

*Perspectiva del desarrollo infantil desde la cognición, la emoción y el comportamiento**

Diego Alejandro Calle Sandoval**
Lina Marcela Rojas Reina***
Clarena Zuluaga Álvarez****

* Description of the perspective of the human life cycle from the variable: cognition, emotion, behavior. (Macro-project 2017-2018).

** Phd. Psychology and neuroscience. Researcher of Universidad Libre Cali. Orcid: <https://orcid.org/0000-0002-4917-5819> | correspondencia: diegoa.calle@unilibre.edu.co, diacalle54@hotmail.com

*** Mg. in education and human development, Researcher of CUE University. Teaching researcher Corporación Universitaria Alexander von Humboldt Armenia-Quindío. Orcid: <https://orcid.org/0000-0002-2057-7320> | correspondencia: lreina14@cue.edu.co, linarajasreina@javerianacali.edu.co

**** Specialized in medical Psychology and human health. Researcher of CUE University. Teaching researcher Corporación Universitaria Alexander von Humboldt Armenia-Quindío. Orcid: <https://orcid.org/0000-0001-6467-8695> | correspondencia: czuluaga@cue.edu.co

*Perspective of child development from cognition, emotion, and behavior**

Como citar este artículo: Calle, D. A., Rojas, L. M., & Zuluaga, C. Perspective of child development from cognition, emotion and behavior. *Revista Tesis Psicológica*, 15(1), 34-48. <https://doi.org/10.37511/tesis.v15n1a2>

Recibido: octubre 9 de 2019
Revisado: diciembre 13 de 2019
Aprobado: abril 2 de 2020

ABSTRACT

The main objective of this study is to describe the perspective of the human life cycle in childhood – considering the variables cognition, emotion and behavior – in the city of Armenia - Quindío, Colombia. It was proposed from the psychological discipline and from the particular interest of characterizing different age groups in the Colombian context, specifically in the Quindío region. A quantitative methodological approach is proposed, given that it corresponds with the descriptive, analytical logic and with the intention to generalize the results. With a descriptive-transversal design, the battery SENA - Sistema de Evaluación para Niños y Adolescentes (Evaluation System for Children and Adolescents) was applied, oriented to collect information from multiple sources: It was possible to work with a n=75 in this opportunity. The results were discriminated by the type of source that provided the information, considering that young children do not respond to the self-report questionnaire because it requires literacy skills that due to biological and school development conditions have not been achieved. A total of 75 questionnaires were applied from the family perspective, 47 from the self-report perspective, and 28 from the school. The results show that according to the self-report presented by the participants, 4 out of 5 children between 7 and 11 years old are involved in a situation of contextual risks. From the family perspective, it is considered that 1 out of 2 participants presents risks like possible school bullying, risk of self-harm and risk of aggression or harm to others. In addition, possible effects on the development of executive functions and the presence of behavioral and emotional problems, possibly related to imbalances and mismatching from the context. Finally, it is considered fundamental to adopt a new form to approach the study of development and life cycle, which includes conditions closer to the population group of interest, taking into account individual differences, the continuous and discontinuous form of development, and conditions of the region to where people belong.

Keywords: executive functions, cognition, emotion, social behavior and childhood development.

RESUMEN

El presente estudio tiene objetivo describir la perspectiva de ciclo vital humano en la niñez, desde las variables cognición, emoción y comportamiento en la ciudad de Armenia-Quindío, Colombia. Se planteó desde la disciplina psicológica y desde el interés particular de caracterizar diferentes grupos etarios en el contexto colombiano, específicamente en la región del Quindío. Se plantea un enfoque metodológico cuantitativo, dado que corresponde con la lógica descriptiva, analítica y con intencionalidad de generalizar los resultados. Con un diseño descriptivo-transversal, se aplicó la batería SENA (Sistema de Evaluación para Niños y Adolescentes), orientada a recoger información de múltiples fuentes, se trabajó con una n=75. Los resultados fueron discriminados por tipo de fuente que proporcionó la información, puesto que los niños pequeños no responden al auto-informe, porque requiere de habilidades de lecto-escritura que por condiciones de desarrollo biológico y escolar no han logrado. Se aplicaron un total de 75 cuestionarios desde la perspectiva familiar, 47 desde la perspectiva autoinforme y 28 desde la escuela. Los resultados evidencian, que según el auto-informe presentado por los participantes, 4 de cada 5 niños están involucrados en una situación de riesgo contextual para las edades de 7 a 11 años y desde la lógica familiar consideran que, 1 de cada 2 participantes presentan riesgos, como posible acoso escolar, riesgo de autolesión y riesgo de agresión o daños a otros. Además, posibles afectaciones en el desarrollo de las funciones ejecutivas y presencia de problemas conductuales y emocionales, posiblemente relacionado con desajustes y desadaptación al contexto. Finalmente, se considera fundamental adoptar una nueva forma de aproximación al estudio del desarrollo y ciclo vital, que incluya condiciones más cercanas a grupo poblacional de interés, teniendo en cuenta las diferencias individuales, la forma continua y discontinua del desarrollo y condiciones propias de la región a la que pertenece.

Palabras clave: funciones ejecutivas, cognición, emoción, comportamiento social y desarrollo infantil.

Introduction

Last century psychology studied the social behavior since different research topics like emotion, language, cognition and behavior during the childhood without an integration theory. Still, development psychology has been working together with the neurodevelopment and child neuropsychology and cognitive science last years. In this way, the behavior conception actually includes the concept of emotion and cognition at the same time (Pinedo, Pachecho, Yáñez, 2017; Rojas-Reina, 2018; Pérez & Filella, 2019). The phylogenetic and ontogenetic evidence hold it (Calle, 2017). The complex relation between emotion and cognition found by Le Doux (1995); Bechara, Damasio and Damasio (2000); Damasio (2011) is correlated with the structure and physiology of the human pre frontal cortex (Fuster, 2008). Most of the researchers consider his region like the center of the behavior integration, voluntary control of the thinking and human actions. These functions are called executive functions (Calle & González, 2016).

Diamond & Wright (2014) studied the strong relation between the working memory, inhibitory control and social behavior during the first childhood development. Researches indicate that the dorsolateral pre frontal cortex (DLPF) maturation, is associated with the increase of white matter from the amygdala to the DLPF, during the childhood and adolescence (Blackmore & Choudry, 2006). It means cognition and emotion development grow together and both influence in the social behavior (Davidson, Amso, Anderson & Diamond, 2006). Therefore, there is a direct relation between the DLPF maturation and the executive function that allowed the children to be able to take decision about the different situation that occurs in their development process. The cerebral cortex changes in those areas across the childhood and

adolescence development confirm them (Flóres & Ostrosky, 2012).

In this way, Savage, Ellis and Kozey (2013) analyzed risk factors for antisocial behavior across the transition to adulthood. Each research concludes with a closed relation between social, emotional and cognition, which are together in the behavior development. In other places, Musso (2010), researched in Argentina the incidence of the social risk in the executive function development. Calle, Grañana, Jiménez y Rosero (2018) found something similar with children victims of the political violence in Quindío Colombia. Each study measured inhibitory control and working memory with “Hearts and Flowers” test designed by Diamond (2006).

In Colombia there are few articles around the child development integrating the cognitive, emotion and behavior perspective, it was until last year that appear the first interest for childhood neuropsychology in Armenia (Calle, Grañana, Jiménez & Romero, 2018). Therefore, researching violence problems at school like bullying, cutting, anxiety, depression and suicide behavior are relevant for the child psychology development study. Still so, the studies have been working in an individual way the variable of cognition, emotion and behavior factors. This study is derived from an integrative research with children grown and raised in the Quindío state in Colombia. Finding an alternative for the absence of researches, the following article pretends inquire the perspective of the human life cycle in children and early adolescence, taking in count that the life cycle is directly related with the age, and the literature was always directing the research to this characteristic, therefore it wasn't taken other factors. It was decided to measure the age with the variables: cognition, emotion, behavior and executive function in Armenia, Colombia.

Methodology

Design

The research Description of the perspective of the human life cycle from the variable: cognition, emotion and behavior. (Macro-project 2017-2018), consists of three phases that consider human development and the life cycle (childhood, youth and adulthood). This paper describes the first phase that corresponds to childhood. This is carried out using the analytical empirical methodological approach, non-experimental design study and transversal scope.

Participants

The partial sample consisted of 75 participants, between 3 and 11 years old. Every one came from different parts of the city without neurological and psychological history. It was taken into account as inclusion criteria, that the children were in school, that at the moment they did not present a diagnosis of mental pathology or receiving medication related to this aspect, the participation was voluntary by children, families and teachers.

Instruments

The instrument used was the battery SENA (Child and Adolescent Evaluation System) Fernández-Pinto, Santamaría, Sánchez-Sánchez, Carrasco y del Barrio (2015). This test collects emotional, cognitive and personal resources information, social behavior and executive functions (as the respond of specific situation) from children perspective, their parents and their teaches, this makes the battery a complex multi-source assessment.

Process

The procedure to access the sample initially was making an approaching to different educational

institutions, provide information to parents, teachers and children about the project, fill out the informed consent and assent, finally, the application of the battery of questions with each of the participants (child, parents and teachers). In the analysis of the results, the data of each questionnaire was entered into the virtual scoring platform of the SENA battery, even though the battery was validated with an Spanish population, however the platform gives the profile based on the typical punctuation standardized for latin population, the numerical data obtained included in the database in Excel and it describes each of the variables of interest (cognition, emotion and behavior), subsequently, through the statistical package Statgraphics, descriptive calculations were performed and correlate them.

Table No 1. Sample according to gender and age

	Characteristic	Frequency
Age	3	4
	4	11
	5	6
	6	7
	8	1
	9	16
	10	15
Gender	11	15
		75
	Female	43
	Male	32

Source: authors

Results

Keeping in mind the objective of the study, in relation of the description of cognition, emotion and behavior variables. The application of SENA battery brings with it the advantage of collecting information from various sources of information and includes the problematic variables emotional, behavioral, executive

functions, contextual and personal resources. For the specific case, applications were made to different sources of 75 children and adolescents, including their parents and teachers.

Below you will find a description of the results from family perspective taking account all participants (n = 75), Self-report and parent's

perspective (n = 47) from teenagers and teacher's and parent's perspective (n = 28) that responds instead of the children's group with ages between 3 and 6 years old, considering their evolutionary and educational development where they could not respond a questionnaire with approximately 130 questions.

Table No 2. Results parent's perspective all participants

T score	Emotional	Behavioral	Executive Functions	Personal resources	
Range	Frequency	Frequency	Frequency	Frequency	Descriptive Level
<39	6	10	14	7	Under – average
40-59	57	52	48	50	Average
60-69	7	7	8	16	High – average
70-79	5	5	4	0	High
80-90	0	1	1	0	Very high
Lost data	0	0	0	2	
	75	75	75	75	

Source: authors

In relation to the table No. 2 in the descriptive level average with a range of 40-59 points obtained in the category, the results obtained match the result expected for the age of the participants. An important finding in this section was the scores below 39 points, which refers to difficulties in the development of the skill, therefore it is possible to say that 6 of children have deficiency in emotional responses, 10 in behavioral responses, 14 in executive functions, 7 in personal resources. On the other hand, the high descriptive levels of the categories with T score higher than 60 points, indicate symptomatology close to a pathology of the respective category. Placing the categories with score above 60 to 90 points, the results shows a frequency where 12 of children with emotional alteration have a possible presence of anxiety-depressive symptomatology, negative affect or difficulty in

the management of activation in different situations; Behavioral alterations 13 of children with possible indicators of the presence of disruptive behavior, contextual issues and personal difficulties. Alterations in executive functions was presented in 13 of children usually with difficulties to control and direct their attention and their behavior (inhibit inappropriate responses-impulsivity), to adapt behavior in different contexts and demands, regulation of the responses and emotional state. A high score thought between 60-69 points in personal resources suggests that the participant has personal characteristic that decreases the probability of presenting problems or minimizing the effect of them, for the case was 16 of the participants.

In addition to that, possible risk factors identified by the parents are presented, such as:

Table No. 3 Frequency of Risk factor (Parent's perspective)

No.	Risk factors identified by family	Frequency
1	Unusual behavior	1
2	Lack of social support	1
3	Non- specific response indicator	1
4	Rejection of the attachment figure	1
5	Risk of school bullying	14
6	Risk of aggressive behavior or harm others	5
7	Risk of self-injury	13
8	No data	39
		75

Source: authors

In the previous description it is evident that 39 of the participants do not present imminent risk at the time of the filling the questionnaire. Worryingly, 36 of the participants are in

possible risks related with specific behaviors of the child or adolescent, due to contextual risks, either as a trouble maker or as a recipient of adverse situations.

Pp. 34 - 48

Table No. 4 Results teacher's perspective participants 3 to 6 years old

T score	Emotional – SCH	Behavioral – SCH	Executive functions – SCH	Personal resources – SCH	
	Frequency	Frequency	Frequency	Frequency	Descriptive level
<39	3	0	2	9	Under – average
40-59	17	25	17	16	Average
60-69	3	1	8	3	High – average
70-79	4	1	1	0	High
80-90	1	1	0	0	Very high
	28	28	28	28	

Source: authors

Table No. 4 shows that average descriptive level with a range of 40-59 points, expected “normality”, where 3 of children aged between 3-6 years old have a deficiency in emotional responses, 2 in executive functions, 9 in personal resources, making reference to difficulties in the development of the ability of being able to respond in order to follow one of the categories. Placing the categories in a range above 60 points, the results show with emotional alteration 8 of the participants, with possible presence of anxiety-depressive symptomatology, negative affect or difficulty in the management of activation in

different situations; Behavioral alterations 3 of children with possible indicators of the presence of disruptive behavior, context issues and personal difficulties. Alterations in executive functions 9 of children that can present difficulties to control and direct their attention and control their behavior (inhibit inappropriate responses-impulsivity), to adapt behavior in different contexts and demands, regulation of the responses and emotional state. A high score in personal resources, suggests that the subject has personal characteristics that decreases the probability of presenting problems or minimize the effect of

them, in this case was the 3 of the participants. All this is described from the teachers' perspective of the participants, emphasizing the categories with T

score higher than 60 points, indicate symptomatology close to a pathology of the category, excepting the category of personal resources.

Table No. 5 Self-report teenagers

T Score	Emotional – SRQ	Behavioral – SRQ	Executive functions - SRQ	Context - SRQ	Personal resources - SRQ	
	Frequency	Frequency	Frequency	Frequency	Frequency	Descriptive level
<39	3	2	3	3	10	Under – average
40-59	31	33	33	32	31	Average
60-69	11	9	10	11	6	High-average
70-79	2	2	1	1	0	High
80-90	0	1	0	0	0	Very high
	47	47	47	47	47	

Source: authors

Table No. 5 shows average descriptive level with a range of 40-59 points, expected “normality”. Score T greater than 60 indicates pathological symptomatology, in this case 3 of children between 7-11 years old present deficiency in the emotional responses, 2 of children in behavioral responses, 3 in executive functions, 3 in contextual issues and 10 in personal resources this represents that exist difficulties in the development of each ability mentioned. Placing the categories with a T score above 60 to 90 points, 13 of children have emotional alteration, with possible presence of anxiety-depressive symptomatology, negative affect or difficulty in the management of activation in different situations. 12 kids with behavioral alterations with possible indicators of the presence of disruptive behavior, context issues and personal difficulties. Alterations in executive functions in 11 that may present difficulties to control and direct their attention, to control their behavior (inhibit inappropriate responses-impulsivity), to adapt behavior in different contexts and demands, regulation of the responses and emotional state. Alterations in the context (family, school and classmates) 12 of the participants, which indicates issues and a difficult process of

adaptation to the context, levels of dissatisfaction and perceived tension with their environment, hostile perception of the milieus or that close people doesn't provides them the support that they deem to be in need.

A high score in personal resources, suggests that the subject has personal characteristics that decreases the probability of presenting problems or minimizing the effect of them, for the case was 6 of the participants. The above is described from the perspective of the participants in the study, with ages between 7 and 11 years.

Table No. 6 Risk factors from Self- reporter ages 7 to 11 years old

No.	Risk factors	Frequency
1	Alteration of perception and thought	2
2	Traumatic stressors	6
3	Lack of social support	5
4	Risk in the family milieus	2
5	Risk of antisocial behavior	4
6	Risk of school bullying	1
7	Risk of aggressive behavior or harm to others	3
8	Self-injury risk	7
9	Sense of anticipated danger and alert	5

No.	Risk factors	Frequency
10	Guilt feeling	2
11	No data	10
		47

Source: authors

According to table No. 6 the results show that 10 of the participants don't present an imminent risk. But 37 of the participants are in one of the risks described in the table, condition that generates concern among researchers considering that the children and adolescent that

participated are in contextual vulnerability conditions, specifically in actions that involve violence of different kinds.

Taking account, the descriptions of the results of the sources of application (family, teachers, children and adolescents) and considering the categories of the study, a series of correlations were made with the variable measured by the instrument, based on the hypothesis of the possible consistency between the results obtained according to the different sources and the age.

Table No. 7 Correlation database from parents and teacher. Participants between 3 to 6 years old

Correlation 3-6 YEARS						
	AGE	Behavioral -SCH	Executive functions -SCH	Emotional - PAR	Behavioral -PAR	Executive functions -PAR
AGE		0,1614	0,0883	0,1824	-0,0252	0,1119
		-28	-28	-28	-28	-28
		0,412	0,6548	0,3529	0,8986	0,5709
Behavioral -SCH	0,1614		0,5327	0,3524	0,7348	0,5606
		-28	-28	-28	-28	-28
		0,412	0,0035	0,0659	0	0,0019
Executive functions -SCH	0,0883	0,5327		0,6568	0,4897	0,5383
		-28	-28	-28	-28	-28
		0,6548	0,0035	0,0001	0,0082	0,0031
Emotional -PAR	0,1824	0,3524	0,6568		0,6153	0,6092
		-28	-28	-28	-28	-28
		0,3529	0,0659	0,0001	0,0005	0,0006
Behavioral -PAR	-0,0252	0,7348	0,4897	0,6153		0,8188
		-28	-28	-28	-28	-28
		0,8986	0	0,0082	0,0005	0
Executive functions -PAR	0,1119	0,5606	0,5383	0,6092	0,8188	
		-28	-28	-28	-28	-28
		0,5709	0,0019	0,0031	0,0006	0

Source: authors

Briefly describing the information in Table No. 7, it is important to mention that, in the process of statistical analysis, variables that didn't represent significant correlations were identified, therefore they were left out of the table. The age variable is conserved considering that the research makes a description from the life cycle and undoubtedly involves the chronological age of the participants.

Regarding the behavior variable, from family and teacher's perspective, a correlation of 0.73 was obtained. Indicating that, children are emitting behaviors consistent in the two specific milieus (home and school). In turn, a correlation of 0.65 was verified between executive functions (school) and emotional responses (family); there is also a correlation of 0.81 between executive function and behavior in the family milieus.

Table No. 8 Correlation database from Self-reporter and parents. Participants between 7 to 11 years old

Correlation 7-11 YEARS								
	AGE	EMO- SRQ	BX-SRQ	EFX-SRQ	CXT-SRQ	EMO-F	BX-F	EFX-F
AGE		-0,188	0,0643	0,0552	-0,1798	0,0768	0,3424	0,1589
		-45	-45	-45	-45	-45	-45	-45
		0,2162	0,6747	0,7186	0,2372	0,616	0,0213	0,2971
EMO- SRQ	-0,188		0,4602	0,7201	0,65	0,1614	0,1748	0,2312
	-45		-45	-45	-45	-45	-45	-45
	0,2162		0,0015	0	0	0,2895	0,2507	0,1265
BX- SRQ	0,0643	0,4602		0,6464	0,6712	0,102	0,3509	0,3228
	-45	-45		-45	-45	-45	-45	-45
	0,6747	0,0015		0	0	0,5048	0,0181	0,0306
EFX- SRQ	0,0552	0,7201	0,6464		0,6439	0,0441	0,2746	0,2593
	-45	-45	-45		-45	-45	-45	-45
	0,7186	0	0		0	0,7738	0,0679	0,0854
CXT- SRQ	-0,1798	0,65	0,6712	0,6439		0,0893	0,3143	0,2728
	-45	-45	-45	-45		-45	-45	-45
	0,2372	0	0	0		0,5595	0,0355	0,0698
EMO-F	0,0768	0,1614	0,102	0,0441	0,0893		0,4851	0,7097
	-45	-45	-45	-45	-45		-45	-45
	0,616	0,2895	0,5048	0,7738	0,5595		0,0007	0
BX-F	0,3424	0,1748	0,3509	0,2746	0,3143	0,4851		0,7015
	-45	-45	-45	-45	-45	-45		-45
	0,0213	0,2507	0,0181	0,0679	0,0355	0,0007		0
EFX-F	0,1589	0,2312	0,3228	0,2593	0,2728	0,7097	0,7015	
	-45	-45	-45	-45	-45	-45	-45	
	0,2971	0,1265	0,0306	0,0854	0,0698	0	0	

Emotional (EMO). Behavioral (BX).
Executive functions (EFX). Context (CXT).
Self-report teenagers (SRQ). Parents (F)

Source: authors

Table No. 8 shows a correlation of 0.72 between emotional responses and executive functions; there is a correlation of 0.67 between contextual problems and behavioral responses, these two correlations are from the perspective of the children (self-report). On the other hand, there was a correlation of 0.70 between executive functions and emotional responses; also, a correlation of 0.70 between executive functions and behavioral responses, the last two are from the family perspective.

Discussion

After the description of the results, the information analyzed affirm that not only the biological component is important from the perspective of the development and life cycle, considering that environmental influences -family and school- are essential to understand the human development in a contextualized way, allowing to know the variables that converge and increase or decrease the levels of adaptation of the children.

This study shows the importance of identify the need to work on the recognition of the characteristics of the population of younger ages where there is evidence of risks and alterations associated with factors emotional, behavioral, personal and contextual, the above according to Rincón-Rodríguez, Rodríguez-Vargas & Galera-Gélvez (2014) who agree on the health care of the child population. On the other hand Montoya, Giraldo, Arango, Forgiarini and García (2014) describe the cognitive, emotional and behavioral characteristics in this population, affirming that psycho-emotional and social aspects are increasingly involved in the development of children, highlighting the aggression as one of the associated indicators in the family and school context; this aspect, together with other mentioned factors, is evident in the results of the present research, where a large proportion of children

between three and six years of age present a risk of aggressive behavior or harm to others, school risk, unusual behaviors for their stage and lack of social support among other aspects.

With respect to personal resources in children under three to six years Franco, Pérez and Pérez (2014), indicate that the timely combination between levels of affection, norms, limits and emotional support contributes to the development of this kind of resources in childhood. This is related to the existing parental control, aspect that certainly decreases the probability of presenting problems associated with mental health from the variable's cognition, emotion and behavior. This topic is also discussed by Isaza and Henao (2012). The above is evident in this research where children who are in these ages have a high score on personal resources seen from the perspective of their parents, who can contribute through socio-familiar climate and interaction styles in a better development of the children.

During childhood, development and quality of life are associated with positive experiences and others do not, conditions derived from the family environment, the school context, relationships associated with other interaction scenarios of minors, where their perceptions, desires, emotional and behavioral reactions are reflect (Mielles-Barrera, 2015; Rojas-Reina, 2018), as well as the individual advantages that are essentially important together with the social conditions and different learning during the childhood and adolescence, in reason that they allow to recognize the potential in their skills and abilities as Nussbaum (2012) would indicate.

On the other hand, studies such as Cabrera, González, Vargas and Franco (2012) shows that a high level of antisocial behavior with a high level of criminal behavior, an aspect that generates great interest in the present research,

considering that in the age group of seven to eleven years is evident a risk of aggressive behavior and harm to others, added to two indicators of relevance: risk in the family milieus and risk of school bullying, in a critical period at the development level of children and adolescents, where the accompaniment by family members and caregivers is necessary, considering that behavioral models are derived from these, as well as the identification of social roles (Uribe, Orcasita and Aguillón, 2012; Pérez and Filella, 2019), aspects that have undergone substantial changes, since the lack of parental supervision is largely due to the immersion of both in the labor context and the structural changes that this entails, in the same way, the generational changes framed in socioeconomic, political restructurings and cultural of the country.

It could raise of vital importance the role that parents play in the formation of children models such as socio - cognitive favors the development of social skills, self-control, social support which allow individuals to acquire and maintain protective behaviors in circumstances that imply direct risk (Orcasita & Uribe, 2010; Rojas-Reina, 2018). Especially when they are identified in the population risks of self-harm, aggression or harm to others and traumatic stressors which can lead negative consequences for the health of children and adolescents, who in the future would be represented in pathologies and a disadaptative development in this population segment (Montoya, Giraldo, Arango, Forgiarini & Garcia, 2014; Barra, Cerna, Kramm & Véliz, 2006,; Pérez & Filella, 2019).

In the case of children from three to six years old, there is a correlation in the results between the perspective of teachers and family, similar to the situation described by Montoya, Giraldo, Arango, Forgiarini & García (2014) respect with the behavior variable, this is likely when there is a greater level of accompaniment from

these contexts due to the age of the minors and their low level of autonomy, as well as the presence of models of greater consistency associated with specific roles (Uribe, Orcasita & Aguillón, 2012; Rojas-Reina, 2018), then the role of social support is fundamental because minors are in the process of developing these skills, where the indicators described so far are presented in both scenarios, which allows to recognize the bidirectionality of the process at the development level and the role, aspects such as the epigenetic perspective and the genetics executive functions.

With the age group of seven to twelve years, there is a correlation between contextual problems and behavioral responses, an aspect that is consistent with the opening of social systems where minors perform the autonomous exploration of interests, different levels of tension are manifested to those of previous ages (Orcasita & Uribe, 2010). Due to the new demands that they experience, show a clear development of their initiative, their situational assessment, besides initiating the assumption of factors that indicate the proximity of the vital and social moratorium, which allow the configuration of different skills and competences required for the new challenges of later stages (Nussbaum, 2012). These findings confirm also the executive functions integrate the emotion, cognition and social behavior parts of the child development. The DLPF cortex is the region where these aspects participate in the voluntary control of the thinking and the behavior (Calle, 2017).

Conclusions

The results allowed us to identify that the majority of children who participated in the present study, for the variables cognition, emotion, behavior and personal resources, are within the expected parameters for the evolutionary cycle in which it is located. However, it is of interest to analyze the susceptibility of the risk factors that

were identified in each of the profiles by source of information. Additionally, differences were found in the perception of each of the sources of information on each case, showing that families have a tendency to overlook negative aspects of the child's behavior, while teachers provide information closer to the experiences of the kid.

In the other hand, it was found an important number of participants were in possible risks related with specific behaviors of the child or adolescent, due to contextual risks, either as a trouble maker or as a recipient of adverse situations that takes them to self-injury or harm others, experience stressors and anticipation alert. Therefore, it is important to do psychoeducation to parents and teachers in order to favor the developed personal resources that allow the children and adolescents to unwind in a more adaptive way to the context that is in a way a risk factor and might be bad for their psychological development.

It is proposed to teachers, family and researchers, adopt a new way of thinking in the

field of development and life cycle; reconsider the concept of life course, from the value of changes, the role of individual differences and the continuous or discontinuous way as development is experienced. Aspects that differ and move us away from the usual indicators and prescriptions, which frame international psychological theories. Therefore, if we want to respond to the diversity of health problems that currently emerge in the general population, it is important to break existing paradigms and review whether the commonly adopted descriptors account for the needs of the specific population or are far from the current characteristics. Thinking about new options, where children and adolescents anticipate situations, experience risks in greater proportion, demand the presence of their families, making clear with their reactions and ways of assuming the various changes, the need to have family and social support to be able to resolve the circumstances that accompany them in their development process, in addition to making decisions oriented to their self-care.

References

- Barra E., Cerna R., Kramm, D., & Véliz, V. (2006). Problemas de salud, estrés, afrontamiento, depresión y apoyo social en adolescentes. *Terapia psicológica* 24 (1), 55-61. <https://www.redalyc.org/pdf/785/78524106.pdf>
- Bechara, A., Damasio, H., & Damasio, A. (2000). *Emotion, Decision Making and the Orbitofrontal Cortex*. *Cerebral Cortex*, 10(3), 295-307. <https://doi.org/10.1093/cercor/10.3.295>
- Blackmore, S., & Choudry, S. (2006). Development of the adolescent brain: implications for executive function and social cognition. *Journal of Child Psychology and Psychiatry* 47(3), 296-312. <https://doi.org/10.1111/j.1469-7610.2006.01611.x>
- Cabrera G., González J., Vargas, L., & Franco, L. (2012). Conducta antisocial y delictiva en adolescentes de un centro de reclusión en el Quindío, periodo 2008-2010. *Psicogente*, 15 (27), 168-177. <https://www.redalyc.org/pdf/785/78524106.pdf>
- Calle, D. (2017). Filogenia y desarrollo de funciones ejecutivas. *Psicogente*, 20(38), 368-381. <http://doi.org/10.17081/psico.20.38.2557>
- Calle, D., & Gonzáles, J. (2016). Funciones Ejecutivas, empatía y conducta suicida: lo que nos cuenta la neurociencia de la cognición social. En J., Andrade & D., Calle (Eds.), *Ensayos académicos en torno al suicidio* (pp. 37-50). Armenia: Editorial Fundación Participar.
- Calle, D., Grañana, N., Jiménez, M., & Romero, A. (2018). *Aproximaciones a la caracterización de la primera infancia en Colombia*. Tunja: Editorial Universidad Pedagógica y Tecnológica de Colombia UPTC.
- Damasio, A. (2011). *Y el cerebro creó al hombre*. Bogotá: Editorial Norma.
- Davidson, M.C., Amso, D., Anderson, L.C., & Diamond, A. (2006). Development of cognitive control and executive functions from 4-13 years: Evidence from manipulations of memory, inhibition, and task switching. *Neuropsychologia*, 44(11), 2037-2078. <https://doi.org/10.1016/j.neuropsychologia.2006.02.006>
- Diamond, A. (2006). The Early development of executive functions. En E. Bialstok & F.I.M. Craik (Eds.), *Lifespan Cognition mechanisms of change* (pp 70-95). London: Oxford University Press. <https://doi.org/10.1093/acprof:oso/9780195169539.003.0006>

- Diamond, A., & Wright, A. (2014). An effect of inhibitory load in children while keeping working memory load constant. *Frontiers in psychology*, 5, 213-220 <https://doi.org/10.3389/fpsyg.2014.00213>
- Fernández-Pinto, I., Santamaría, P., Sánchez-Sánchez, F., Carrasco, M. A., & del Barrio, V. (2015). *SENA. Sistema de Evaluación de Niños y Adolescentes. Manual de aplicación, corrección e interpretación*. Madrid: TEA Ediciones.
- Flores, J., & Ostrosky, F. (2012). *Desarrollo neuropsicológico de los lóbulos frontales y las funciones ejecutivas*. México: Manual Moderno.
- Franco, N., Pérez, M., & Pérez, M. (2014). Relación entre los estilos de crianza parental y el desarrollo de ansiedad y conductas disruptivas en niños de 3 a 6 años. *Revista de Psicología clínica con Niños y Adolescentes*, 1(2), 149-156. http://www.revistapcna.com/sites/default/files/6-rpcna_vol.2.pdf
- Fuster, J. (2008). *The Prefrontal Cortex*. London: Elsevier. <https://doi.org/10.1016/B978-0-12-373644-4.00002-5>
- Isaza, L., & Henao, G.C. (2012). Influencia del clima sociofamiliar y estilos de interacción parental sobre el desarrollo de habilidades sociales en niños y niñas. *Persona*, 15, 253-271. <https://doi.org/10.26439/persona2012.n015.138>
- Le Doux, J.E. (1995). Emotions Clues the brain. *Annual Review Neuroscience*, 46, 209-235. <https://doi.org/10.1146/annurev.ps.46.020195.001233>
- Mieles-Barrera, M.D. (2015). Calidad de vida de niños y niñas de estratos medios: estudio de caso. *Revista Latinoamericana de Ciencias Sociales, Niñez y Juventud* 13 (1), 295-311. <https://doi.org/10.11600/1692715x.13117131213>
- Montoya, D.A., Giraldo N., Arango L., Forgiarini, R., & Garcia, A. (2014). Características cognitivas, emocionales y conductuales de niños preescolares del programa buen comienzo en el noroccidente de Medellín. *El Ágora USB* 14(2), 637-645. <https://doi.org/10.21500/16578031.38>
- Musso, M. (2010). Funciones ejecutivas: un estudio de los efectos de la pobreza sobre el desempeño ejecutivo. *Interdisciplinaria*, 27(1), 95-110. <https://www.redalyc.org/pdf/180/18014748007.pdf>
- Nussbaum, M. (2012). *Crear capacidades. Propuesta para el desarrollo humano*. Barcelona: Espasa.

- Orcasita, L., & Uribe, A. (2010). La importancia del apoyo social en el bienestar de los adolescentes. *Psychologia: avances de la disciplina* 4(2), 69-82. <https://doi.org/10.21500/19002386.1151>
- Pérez, N., & Filella, G. (2019). Educación emocional para el desarrollo de competencias emocionales en niños y adolescentes. *Praxis & Saber*, 10(24), 23-44. <https://doi.org/10.19053/22160159.v10.n25.2019.8941>
- Pinedo, I. A., Pachecho, L., & Yáñez, J. (2017). Las emociones y la moral: claves de interpretación desde una aproximación cognitiva. *Revista Tesis Psicológica*, 12(1), 82-104. Recuperado de <https://www.redalyc.org/pdf/1390/139057282007.pdf>
- Rincón-Rodríguez, C.J., Rodríguez-Vargas, O.E., & Galera-Gélvez, K.G. (2014). Descripción de manejo de la información en la primera infancia en dieciséis municipios colombianos. *Revista Gerencia y Políticas de Salud* 13 (27), 296-318. <https://doi.org/10.11144/Javeriana.rgyps13-27.dmip>
- Rojas-Reina, L. (2018). Características cognitivo-emotivas de jóvenes que hacen parte del fenómeno bullying (Tesis de Maestría). Medellín, Fundación Centro Internacional de Educación y Desarrollo Humano (CINDE). <http://hdl.handle.net/20.500.11907/2503>
- Savage, J., Ellis, S., & Kozey, K. (2013). A Selective Review of the Risk Factors, For Antisocial Behavior across the Transition to Adulthood. *Psychology*, 4(6A), 1-7. <http://dx.doi.org/10.4236/psych.2013.46A2001>
- Uribe A.F., Orcasita L., & Aguillón E. (2012). Bullying, redes de apoyo social y funcionamiento familiar en adolescentes de una institución educativa de Santander, Colombia. *Psychologia. Avances de la disciplina* 6(2), 83-99. <https://doi.org/10.21500/19002386.1186>