

**MEDIATIONAL INTERVENTION AND HEALTH PROMOTION WITH  
PRESCHOOL CHILDREN****INTERVENÇÃO MEDIACIONAL E PROMOÇÃO DA SAÚDE COM  
CRIANÇAS PRÉ-ESCOLARES****INTERVENCIÓN MEDIACIONAL Y PROMOCIÓN DE LA SALUD COM  
NIÑOS PREESCOLARES**Kéllen Campos Castro Moreira<sup>1</sup>**ABSTRACT**

The Mediated Intervention for Sensitizing Caregivers (MISC), the Theory of Structural Cognitive Modifiability (MCE) and the Mediated Learning Experience (MCA) are approaches that can promote the development and teaching-learning through the use of mediation criteria. The five mediational criteria were applied in health education workshops with preschool children. It has the aim to show the mediation of health education with preschool children. Educational workshops were held in a philanthropic school, with children aged three to four years old, on health topics from the perspective of mediational intervention. Data were obtained through the analysis of the video recordings and the drawings made by the children during the workshops. It is concluded the relevance of the mediational intervention for the Health Promotion and the appropriation by the children of the health concepts worked during the interventions. However, due to the reduced sample size, further studies should be undertaken.

**Descriptors:** Health Education; Learning; Child, Preschool; Cultural Competency.

**RESUMO**

O Programa MISC (Mediated Intervention for Sensitizing Caregivers), a Teoria da Modificabilidade Cognitiva Estrutural (MCE) e a Experiência da Aprendizagem Mediada (EAM) são abordagens capazes de promover o desenvolvimento e o ensino-aprendizagem através do uso de critérios de mediação. Os cinco critérios mediacionais foram aplicados em oficinas de educação em saúde com crianças pré-escolares. Objetiva relatar a mediação na educação em saúde com crianças pré-escolares. Foram realizadas oficinas educativas em uma escola filantrópica, com crianças de três e quatro anos, sobre temas de saúde a partir da perspectiva da intervenção mediacional. Os dados obtidos se deram através da análise das gravações em vídeo e dos desenhos realizados pelas crianças durante as oficinas. Conclui-se a pertinência da intervenção mediacional para a Promoção da Saúde e apropriação pelas crianças dos conceitos de saúde trabalhados durante as intervenções. Contudo, devido ao tamanho reduzido da amostra, novos estudos deveriam ser empreendidos.

**Descritores:** Educação em Saúde; Aprendizagem; Pré-Escolar; Competência Cultural.

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**RESUMEN**

El programa MISC (Mediated Intervention for Sensitizing Caregivers), la Teoría de la Modificación Cognitiva Estructural (MCE) y la Experiencia del Aprendizaje Mediado (EAM) son enfoques capaces de promover el desarrollo y la enseñanza-aprendizaje a través del uso de criterios de mediación. Los cinco criterios de mediación se aplicaron en talleres de educación en salud con niños preescolares. Objetivo relatar la mediación en la educación en salud con niños preescolares. Se realizaron talleres educativos en una escuela filantrópica, con niños de tres y cuatro años, sobre temas de salud desde la perspectiva de la intervención mediacional. Los datos obtenidos se dieron a través del análisis de las grabaciones en vídeo y de los dibujos realizados por los niños durante los talleres. Se concluye la pertinencia de la intervención mediacional para la Promoción de la Salud y apropiación por los niños de los conceptos de salud trabajados durante las intervenciones. Sin embargo, debido al tamaño reducido de la muestra, se deberían emprender nuevos estudios.

**Descriptor:** Educación em Salud; Aprendizaje; Preescolar; Competencia Cultural.

## INTRODUCTION

Health education is an important strategy for the adoption of healthy habits, that is, to health promotion.<sup>1,2,3,4</sup> Despite the legal apparatus and programs aimed at health promotion<sup>1</sup>, the relevant literature review indicates little scientific production involving children and health education. And, in educational activities reported, the subjects such as the disease prevention, at the expense of health promotion, are more common.

The prevailing view in educational activities is still the disease (pathogenic) whereas it should be health (salutogenic).<sup>2,3,4,5</sup> Another relevant aspect is the use of appropriate language, and with children it occurs through play by awakening creativity and approach the imagery and child language.<sup>5</sup> Methodologies and resources can guide the educational practice towards child health promotion.<sup>1,2,3,4</sup>

The MISC Program (Mediated Intervention for Sensitizing Caregivers) was drawn from the Theory of Structural Cognitive Modifiability (MCE) and the Mediated Learning Experience (MCA), which are approaches that may promote the development and teaching and learning through the use of mediation criteria. It points out two forms of human learning: one refers to the interaction of the organism with the environment and the other is related to the EAM, allowing the development of theoretical and methodological tools capable of producing Structural Cognitive Modifiability (MCE).<sup>7,8,9</sup>

For the EAM to happens, a mediator must be placed, intentionally, between the stimulus and the subject and use the mediation criteria. Its use among educators and children can modify the children cognitive, social and emotional behavior and, create learning situations. It is

necessary the use of five criteria, called universal mediational criteria.<sup>7,8,9</sup>

- Focusing (Intentionality and Reciprocity): it refers to all mediator's attempts (teacher, educator, nurse...) to ensure that the mediated (population, individual, student...) focus attention on something he wants. The intention of the mediator should be clear and there must be reciprocity by the mediated through his verbal and nonverbal responses to the behavior of the former.
- Expansion or Transcendence: it is present when the mediator tries to expand the understanding of the mediated on what is being taught using the explanation, comparison, addition of new experiences, besides those necessary for the moment.
- Affectivity or Meaning Mediation: it is observed when the mediator uses the emotional during the interaction, leading to understanding of the meaning of the objects, people, relationships and environmental events.
- Reward (feeling of competence): it is identified when there is expression of satisfaction, by the mediator, regarding the mediated

behavior and cause the explanation of the reason of their satisfaction, allowing them feelings of self-control, ability and success, in addition to expanding their willingness to actively explore the new.

- Behavior regulation: it refers to the help of the mediator to the mediated in planning before acting, making him aware of the adequacy of "thinking" before acting, so that he can plan the steps of his behavior to achieve a goal.

The criteria do not have a chronological order to be used, except the focusing that should be used in the beginning of mediation (it can also be used at other times) as it must have the intention clearly presented and have the reciprocity by the mediated.

Given the need to promote health, the small amount of educational activities on the positive concept with children, accessibility and relevance of using the mediational criteria, educational workshops were held in a philanthropic school, with children aged three and four years old, on health issues, from the perspective of mediational intervention. The aim is to report the mediation in health education with preschool children.

## METHOD

It is an experience report in health education with children performed by a nurse, in Minas Gerais state, in the first school semester of 2016. The workshops promoting health started after the approval of the project by the Research Ethics Committee (CEP) of the Federal University of Uberlândia (UFU), registered under the number 50170714.8.0000.5152, and after signing the Consent Form, by those responsible.

The intervention local was in a charitable children's institution that serves children from disadvantaged social groups. The participants were selected by the director, consisting of six children, being four girls and two boys, aged three and four years old. The materials used were:

- Children's stories;
- Games;
- Video recordings of the workshops;
- Records of children during the workshops and description.



**Photo 1:** Completed stories on Health Education



**Photo 2:** Suitcase with Games

Literature review and readings were carried out in order to prepare the recreational resources in the health promotion area: nine stories (topics: physical activity, nutrition, body and oral hygiene, school, society, education, traffic, family and care with the self and with the other) and games to facilitate approaching the children during the workshops.

Data collection took place through video recordings of the workshops and records (scribbles) of the children at the end of each workshop. For data analysis, after each workshop there was a transcript of the video recordings, by the researcher, according to the mediation criteria used. It was also used the scribbles of the children and their reports on what they had drawn.

## RESULTS

It is believed that the change in the words and actions is due to the use of mediational criteria and playful. Although there is no report in the literature and scientific production on the use of mediation criteria applied to health education, data from the workshops demonstrated the relevance of the use of the mediation criteria in workshops for health promotion.

Workshop 1 was held with three children aged 3 years old (children 1, 2 and 3), lasting 30 minutes on the theme Family; child 2 was the only male child. Workshop 2 was held with three children aged 4 years old (children 4, 5 and 6), lasting 47 minutes, on the theme Family, and with two female children: 4 and 6. The purpose of these first two workshops was to introduce the concept of family and its various

compositions; the resources used were bond paper sheet, crayons, colored pencils, children's story book on the theme Family and a puzzle also on the theme Family; the latter two produced by the researcher.

Workshop 3 was held with three children aged 4 years old (children 4, 5 and 6), lasting 38 minutes, on the theme Body and Oral Hygiene. The workshops 3 and 4 aimed the children to learn the steps of hand washing and hygiene habits and value the daily hygiene. The resources used involved topic story, blue gouache, water supply (bathroom sink), mirror, hand towel, bond paper sheet, colored pencils and crayons.

In order to start the workshops, the researcher greeted children, already sitting with them on the carpet and in a circle; then, she asked them how the weekend was. From the speeches of the children, who referred to the trips and family they experienced, the researcher made use of the focusing criterion through verbal and nonverbal communication.

Of the 481 mediational behaviors identified in the four workshops, 320 (66.53%) referred to Focusing, being it the criterion most used, followed by Reward, with 12.89% of the cases. Focusing is the first criterion needed for quality mediation. In the workshops, regardless of the age of the infants and the theme, the intentionality of the researcher and the reciprocity of the children, expressed verbally or non-

verbally, were very present. And the workshops with the highest number of Focusing were the workshops on the theme Family. Children talked a lot about their families, as well as daily events.

Then, there is the Reward, which can here be seen as resulting from Focusing. Children, when interested and interacting with the mediator on the theme explored, could understand and express. Thus, the researcher used praise and encouragement, explaining them the reason for her behavior or thought to be appropriate.

Expansion was the third most frequently used criterion, with 43 occurrences (8.94%). This criterion was worth to explain hygiene habits in a sequential manner, so as to increase the variable concepts previously known by the infants. Behavioral regulation was the fourth most used criterion, identified in 6.03% of the cases.

The mediational criterion less used was Meaning Mediation, present in only 5.61% of the total occurrences. It is inferred its small frequency by the little intimacy of the mediated with the participants<sup>9</sup>, by the need to carry out the activities proposed and the limited time of the workshops.

## **DISCUSSION**

Each week, the director chose the theme of the workshop, in order to meet the



local reality. The workshops followed the order of story-telling, using the mediation criteria, play and children's drawings. The workshops were filmed, analyzed and transcribed as the mediational criteria.

Each workshop started with the greeting of the researcher to the children, who were already sitting on the carpet and in a circle, followed by the question of how they were, and how the weekend was. These questions served to use the Focusing criterion, as it was presented the workshop theme (making clear the intention of the researcher), correlating it to the children's daily life (getting reciprocity), as in the following example: *Oh, cool (child 1) you visited your cousin!!? - directing the eyes and hands to child 1. So, today you are talking about cousin, Mom, brother ... You spent the weekend with your family!!? And, today I brought a little story about the family. Everyone has a family. Who is your family?* – She asked child 2. This was the initial criterion of mediation, and which shall be used.<sup>7,8,9</sup>

As the story on the Family theme was told, the children complemented it with speeches and concluded who was their family. The explanation, comparison and addition of experience on the part of the researcher consisted on the use of the Expansion criteria: *For this little boy here, Samuca, he says that family is those who live with us. Family is only those who live with us?* Child 2 answered *Yes-* nodding his head in

agreement. The researcher continued the story: *Alê (showing the image of the book's character) thinks family is those who care, who help with whom we eat every day at home together, who gets to school... And Sugismunda says she learned in school that it is who cares. Who takes cares of you?* Child 2 stared wide-eyed and said: *My father cares, Erica takes care of me and my mom takes care of me!*. This is the mediation criterion that allows greater knowledge and assist in the development. In conjunction with the following criteria, it allows the mediated to advance from the Real Development Zone (ZDR) and the Proximal Development Zone (ZPD).<sup>7,9</sup>

As an example of the meaning mediation there is: *Is it!? And, then, at this time what you eat, what you like to eat when you're at lunch or dinner with your family?. And, an example of the use of the Reward criterion (feeling of competence): Ah, then you help your mom!? That's right, we have to help the family!*

Regarding the behavior regulation, it occurred when the researcher was telling the story and children 6 saw the heart in the story and said he had one, and child 5 complemented saying that he/she had a brilliant robot. The researcher had to use this criterion: *Is it!? But, what are we talking about today!? Oh, about family, then, shall we continue the story!?* And, when child 2 commented on his/her slippers and kept the attention to it: *That's cool, but, today we are talking about family and your mother bought you a*

*new slipper... She was taking care of you, like a family!*

Of the six children participating, in five (83.33%), there was a change of concepts about who family is, attitudes or activities that have with the family. Initially, they only mentioned the mother, in the course of the workshop they considered father, brothers and grandparents, since according to the participants they also participated in care. And about hand washing (steps and time), of the six children participating, six (100%) showed learning, and of these, only one (16.67%) did not achieve the step by step of hand hygiene during the game.

The drawings made by the children, associated with the explanation (for being scribbles) were useful as the provision of research data. It was noticed by the speeches of the three children aged three years old (50%), that there was difficulty in understanding or expressing as to what was requested, since the drawings did not refer to activities such as "cooking noodles" (4-years-old child), but the "ball, boat and mother." Children acquire oral language at two years old, but, language and understanding relate to action.<sup>10</sup> So, when the researcher asked them to draw on what they liked to do as a family, they failed to elaborate a situation, but only the concrete (ball, boat, mother, fish, penguin, for example).

Although this research is unprecedented, since there is no scientific productions using the mediational criteria for health education, data from the workshops showed the relevance of the use of mediation criteria in workshops for health promotion. Mediational intervention is a technology resource featuring low cost, wide access, flexibility regarding the location, age group, socio-economic and cultural situations and verifiable results.

## CONCLUSION

Understanding the variables that relate to healthy habits of young children involves several factors, from family issues to subjective mechanisms. These habits can be due to health education workshops with the use of mediation criteria. However, further studies should be undertaken, since there are no other researches using the mediation criteria in health promotion and, at the small and limited sample size. Researches with greater number and diversity of participants are suggested, in which the mediator belongs to the social environment of the mediated. It is expected that the mediational intervention, as a health technological resource, encourages future applications in health promotion activities.



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