·

The motivation for child mastery and its relationship with positive parenting and praise in an Argentine sample

La motivación de dominio infantil y su relación con la parentalidad positiva y los elogios en una muestra argentina

Motivação de maestria e sua relação com a parentalidade positiva e os elogios em uma amostra argentina

Natalia A. Mancini¹, ORCID 0000-0002-4486-1481 Ailín C. Simaes², ORCID 0000-0002-1113-6523 Lucas G. Gago Galvagno³, ORCID 0000-0001-5993-3866 Angel M. Elgier⁴, ORCID 0000-0002-6110-5151

- ¹ Universidad de Buenos Aires, Conicet, Universidad Abierta Interamericana, Laboratorio de Cognición y Políticas Públicas, Argentina
- ² Universidad de Buenos Aires, Conicet, Universidad Abierta Interamericana, Laboratorio de Cognición y Políticas Públicas, Argentina
- ³ Universidad de Buenos Aires, Conicet, Universidad Abierta Interamericana, Laboratorio de Cognición y Políticas Públicas, Argentina
- ⁴ Universidad de Buenos Aires, Conicet, Universidad Abierta Interamericana, Laboratorio de Cognición y Políticas Públicas, Argentina

Abstract

The aim of this study was to analyze the relationship between the motivation for child mastery and parental variables such as positive parenting and praise given by primary caregivers in Argentina. In this way, it would be possible to expand the understanding of the relational dynamics between caregivers and infants and identify which parenting behaviors promote children's motivational development. The Dimensions of Mastery Questionnaire (DMQ), the Positive Parenting Scale (E2P), and the Scale of Praise given by primary caregivers to infants were used for this purpose. The participants were 107 primary caregivers of infants aged between 0 and 3 years in Argentina. Multiple linear regression was conducted, revealing that positive parenting, along with age, contribute to child mastery motivation, while praise was not a predictor of this variable. In conclusion, the significance of positive parenting skills during infant rearing for the appropriate development of motivation and cognitive/emotional abilities is emphasized. Including the development of these skills in interventions with primary caregivers would be relevant and crucial for promoting the comprehensive development of children.

Keywords: mastery motivation; praise; positive parenting; child rearing; childhood

Resumen

El objetivo de este estudio fue analizar la relación entre la motivación de dominio de infantes y las variables parentales, como la parentalidad positiva y los elogios otorgados por cuidadores primarios de Argentina. De esta manera sería posible ampliar el conocimiento del funcionamiento vincular entre cuidadores e infantes e identificar qué conductas parentales favorecen el desarrollo motivacional infantil. Para ello se utilizó el cuestionario de Dimensiones de Motivación de Dominio (Dimensions of Mastery Questionnaire; DMQ), la Escala de Parentalidad Positiva (E2P) y la escala de elogios otorgados por cuidadores primarios a infantes. Los participantes evaluados fueron 107 cuidadores primarios de Argentina, de infantes de entre 0 y 3 años. Se realizó una

regresión lineal múltiple, que mostró como resultado que la parentalidad positiva junto con la edad contribuyen a la motivación de dominio infantil, mientras que los elogios no fueron predictores de esta variable. Se concluye y se enfatiza la relevancia de las competencias parentales positivas durante la crianza de los infantes para un desarrollo adecuado de la motivación y habilidades cognitivas/emocionales. Incluir el desarrollo de estas competencias en intervenciones con cuidadores primarios sería pertinente y sustancial para favorecer el desarrollo integral de los menores.

Palabras clave: motivación de dominio; elogios; parentalidad positiva; crianza; infancia

Resumo

O objetivo deste estudo foi analisar a relação entre a motivação de maestria de crianças e variáveis parentais, como a parentalidade positiva e ps elogios concedidos pelos cuidadores primários na Argentina. Dessa forma, seria possível expandir o conhecimento do funcionamento do vínculo entre cuidadores e crianças e identificar quais comportamentos parentais favorecem o desenvolvimento motivacional infantil. Para isso, foi utilizado o Questionário de Dimensões de Motivação de Maestria (Dimensions of Mastery Questionnaire - DMQ), a Escala de Parentalidade Positiva (E2P) e a Escala de Elogios concedidos pelos cuidadores primários a crianças. Os participantes avaliados foram 107 cuidadores primários de crianças de 0 a 3 anos na Argentina. Foi realizada uma regressão linear múltipla, mostrando como resultado que a parentalidade positiva, juntamente com a idade, contribuem para a motivação de maestria infantil, enquanto os elogios não foram preditores dessa variável. Conclui-se enfatizando a relevância das competências parentais positivas durante a criação das crianças para um desenvolvimento adequado da motivação e habilidades cognitivas/emocionais. Incluir o desenvolvimento dessas competências em intervenções com cuidadores primários seria pertinente e substancial para favorecer o desenvolvimento integral das crianças.

Palavras-chave: motivação de maestria; elogio; parentalidade positiva; criação; infância

Received: 3/26/2022 Accepted: 5/10/2023

Correspondence: Natalia A. Mancini, Universidad de Buenos Aires, Conicet, Universidad Abierta Interamericana, Laboratorio de Cognición y Políticas Públicas, Argentina. E-mail: draylif@gmail.com

Mastery motivation is a multidimensional construct that is understood as an intrinsic force that stimulates an individual to attempt to master a moderately challenging skill (Morgan et al., 1990). Higher mastery motivation would imply preference for challenges, greater exploration, interest in objects, people, different tasks or domains (Barrett & Morgan, 2018). It is of relevance during child development, as it implies support for cognitive development (Banerjee & Tamis-LeMonda, 2007), for learning different skills such as mathematics, language, social skills or self-regulation (Banerjee & Tamis-LeMonda, 2007; Berhenke et al., 2011). In addition, it modulates learning as infants with higher mastery motivation tend to explore different tasks to a greater extent, enjoying the challenge (Barrett & Morgan, 2018; Barrett et al., 1993), producing behaviors where the infant persists in solving moderately challenging tasks favoring learning (Barrett & Morgan, 2018). Similarly, mastery motivation predicts school readiness (Józsa & Barrett, 2018; MacPhee et al., 2018), and school success or academic achievement of preschool (Turner & Johnson, 2003) and school children (Józsa & Morgan, 2014). It has two essential aspects: the instrumental and the affective or expressive (Wang & Barrett, 2013). The first one is related to perseverance and involves sustaining the making of focused attempts to achieve a goal related to attaining mastery

of the external or internal world. The expressive aspect of mastery motivation involves the demonstration of affect during or after making an attempt to master a challenging task (Wang & Barrett, 2013).

On the other hand, praise given by primary caregivers, defined as positive evaluations of attributes, products or processes, is associated with differences in infants' motivational development (Dweck, 2017; Gunderson et al., 2013; Gunderson et al., 2017; Lucca et al., 2019). Traditionally, praising children is promoted as always beneficial (Henderlong & Lepper, 2002). However, the evidence is controversial; some types of praise have been reported to enhance motivation while others may impair it (Henderlong & Lepper, 2002; Ryan & Deci, 2017). Research suggests that praise toward the person (e.g., "you're a genius"), could be unfavorable, potentially causing the child to attribute success to general characteristics that a person may or may not have, whereas praise toward the process (e.g., "how well you are doing") during the task, would be more beneficial on mastery motivation because it would help infants focus on their ability to improve during learning a skill (Henderlong & Lepper, 2002; 2007; Mueller & Dweck, 1998; Zentall & Morris, 2010). Other studies show that the greater the positive evaluations (both toward the person and the process) during challenging tasks, the greater the infants' mastery motivation in performing the task and in facing challenges on their own (Kelley et al., 2000).

Parental competencies are defined as the practical capacities that parents deploy to guarantee protection, care and education to their children, including the organization of the child's experience in times of stress and also the availability for exploration and enjoyment (Barudy & Dantagnan, 2010). Barudy and Dantagnan (2010) classify parenting competencies into capacities (attachment capacity and empathy) and skills (parenting models and ability to use community resources). Positive parenting includes these competencies and is therefore shaped by warm affective bonds, which provide a feeling of protection and acceptance to children, while guaranteeing a structured environment with stable norms and values that shape discipline within the family. Finally, to the support and stimulation for the personal development of children's skills (Barudy & Dantagnan, 2010; Gómez & Muñoz, 2015). According to Gómez and Muñoz (2015), parental competencies are the following: bonding, formative, protective and reflective.

In the first place, bonding parental competence seeks to promote a secure attachment style through behaviors that favor the understanding of the mental and emotional states of the children (mentalization), sensitivity to interpret their signals, emotional warmth and involvement in their development. Formative parental competence is linked to children's learning and socialization, and includes the stimulation of learning, the regulation of their behavior through positive discipline, and the transmission of norms and values, in order to promote coexistence in society. The third dimension mentioned is protective parental competence, whose objective is to guarantee protection through care and attention to basic needs, guaranteeing the child's physical, emotional and psychosexual safety, organizing daily life through habits, and seeking social support to provide emotional, instrumental or economic support for the child's development. Finally, reflective parental competence includes the primary caregivers' metacognition of their own behaviors and the evaluation of the child's growth in the various areas, giving rise to feedback on the parental skills mentioned above (Gómez & Muñoz, 2015). This is composed of anticipation, monitoring and parental self-care. In addition, competencies can be strengthened around the principles of positive parenting through parental education programs (Rubio et al., 2021a).

In another vein, praise for the process in the development of a given task enables a positive association between effort and skill (Gunderson et al., 2018). Likewise, the infant's motivation to persist in a task is benefited by sensitive, supportive, and non-punitive parental behaviors that establish a secure base for the child's development (Wise, 2007). Thus, children regulate and assess their own actions around adult standards and evaluation (Harter, 1978; 1981). Gunderson et al. (2013) counted praise given by parents in their homes to children aged 14 to 38 months. They found that the use of process praise, as opposed to person praise, positively predicts implicit theories of ability, i.e., that children believe they can continue to learn and improve despite making mistakes. They also found that process praise was used with differences according to the gender of the infants, being more frequent with boys than with girls, i.e., male infants were praised more frequently for their effort and strategies than for their person. In a later study, Gunderson et al. (2017), assessed the same children one to two years later. They found that the use of process praise, when infants were between 1 and 3 years old, predicted academic performance in math and reading comprehension seven years later.

Lucca et al. (2019) studied perseverance in 18-month-old children, understood as greater persistence in a stacking task, counting the time spent trying to stack hoops, the number of repeated attempts, both successful and unsuccessful, and the amount of time the child continued trying after a failure. They found that the greater the amount of praise for the process, the greater the perseverance. Thus, providing emotional support to children during problem-solving tasks predicts task persistence, regardless of the socioeconomic status of families (Martin et al., 2013; Mokrova et al., 2012). However, Kelley et al. (2000) found that positive evaluations of all types made by parents at 24 months of infants were associated with greater mastery motivation and persistence at 36 months. On the other hand, the greater the maternal control and negative evaluations of the infants regarding their person, products or actions, the lower the perseverance and the greater the shame and avoidance of tasks. Therefore, other parental variables could be modulating infant motivation.

There is evidence on how aspects of parenting are associated with motivation in 14-, 24-, and 36-month-old infants (Prendergast & McPhee, 2018). Motivation was assessed through the aspect of perseverance, with puzzle games of increasing difficulty, looking at the infant's effort to solve the task and not necessarily successful performance. An association was reported between these parental variables, such as scaffolding capacity or the mode of discipline and school readiness -assessed with language and math skills tests-. In turn, it was found that infant mastery motivation functioned as a mediator between parenting and preschool skills, i.e., parenting modes are related to children's motivation and thus affect the development of cognitive skills in preschool (Prendergast & McPhee, 2018). Józsa and Barrett (2018) highlight the importance of nurturing, warm, and volitional supportive parenting. The authors found that these aspects of parenting affect their adolescent daughters/daughters' mastery motivation and on academic performance. Zentall (2009) also found that social aspects of parenting, particularly sensitivity at 3, 5, and 7 months of infants, predict lower negative affect (motivational component) in the performance of an activity at 20 months. Although the use of praise did not predict motivation, sensitive parenting behaviors appear to be important for infants' learning behaviors. In addition, it is important to mention the positive association found between amount of praise given by parents and positive parenting competencies (Simaes et al., 2021).

Given the scarcity of studies analyzing the relationship between parenting and motivation (Józsa & Barrett, 2018), this study aims to explore the association between the ways in which primary caregivers relate to their children and the development of infant

motivation of these children, addressing the possible relationship from the concept of parental competencies and praise. In addition, it is proposed to analyze the contribution of praise given by primary caregivers and the competencies included in positive parenting on infants' mastery motivation, that is, to analyze whether parental variables predict mastery motivation. This would allow a better understanding of bonding functioning to generate interventions or use other interventions that have evidence of effectiveness (Rubio et al., 2020), promoting positive parenting from the practice of different sensitive discipline strategies, including the use of praise favoring motivation towards new or challenging tasks. It is hypothesized that these competencies or behaviors on the part of primary caregivers favor motivational development allowing greater learning of cognitive or social skills.

Methodology

Type of study

This is a quantitative study of descriptive and associative scope, non-experimental and cross-sectional (Hernández-Sampieri et al., 2014).

Participants

The sample consisted of 125 primary caregivers (M = 32.94 years; SD = 6.01; 106 female) of children aged 0 to 3 years (mean age in months = 15.57; SD = 9.65; 66 girls). The type of sampling was non-probabilistic, purposive and by snowball. Data collection was carried out during the months of July and August 2020. The inclusion criteria were fathers, mothers or caregivers of infants residing in Argentina, in the Metropolitan Area of Buenos Aires, with children aged 0 to 3 years, and the exclusion criterion was that the children had a history of developmental disorders. Regarding the educational level of the population, 46.4 % had a complete university level, 17.6 % had an incomplete university level, another 17.6 % had a complete tertiary level, 8 % had an incomplete tertiary level, 7.2 % had a complete secondary level, and finally 3.2 % had an incomplete secondary level. Regarding the current schooling of the infants, 5.6 % attended kindergarten, 17.6 % attended nursery school and 76.8% did not attend any educational institution.

Ethical considerations

This research was approved by the Ethics Committee of the Universidad Abierta Interamericana. The procedures recommended by the Ethical Research Involving Children Project (ERIC) and the American Psychological Association (APA) were applied (Graham et al., 2013); in addition to the principles established by the International Convention on the Rights of the Child and National Law No. 26061 on the Comprehensive Protection of the Rights of the Child.

Instruments

Sociodemographic Questionnaire. An ad hoc questionnaire was used to collect sociodemographic data, including the educational level of the primary caregiver (primary incomplete and complete, secondary incomplete and complete, tertiary incomplete and complete, university incomplete and complete), occupation (professional, technician, operator, unskilled, unemployed, housewife) gender (female, male, other) and age of the caregiver and infant, as well as the infant's schooling (attends kindergarten, attends kindergarten, does not attend).

Bueus G. Gugo Gurugus & ringor in Egysti

Scale of praise given by primary caregivers to infants. A scale was used to evaluate the praise given by parents to children (Mancini et al., 2023). It is a 5-point Likert scale responding to the frequency in which they use 13 phrases possibly used by caregivers that represented the three types of praise intended to be studied: product (α = .91), process (α = .74), and person (α = .73) praise. The total variance explained by the instrument is 57 %. To calculate the praise scale scores, the raw scores were averaged according to the number of items assigned to each dimension. A total score was obtained for praise given by the primary caregivers to the infants and a distinguished score for each type of praise: process, product and person.

Dimensions of Mastery Motivation (DMQ 18). The linguistically adapted versions of the Dimensions of Mastery Questionnaire (DMQ) (Morgan et al., 2020) were used. When the age of the infant whose motivation was being reported was between 6 and 23 months, an infant version with 38 items was used, while if the age was between 23 and 36 months, the preschool version with 39 items was used. This questionnaire evaluates through parental report two aspects of mastery motivation: instrumental/persistence and expressive. Within the first group are the scales: persistence towards objects, gross motor persistence, social persistence with adults, social persistence with peers. The expressive scales are: dominance pleasure and negative reactions to challenge. Finally, a scale of general competence compared to peers is included. A total mastery motivation score was calculated with an average of the corresponding scales (persistence and mastery pleasure scales), as well as a persistence score (average of cognitive or object persistence, gross motor persistence, social persistence with adults and social persistence with children). In addition, a score was obtained for each scale: persistence, mastery pleasure, negative reaction to challenge-frustration/anger and general competence.

In relation to the reliability of the scale, in this sample, the general motivation score, i.e., the persistence and mastery pleasure scales, for the infant scale obtained $\alpha = .92$ and for the preschool scale $\alpha = .89$. Regarding validity, there is many studies that provide data, for example, related to constructs such as temperament, pre-academic skills, and it is even found that mastery motivation is related to academic performance to a greater extent than intelligence. Similarly, the same construct has been associated observationally, for example, from the performance of moderately challenging tasks or through free play. Factor analyses were also conducted to support the structure of the theoretically proposed dimensions, as well as studies on the discriminant validity of the technique (Morgan et al., 2020).

Positive Parenting Scale (E2P). The positive parenting scale (Gómez & Muñoz, 2015) allows identifying parental competencies that adults use towards their children, grouping them into four areas: bonding, training, protection, and reflection. This instrument collects the perception or valuation that the adult has in relation to his or her own competencies. It is made up of 54 items, showing adequate internal consistency in the total scale (α = .95), and in the bonding (α = .89), formative (α = .86), protective (α = .84) and reflective (α = .82) competencies (Gómez & Muñoz, 2015). A total score for positive parenting was obtained, and one for each of the four competencies. Regarding validity (Muzzio & Quinteros, 2014), expert judgment was performed to verify the warmth of the items and their belonging to the categories, in addition, concurrent validity was checked with PSI-SF (parental stress), ASQ-3 (psychomotor development) and the NCFAS-G scale (family functioning).

Procedure

An online questionnaire, elaborated and developed from the research team's website, was used. Participants were recruited through the social networks Facebook,

Instagram, and WhatsApp. The email address of a member of the research team was left so that they could contact him or her if needed. After agreeing to participate through informed consent, the questionnaires were presented in the same order for all participants, to perform an equalization check and balance the fatigue and learning effect: Sociodemographic Questionnaire, Praise Questionnaire, Dominance Motivation Dimensions (DMQ 18), Positive Parenting Scale (E2P). Participants took approximately 15 minutes to complete the questionnaire.

Data analysis

The Kolmogorov-Smirnov test was performed testing the normality (p > .05) of the total scores of the variables of praise given, mastery motivation and positive parenting. Homogeneity of variances (p > .05) is also met with Levene's test. In addition, all scores present skewness and kurtosis between \pm 2, indicating that no value is extreme (Hinton, 2014). For these reasons, it was decided to use parametric statistics for the following analyses.

Descriptive scores were obtained for all variables, such as mean, standard deviations, minimum and maximum. Correlation analyses were then performed between variables using Pearson's statistic. Next, multiple linear regression was performed to test whether the praise given, and positive parenting predicted infant mastery motivation. A Pearson correlation analysis was performed on praise and parenting, given that these variables are positively associated, centralization of these variables was performed to reduce the correlation between these predictors and avoid multicollinearity, also analyzing the interaction between the variables. In addition, the age of the infants was controlled as a predictor of mastery motivation.

Results

Considering the index of acceptable limits of skewness and kurtosis of \pm 2 according to Hinton (2014), the variables are considered to be slightly negatively skewed, but no extreme outliers are found in the sample (max. skewness = -1.11, max. kurtosis = 1.18) (Table 1). In addition, Table 1 shows the mean and standard deviation values for the variables of mastery motivation, praise, and positive parenting.

On the other hand, no gender differences were found in mastery motivation (t(df) = -1.286(122)) between girls (M = 3.42; SD = .81) and boys (M = 3.59; SD = .70).

Table 1Descriptive statistics of the study variables (N=125)

Variables	M (DE)	95% CI	Range	Asymmetry	Kurtosis	
Total Motivation	3.49 (.76)	[3.36-3.63]	.98-5	64	.30	
General Persistence	3.34 (.81)	[3.19-3.48]	.73-5	55	.16	
Cognitive or object persistence	3.46 (.91)	[3.29-3.62]	1.00-5	40	38	
Persistence of gross motor skills	3.76 (.97)	[3.59-3.94]	.40-5	-1.01	1.18	
Social Persistence with adults	3.45 (.93)	[3.29-3.62]	.83-5	51	17	
Social Persistence with children	2.67 (1.19)	[2.46-2.88]	.50-5	.06	-1.12	
Mastery pleasure	4.13 (.84)	[3.98-4.28]	1.00-5	-1.11	1.06	
Negative reactions to challenge-frustration/anger	3.10 (1.36)	[2.86-3.34]	1.00-7.80	.70	.29	
General Competence	3.34 (.99)	[3.16-3.52]	1.00-5	43	34	
Total Praises	3.53 (.80)	[3.39-3.67]	1.00-5.00	58	39	
Product Praise	3.46 (1.08)	[3,27-3.65]	1.00-5.00	52	.12	
Process Praise	3.70 (.91)	[3.54-3.86]	1.00-5.00	59	24	
Persona Praise	3.51 (.97)	[3.34-3.68]	1.08-5.00	50	.38	
Positive Parenting	174.38 (19.69)	[170.84-177.92]	119.33- 225.07	28	.05	
Bonding Competencies	47.40 (5.44)	[46.43-48.36]	30-56	62	.13	
Training Competencies	35.08 (7.88)	[33.69-36.48]	14-48	64	05	
Protective Powers	59.47 (8.09)	[58.04-60.90]	39.67- 77.07	10	66	
Reflective Competencies	32.42 (4.32)	[31.65-33.19]	21-44	.33	.54	

In relation to the associations found between the variables, it is observed that mastery motivation is positively associated with the total praise given by the primary caregivers, however, in particular, it is not associated with process praise, while it is associated with product and person praise. The only dimension associated with process praise was mastery pleasure. On the other hand, mastery motivation was positively associated with positive parenting, formative, protective and bonding competencies, while it was not associated with reflective competencies. These correlations and those found for all variables can be observed in Table 2.

 Table 2

 Pearson's bivariate correlations between the study variables

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.
1. Mastery motivation	1	.985**	.808**	.812**	.822**	.743**	.758**	.338**	.517**	.299**	84	.273**	.285**	.553**	.452**	.600**	.408**	126
2. General Persistence		1	.801**	.839**	.830**	.759**	.636**	.336**	.502**	.254**	46	.228*	.268**	.532**	.426**	.588**	.396**	108
3. Cognitive/object persistence			1	.661**	.579**	.410**	.592**	146	.417**	.247**	73	.196*	.283**	.491**	.382**	.521**	.364**	153
4. Persistence of motor skills				1	.652**	.439**	.468**	.241**	.324**	100	-20	63	.176*	.388**	.364**	.448**	.239**	68
5. Social persistence with adults					1	.490**	.545**	.303**	.360**	.198*	107	143	.217*	.451**	.387**	.517**	.289**	110
6. Social persistence with children						1	.460**	.365**	.495**	.263**	0	.305**	.196*	.395**	.261**	.421**	.372**	32
7. Mastery Pleasure							1	.245**	.418**	.381**	.206*	.365**	.264**	.468**	.419**	.468**	.332**	159
8. Negative reaction to challenge-frustration/anger.								1	.332**	159	-19	.237**	45	.262**	144	.293**	.225*	74
9. General competence									1	.288**	-13	.302**	.278**	.385**	.274**	.347**	.364**	118
10. Total Praises										1	.635**	.893**	.739**	.356**	.260**	.382**	.232**	,186*
11. Process											1	.396**	.335**	.271**	.323**	.234**	82	.264**
12. Product												1	.444**	.284**	161	.291**	.246**	119
13. Person													1	.288**	.198*	.372**	154	115
14. Positive Parenting														1	.762**	.862**	.823**	.546**
15. Bonding competencies															1	.590**	.438**	.364**
16. Training Competencies																1	.600**	.289**
17. Protective powers																	1	.285**
18. Reflective competencies																		1

Note. N = 125. * Correlation is significant at the .05 level. ** Correlation is significant at the .01 level.

Lucias G. Gago Garvagno & Anger Mr. Engler

Table 3 shows that the age of the children and parenting contribute significantly to the child's mastery motivation; however, praise does not. The total model explains 36% of the variability of mastery motivation, and the higher the age of the children and the more positive parenting of the caregivers, the higher the mastery motivation.

Table 3 *Predicting child dominance motivation through praise and positive parenting*

Mastery Motivation	F	R2	В	β	p
Age of infant	20.565	.143	.030	.378	.000
Age of infant	17.307	.366	.018	.221	.005
Praise			.069	.072	.365
Parenting			.018	.460	.000
Interaction praise parenting			002	066	.368

Note. N = 125. Praise, parenting, and intersectionality are centralized.

Discussion

The present study focused on analyzing the associations between mastery motivations and parenting practices such as positive parenting and praise given by primary caregivers to infants aged 0 to 3 years.

From the descriptive point of view, it was observed that the highest score in terms of motivation was the pleasure of mastery, that is to say that the primary caregivers report to a greater extent the children's enjoyment of the activities they perform and their demonstration, such as the production of smiles or displays of emotion when achieving objectives. In contrast, the lowest mean was for social persistence with peers. This could be conditioned to the evaluation context during 2020 where in Argentina Preventive Social Isolation was in force producing changes in the daily life of families, preventing social encounters and attendance to educational institutions such as kindergartens, thus decreasing sociability among peers in that period (Kreysa et al., 2022; Unicef Argentina, 2020; Wang et al., 2020). In terms of parenting, the highest levels of protective and bonding competencies were associated with seeking security for the child and establishing a bond of warmth, sensitivity, and secure attachment.

On the other hand, no gender differences were found in mastery motivation, being that in the study by Gunderson et al. (2017) they found gender differences but assessing motivation through motivational frames and not the children's mastery motivation, so there are no antecedents showing gender differences specifically in mastery motivation (Lewis et al., 1992).

Regarding the relationships studied, praise and positive parenting were associated with each other. These results are theoretically consistent, since both variables are oriented to a warm bond with interest in training, protecting and accompanying infants in their learning and development (García et al., 2019). For a greater understanding of these results refer to Simaes et al. (2021).

Mastery motivation was positively associated with both parental variables (praise and positive parenting). In the case of praise given, it was specifically associated with product and person praise, while not with process praise. This is contradictory to what has been found so far, since process praise, aimed at reinforcing learning during task performance and effort in task completion, is associated with higher motivation (Gunderson et al., 2018; Lucca et al., 2019), while person praise is not found to be positively associated. However, Kelley et al. (2000) found positive association with all types of praise, including praise referring to the infants' person, so it is more in line with what was found in the current study. Given that this is one of the first studies in the Argentine context of this variable, the differences could be due to a different functioning in this cultural context. This effect has been evidenced (Gago-Galvagno et al., under review) where new studies from the Latin American context show contextual diversity in the early development of different cognitive functions and emotional regulation. Gago-Galvagno et al. (under review) mention differences in the behavior of Latin American populations possibly explained historically, referring for example to temperament, personality characteristics and caregiving styles (Bornstein et al., 2021; Simaes et al., 2022). In this sense, it is found that Chilean and Argentinean caregivers engage their infants to a greater extent in social behaviors and parenting behaviors from a physical approach than Asian mothers, while Asian mothers more frequently engage their infants in didactic behaviors (e.g., directing infants' attention to objects or the environment) (Cote & Bornstein, 2000; Simaes et al., 2022). Similarly, previous studies indicate that mothers from Colombia and Argentina present notably higher levels of active-animate behavior (such as, for example, seeking animated social interaction) during interaction with their infants compared to U.S. mothers (Posada et al., 2002; Richaud et al., 2013). Thus, it is to be expected to find differences in parental parenting behaviors relative to current studies on praise mostly from U.S. or European settings (Owen et al., 2012).

A positive association was also observed between mastery motivation and total positive parenting. Of the parenting competencies, formative, bonding and protective competencies were associated, however, reflective competence was not associated with any dimension of motivation. This may be because reflective competence refers to cognition regarding one's own parenting practices (Gómez & Muñoz, 2015), affecting the behaviors and thinking of caregivers and are not actions directly directed to the infant, as the other three competencies are.

Delving into the relationship found between mastery motivation and positive parenting, we found concordance with the literature (Józsa & Barrett, 2018; Prendergast & McPhee, 2018; Zentall, 2009). On the one hand, Józsa and Barrett (2018) found that nurturing parenting with caring and warmth behaviors as well as motivationally supportive parental behaviors were associated with mastery motivation dimensions. Likewise, Prendergast and McPhee (2018) found associations between motivation through children's perseverance and positive scaffolding and disciplining parental behaviors. This background also coincides in the ages studied (14, 24 and 36 months), with the current research where caregivers of children aged 0 to 3 years were analyzed. Finally, Zentall (2009) also evaluated younger children, finding that social aspects of parenting predicted lower negative emotions in the performance of activities at 20 months.

In addition to the correlational results, it was also found that positive parenting, together with the age of the infants, contributed to child mastery motivation, i.e., the more positive parenting reported by primary caregivers, the higher the mastery motivation they reported for the infants in their care. However, neither praise nor the interaction between praise and positive parenting contributed to mastery motivation. This could be due in part

Buous G. Gugo Guivagno & Finger M. Engler

to the limitations of the technique because, although this technique is psychometrically validated, some conditions for a comprehensive validation are missing (Mancini et al., 2023). Also, as mentioned above, there could be contextual implications that imply a difference in the behavior of the variable with respect to what is found so far in the literature. On the other hand, it coincides with some antecedents (Zentall, 2009) where no association was found between motivation and praise, while it was found with parental behaviors. Specifically, less negative affect (motivational dimension) is found with greater parental sensitivity (Zentall, 2009). This sensitivity involves the ability to respond appropriately to the child's needs, for example, noticing signs of tiredness or disinterest in an activity and being able to offer another according to the child's interests and age (Cerezo et al., 2006). Similarly, behaviors of attention to emotional and physical state are of relevance in cognitive and social development (Bowlby, 1969; Clerici et al., 2020). In addition, taking into account the attachment theory, from which an emotional bond is established between the child and the caregiver figure providing security and protection to the infant (Bowlby, 1969), it should be considered that these early bonding experiences can contribute to the regulation of behavior and impact on the interpersonal relationships developed by the child (Fraley, 2002). Based on this, it could be thought that other parental behaviors, such as family cooperation (Kim et al., 2021), activities shared in the home such as story reading (Gago-Galvagno et al., 2023) and the frequency of these moments, among other aspects, could be moderating the relationship between praise and dominance motivation, these being only one of the possible strategies within positive parenting.

The results of the present study should be interpreted with caution due to its limitations. One limitation is the use of non-probabilistic sampling method. Additionally, the evaluation of praise relied solely on self-reporting techniques, which may restrict response options and lack a qualitative and ecological approach to naturally occurring praise in everyday situations between primary caregivers and infants. In addition, as mentioned, conditions for validation are lacking. Similarly, while the motivation and parenting techniques have been linguistically adapted, they have not yet undergone psychometric validation in this country. The study provides an initial exploration of the relationship between motivation and parental responses in the context of Argentina. Future studies are recommended to employ a more ecologically valid assessment of these variables, particularly regarding the observation of praise used by primary caregivers.

In summary, based on the results found in this study, the relevance of parental behaviors is considered, given that they influence children's behaviors, as well as their cognitive and emotional development. Primary caregivers with higher capacities seem to be more likely to guarantee the infant's protection, stimulation, provide availability for exploration and enjoyment, as well as to guide in the learning of activities and to generate a warm bond that favors to a greater extent the motivational development to master new tasks and skills of the children. For this reason, it would be important to generate interventions that promote these parenting skills. In this sense, it is necessary to consider Rubio et al. (2021b), who conducted a systematic review of group interventions for parenting education. The purpose of these interventions is to strengthen the protective factors, as well as to reduce the risk factors, which could have harmful effects on the comprehensive development of children.

References

- Banerjee, P. N. & Tamis-LeMonda, C. S. (2007). Infants' persistence and mothers' teaching as predictors of toddlers' cognitive development. *Infant Behavior and Development*, 30(3), 479-491. https://doi.org/10.1016/j.infbeh.2006.12.001
- Barrett, K. C. & Morgan, G. A. (2018). Mastery motivation: Retrospect, present, and future directions. In A. J. Elliot (Ed.), *Advances in motivation science* (pp. 1-39). Elsevier Academic Press. https://doi.org/10.1016/bs.adms.2018.01.002
- Barrett, K. C., Morgan, G. A., & Maslin-Cole, C. (1993). Three studies on the development of mastery motivation in infancy and toddlerhood. In D. J. Messer (Ed.), *Mastery Motivation in Early Childhood: Development, Measurement and Social Processes*, (pp. 83-108). Routledge.
- Barudy, J. & Dantagnan, M. (2010). Los desafíos invisibles de ser padre o madre: Manual de evaluación de las competencias y la resiliencia parental. Gedisa.
- Berhenke, A., Miller, A. L., Brown, E., Seifer, R., & Dickstein, S. (2011). Observed emotional and behavioral indicators of motivation predict school readiness in Head Start graduates. *Early childhood research quarterly*, 26(4), 430-441. https://doi.org/10.1016/j.ecresq.2011.04.001
- Bornstein, M. H., Rothenberg, W. A., & Lansford, J. E. (2021). Change over time in four domains of parenting in diverse international contexts: specificity and universality, country and culture, determinants, strengths, and limitations, future directions and implications. In M. H. Bornstein, W. A. Rothenberg & J. E. Lansford (Eds.), *Parenting across cultures from childhood to adolescence* (pp. 227-263). Routledge. https://doi.org/10.4324/9781003027652-11
- Bowlby, J. (1969). Attachment and loss. Hogarth.
- Cerezo, M. A., Trenado, R. M., & Pons-Salvador, G. (2006). Interacción temprana madrehijo y factores que afectan negativamente a la parentalidad. *Psicothema*, 18(3), 544-550.
- Clerici, G. D., Elgier, Á. M., Gago-Galvagno, L. G., García, M. J., & Azzollini, S. C. (2020). La contribución del entorno socioeconómico al autoconcepto y percepción infantil de las pautas parentales de crianza. *Revista de Psicología y Educación*, 15(1), 87-97. https://doi.org/10.23923/rpye2020.01.188
- Cote, L. R. & Bornstein, M. H. (2000). Social and didactic parenting behaviors and beliefs among Japanese American and South American mothers of infants. *Infancy*, 1(3), 363-374. https://doi.org/10.1207/s15327078in0103_5
- Dweck, C. S. (2017). The journey to children's mindsets-and beyond. *Child Development Perspectives*, 11(2), 139-144. https://doi.org/10.1111/cdep.12225
- Fraley, C. R. (2002). Attachment stability from infancy to adulthood: Meta-analysis and dynamic modeling of developmental mechanisms. *Personality and Social Psychology Review*, 6(2), 123-151. https://doi.org/10.1207/s15327957pspr0602_03
- Gago-Galvagno L. G., Miller S. E., Mancini N., Simaes A. C., Elgier A. M., Azzollini S. C. (in revision). Importance of cultural context in the study of infants' EF: Advances in Latin America research. *Child Development Perspectives Wiley Online Library*.
- Gago-Galvagno, L. G., Perez, M. L., Justo, M. M., Miller, S. E., Simaes, A. C., Elgier, A. M., & Azzollini, S. C. (2023). Contributions of screen use on early language and development milestones in Argentinean toddlers from different socioeconomic contexts. *Trends in Psychology*, 1-18. https://doi.org/10.1007/s43076-023-00292-w

- García, D., Rodriquez, G. M., Hill, R. M., Lorenzo, N. E., & Bagner, D. M. (2019). Infant language production and parenting skills: A randomized controlled trial. *Behavior Therapy*, 50(3), 544-557. https://doi.org/10.1016/j.beth.2018.09.003
- Gómez, E. & Muñoz, M. (2015). *Escala de Parentalidad Positiva* (2nd ed.). Fundación ideas para la infancia. http://danalarcon.com/wpcontent/uploads/2015/05/Manual-de-la-Escala-de-Parentalidad-Positiva2015.pdf?1d3745
- Graham, A., Powell, M. A., Anderson, D., Fitzgerald, R., & Taylor, N. J. (2013). *Ethical research involving children*. Unicef Office of Research-Innocenti.
- Gunderson, E. A., Donnellan, M. B., Robins, R. W., & Trzesniewski, K. H. (2018). The specificity of parenting effects: Differential relations of parent praise and criticism to children's theories of intelligence and learning goals. *Journal of experimental child psychology*, *173*, 116-135. https://doi.org/10.1016/j.jecp.2018.03.015
- Gunderson, E. A., Gripshover, S. J., Romero, C., Dweck, C. S., Goldin-Meadow, S., & Levine, S. C. (2013). Parent praise to 1-to 3-year-olds predicts children's motivational frameworks 5 years later. *Child development*, 84(5), 1526-1541. https://doi.org/10.1111/cdev.12064
- Gunderson, E. A., Hamdan, N., Sorhagen, N. S., & D'Esterre, A. P. (2017). Who needs innate ability to succeed in math and literacy? Academic-domain-specific theories of intelligence about peers versus adults. *Developmental Psychology*, *53*(6), 1188. https://doi.org/10.1037/dev0000282
- Harter, S. (1978). Effectance motivation reconsidered: Toward a developmental model. *Human Development*, 21, 34-64. https://doi.org/10.1159/000271574
- Harter, S. (1981). A model of mastery motivation in children: Individual differences and developmental change. In W. A. Collins (Ed.), *Aspects of the development of competence: The Minnesota Symposia on Child Psychology* (Vol. 14, pp. 215-255). Erlbaum.
- Henderlong, J. & Lepper, M. R. (2002). The effects of praise on children's intrinsic motivation: a review and synthesis. *Psychological bulletin*, 128(5), 774. https://doi.org/10.1037/0033-2909.128.5.774
- Henderlong, J. & Lepper, M. R. (2007). The effects of person versus performance praise on children's motivation: Gender and age as moderating factors. *Educational psychology*, 27(4), 487-508. https://doi.org/10.1037/0033-2909.128.5.774
- Hernández-Sampieri, R.; Fernández, C. & Baptista, P. (2014). *Metodología de la Investigación* (6ª ed.). McGraw-Hill.
- Hinton, P. (2014). SPSS Explained. Routledge. https://doi.org/10.4324/9781315797298
- Józsa, K. & Barrett, K. C. (2018). Affective and social mastery motivation in preschool as predictors of early school success: A longitudinal study. *Early Childhood Research Quarterly*, 45, 81-92. https://doi.org/10.1016/j.ecresq.2018.05.007
- Józsa, K. & Morgan, G. A. (2014). Developmental changes in cognitive persistence and academic achievement between grade 4 and grade 8. *European Journal of Psychology of Education*, 29(3), 521-535. https://doi.org/10.1007/s10212-014-0211-z
- Kelley, S. A., Brownell, C. A., & Campbell, S. B. (2000). Mastery motivation and self-evaluative affect in toddlers: Longitudinal relations with maternal behavior. *Child Development*, 71(4), 1061-1071. https://doi.org/10.1111/1467-8624.00209
- Kim, C. Y., Fredman, S. J., & Teti, D. M. (2021). Quality of coparenting and infant—mother attachment: The mediating role of maternal emotional availability. *Journal of Family Psychology*, 35(7), 961-971. https://doi.org/10.1037/fam0000846

- Kreysa, H., Schneider, D., Kowallik, A. E., Sadat Dastgheib, S., Doğdu, C., Kühn, G., Ruttloff, J. & Schweinberger, S. R. (2022). Psychosocial and behavioral effects of the COVID-19 pandemic on children and adolescents with autism and their families: overview of the literature and initial data from a multinational online survey. *Healthcare* 4(5), 1-23. https://doi.org/10.3390/healthcare10040714
- Lewis, M., Alessandri, S. M., & Sullivan, M. W. (1992). Differences in shame and pride as a function of children's gender and task difficulty. *Child Development*, 63(3), 630-638. https://doi.org/10.2307/1131351
- Lucca, K., Horton, R., & Sommerville, J. A. (2019). Keep trying!: Parental language predicts infants' persistence. *Cognition*, 193(104025), 1-8. https://doi.org/10.1016/j.cognition.2019.104025
- MacPhee, D., Prendergast, S., Albrecht, E., Walker, A. K., & Miller-Heyl, J. (2018). The child-rearing environment and children's mastery motivation as contributors to school readiness. *Journal of Applied Developmental Psychology*, *56*, 1-12. https://doi.org/10.1016/j.appdev.2018.01.002
- Mancini, N. A., Schetsche, C., Morales, L. J., Simaes, A. C., & Gago Galvagno, L. G. (2023). Construcción de una escala para evaluar tipos de elogios otorgados por cuidadores primarios a infantes de 0 a 3 años. *Interdisciplinaria*, 40(1), 146-157. https://doi.org/10.16888/interd.2023.40.1.9
- Martin, A., Ryan, R. M., & Brooks-Gunn, J. (2013). Longitudinal associations among interest, persistence, supportive parenting, and achievement in early childhood. *Early Childhood Research Quarterly*, 28, 658-667. http://dx.doi.org/10.1016/j.ecresq.2013. 05.003
- Mokrova, I. L., O'Brien, M., Calkins, S. D., Leerkes, E. M., & Marcovitch, S. (2012). Links between family social status and preschoolers' persistence: The role of maternal values and quality of parenting. *Infant and Child Development*, 21, 617-633. http://dx. doi.org/10.1002/icd.1761
- Morgan, G. A., Harmon, R. J., & Maslin-Cole, C. A. (1990). Mastery motivation: Definition and measurement. *Early education and Development*, *1*(5), 318-339. https://doi.org/10.1207/s15566935eed0105_1
- Morgan, G. A., Liao, H. F., & Józsa, K. (2020). Assessing mastery motivation in children using the Dimensions of Mastery Questionnaire (DMQ). Szent István University.
- Mueller, C. M. & Dweck, C. S. (1998). Praise for intelligence can undermine children's motivation and performance. *Journal of personality and social psychology*, 75(1), 33. https://doi.org/10.1037/0022-3514.75.1.33
- Muzzio, E. G. & Quinteros, M. M. M. (2014). *Escala de parentalidad positiva*. http://www.apsptomontt.cl/wpcontent/uploads/2016/04/Manual-de-la-Escala-de-Parentalidad-Positiva-2015. pdf
- Owen, D. J., Slep, A., & Heyman, M. S. E. R. (2012). The effect of praise, positive nonverbal response, reprimand, and negative nonverbal response on child compliance: a systematic review. *Clinical Child and Family Psychology Review*, 15(4), 364-385. https://doi.org/10.1007/s10567-012-0120-0
- Posada, G., Jacobs, A., Richmond, M. K., Carbonell, O. A., Alzate, G., Bustamante, M. R., & Quiceno, J. (2002). Maternal caregiving and infant security in two cultures. *Developmental Psychology*, 38(1), 67-81. https://doi.org/10.1037/0012-1649.38.1.67
- Prendergast, S. & MacPhee, D. (2018). Parental contributors to children's persistence and school readiness. *Early Childhood Research Quarterly*, 45, 31-44. https://doi.org/10.1016/j.ecresq.2018.05.005

- Richaud, M. C., Mestre, M. V., Lemos, V., Tur, A. M., Ghiglione, M. E., & Samper, P. (2013). La influencia de la cultura en los estilos parentales en contextos de vulnerabilidad social. *Avances en Psicología Latinoamericana*, 31, 419-431.
- Rubio, F. J., Trillo, M. P., & Jiménez, C. (2020). Programas grupales de parentalidad positiva: una revisión sistemática de la producción científica. *Revista de Educación*, 389(3), 267-295. https://doi.org/10.4438/1988-592X-RE-2020-389-462
- Rubio, F. J., Trillo, M. P., & Jiménez, C. (2021a). Educación y crianza de los hijos. Detección de necesidades socioeducativas y formativas de los progenitores. Revista Española de Pedagogía, 279(2), 249-267. https://doi.org/10.22550/rep79-2-2021-08
- Rubio, F. J., Trillo, M. P., & Jiménez, C. (2021b). Características de los estudios de evaluación de programas grupales de educación parental: una revisión de alcance. *ESE*. *Estudios sobre educación*, 41(3), 71-105. https://doi.org/10.15581/004.41.005
- Ryan, R. M. & Deci, E. L. (2017). Self-determination theory: Basic psychological needs in motivation, development, and wellness. Guilford Publications.
- Simaes, A. C., Galvagno, L. G. G., Passarini, L. A., Trenado, R. M., & Elgier, Á. M. (2022). Associations between maternal behavior, infant joint attention, and social vulnerability. *Cognitive Development*, 61, 101141. https://doi.org/10.1016/j.cogdev.2021.101141
- Simaes, A. C., Mancini, N. A., Galvagno, L. G. G., & Elgier, Á. M. (2021). La parentalidad positiva y los elogios de cuidadores primarios hacia infantes en el contexto de pandemia por COVID-19. *Cuadernos de Neuropsicología/Panamerican Journal of Neuropsychology*, 15(2), 21-33.
- Turner, L. A. & Johnson, B. (2003). A model of mastery motivation for at-risk preschoolers. *Journal of educational psychology*, *95*(3), 495-505. https://doi.org/10.1037/0022-0663.95.3.495
- Unicef Argentina. (2020). Encuesta COVID-19- Encuesta de Percepción y Actitudes de la Población. Impacto de la pandemia COVID-19 y las medidas adoptadas por el gobierno sobre la vida cotidiana [Informe sectorial: Educación]. https://www.unicef.org/argentina/media/8056/file/Covid19-EncuestaRapida-InformeEducacion.pdf
- Wang, G., Zhang, Y., Zhao, J., Zhang, J., & Jiang, F. (2020). Mitigate the effects of home confinement on children during the COVID-19 outbreak. *The Lancet*, 395(10228), 945-947. https://doi.org/10.1016/s0140-6736(20)30547-x
- Wang, J. & Barrett, K. C. (2013). Mastery motivation and self-regulation during early childhood. En K. C. Barrett, N. A. Fox, G. A. Morgan, D. A. Fidler, & L. A. Daunhauer (Eds.), *Handbook of self-regulatory processes in development: New directions and international perspectives* (pp. 337-380). Taylor & Francis Press.
- Wise, A. M. (2007). Parenting, child mastery motivation, and children's school readiness to learn in Turkey: A structural equation analysis. Syracuse University Library.
- Zentall, S. R. & Morris, B. J. (2010). "Good job, you're so smart": the effects of inconsistency of praise type on young children's motivation. *Journal of Experimental Child Psychology*, 107(2), 155-163. https://doi.org/10.1016/j.jecp.2010.04.015
- Zentall, S. R. (2009). Early parent-child relationship and type of parental praise and criticism as predictors of toddler motivation on an unsolvable task. University of Notre Dame.

How to cite: Mancini, N. A., Simaes, A. C., Gago Galvagno, L. G., & Elgier, A. M. (2023). The motivation for child mastery and its relationship with positive parenting and praise in an Argentine sample. *Ciencias Psicológicas*, *17*(1), e-2863. https://doi.org/10.22235/cp.v17i1.2863

Authors' participation: a) Conception and design of the work; b) Data acquisition; c) Analysis and interpretation of data; d) Writing of the manuscript; e) Critical review of the manuscript.

N.A.M. has contributed in a, b, c, d, e; A.C. S. in b, c, d, e; L. G. G. G. in e; A. M. E in e.

Scientific editor in-charge: Dra. Cecilia Cracco.