Therefore, this study includes factors related to parenting and early bonding within the context in which they develop, with the aim of strengthening parenting practices

and child care that shape children's development. Additionally, this stage is a fertile ground for the implementation of early interventions (Knudsen, 2004; Schore, 2005), which are deeply influenced by culture (Matsumoto, 2008; Butler, 2007). On the other hand, this study aims to compare two samples, as a significant limitation in early childhood and parenting topics is that the majority of studies consistently reveal that perhaps 80-90% of the published science in these fields comes from Western Europe and North America (the "developed" world), while only about 10-20% of the global literature represents humanity from the majority ("developing") world (Tomlinson & Bornstein, 2014). Therefore, it is essential to conduct studies that include Latino populations to identify differences or find appropriate generalizations according to these studies.

Method

Design

The present study employs a nonexperimental, descriptive, longitudinal, and comparative design. It describes and compares children's socioemotional development in two different countries (Chile and the U.S.) at two distinct time points (12 and 30 months).

Participants

The study had a nonprobability, purposive sample of 142 mother-child dyads who attended daycare centers and were part of a larger study examining the relationship between children's SED and caregivers' competencies. Inclusion criteria required that mothers and children lived together, and that children's SED was assessed at 12 months. Children with severe developmental disorders and mothers with psychiatric conditions were excluded.

For the first assessment, 90 Chilean children participated (56.7% boys and 43.3% girls), aged between 10 and 15 months (M = 11.9 months, SD = 1.37). Mothers were between 15 and 44 years old (M = 27.79 years, SD = 6.74), with 47.8% holding

technical and/or university degrees. In the U.S., 52 children participated (44.2% boys and 55.8% girls), aged between 10 and 15 months (M=12.17 months, SD=1.44). Mothers were between 19 and 48 years old (M=32.44 years, SD=5.84), with 86.6% holding technical and/or university degrees (see Table 1).

For the second assessment, 70 Chilean children, aged between 27 and 32 months (M = 27.79 months, SD = 6.74), and 49 U.S. children, aged between 28 and 37 months (M = 32.44 months, SD = 5.85), were evaluated. No significant differences

were found between U.S. and Chilean children in terms of age and gender. Even though mothers in the U.S. had significantly higher education levels than Chilean mothers ($X^2(6) = 39.25$, p \leq .001), Chilean mothers were significantly younger than U.S. mothers (t(129) = -7.15, p \leq .001). Regardless of the 16.2% (n = 23) of mother-child dyads that drop-out from the study (mainly due to changes in daycare centers or relocation), attrition analyses revealed no significant differences in SED or maternal education between those who remained and those who dropped out (see Table 1).

Table 1.Distribution of mothers' education and children's gender

		Chile (n=90)		us (n=52)		
		f	%	f	%	р
						≤ .00
Maternal 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						n.s.
	Male	51	56.7	23	44.2	
	Female	39	43.3	29	55.8	

Sociodemographic Questionnaire

This instrument was developed by the research team to ensure that inclusion criteria were met and to collect participants' sociodemographic information.

Instruments

Social-Emotional Scale (Bayley, 2006)

This scale assesses children's socioemotional development through caregivers' identification of socioemotional milestones. It includes 35

Likert-scale items, to which caregivers respond based on the frequency with which they observe each behavior in their child. Adequate reliability has been reported, ranging from 0.83 to 0.94 in U.S. children (Bayley, 2006) and 0.95 in Chilean children (Farkas, Santelices, & Himmel, 2013). In this study, reliability reached a Cronbach's alpha of 0.84.

Procedure

For data collection, contact was made with the directors of childcare centers to request their

participation. Those that met the inclusion criteria and agreed to participate were asked to sign an informed consent form, and the assessments were conducted at the childcare centers, where participants completed the Sociodemographic Questionnaire and the Social-Emotional Scale. When the children reached an age range of 27 to 33 months, the Social-Emotional Scale assessment was repeated. All necessary ethical precautions were taken throughout the process, and participants were assured that the data obtained would be used solely for research purposes.

Data Analysis

The study's first aim was to compare SED between U.S. and Chilean children at two time points (T1: 12 and T2: 30 months), as well as variations between these time points. To achieve this, ANCOVA analyses were conducted. Since children were assessed over a six-month period and raw scores were used, children's age at the time of assessment was included as a control variable. Adjustments were also made for children's sex and mothers' education. Afterwards, to analyze the change over these two time points, a delta SED variable was created by subtracting the raw SED score obtained at T1 from the raw SED score obtained at T2. Next, ANCOVA analyses were performed, controlling for children's age and sex as well as mothers' education.

Table 2.Analysis of covariance of infants' SED at T1 and T2

For the second aim, a hierarchical regression analysis was conducted to predict country's influence on children's SED at 30 months, controlling for children's age, sex, and SED at 12 months, as well as mothers' education. Finally, a Sobel test was conducted to analyze the possible mediating role of mothers' education in the relationship between country and children's SED at T2was run. For this test, children's SED at T1 and age at T2 were controlled. Children's sex was not included, as this variable was not significant in any of the previous analyses.

Results

Descriptive Analyses of SED at Two Time Points

At 12 months, on average, children's SED yielded 74.59 points (SD = 7.843, range 50-99). Specifically, U.S. children reached 74.48 points (SD = 8.408, range 59-99), while Chilean children obtained a mean of 74.46 points (SD = 7.542, range 50-85). On the second measurement, the entire sample obtained a mean of 130.09 points (SD = 19.191, range 78-174); U.S. children scored 137.98 points (SD = 18.855, range 78-174), while Chilean children averaged 124.57 points (SD = 17.533, range 80-170).

		Time 1			Time 2	
Variables	мs (df)	F	Sig.	мs (df)	F	Sig.
Child's age (Time of assessment)	371.8 (1)	6.37	.013**	3148.7 (1)	11.21	.001
Infant's sex	0.357 (1)	0.01	.938	78.755 (1)	0.280	.598
Mother's education	259.5 (1)	4.45	.037*	3072.5 (1)	10.9	.001
Country	51.24 (1)	0.88	.350	126.1 (1)	0.45	.504

Comparison of U.S. and Chilean Children's SED

ANCOVA analyses showed no significant differences between countries at T1 and T2 after adjusting for children's age and sex as well as for maternal education (see Table 2). Particularly, the variables that explained differences in SED were maternal education at T1 (F(1, 137) = 4.447, p = .037) and at T2 (F(1, 108) = 10.940, p \leq .001), as well as children's age at T1 (F(1, 137) = 6.40, p = .013) and at T2 (F(1, 108) = 11.212, p \leq .001). These results confirmed the relevance of controlling for these variables and showed that children's SED increased as maternal education and infants' age increased.

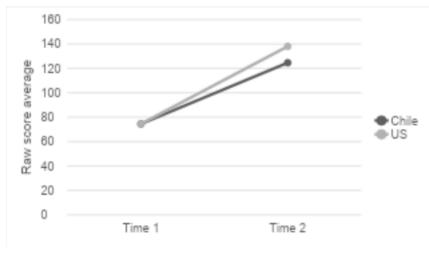
 Table 3.

 ANCOVA of the SED change between T1 and T2

Furthermore, a delta of change was calculated by subtracting SED at T1 from SED at T2. This was done to compare children's SED between both time points. ANCOVA analysis showed significant differences between U.S. and Chilean children ($F_{(1,117)} = 15.84$, p \leq .001). Specifically, U.S. children exhibited a greater increase in SED between T1 and T2 (M(Ch) = 49.86, M(US) = 65.04) (see the change between both time points in Figure 1). Moreover, these results remained significant even after adjusting for children's age, sex, and maternal education ($F_{(1,107)} = 3.944$, p = .004) (see Tables 2–3 and Figure 1).

Variables	DF	MS	F	Sig.
Child's age T1	1	101	.37	.544
Child's age T2	1	7806	28.56	<.000
Child's sex	1	239	.87	.352
Mother's education	1	2519	9.22	.003
Country	1	1078	3.94	.004

Figure 1. Socioemotional change between T1 and T2 for both samples.



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Analysis of Country's Predictive Value in Children's SED at 30 Months

A hierarchical regression analysis in which control variables were entered first was performed: SED at T1 (model 1), children's age at T2 as well as mothers' education (model 2), and finally country was added (model 3). This process yielded three regression models (see Table 4), in which the complete model explained 29.4% of children's SED variance at T2 and was statistically significant ($F = 10.318, p \leq .001$).

The first model showed that SED at T1 was a significant predictor of SED at T2 (β = .253, t = 2.76, p = .007), explaining 6.4% of the variance and remaining a significant predictor after all variables had been added to the model. This result indicated

that the higher SED at T1 was predictive of a higher SED at T2. As previously stated, this outcome was expected and contributes to supporting the stability of the construction. The second model showed that children's age at T2 was a significant predictor (β = .419, t = 4.89, p ≤ .001), contributing 15.9% of the explained variance. This is consistent with the fact that children's age fell within a range of 6 months (28 to 33 months), which is a wide range at this developmental stage. Next, maternal education was a significant predictor explaining 7.6% of the variance and (β = .298, t = 3.58, p ≤ .001) remaining significant in the final model. Finally, once adjustments were made for the other variables, country was not significant (model 3, see Table 4).

Table 4. Hierarchical regression analysis for children's SED at T2

		Model 1		Mod	lel 2		Mode	I 3	
	В	SE	β	В	SE	β	В	SE	
Intercept	84.08	16.72		-71.08	36.23		-61.57	37.06	
SED T1	0.62	0.22	.253**	0.52	0.20	.214**	0.56	0.20	.228**
Child's age T2				4.73	1.12	.344**	4.24	1.20	.308**
Mother's education				4.08	1.13	.299**	3.40	1.27	.248**
Country							4.58	3.90	.115
F	7.59**			- 16.84**		_ 13.02**			
R ² adjusted	.064			.317		.325			

^{**&}lt; 0.01

Country and Maternal Education: How They Mediate SED at Time 2

Even though initial regression analysis models showed that children's country significantly explained children's SED variance, when maternal education was included, this significance disappeared. Thus, a Sobel test was performed to analyze a possible mediating role of maternal education, controlling for SED T1 and child's age at T2.

As Table 2 shows, the country had a significant effect on SED at T2, but only through maternal

education (β = .157, SE = 2.021, p ≤ .001). Therefore, analyses revealed that maternal education (which is also a contextual variable, like country) was the variable that explained the variance of SED in both samples.

Regarding the adjustment indicators, the chisquare goodness-of-fit statistic was not significant ($X^2 = 3.67$, gl = 2, p = .16), indicating that the data fit the theoretical model and that there was good adaptation to the proposed model (Byrne, 2006). In this model, the comparative fit index (CFI) was 1.00, and the TLI was 1.01, which indicates a good adjustment with values higher than 0.95. Additionally, the root mean square error of approximation (RMSEA) was 0.000 [90% CI = 0-0.243] and SRMR (0.022), showing values lower than .88. All these indicators together showed that the confirmatory model fits well with the observed correlation matrix (Byrne, 2006).

Discussion

The literature suggests that depending on the context in which a child develops, particular characteristics of socioemotional development (SED) (e.g., freedom of expression, cooperation, responsibility, aggression, and shyness) may be fostered (Chen & Rubin, 2011). Therefore, differences in children's SED between Chilean and U.S. samples, as well as changes between 12 and 30 months, were expected.

Firstly, and in contrast to what was expected, no significant differences between countries at T1 and T2 were identified. One possible explanation is that data were collected in specific cities of both countries, and only children residing in those cities and attending daycare centers were included. This allows us to hypothesize that these samples may not have significant differences between each other, which in turn may have influenced the results. Another possible explanation is that the children in this study were still too young for differences to emerge in response to increased exposure to socialization and culture (Else-Quest et al., 2006).

Regarding the observed changes in SED between the two time points, U.S. children showed a significantly greater increase compared with their Chilean counterparts. In line with previous studies, this result allows to hypothesized that a context of development such as the U.S., where parents promote individuality, autonomy, separation, and the encouragement of emotional expression through a less strict form of discipline without apprehensions related to conformity of the group (Keller & Greenfield, 2000; Schwab, 2013), may have a greater impact in promoting children's SED.

Conversely, collectivistic values identified in a country such as Chile (e.g., encouragement of obedience, group conformity, and critiques of emotional expressions) may not diminish children's SED (Chao, 1995; Chen & Rubin, 2011; Keller et al., 2004; Markus & Kitayama, 1991; Matsumoto, 1991; Schwartz, 2006).

Moreover, the results showed that country had a predictive effect on children's SED at 30 months. However, this result was indirect, since it operated through mothers' education. Therefore, analyses revealed that maternal education mediated the influence of the country on children's SED, where Chilean mothers had more heterogeneity regarding educational levels in comparison with their U.S. counterparts. Previous studies have shown that maternal education predicts the quality of motherchild interactions (Klebanov et al., 1994; Olhaberry & Santelices, 2013) as well as how higher levels of maternal education are positively associated with children's SED (Bornstein & Bradley, 2003). Furthermore, higher educational levels of education have been linked to individualistic cultural elements, whereas the opposite may be related to more collectivistic contextual values. Therefore, future research should examine more specific effects of caregivers' educational levels, as well as the heterogeneity within each sample with the relationship between country and children's SED.

Additionally, for mothers with lower educational levels, such as Chilean, upbringing may become a greater challenge which may to lead to higher levels of stress. This, in turn, may negatively impact parenting skillsincreasing the social pressure of raising their children according to what is valued within their context. Thus, mothers in this situation may tend to disregard characteristics inherent to age and be less receptive to children's individual differences, all of which would diminish SED (Koeske & Koeske, 1990; Mermelshtine & Barnes, 2016).

Recognizing that effective parenting is a process through which parents meet their children's needs according to cultural norms that evolve from generation to generation (Smetana, J. 2017), and that there are studies suggesting that some parenting behaviors appear to be universally adaptive across different cultures, such as physical care, which is crucial for infant survival, behaviors like responding to babies' vocalizations and fostering secure attachment relationships are likely consistent across cultures (Rohner & Lansford, 2017). This study underscores the importance of considering the role of the family's economic, human, and social capital in explaining variability in parent-child interactions across cultural groups, aligning with other studies that emphasize the importance of considering both the characteristics of childcare environments and cultural parenting practices when analyzing the socioemotional development of children in different contexts (Kuchirko & Tamis-LeMonda, 2019), as well as the importance of implementing preventive interventions across various contexts to promote child socioemotional development, particularly when parental risk factors are present.

Limitations and Future Research

This study had some limitations that must be addressed. Firstly, samples were small and not equivalent to countries and therefore results should be interpreted with caution. Another limitation is that SED was assessed through mothers' reports of their children's socioemotional development, which may introduce bias due to maternal perceptions. In this regard, it would be interesting for future research to assess SED with other instruments to complement maternal reports.

Future studies should also employ larger and more representative samples to validate these results as well as incorporate observational instruments for the evaluation of SED. Likewise, it would be interesting if future studies could assess differences in parenting skills, strategies, and beliefs in caregivers with different educational levels as well as in various cultural contexts in order to develop a deeper understanding of how these variables impact children's SED. Particularly, it would be interesting if future studies could specifically explore what

mothers with higher education do differently in comparison with mothers with lower levels of education. This could be approached through quantitative and qualitative methodologies.

Despite these limitations, this study contributes to a broader understanding of the variables involved in children's SED in this case, the influence of contextual variables, such as country and maternal education, on early childhood development.

References

Bakermans-Kranenburg, M. J., Van Ijzendoorn, M. H., & Juffer, F. (2003). Less is more: Meta-analyses of sensitivity and attachment interventions in early childhood. *Psychological Bulletin*, 129(2), 195–215. https://doi.org/10.1037/0033-2909.129.2.195

Barata, C. (2011). *Executive function skills in Chilean*pre-school children [Doctoral Thesis]. Retrieved from ProQuest Information and Learning.

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

Bergeron, N., & Schneider, B. H. (2005). Explaining cross-national differences in peer-directed aggression:
A quantitative synthesis. *Aggressive Behavior*, 31(2), 116–137. https://doi.org/10.1002/ab.20049

Bornstein, M. H., & Bradley, R. H. (2003). *Socioeconomic status, parenting, and child development.* Routledge. Bowlby J. Attachment and Loss, Vol. 1. *Attachment*. Basic Books. 1969.

Bradley, M. M., Codispoti, M., Sabatinelli, D., & Lang, P. J. (2001). Emotion and motivation II: Sex differences in picture processing. *Emotion*, 1(3), 300–319. https://doi.org/10.1037/1528-3542.1.3.300

Bronfenbrenner, U. (1979). Contexts of child rearing problems and prospects. *American Psychologist*, 34(10), 844–850. https://doi.org/10.1037/0003-066X.34.10.844

Brophy-Herb, H. E., Bocknek, E. L., Valloton, C. D., Stansbury, K. E., Senehi, N., Dalimonte-Merckling, D., & Lee, Y. E. (2015). Toddles with early behavioral problems at higher family demographic risk benefit the most from maternal emotion talk. *Journal of Developmental and Behavioral Pediatrics*: JDBP, 36(7), 512–520. https://doi.org/10.1097/dbp.0000000000000000

- Brownell, C., & Kopp, C. (2007). Socioemotional development in the toddler years. Transitions and transformations. Guilford Press.
- Butler, E. A., Lee, T. L., Gross, J. J. (2007). Emotion regulation and culture: Are the social consequences of emotion suppression culture-specific? *Emotion*,7(1),30–48. https://doi.org/10.1037/1528-3542.7.1.30
- Byrne, B. M. (2006). Structural Equation Modeling with EQS: Basic concepts, applications, and programming. Mahwah.
- Calzada, E. J. (2010). Incorporating the cultural value of respect into a framework of Latino parenting. *Cultural Diversity and Ethnic Minority Psychology*, 16(1), 77–86. https://doi.org/10.1037/a0016071
- Campos, J. J., Mumme, D., Kermoian, R., & Campos, R. G. (1994). A functionalist perspective on the nature of emotion. *Japanese Journal of Research on Emotions*, 2(1), 1–20. https://doi.org/10.4092/jsre.2.1
- Camras, L. A., Bakeman, R., Chen, Y., Norris, K., & Cain, T. R. (2006). Culture, ethnicity, and children's facial expressions: A study of European American, Mainland Chinese, Chinese American, and adopted Chinese girls. *Emotion*, 6(1), 103–114. https://doi.org/10.1037/1528-3542.6.1.103.
- Camras, L. A., Oster, H., Campos, J., Campos, R., Ujiie, T., Miyake, K., Wang, L., & Meng, Z. (1998). Production of emotional facial expressions in European American, Japanese, and Chinese infants. Developmental Psychology, 34(4), 616–628. https://doi.org/10.1037/0012-1649.34.4.616
- Chan, S. M., Bowes, J., & Wyver, S. (2009). Parenting style as a context for emotion socialization. *Early Education and Development*, 20(4), 631–656. https://doi.org/10.1080/10409280802541973
- Chao, R. K. (1995). Chinese and European American cultural models of the self-reflected in mothers' childrearing beliefs. *Journal of the Society for Psychological Anthropology*, 23(3), 328–354. https://doi.org/10.1525/eth.1995.23.3.02a00030
- Chen, X. (2011). Culture, peer interaction and social-emotional development. *Child Development Perspectives*, 6(1), 27–34. https://doi.org/10.1111/j.1750-8606.2011.00187.x
- Chen, X., & Rubin, K. (2011). *Socioemotional development* in cultural context. Guilford Press.

- Cohen, J., Onunaku, N., Clothier, S., and Poppe, J. (2005).

 Helping young children succeed: Strategies to promote early childhood social and emotional development.

 Washington, DC: National Conference of State Legislatures.
- Denham, S., Mitchel-Copeland, J., Strandberg, K., Auerbach, S., & Blair, K. (1997). Parental contribution to preschoolers' emotional competence: Direct and indirect effects. *Motivation and Emotion* 21(1), 65–86. https://doi.org/10.1023/A:1024426431247
- 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. https://doi.org/10.2307/1131407
- Else-Quest, N., Hyde, J., Goldsmith, H., & Van Hulle, C. (2006). Gender differences in temperament: A meta-analysis. *Psychological Bulletin*, 132(1), 33–72. https://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 [Gestural communication in early infancy: A review of its development, relation with language and intervention implications], *Psykhe*, 16(2), 107–115.doi: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 preescolares, en la expresión y comprensión de los estados internos y su impacto en el desarrollo socioemocional de los niños. [Analysis from a cultural evolutionary perspective of the use of gestural communication in infants and preschoolers in the expression and understanding of internal states and its impact on socioemotional development of children] (FONDECYT Project No. 1110087. School of Psychology, Pontificia Universidad Católica de Chile, Santiago, Chile).
- Farver, 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.tboo924.x
- Fiske, A. P., Kitayama, S., Markus, H. R., & Nisbett, R. E. (1998). The cultural matrix of social psychology.

- In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *The Handbook of social psychology* (pp. 915-981). McGraw-Hill.
- 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. https://doi.org/10.1080/00221325.1995.9914835
- Greenfield, P. M., Keller, H., Fuligni, A., & Maynard, A. (2003). Cultural pathways through universal development. *Annual Review of Psychology*, *54*(1), 461–490. https://doi.org/10.1146/annurev.psych.54.101601.145221
- Greenspan, S. I., DeGangi, G., & Wieder, S. (2001). *The Functional Emotional Assessment Scale* (FEAS): *For infancy and early childhood*. Interdisciplinary Council on Development 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. Perseus Books.
- Greenspan, S. I., & Wieder, S. (2006). Infant and early childhood mental health. A comprehensive development approach to assessment and intervention. American Psychiatric Publishing.
- Hoff, E., Laursen, B., & Tardif, T. (2002). Socioeconomic status and parenting. In M. H. Bornstein (Ed.), Handbook of parenting Volume 2: Biology and ecology of parenting (pp. 231–252). Mahwah.
- Hofstede, G. (1980). Culture's consequences: International differences in work-related values. Sage.
- Hofstede, G. (1991). *Cultures and organizations. Software of the mind*. McGraw-Hill.
- Hofstede, G. (2001). Culture's consequences: Comparing values behaviors, institutions and organizations across nations. Sage.
- Keller, H. (2003). Socialization for competence cultural models of infancy. *Human Development*, 46(5), 288–311. https://doi.org/10.1159/000071937
- Keller, H. (2007). *Cultures of infancy*. Lawrence Erlbaum Associates Publishers.
- Keller, H. (2012). Cultures of Infancy. Psychology Press.
 Keller, H., & Greenfield, P. (2000). History and future of development in cross-cultural psychology. Journal of Cross-Cultural Psychology, 31(1), 52–62. https://doi.org/10.1177/0022022100031001005

- Keller, H., & Kärtner, J. (2013). Development. The cultural solution of universal developmental tasks. In J. M. Gelfand, C. Y. Chiu, & Y. Y. Hong (Eds.), Advances in culture and psychology (pp. 63–116). Oxford University Press. https://doi.org/10.1093/acprof:050/9780199930449.003.0002
- Keller, H., Lohaus, A., Kuensemueller, P., Abels, M., Yovsi, R., Voelker. S., Jensen, H., Papaligoura, Z., Rosabal-Coto, M., Kulks, D., & Mohite, P. (2009). The Bio-culture of parenting: evidence from five cultural communities. *Parenting: Science and Practice*, 4(1), 25–50. https://doi.org/10.1207/s15327922par0401_2
- Keller, H., Yovsi, R., Borke, J., Kärtner, J., Jensen, H., & Papaligoura, Z. (2004). Developmental consequences of early parenting experiences: self- recognition and self-regulation in three cultural communities. *Child Development*, 75(6), 1745–1760. https://doi.org/10.1111/j.1467-8624.2004.00814.x
- Klebanov, P. K., Brooks-Gunn, J., & Duncan, G. (1994).

 Does neighborhood and family poverty affect mothers' parenting, mental health, and social support? *Journal of Marriage and Family*, 56(2), 441–455. https://doi.org/10.2307/353111
- Koeske, G., & Koeske, R. (1990). The buffering effect of social support on parental stress. *American Journal of Orthopsychiatry*, 60(3), 440–451. https://doi.org/10.1037/h0079164
- Kolstad, A., & Horpestad, S. (2009) Self-construal in Chile and Norway: implications for cultural differences in individualism and collectivism. *Journal of Cross-Cultural Psychology*, 40(2), 275–81. https://doi.org/10.1177/0022022108328917
- 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. https://doi.org/10.5200/1822-9530.2010.03
- Kuchirko, Y. A., & Tamis-LeMonda, C. S. (2019). The cultural context of infant development: Variability, specificity, and universality. *Advances in child development and behavior*, 57, 27–63. https://doi.org/10.1016/bs.acdb.2019.04.004

- Knudsen EI. (2004). Sensitive periods in the development of the brain and behavior. *J. Cogn Neurosci*, 16(8):1412–1425. doi: 10.1162/0898929042304796.
- Markus, H. R., & Kitayama, S. (1991). Culture and self: Implications for cognition, emotion, and motivation. *Psychological Review*, *98*(2), 224–253. https://doi.org/10.1037/0033-295X.98.2.224
- Matsumoto, D. (1991). Cultural influences on facial expressions of emotion. *Southern Communication Journal*, 56(2), 128–137. https://doi.org/10.1080/10417949109372824
- Matsumoto, D., & Juang, L. P. (2008). *Culture and Psychology*. Wadsworth/Thomson.
- Matsumoto D, Yoo S. H., Nakagawa, S. (2008). Culture, emotion regulation, and adjustment. *J Pers Soc Psychol*, 94(6), 925–37. https://doi:10.1037/0022-3514.94.6.925
- 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(3), 296–316. https://doi.org/10.1002/icd.1961
- Metwally, A. M., Salah El- Din, E. M., Shehata, M. A., Shaalan, A., El Etreby, L. A., Kandeel, W. A., Shaaban, S. Y., & Rabah, T. M. (2016). Early life predictors of socio-emotional development in a sample of Egyptian infants. PLoS ONE, 11(7). https://doi.org/10.1371/journal.pone.0158086
- 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 States. *Infant Child Development*, 26(6), 1-12. https://doi.org/10.1002/icd.2003
- Neitzel, C., & Stright, A. D. (2004). Parenting behaviors during child problem solving: The roles of child temperament, mother education and personality, and the problem —solving context. *International Journal of Behavioral Development*, 28(2), 166–179. https://doi.org/10.1080/01650250344000370
- OCDE (2016). PISA 2015, resultados clave [PISA 2015, key results]. Retrieved from https://www.oecd.org/pisa/pisa-2015-results-in-focus-esp.pdf
- 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 [Father's Presence and the Quality of Mother-Child Interaction: A Comparative Study on Chilean Nuclear and Single-Mother Families]. *Universitas Psychologica*, 12(3), 833–843. https://doi.org/10.11144/Javeriana.upsy12-3.ppci
- Page, M., Wilhelm, M., 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 and Development*, 33(1), 101–110. https://doi.org/10.1016/j.infbeh.2009.12.001
- Perner, J. (1994). Comprender la mente representacional.
- Pettenati, P., Sekine, K., Congestri, E., & Volterra, V. (2012).

 A comparative study on representational gestures in Italian and Japanese children. *Journal of Nonverbal Behavior*, 36(2), 149–164. https://doi.org/10.1007/s10919-011-0127-0
- Raver, C., & Zigler, E. (1997). Social competence: An untapped dimension of Head Start's success. *Early Childhood Research Quarterly*, 12(4), 363–385. https://doi.org/10.1016/So885-2006(97)90017-X
- Rohner, R. P., Lansford J. E. (2017). Docment details- Depp Structure of human affectional systems: Introduction to interpersonal acceptance-rejection Theory. *Journal* of Family Theory and Review 9(4) 426–440. https://doi.org/10.1111/jftr.12219
- 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. https://doi.org/10.1002/1097-0355(200101/04)22:1<7::aid-imhj2>3.0.co;2-N
- Schore A. N. (2005). Back to basics: attachment, affect regulation, and the developing right brain: linking developmental neuroscience to pediatrics. *Pediatr Rev*, 26(6), 204–217. doi: 10.1542/pir.26-6-204.
- Schwab, K. W. (2013). Individualism-collectivism and power distance cultural dimensions: How each influences parental disciplinary methods. *Journal of International Education and Leadership*, 3(3), 1–8.
- Schwartz, S. H. (2006). A theory of cultural value orientations: Explication and applications. *Comparative Sociology*, *5*(2–3), 137–182. https://doi.org/10.1163/156913306778667357

- Singelis, T. M., Triandis, H. C., Bhawuk, P. S., & Gelfand, M. J. (1995). Horizontal and vertical dimensions of individualism and collectivism: A theoretical and measurement refinement. Cross-Cultural Research, 29, 240–275. https://doi.org/10.1177/106939719502900302
- Smetana J. G. (2017). Current research on parenting styles, dimensions, and beliefs. *Current opinion in psychology*, 15, 19–25. https://doi.org/10.1016/j.copsyc.2017.02.012
- Spinrad, T. L., Eisenberg, N., Gaertner, B., Popp, T., Smith, C. L., Kupfer, A., Grieving, K., Liew, J., & Hofer, C. (2007). Relations of maternal socialization and toddlers' effortful control to children's adjustment and social competence. *Developmental Psychology*, 43(5), 1170–1186. https://doi.org/10.1037/0012-1649.43.5.1170
- Sroufe, A. (2000). *Desarrollo emocional*. Oxford University Press.
- Stern, D. *The First Relationship Infant and Mother, With a New Introduction.* Harvard University Press. 2009.
- Stevenson-Hinde, J. (2011). Culture and socioemotional development, with a focus on fearfulness and attachment. In X. Chen & K. Rubin (Eds.), *Socioemotional development in cultural context* (pp. 11–28). Guilford Press.
- Super, C. M., & Harkness, S. (1986). The developmental niche: A conceptualization at the interface of child and culture. *International Journal of Behavioral Development*, 9(4), 545–569. https://doi.org/10.1177/016502548600900409
- Thompson, R. (1991). Emotional regulation and emotional development. *Educational Psychology Review*, *3*(4), 269–307. https://doi.org/10.1007/bf01319934
- Tomlinson, M., Bornstein, M. H., Marlow, M., Swartz, L. (2014). Imbalances in the knowledge about infantmental health in rich and poor countries: too littleprogress in bridging the gap. *Infant Ment. Health J.*,35, 624–629. https://doi.org/10.1002/imhj.21462
- Tremblay, R. E., Nagin, D. S., Séguin, J. R., Zoccolillo, M., Zelazo, P. D., Boivin, M., Pérusse, D., & Japel, C. (2004). Physical aggression during early childhood: trajectories and predictors. *Pediatrics*, 114(1), 43–50. https://doi.org/10.1542/peds.114.1.e43
- Vallotton, C. D. (2008). Signs of emotion: What can preverbal children "say" about internal states? *Infant*

- Mental Health Journal, 29(3), 234–258. https://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(3), 401–415. https://doi.org/10.1016/j.ecresq.2012.01.003
- 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(2), 169–181. https://doi.org/10.1016/j.ecresq.2010.09.002
- Wang, Q., & Leichtman, M. (2000). Same beginnings, different stories: A comparison of American and Chinese children's narratives. *Child Development*, *71*(5), 1329–1346. https://doi.org/10.1111/1467-8624.00231
- Wienberg, M. K., Tronick, E., Cohn, J. F., & Olson, K. L. (1999). Gender differences in emotional expressivity and self-regulation during early infancy. *Developmental Psychology*, 35(1), 175–188. https://doi. org/10.1037//0012-1649.35.1.175