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CHILDREN WITH VISUAL DISABILITIES AND THEIR CREATIVE ACTIVITIES: CONTRIBUTIONS FROM THE HISTORICAL-CULTURAL PERSPECTIVE

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ABSTRACT

The Historical-Cultural Perspective has defended the centrality of imagination for child development and the need to understand disability in a more positive, social and inclusive way. In this theoretical-argumentative work, our objective was to problematize how creative activities are developed in children with visual impairment. Based on the assumption that these children have particularities in the way of perception and production of images and configure alternative forms of organization of creative activity, a bibliographic survey was carried out on the scientific production of the Historical-Cultural matrix that involves these themes between the years of 2007 -2017, in the databases of the Brazilian Digital Library of Theses and Dissertations, PROQUEST and B-ON (Portugal). We identified that the studies about these themes are reduced, but they move towards defending that situations of play, creative activity and authorship are privileged spaces for children with visual impairment to interact with the environment, objects and social peers.

Keywords: Children's imagination; visual impairment; Historical-Cultural Psychology.

Niños con deficiencia visual y sus actividades creadoras: contribuciones de la perspectiva histórico-cultural

RESUMEN

La Perspectiva Histórico-Cultural ha defendido la centralidad de la imaginación para el desarrollo infantil y la necesidad de entenderse la deficiencia por un sendero más positivo, social e inclusiva. En ese estudio teórico-argumentativo nuestro objetivo fue problematizar cómo las actividades creadoras se desarrollan en niños con deficiencia visual. Partiéndose del presupuesto que esas presentan particularidades en el modo de percepción y producción de imágenes y configuran formas alternativas de organización de la actividad creadora, se realizó una recopilación bibliográfica sobre la producción científica de matriz Histórico-Cultural que abarcan esas temáticas entre los años de 2007-2017, en las bases de datos da Biblioteca Digital Brasileña de Tesis y Tesinas, PROQUEST y B-ON (Portugal). Identificamos que los estudios que abarcan esas temáticas son escasos, pero avanzan en el sentido de defender que las situaciones de juegos, la actividad creadora y la autoría son espacios privilegiados para los niños con deficiencia visual interactuar con el ambiente, los objetos y los pares sociales.

Palabras clave: Imaginación infantil; deficiencia visual; Psicología Histórico-Cultural.

Crianças com deficiência visual e suas atividades criadoras: contribuições da perspectiva histórico-cultural

RESUMO

A Perspectiva Histórico-Cultural tem defendido a centralidade da imaginação para o desenvolvimento infantil e a necessidade de se entender a deficiência por uma via mais positiva, social e inclusiva. Neste trabalho teóricoargumentativo nosso objetivo foi problematizar como as atividades criadoras se desenvolvem em crianças com deficiência visual. Partindo do pressuposto de que essas crianças apresentam particularidades no modo de percepção e produção de imagens e configuram formas alternativas de organização da atividade criadora, realizou-se um levantamento bibliográfico sobre a produção científica de matriz Histórico-Cultural que envolve essas temáticas entre os anos de 2007-2017, nas bases de dados da Biblioteca Digital Brasileira de Teses e Dissertações, PROQUEST e B-ON (Portugal). Identificamos que os estudos sobre essas temáticas são reduzidos, mas avançam no sentido de defenderem que as situações de brincadeira, a atividade criadora e a autoria são espaços privilegiados para as crianças com deficiência visual interagirem com o ambiente, os objetos e os pares sociais.

Palavras-chave: Imaginação infantil; deficiência visual; Psicologia Histórico-Cultural.

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INTRODUCTION

The act of imagining and creating is complex and specific to mankind. The abilities to perceive the environment and intentionally create strategies for survival - displaced from the concrete perceptual field - characterize the imagination. Although it is a commonly used term, the concept of imagination reveals differences in its way of being understood, both in history and in Psychology itself (Vigotski, 2009; Silva, 2012).

For L. S. Vigotski (1896-1934), precursor of the Historical-Cultural Perspective, the imagination involved a reconstructive or reproductive and combinatorial or creative activity. The reconstituting - or reproductive dimension is directly related to memory and it is based on the reproduction of means of conduct already elaborated and that refer us to past impressions. There is a relationship between memory and imagination, no doubt, because the human brain preserves the lived experience, which favors the reproduction of learned actions. The second type of activity, called combinatorial or creative, refers to the creation of new images or actions that distance themselves from reproduction. Although the brain keeps the experience, it reworks and recombines it articulated to the elements of reality, promoting the emergence of new behavioral patterns, new situations, actions, feelings and objects. Therefore, the man is able not only to retain experiences and reproduce them, but, from them, to create new ways of thinking and acting. In other words, we do not repeat what we have lived, but through imagination we plan the future, transform the present and reconstruct the past (Vigotski, 2009).

From an ontogenetic point of view, this implies that imagination is the fundamental basis for creative activity, articulating itself with the broader cultural aspects of human experience, whether in art, science or technique. Everything that is part of humanity's cultural collection is the product of its creation. Vigotski (2009) explains that all cultural artefacts are the result of a complex and historically demarcated symbolic operation. Such an operation, also stemming from the experience itself with the symbolic field, materializes as *crystallized imagination*. This means that the creator is always the product of a specific historical time and of the social environment; his invention emerges from the needs prior to him and is anchored in those that go beyond him (Vigotski, 2009).

Vigotski (2003) draws our attention to what would be the function of imagination? It would be responsible for the "organization of forms of behavior that have not yet occurred in the experience of human beings" (p. 153). Imagination, in these terms, is directed to a *future*. Cruz (2015), inspired by Vigotski's ideas, states that imagination is a complex psychic activity that gives rise to what we call the psychological system; responsible for the emergence of the functional system.

> For such complex forms of activity, which go beyond the limits of the processes that we usually call functions, it would be correct to use the name of psychological system, given its complicated functional structure. Characteristics of this system are the predominance of cross-functional connections and relationships (Vigotski, 2001, p. 436).

Agreeing with this thought, Cruz (2011) discusses the need to study the relationship between imagination, language and cognition in the process of developing knowledge, with the premise that these relationships change during development. They are dynamic and also vary according to the different "ways of elaborating knowledge and creative activity" (Cruz, 2011, p. 94) in ontogenesis and take on specific shapes, especially in childhood.

In this line, our interest in this theoreticalargumentative work is to problematize, through a refined bibliographic survey, how creative activities (playing, narrating and drawing) develop in children who perceive and interact with the world in a different way. The experience of visual impairment seems to us opportune to understand the particularities in the way of *perception and production of images* that involve these subjects, configuring alternative forms of organization of creative activity, as we will approach.

Understanding disability and its potential

Vigotski (2012), already at the beginning of the 20th century, criticizes the limited conceptions about the development of the person with peculiarities in development. For him, the general laws of development are the same for each and every child, even those with disabilities, being only distinct from a qualitative point of view and, therefore, mediational.

At the time, the Belarusian theorist scolded studies focused on understanding development only by the quantitative aspect, as some classical methods only measured the degree of the deficiency, however, they did not explain it. In the opposite direction of these approaches, he sought to investigate the way in which the organization of psychic functioning in this condition and the potential of development took place, through a way of understanding that was much more positive, social and inclusive (Nuemberg, 2008).

For Vigotski (2012), disability develops at two levels: primary and secondary. The first refers to the organic, physiological aspect. The secondary concerns how culturally the disability is signified. Secondary disability is directly linked to the socio-historical environment in which it is experienced. In fact, the sense organs are characterized as biological, but they are constituted as social organs, since their perception capacities are intertwined with the human experiences (Barroco, 2007).

Nuemberg (2008) clarifies that the limitations faced by people with disabilities are also social, as the world is organized for what is understood as a standard of normality. Society is geared towards a hegemonic human development profile, which, consequently, creates obstacles for the effective participation of people with disabilities in society.

For Vigotski (2012), when it comes to blindness, it is not just an absence of the sense of sight; it reconfigures the person's potential. Thus, blindness generates new strategies for the functioning of the psychic system, transforming the usual functioning. In other words, paradoxically, blindness is a source of manifestation of abilities, skills and strength.

Thus, Vigotski (2012) warns that the blind person is not submerged in darkness, as it is thought. For him, we cannot compare it with a blindfolded person, as he experiences another form of visuality and his psychic functioning is configured in another way.

Assuming the vanguard of what is now understood by inclusion, Vigotski warns that the understanding of blindness in modern science must be based on three axes, namely: a) the prevention of blindness aimed at the popular strata; b) the elimination of education for the blind based on isolation and disability; and c) the social work of blind people. He points out that the work, here, does not refer to philanthropy or assistance, but "to the authentic essence of work, the only one capable of creating for the personality the necessary social position" (Vigotski, 2012, p. 113, our translation).

These three dimensions are central because blind people need to overcome the social feeling of inferiority, which involves "a process (organic and psychological) of creating and recreating the child's personality" (Vigotski, 2012, pp.16-17) that it is not individual, but essentially relational. This implies that the appropriate mediation and appropriate resources used with children with disabilities in the school and clinical environment, for example, directly impact their developmental trajectory.

Next, we will discuss the singularities of visual impairment and the specificities of imaginative functioning that involve playing, narrating and drawing children in evidence, based on research conducted in the last ten years that take the historical-cultural perspective as a theoretical matrix.

The creative activities of the visually impaired child: contributions from studies developed from the historical-cultural perspective

The act of seeing, however organic it may seem, it is also linked to the cultural roots in which the individual is immersed. At birth, the child perceives the light in an unstable, diffuse way. As the child grows, the vision develops, requiring learning and interaction with the environment. This means that the child then *learns to see*. "People are not born knowing how to see, they learn to see by developing the structures of the eyes and the visual cortex" (Lima, 2006, p. 73).

Lima (2006) states that 75% of perception is the responsibility of vision, with hearing, smell, taste and touch being other modes of perception developed. Sensory deficiencies, then, arise when there is a change in one of the sense organs, more specifically, in vision and / or hearing.

The sample of the Demographic Census of the Brazilian Institute of Geography and Statistics [IBGE] (2010) reveals that, among the deficiencies in Brazil, the visual has the highest incidence rate, representing 18.8% of the population. It should be noted that there is a range of specifics to designate the term. The delimitation of the group of blind and low vision, for example, refers to visual acuity (if you measure what is perceived at a certain distance) and the visual field (amplitude of the area reached by vision) (Count, 2005; Lima, 2006; Sá, Campos, & Silva, 2007; Raposo & Carvalho, 2015).

In the case of visual impairment, based on the World Health Organization (WHO), Conde (2005) clarifies that there is no absolute concept, as there are varying degrees of residual vision. Total blindness refers to that in which there is no perception of light, and legal blindness is specified in Decree No. 5,296, of December 2, 2004 (which regulates priority care for people with disabilities):

Visual impairment: blindness, in which visual acuity is equal to or less than 0.05 in the best eye, with the best optical correction; low vision, which means visual acuity between 0.3 and 0.05 in the best eye, with the best optical correction; cases in which the sum of the measurement of the visual field in both eyes is equal to or less than 60°; or the simultaneous occurrence of any of the previous conditions (Art. 5, paragraph 1, item I, point c).

Lima (2006) problematizes that the great incidence of visual impairment is evident in the popular strata, in which living conditions are precarious. The surveys (Albuquerque & Alves, 2003; Carlos et al., 2009; Santos, Velarde, & Ferreira, 2010; Anjos, 2013) indicate the lack of prenatal, natal and post-natal care, of vitamin A, basic food conditions for pregnant women, infectious diseases, tumors, glaucoma, cataracts, diabetes mellitus etc. as some of the factors responsible for vision problems.

However, of the children legally designated as blind, according to the references described in the decree presented above, 70% of them have some practical use of vision. For this reason, in the educational and assistance scope, the presented blindness report is not enough to understand what the child, in fact, sees. Thus, it is necessary to carry out a functional vision assessment so that mediations both in the family and at school - contexts of greater child socialization - are effective for the development of the child, in order to enhance the residual vision (Sá et al., 2007).

Thereby, researching how the creative processes of blind or low vision children develop implies recognizing their particularities and ways of imagining and creating that, often, can differ from the established pattern as normal or unique.

In this sense, we carried out a national (articles, theses and dissertations) and international (articles) bibliographic survey on scientific production about the subject of visual impairment and imagination, specifically with regard to children's creative activities of playing, narrating and drawing in the period of the last decade - between the years 2007 and 2017. The databases used were: The Brazilian Digital Library of Theses and Dissertations, PROQUEST and B-ON (Portugal).

Initially, in order to have a general overview of the research framework about visual impairment, we used the following descriptors¹, which guided us about the work developed: a) *visual impairment*: 717 works - 550 dissertations / 167 theses; b) *blindness*: 333 works - 231 dissertations / 102 theses; and c) *low vision*: 526 papers - 399 dissertations / 127 theses.

We emphasize, however, that although visual impairment is a more comprehensive term than blindness and low vision, the number of studies found with the descriptor visual impairment (717) does not correspond to the sum of the investigations developed (859) with the blindness (333) and low vision (526) descriptors. This leads us to infer that, although we are very close, the issue of visual impairment was not necessarily considered. Even because the term blindness, for example, can be used in the area of Letters in its metaphorical sense. Anyway, evaluating the number of searches found with the descriptor *visual impairment*, we realized that, on average, 71 searches were carried out per year, a considerable amount, which reveals the interest and concern with the theme. We can see that there was a greater amount of production between the dissertations than in the theses.

Another point that calls our attention refers to the number of works associated with the descriptor *low vision*. It overcomes the term *blindness*. Although it is not our goal to clarify the reason for this situation, the fact seems curious to us. Firstly, due to the surprising amount of research aimed at low vision and / or blindness, and secondly, to those who did not meet at the intersection of the two descriptors.

Therefore, in order to improve our bibliographic research, although we understand that the children's creative activities of playing, narrating and drawing occur in an amalgamated way (Costa & Silva, 2012; Costa, Silva, & Souza, 2013), we decided to divide them into different descriptors, namely: a) visual impairment / blindness / low vision and play; b) visual impairment / blindness / low vision and make-believe; c) visual impairment / blindness / low vision and symbolic play; d) visual impairment / blindness / low vision and design; and e) visual impairment / blindness / low vision and narrative. We highlight, next, the research found in the area of Psychology and Education that take the historical-cultural perspective as an epistemological matrix of studies.

In general, imagination and creation occupy a prominent place for Vigotskian thought. We can see that there are several studies (Maheirie, Smolka, Strappazzon, Carvalho, & Massaro, 2015; Schroeder & Schroeder, 2011; Schwede & Zanella, 2013; Silva, 2012; Silva, Costa, & Abreu, 2015) that address the creative processes and their relationship with child development. For the delimitation of our work, we dedicate attention to studies that bring contributions specifically to issues related to visual impairment and children's creative activities, as we will address below.

Silva and Batista (2007) carried out a research whose objective was to analyze the cognitive and imaginative acquisitions of a blind child with four years of age, who presented the hypothesis of also having the (rare) Rodriguez syndrome, "which causes growth and development delay "(p. 150). The acquisitions analyzed were related to the use of objects in a conventional way (or not), development in play activities and the emergence of different ways of communication. The longitudinal study, divided into individual and collective sessions, lasted for two years and was carried out with a social group, in which the highlighted child participated.

¹ The descriptors were searched in the following languages: Portuguese, English and Spanish.

This group was made up of other visually impaired children, and many of them, with other particularities. Through observation, video recording and annotation of the sessions, the meetings were recorded and the data was constructed.

In a section of the research, through play, the authors stated that the participant was able to communicate with the researcher. The child-object-adult interaction was important for the acquisition and development of the researched child's language. Another point was the mediation of the adult was also decisive for the participant to interact with the toy. At first, this interaction occurred in an unconventional way. However, when the child, for example, received a drum, only from the mediation of the adult's language, the toy gained the socially established meaning.

In another way, in a bibliographic research, Silva and Costa (2011) investigated the link between early education, visual impairment and adapted toys. The study was carried out in digital scientific databases and in books directed to specific areas of Health (Ophthalmology and Neurology, Physiotherapy), Psychology and Special Education. The researchers analyzed and synthesized the texts read in order to answer two questions: a) the criteria used in the choice of toys and their respective adaptations for the visually impaired child; and b) the role of those responsible for stimulation, including the toys mentioned above. In this work, Silva and Costa (2011) emphasize the importance of offering toys that are appropriate to the stage of development of the visually impaired child, as the opposite can cause disappointments. Based on the studies and considering the safety of children, the researchers suggest that toys have specific characteristics, such as: contrast in colors, brightness, luminosity, sound, appropriate sizes, etc. For them, these particularities guide the look and enhance visual acuity.

In addition, based on their own experiences, added to the bibliographic survey carried out, the authors infer some important aspects, namely: a) the adapted toys are some of the effective strategies for the development of the child's residual vision, mobility and other behaviors with visual impairment; b) stimulation provides overwhelming benefits when the parents and the child show interest in initiating and maintaining this activity; and c) together with adequate stimulation, it is necessary to integrate it into an accessibility project that starts in the family itself (Silva & Costa, 2011).

In this perspective, Ruiz and Batista (2011, 2014) developed a study with blind or low vision children in order to understand the social interactions they perform and the adult's participation in this process. For that,

these interactions were observed and videotaped from games and appropriate toys made available to the participants. According to the authors, play can be understood as a driving space for the interaction between children with visual impairment to occur, with the child's mode of participation being flexible and dynamic. The adult's performance was also crucial at different moments in the make-up of make-believe, especially through the choice and description of the appropriate materials and the role that he can assume in the game itself. This conclusion goes in the same direction as the research previously presented (Silva & Batista, 2007).

Mattos (2011, 2015) focuses on the photographic image as a mediator of his research in children with visual impairment. In both works, she proposed that the investigation with children / young people (with and without visual impairment) should take place through photography. Mattos (2011) seeks to tension the different views that the children presented on the contexts in which they lived through the photographic images taken by them. In this way, an aesthetic workshop with five meetings was initially developed. Mattos (2011) explains that in the different activities carried out during the aesthetic workshop - through games, musicality, body stretching, contact with varied textures and sounds, theater plays, the act of photographing itself, etc. - it was possible to "reinvent feeling, hear and see" (p. 84). After the children participated in different experiences, each one received a disposable camera to be taken home so that they could produce their images about the contexts in which they lived.

In general, according to Mattos (2011), the photographs produced by the children revealed the different ways of seeing, presenting some characteristics in common. For example, images of family members, toys, interior places of the place where they lived, figures representing sound aspects, such as television, dog barking etc., were portrayed, or even places where the sense of smell also comprised photography such as, garden, plants, flowers etc.

In a later study, Mattos (2015), instead of focusing the analysis on the photograph itself, analyzes the process of photographing and producing the image. In other words, everything that involved the choice or not, of what and how to produce the photographs. In her study, the researcher held an aesthetic workshop divided into different meetings, in which she proposed to participants to walk on paths that simulated city spaces and, later, to produce photographic and audiovisual narratives.

In a succinct way, given the richness of the work, in its results, the researcher demonstrates that,

through the mediation of the other, the production of the narratives collaborated for the widening and constitution of the different looks and meanings of the participants involved. According to Mattos (2015), children / young people took some photographs, perceiving the environment through touch, as well as, through the eyes of others, through language.

Finally, Albarran, Cruz and Silva (2016) in a theoretical article about playing blind or low vision children, point out the importance of this activity for child development in different theoretical movements in Psychology. In a literature review in the integrated database of the University of Brasília, in the Federal District, and in oasisbr, the authors highlight research based on the historical-cultural perspective developed in Brazil during the period 2004-2014.

In the meantime, they found that historical-cultural studies point to the relevance of adult mediation in the play of children with visual impairments, in addition to the importance of make-believe for questions about mobility and orientation. According to the authors, the works also indicate playing as a driver of social interaction, insofar as it promotes the understanding of rules and culture. In addition, as the study points out, playing can be a *locus* for the imagination development, since it implies the elaboration of scenarios, the assumption of roles and other elements that make up the game (Albarran et al., 2016).

Other works, such as those of Celeste (2007), Sieiro (2013), Medeiros (2013), Ferroni and Gil (2012) and Freitas and Gil (2012), despite not being affiliated to the Historical-Cultural Perspective, also reveal the efforts tracked to understand the issues related to the development of the visually impaired child. In relation to the imaginative and creative process, more specifically on children's creative activities, we perceive playing as occupying a prominent place among the works found. We note that, although the studies do not have as a central objective the issues that circumscribe the activity of playing, to a certain extent it emerged as a locus for research to develop. The situations of make-believe, free or structured, were chosen to be observed in order to study the visually impaired child and their processes of development of social skills (Celeste, 2007), their ways of interaction (Freitas & Gil, 2012), the forms of social mediation of learning (Ferroni & Gil, 2012), their linguistic development (Medeiros, 2013) and their subjective constitution (Sieiro, 2013).

About the investigations carried out anchored in the historical-cultural perspective (Albarran et al., 2016; Mattos, 2011, 2015; Ruiz & Batista, 2011, 2014; Silva & Costa, 2011; Silva & Batista, 2007) we faced with conceptual efforts and empirical researches that sought to understand the dynamics of children's creative activities based on the specificities of visual impairment. These studies, despite being quantitatively few for the ten-year time frame, advance in the sense of arguing that play situations, creative activity and authorship are privileged spaces for visually impaired children to interact with the environment, objects and social peers, in which imagination takes center stage for child development.

In addition, these works assert the importance of adult participation in the make-up of the blind or low vision child, with regard to language development, the apprehension of social rules established historically and the appropriate materials to be chosen for the activity. Regarding this adequacy, Silva and Costa (2011) are categorical in emphasizing the participation of the family in stimulating the child from an early age in a project of accessibility in the family environment itself. This implies that, for this theoretical matrix, playing is intrinsically related to the development of typically human psychological systems and that, in the case of children with visual impairments, it is relevant to be attentive to the mediations and toys used, in order to guarantee broad participation in play, enhancing the development of creative activities and the emergence of alternative development routes.

We also point out that Mattos (2011, 2015), when working with children with and without visual impairment, shows us that photographic images are constructed beyond the sense of sight. Other perceptions such as smell, touch and hearing make up the imaginative and creative plan of children with visual impairments, revealing, according to the researcher, other ways of seeing and feeling images. In addition, children's photographs and narratives about them materialize as expressions of authorshipcreation impregnated by the affections shared among the participants.

CONCLUSION

Throughout this text, we have brought contributions from the historical-cultural perspective, mainly from the classical texts by Vigotski, to understand the centrality of imaginative processes in the psychic functioning of those subjects who apprehend, feel and interact with the world in ways that are not hegemonic, since have visual impairment.

Our objective was to carry out a survey of the research carried out in the last ten years, weaving theoretical dialogues between the investigations and demonstrating the advances achieved. However, we regret the scarcity of work about this topic.

So far, as far as we can identify, all focused research

reveals the peculiarities in the way these children interact with the world, providing evidence of a qualitative change in the way of organizing creative activity (playing, narrating and drawing, for example), in reason for the relationship between perception, image production and imagination. This brings central contributions to the planning of educational and clinical actions, as well as to the development of policies, curricula and interventions that enhance the development of children with visual impairments.

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