

Comparison of emotional intelligence and creativity levels in schooled and homeschoolers

Comparación de los niveles de inteligencia emocional y creatividad en niños escolarizados y educados en casa homeschoolers

Comparação dos níveis de inteligência emocional e criatividade em alunos que estudam em casa e em escolas domiciliares

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Abstract

Introduction: The demand of today's world requires individuals who are capable of adapting, interacting and finding precise solutions for diverse circumstances regardless of their origin, or the learning style they have had access to. This is why emotional intelligence and creativity play an important role in the success of individuals. **Objective:** To compare the level of development of emotional intelligence and creativity in children between the ages of 8 and 10 from two different groups (schooled and homeschool). **Methodology:** The results obtained by the two groups of children applying the TMMS-24 Scale and the Torrance Creative Thinking Test, adapted for the Spanish language, are analyzed. **Results:** It is observed that school children obtain a higher level of creativity and *homeschoolers* children, a higher level of emotional intelligence. **Conclusions:** School children as well as *homeschoolers* have the potential to develop emotional intelligence and creativity in educational environments. It is necessary that the adults who accompany the processes more consciously promote activities and tools aimed at these areas of child development.

Keywords: Scholarship; Home education; Emotional intelligence; Creativity

Resumen

Introducción: La demanda del mundo actual requiere individuos que sean capaces de adaptarse, relacionarse y encontrar soluciones precisas para las diversas circunstancias sin importar su origen o el estilo de aprendizaje al que hayan tenido acceso. Por esto, la inteligencia emocional y la creatividad desempeñan un papel relevante en el éxito de los individuos. **Objetivo:** Comparar el nivel de desarrollo de la inteligencia emocional y de la creatividad en niños y niñas con edades entre 8 y 10 años de dos grupos (escolarizados: 35, y *homeschoolers*: 9). **Metodología:** Se analizan los resultados obtenidos por los dos grupos de niños aplicando la escala TMMS-24 y el test de pensamiento creativo de Torrance, adaptado para el idioma español. **Resultados:** Se observa que los niños escolarizados obtienen mayor nivel de creatividad y los niños *homeschoolers* mayor nivel de inteligencia emocional. **Conclusiones:** Tanto los niños escolarizados como los *homeschoolers* tienen posibilidades de desarrollar la inteligencia emocional y la creatividad en los ambientes educativos. Es necesario que los adultos que acompañan los procesos promuevan más conscientemente actividades y herramientas direccionadas a estas áreas del desarrollo infantil.

Palabras clave: Escolaridad; Educación en el hogar; Inteligencia emocional; Creatividad¹

¿Cómo citar este artículo?

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¹ Los términos clave han sido recuperados a partir de los Tesauros Unesco y Barcelona.



Resumo

Introdução: As demandas do mundo atual exigem indivíduos capazes de se adaptar, se relacionar e encontrar soluções precisas para diversas circunstâncias, independentemente de sua formação ou do estilo de aprendizado a que tiveram acesso. Portanto, a inteligência emocional e a criatividade desempenham um papel relevante no sucesso dos indivíduos. **Objetivo:** Comparar o nível de desenvolvimento da inteligência emocional e da criatividade em meninos e meninas com idades entre 8 e 10 anos em dois grupos (escolarizados: 35, e *homeschoolers*: 9). **Metodologia:** Os resultados obtidos pelos dois grupos de crianças foram analisados por meio da aplicação da escala TMMS-24 e do teste de pensamento criativo de Torrance, adaptado para o espanhol. **Resultados:** observou-se que as crianças que frequentam a escola obtêm níveis mais altos de criatividade e as que frequentam a escola em casa, níveis mais altos de inteligência emocional. **Conclusões:** Tanto as crianças escolarizadas quanto as que estudam em casa têm a possibilidade de desenvolver a inteligência emocional e a criatividade em ambientes educacionais. É necessário que os adultos que acompanham os processos promovam de forma mais consciente atividades e ferramentas voltadas para essas áreas do desenvolvimento infantil.

Palavras-chave: Educação domiciliar; Inteligência emocional; Criatividade.



Introduction

The education of children has represented a fundamental axis for the development of societies and the culture of peoples (García, 2013). In education, different modalities can be found. On the one hand, there is conventional education, mostly promoted and offered by governments, in which children attend educational centers where they acquire a great deal of knowledge for their performance in life, adaptability and the development of their capabilities (Bernasconi and Rodríguez-Ponce, 2017). Some of these institutions are centers that, impacted by new pedagogical models, represent an alternative to maximize the potential of students, fostering motivational environments based on innovative pedagogical models (Leliwa et al., 2016).

In addition, and with a long history, there is the teaching-learning process at home, in which the child is offered the opportunity to develop in a close environment, with the motivation of permanent interaction with his or her parents or tutors. This corresponds to the oldest teaching-learning method, since, since before individuals attended educational centers, it has been the way in which they have received knowledge (Gaither, 2017).

In view of the importance of education in any of its modalities, it is relevant to address two basic objectives for the development of human potential: emotional intelligence and creativity. Emotional intelligence has become a relevant area of study in recent decades. Martínez Moraga (2014) mentions that emotional intelligence has a significant impact on school performance, since emotions are inherent to individuals. Similarly, Alcaldía Mayor de Bogotá, Secretaría de Educación (2014) mentions that the socio-affective development of students leads to better school performance. This is corroborated in the study by Cejudo (2017), in which it is observed that the application of a program to improve emotional intelligence in a sample of 123 primary school students positively influenced the experimental group (63 students) and produced a significant improvement in academic performance. The above can also be noted in the results obtained in the study by Pulido Acosta and Herrera Clavero (2017), in which a sample of 1186 individuals was assessed, of which 81% corresponded to primary and secondary levels, and the remaining amount to university programs. It was shown that the relationship between emotional intelligence and academic performance is directly proportional. Jones et al. (2017) ratify that emotional intelligence produces not only benefits in terms of academics, but also has an impact on the physical and mental health of individuals, and leads to success in their professional and working life. Medlin (2013) states that out-of-school children reflect an appropriate emotional development, given that they have good relationships with their family and friends, having less incidence of problems in adolescence and good adaptation in the university environment.

Since the inclusion of the concept of emotional intelligence in the school environment, several studies have been developed (Berger et al., 2013; Bisquerra Alzina and Hernández Paniello, 2017; Costa and Faria, 2015) to implement programs in schools that contribute to the emotional development of students. The results obtained reflect the need for specific interventions in this area for the comprehensive development of schoolchildren. For his part, Klimenko (2015) refers to the importance of creativity in the school context. He mentions that it is there where a wide range of opportunities to be developed in individuals is presented.

In this way, the creative capacity promotes transforming, influential and innovative entities in contemporary society, which demand diverse options to respond to the needs and concerns of the society.

ness. Fernández Romero (2010) focuses his attention on the low creative development fostered in most schools, which motivates the approach of enriching the work in educational institutions. For their part, Gómez Alvarado and Gutiérrez Bolaños (2020) support the previous idea and explain the great importance of creativity in the advancement of societies from a cultural and economic perspective. Finally, due to the above and regardless of the educational modality in which individuals are, it is necessary to promote the development of their emotional intelligence and creativity (Alcaldía Mayor de Bogotá, Secretaría de Educación, 2014).

Theoretical framework

Schooling

Talking about education implies talking about change. A change that has been reflected throughout the ages as a fundamental element for the development of society, culture, family and, in general, the contexts in which individuals develop (Casares García and Soriano Díaz, 2014).

The United Nations Educational, Scientific and Cultural Organization (Unesco) (2013) states that education, as the constituent axis of its mission, is a factor that "transforms lives" and that it affects nutrition, tolerance, employment, economy, physical integrity, among others, of individuals. Therefore, education corresponds to a continuous training in the individual and social sphere that has its basis in achieving integral development that includes everything related to their honor, obligations and rights (Ministry of National Education [MinEducación], 2024). Thus, education requires continuous transformation processes that adapt to the needs, characteristics and objectives of individuals and communities (González Hermoso de Mendoza, 2013). Hence, it is necessary to address various factors, such as the particularities of students, their context, the curricular compendium, strategies and measurable scopes of teaching (Unesco, 2017).

It is necessary to emphasize that the focus of the aforementioned factors is on individuals, since aspects such as the stability of physical, social and emotional health are essential to ensure a teaching environment conducive to the achievement of the objectives of the educational community and the pursuit of the fulfillment of the right to education of all people. In this aspect, the role of teachers is fundamental, which is why they must be qualified, prepared, motivated professionals with the necessary support tools (Unesco, 2017).

Education is a transformative process that is mediated by independent aspects that need to be coordinated to achieve the fulfillment of the proposed objectives within a community in the social and political sphere (Leliwa et al., 2016). Thus, it is clear that education is not equivalent to schooling, since the latter is related to attendance at formal school centers established by age, while education is an encompassing concept that transcends other spheres, such as the family, society and even the entire world (Bisqueria Alzina and Hernández Paniello, 2017).

The term education in a schooling context, as it is understood today, is established between the sixteenth and eighteenth centuries. Prior to this time it was understood as the work performed by parents attending to the nutrition, upbringing and behavioral norms of children within a family (Cuesta, 2014).



Based on this differentiation, one of the controversies established in relation to education is centered on the educational environments in which it takes place: schooling and unschooling or home schooling. Considering this difference, the Office of the Mayor of Bogota, Secretariat of Education (2014) establishes that schooling refers to that offered by formal education centers, subject to governmental controls and regulations, which individuals attend by establishing themselves in groups determined by their age and level of cognitive development, in order to contribute to their social integration and comprehensive development. Among the advantages of this educational context is the fact that children find an opportunity for development in school centers that their parents surely did not have. It also makes it possible for them to receive attention and affection that many children do not receive within their families, achieving differentiation and affirmation as they interact with their community in the educational experience.

The high degree of government interest in education has led to the creation of strategies in the school context to educate citizens. Some of these strategies implemented in Colombia are consolidated in the establishment of the single school day (between 6 and 8 hours of class per day), which in 2017 reached 563 111 students in 1107 public institutions (MinEducación, 2017). Another strategy was focused on infrastructure, carrying out contracting or construction of 30 693 new classrooms throughout the Colombian territory, to be delivered in their entirety before the end of 2018. There are also aspects in relation to teacher training and accompaniment manifested in 7,000 professionals who have achieved free master's degrees in the best universities in the country, contributing to better results, reflected in the announcement of the Organization for Economic Cooperation and Development (OECD), which identifies Colombia as the "sixth fastest improving education system", in a total of 71 countries presented (MinEducación, 2013). This reflects the great transcendence of teachers in educational action and the value of school-based education supported by national and international public institutions.

Indeed, government attention to educational institutions favors the recognition of the reality of societies, since it is there where most of the citizens of a community are represented. Social, cultural, economic and emotional aspects can be perceived to direct the teaching actions supported by the institutions established for this purpose (Alcaldía Mayor de Bogotá, Secretaría de Educación, 2014).

Despite the above, it is necessary to recognize that, even with the great effort of governments to contribute to education, aspects such as violence, child abuse, insecurity, bullying and stress, among others, impact the lives of children (Alcaldía Mayor de Bogotá, Secretaría de Educación, 2014). One of the most notable aspects in this sequence of situations is bullying. While it is true that the aim is to train children in educational entities, external influence reaches the educational environment and generates social disorder in which the "weakest" is hurt, and opportunities are taken to mock or undermine the dignity of the other (Carrasco Lozano and Veloz Méndez, 2014).

Home education

For its part, the home-based educational context has been generalized under the term homeschooling, which means "school at home" (Herwina, 2016). Other terms for this form of education are "home education", "home-based learning" or "independent schools"; "home education", "home based education", "education othenoise", "elective education" in the United Kingdom; "L'école à la Maison", "l'instruction en famille" and "l'instruction a domicile" in France; "scuola familiare" in Italy, and "ensino do-



méstico" in Portugal. However, the most widely used term is the one initially mentioned: homeschooling, since the United States was the most notable precursor of this system in the 1970s and 1980s, influencing the entire world to this day (Goiria Montoya, 2012).

Homeschooling refers to the model in which parents or guardians assume the role of educating their own children with a clear sense of responsibility (Avalos-Obregón et al., 2018). In this way, parents, even if they do not have teacher training, educate in a natural environment in all areas of knowledge, in the same way that they teach life skills, for example, learning to walk (Exeni, 2015; Herwina, 2016). Goiria Montoya (2012) states that this method is under development in a minority population compared to the users of public education; however, it responds to the right exercised by citizens to educate with new strategies that finally achieve the objective of education in terms of providing useful and integral men and women to serve society.

Linked to homeschooling are the advantages of keeping children in a daily learning environment, in which they receive their education with feelings of security and acceptance (Herwina, 2016). In this way, continuity is maintained in the formation of children, since the family is the environment in which the social, linguistic, affective and behavioral bases of people are implanted as preparatory tools for life in the community (Haq et al., 2022; Pozas et al., 2021; Secretaría de Educación Distrital de Bogotá, 2014).

For its part, technological development has been a key strategy for the development of homeschooling. Through this medium, useful guidelines and materials are offered that guide parents and lead them to the use of libraries, bookstores, public entities and participation in groups, in which experiences that strengthen education and at the same time this teaching modality are socialized (Carlson, 2020; Herwina, 2016).

Despite the above, in terms of the great interest of parents in generating quality education for their children, there are limitations in this educational model. One of them is related to the lack of government certification for homeschool children, which at the same time generates a lack of controls and monitoring (Cooper et al., 2016; Herwina, 2016). This could put children at risk in terms of their safety and proper development. Another aspect is found in the motivations of some parents who assume this responsibility because of limitations to access to public education (due to distance or transportation issues) and they themselves have neither the tools nor the necessary training to fulfill the goal of education (Herwina, 2016). On the other hand, Rothermel (2015) shows that homeschooling requires attention and time from parents, which makes it impossible for them to work externally. This could result in a lower income of resources, which could jeopardize the economic stability of the family.

Finally, despite the advantages or disadvantages that can be obtained from homeschooling, there is a relevant truth that cannot be ignored and it is the fact that this model is impacting the whole world and is constantly growing (Brian, 2016). This is ratified by a study conducted in the United States in which it was observed that the approximate number of home-schooled children during 1999 was 850 000 and rose to 1 773 000 in 2012. The most significant increase was in the period 1999-2007 (National Center For Education Statistics [NCES], 2016).

After exposing the positive or negative aspects of the education in relation to the environment where

In the case of schooling or homeschooling, it is necessary to mention that the objective of the professionals involved in education must be to be available to promote the harmonious development of children and contribute to a tolerant and balanced society.

Emotional intelligence

Emotions are inherent to human beings, which is why it is fundamental to consider them in all areas of life. In the pedagogical field, emotions are recognized as a tool that cuts across all areas of the educational environment. For this reason, the management of affection as part of emotional intelligence contributes to the maintenance of better relationships, positive treatment, an assertive communication system and the recognition of the other with their respective rights (Alcaldía Mayor de Bogotá, Secretaría de Educación Distrital, 2014).

Other beneficial aspects of emotion management in the interpersonal domain in children and young people within an educational environment are expressed by Bisquerra Alzina (2011) and Ruiz-Aranda et al. (2013):

- They contribute positively to interpersonal and social relationships.
- They increase sensitivity and the desire to give and share with others, fostering a willingness to help and support their peers.
- There is a greater willingness to trust others.
- Enjoys relationships and friendships.
- Provides emotional well-being.
- Emergence of sudden behaviors.

From the cognitive point of view, emotional intelligence has an impact and promotes a taste for learning (Alcaldía Mayor de Bogotá, Secretaría de Educación Distrital, 2014). It also leads to the creation of strategies for the use of intellectual potential and fosters creativity to respond to various situations and problems. It facilitates the ability to decide, perseverance, motivation and security that allows them to face new challenges (Bisquerra Alzina, 2011). In general, it favors higher academic achievement and lower student dropout rates (Unesco, 2013; Ruiz-Aranda et al., 2013).

Creativity

While it is true that the term creativity has been used throughout the ages in many contexts (Wreen, 2015), it is necessary to define it. According to Rodrigo Martín and Rodrigo Martín (2012), creativity comes from the Latin *creare* which implies doing or generating something that did not exist. Wreen (2015) exposes that creativity is a word related to the verb to create, the adjective creative and, in general, with nouns such as created and creation. It refers to realizing something. Which implies a "creation", which is the result of what was realized. In this way, everything an individual does concludes in a "product" that not only

includes physical aspects (objects), but also mental states, constructs, structures, situations, activities (Wreen, 2015; Marina, 2013).

From the above, it is concluded that creativity does not exist in itself, but contains factors that determine it. These include the individual creator, a fundamental factor of creativity, whose level of creativity is determined by his or her history, beliefs, actions, values, skills, cognition, intelligence, etc. (Wreen, 2015), the sequence that makes the creative result possible, the result of the creative action and the circumstances that make creative actions possible (Rodrigo Martín and Rodrigo Martín, 2012).

Finally, attention is focused on the proposal of Wallas (1926), mentioned by López-Fernández and Llamas-Salguero (2018), in which it is proposed that the creative process involves the following phases: preparation, incubation, illumination and verification.

Creativity provides tools for self-motivation and support for learning processes, offers the possibility of providing solutions to problems with originality, a defined and precise approach, takes advantage of available tools and overcomes obstacles (Lara Coral, 2012). In addition, it provides the adaptability required by individuals in a changing world, which demands answers and interventions in so many facets of existence. Research makes it clear that each phase of the creative function shares activation of brain processes linked to structures that intervene directly with learning processes (López-Fernández and Llamas-Salguero, 2018). This allows us to deduce that creativity is related to functions related to cognition (Klimenko, 2015).

In addition to the above description, it should be noted that creativity is a tool that enables the survival of individuals, and drives them to generate, know, change, invent, experiment, etc., leading the human being to the discovery of objectives and solution of problem situations that, when solved, lead to satisfaction and, therefore, happiness (Marina, 2013). In addition, creativity in individuals contributes to the formation of the personality and, with this, the achievement of two important objectives in the process of educating: integral development (physical, mental and emotional) and the generation of transforming and transcendent people (Rodrigo Martín and Rodrigo Martín, 2012).

In attention to the importance of the above ideas, Unesco (2017) establishes creativity as one of the aspects to be developed in education.

Finally, Klimenko (2015) draws attention to developing creativity in individuals, so that they are able to find answers to everyday situations, influence societies, take advantage of the use of resources and, finally, provide a suitable environment for present and future generations.

Methodology

Design

The design used in this study is quantitative, experimental, descriptive and comparative. The va-

The independent variable is the educational method (schooled and home-schooled). The study contains two dependent variables: level of creativity and emotional intelligence.

Instruments

Table 1 shows the neuropsychological variables studied in this research with their respective scales.

Table 1.

Neuropsychological variables

Variable	Instrument
Emotional intelligence (quantitative variable)	TMMS-24 Scale
Creativity (quantitative variable)	Torrance Creative Thinking Test, adapted for Spanish language

Source: Own elaboration.

The instruments used for the evaluation of the variables are as follows:

- **TMMS-24 Scale:** It was chosen because it has been used in previous studies in the assessment of the emotional intelligence variable, providing certainty of validity and reliability. It has been easily accessible and provides basic information required for the study in the proposed age range.

This scale consists of 24 statements, distributed in blocks of 8 to evaluate emotional attention, emotional closeness and emotional repair. The response options (Table 3) are distributed from 1 to 5 and the evaluation ranges of the emotional intelligence test are shown (Table 2) in the three aspects assessed by the test.

Table 2.

Response options TMMS-24 scale

1	2	3	4	5
No agreement	Somewhat in agreement	Quite in agreement	Very much in agreement	Totally agree

Source: Own elaboration.

Table 3.

TMMS-24 scale evaluation ranges

Factors	Scores	Men	Women
Attention	Needs to improve its attention: it pays little attention	<21	<24
	Adequate attention	22-32	25-35
	Needs to improve its attention: it pays little attention	>33	>36
Clarity	Clarity must be improved	<25	<23
	Adequate clarity	26-35	24-34



Factors	Scores	Men	Women
Repair	Must improve repair	<23	<23
	Adequate repair	24-35	24-34
	Excellent repair	>36	>35

Source: Own elaboration.

- Torrance creative thinking test: It was chosen because it has been used in previous studies in the assessment of creativity, it is easily accessible and collects basic information on the variable in the age range required for this study.

The test consists of three activities:

1. To make a drawing from a given figure (oval).
2. To make up to ten drawings from already established traces.
3. Make up to 30 drawings using two parallel lines at a time.

The activities assess the level of creativity in the components of:

- Originality: Measured by novel responses, using a predetermined list of scores (0-5) for each age. Those drawings not on the list receive the highest score.
- Fluency: Measured by the number of drawings that are generated in activities 2 and 3.
- Flexibility: It is valued by the variety of categories in which the drawings made by the children are placed (for example, animals, food, geometric shapes, etc.).
- Elaboration: Responds to scores assigned to each drawing according to the guidelines established by the test (e.g., use of color, variety of title, additional decoration to each figure, etc.).

Finally, once the scores for each component are summed, a percentile is assigned according to the guidelines established for each age. Overall creativity is produced as a result of the sum of the scores of all the components and, finally, a percentile is assigned to this value.

Results

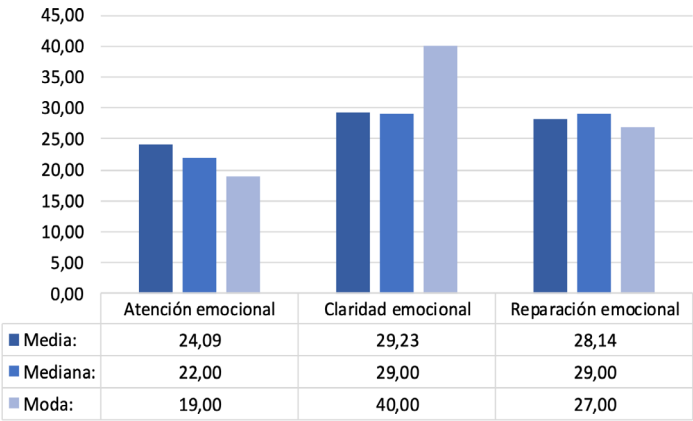
Descriptive analysis

In the emotional intelligence variable, school children present adequate levels in each of the factors (attention, clarity and emotional repair). However, it is relevant to note that, in the case of the



In the case of emotional attention, the mode remained in the "Must improve" range. In contrast, in emotional clarity, a mode was observed at the "Excellent" level for this factor (Figure 1).

Figure 1.
Descriptive statistics. Emotional intelligence factors in school children

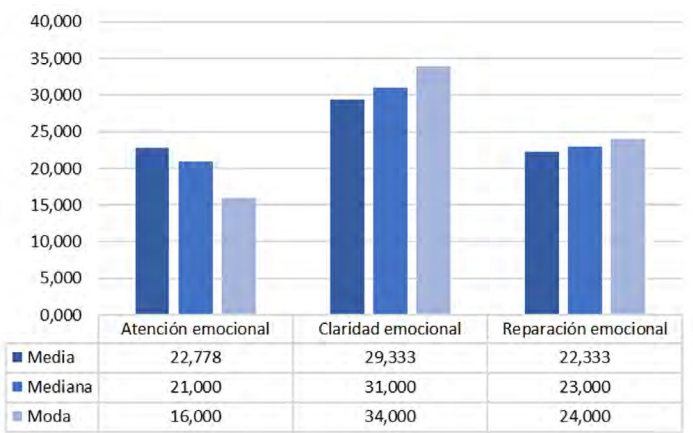


Source: Own elaboration.

Since the ranges of each factor of emotional intelligence are different for men and women, it is necessary to mention that the value of the mean of attention is interpreted according to gender. That is, if the sample were determined only by women, it would be said that "They should improve"; but, if it were determined only by men, it would be said that "They have adequate attention". Due to this divergence, it could be concluded that this mean value corresponds to the limit between "Should improve" and "Adequate" for the emotional attention component in the group of *homeschoolers* (Figure 2).

For the other two factors, the means are located, respectively, in "Adequate emotional clarity" and "Should improve emotional repair". In this case, the values coincide for both genders.

Figure 2.
Descriptive statistics. Emotional intelligence factors in homeschoolers.



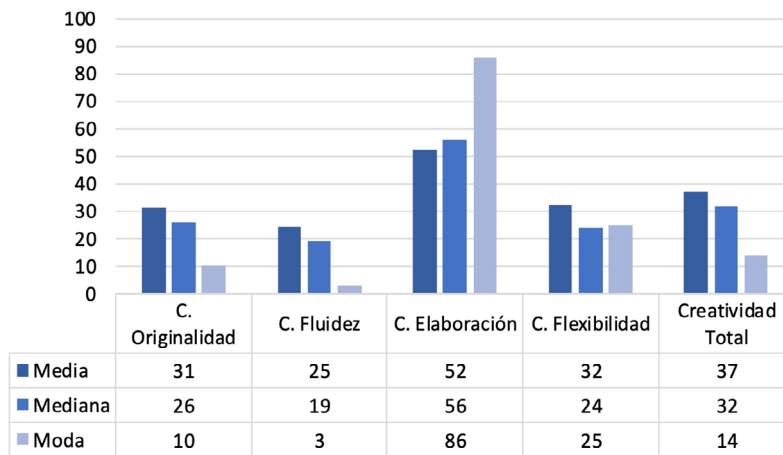
Source: Own elaboration.

In the creativity variable, the results of central tendency in the components of creativity and total creativity of schoolchildren are described (Figure 3). It is observed that the components of originality, fluency and flexibility are below the 50th percentile, which shows that, compared to other children, the levels of these components are lower.

In the case of the elaboration component, it can be observed that it is around the mean percentile, being a positive result when compared to children of the same age, and the mode reflects a consistent higher percentile value (86).

Figure 3.

Descriptive statistics. Creativity factors in school children

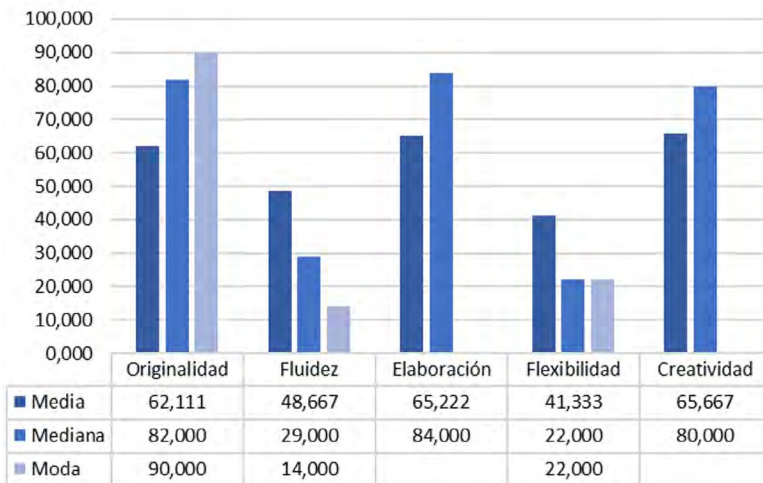


Source: Own elaboration.

In the case of total creativity, the result is a mean of 36.80, which indicates a creative development generally lower than that of children of the same age. The mode reflects the low percentile in which most of the subjects were placed when making an overall assessment of their creativity.

Figure 4.

Descriptive statistics. Creativity factors in homeschoolers



Source: Own elaboration.

Figure 4 shows the results of the assessment of each of the components and total creativity in the out-of-school children. It can be seen that the fluency and flexibility components are located in a percentile below the mean (50), which implies that they scored lower in these aspects in relation to other children of the same age.

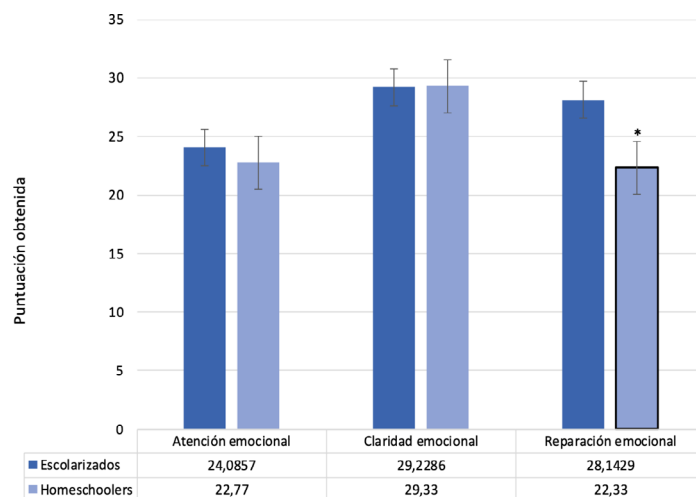
In terms of originality, elaboration and total creativity, it can be noted that the mean is inclined towards a higher percentile that shows a degree of better creativity of the children in the sample compared to other children of their age (Figure 4).

Inferential analysis (nonparametric test)

Regarding emotional intelligence, Figure 5 shows that in the components of attention and emotional repair, the schooled children obtained higher values than the *homeschoolers* and were equal in the results of emotional clarity. However, there is only a statistically significant difference in the result of the nonparametric test in the repair component between the two groups ($p = 0.0111$).

Figure 5.

*Inferential statistics. Comparison of emotional intelligence components between both groups * $p \leq 0.05$.*



Source: Own elaboration.

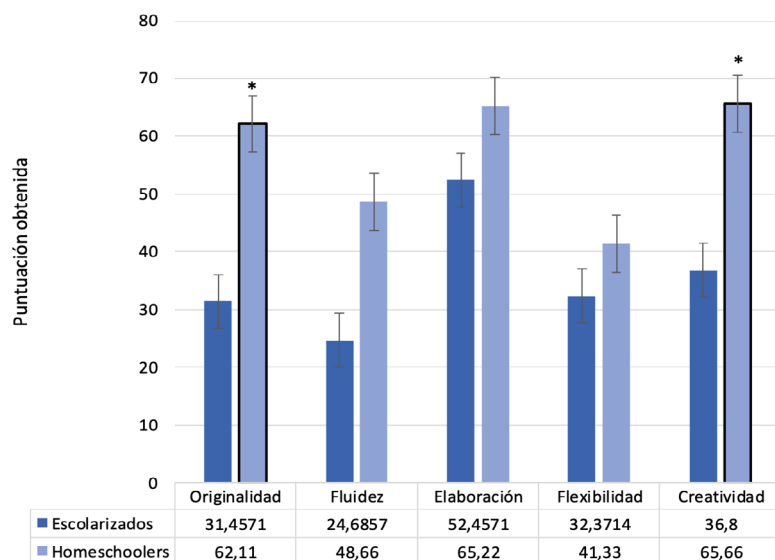
In the comparison between the two groups, it is observed (Figure 6) that the group of *homeschoolers* shows a greater development of creativity than school children. In components such as originality and fluency, the values of the *homeschoolers* are twice as high as the percentile placement obtained by the school children, and in total creativity there is a difference of 28.86 percentiles between the two groups.

However, the statistical analysis of the Mann-Whitney U test results shows that there is only a statistically significant difference in the comparative values of originality ($p = 0.03$) and total creativity ($p = 0.0141$).



Figure 6.

*Inferential statistics. Comparison of creativity factors between both groups * $p \leq 0.05$.*



Discussion

The results reflect that there is a statistically significant difference only in one of the factors of emotional intelligence, which shows that schooled children have better development of this variable compared to *homeschoolers*. The above contradicts what is stated by Brian (2016), who emphasizes that homeschooled children have a positive emotional development compared to schooled children.

The study shows that school children showed significant differences, but only in one of the factors of emotional intelligence. However, Medlin (2013) mentions that parental commitment to personal development and interaction in various social groups contribute to the development of emotional intelligence more favorably than in school children, an aspect that is not reflected in this study. Instead, Bisquerra Alzina and Hernández Paniello (2017), who mention that the school environment facilitates the development of emotional intelligence because group tasks give a sense of well-being to the participants, are accepted.

On the other hand, community participation, as mentioned by the NCES (2016) in benefit of the development of emotional intelligence, was proven in this study in relation to schooled children and not *homeschoolers*, as it was raised at the time. Thus, school education also provides important social skills that contribute to the development of emotional intelligence (Pearlman-Avnion and Grayevsky, 2019).

The second objective is aimed at comparing the level of creativity of both groups. It was expected to find that homeschooled children would have greater creativity, due to the interaction with their peers, teachers and the multiple strategies used by teachers in their educational work (Menchén Bellón, 2015; Rodrigo Martín and Rodrigo Martín, 2012). However, the results reflect that *homeschoolers* present greater creative development in two of the four components assessed with the

instrument. This differs from the thinking expressed by the aforementioned authors. It is reflected in this study that the influence of the different motivating elements of creativity at school, as mentioned by Díaz Gómez and Mitjás Martínez (2013), were not representative when making the comparison between both groups. On the other hand, Elisondo and Donolo (2014) mention that the relationship with peers is an enhancer of creativity. However, this study reflects that this relationship does not necessarily provide a better level of creativity.

Finally, the affirmation of Herwina (2016) who emphasizes that the creation of meaningful and everyday spaces of the home enable appropriate creative development is verified.

Conclusions

Significant differences exist between schooled boys and girls and *homeschoolers* between the ages of 8 and 10 as follows:

- Children in school (35 of this sample) show higher scores in the emotional intelligence component.
- *Homeschoolers* (9 of this sample) show greater creative development than school children, finding a significant difference in the originality component.
- 100% of the *homeschoolers* in this study attend creative programs in addition to their learning activities at home, which may have greatly influenced the results obtained on the creativity variable.

Conflicts of interest

It is declared that this article has no conflicts of interest that may involve third parties.

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