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Original Article

Children's Perception of Dentists through the Interpretation of Drawings

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Abstract

Objective: To evaluate the perceptions of students aged 05-12 years about dentists through the interpretation of drawings. **Material and Methods:** This is a cross-sectional study whose sample consisted of 1015 children aged 5-12 years from 10 public schools of Salvador, Brazil. The students produced drawings about their main idea associated with the dentist and answered a semi-structured interview consisting of seven items. **Results:** Males (521 volunteers - 51.3%) were more prevalent than females (494 volunteers, 48.6%), 688 (67.7%) children had experienced dental care, and need for treatment was the reason for seeking dental care to 306 (30.1%) of them. In describing the professional using one word, positive words totaled 805 (79.1%) responses, negative words accounted for 24 (2.2%) and 186 (18.3%) participants could not answer. The drawing category that had the largest number of volunteers was "Procedures", with 238 (23.4%) drawings, followed by: "Dental Consultation" with 228 (22.4%), "Other Professionals" with 174 (17.1%), "Dentist" with 115 (11.3%), "Oral Health" with 71 (6.9%), "Miscellaneous" with 71 (6.9%), "Dental Office" with 55 (5.4%), "Mouth" with 36 (3.5%) and "Pain / Fear" with 27 (2.6%). **Conclusion:** Drawings were effective in representing the particular vision of students and showed a plurality and complexity of concepts and ideas related to the dentist. In addition to procedures and consultation, professional behavior, knowledge transmitted to patients, physical environment and experienced sensations, factors linked to the origin of the main idea about the professional were also relevant. The perception of volunteers was positive both in the drawings as in the responses of the semi-structured interview.

Keywords: Dentistry; Perception; Child.

Introduction

The image on the dentist on children's mind is often related to a sadistic person, who destroys and hurts. This is because family and close people have forwarded negative information on dental care, to the representations of the professional in communication media and arts, and to the particular experiences lived by each child.

The purpose of identifying children's attitudes toward their dentists is to perform positive changes or adjustments that improve the quality of dental visits in order to make children more comfortable during dental care [1].

Many studies on fear and anxiety in dental appointments have been developed [2-5], but little has been studied about other sensations, feelings and ideas that can be experienced in this type of care.

Building a relationship of trust with the dentist is an aspect that favors the dental care of the child patient. However, many studies related to this relationship have been conducted using secondary data (indirect collection of information by parent or guardian) and may not properly represent the subjective view of the child about the experience [6].

One of the psychological techniques most widely studied and used to evaluate child patients is the study of drawings. The drawing as a graphic representation of thoughts and feelings is one of the most primitive forms of human communication [7,8].

The drawing is characterized as an instrument to measure psychological phenomena and allows the graphical representation of thoughts and feelings, and is also a form of human communication both in the field of intervention as in research in different contexts [7].

Drawings are used in educational environment [9], psychological assessments made by professionals in this area [7,10] and other areas such as speech therapists [11,12], occupational therapists [13] and dentists [6,14-17].

When drawing, the child does not represent the reality as it is, but rather a reality that involves attention, memory, imagination [12], thought, emotions [18], symbolism [11], cognition, personality, development [8], and the reality itself [19]. Drawing as expressive activity provides, therefore, the objectification of the most inner, deep and hidden plane of thought [18].

When drawing, the child organizes information, processes lived and thought experiments, reveals his learning and develops a unique style of representing the world [20].

Based on Piaget's assumptions, Di-Leo [21 cited 7] established criteria for the understanding of the evolution process of drawings in children's cognitive development stages. In Sensory-Motor Stage (0-04 years), scrawl emerges and up to 02 years of age, drawing is initially a reflex response and part of the motor activity. From the age of 02 years, the child draws circles as signs of symbolic communication, which is evident from the age of 3-4 years. In the Pre-Operational Stage (04-07 years), there is intellectual realism and the child draws from an internal model, highlighting transparencies and the presence of expressionism and subjectivism. In the Concrete Operations Stage (07-12 years), there is a reduction of subjectivity and the child begins to draw the

visible reality. Human figures become more proportionate without transparencies and colors are more conventional due to visual realism. In the Formal Operations Stage (12 years onwards), drawings are submitted to own criticism and as a result, the drawing activity decreases; however, children with skills to drawing maintain this activity.

Understanding the perception of the child patient in relation to the dentist is important information to find out how the child perceives and the dental care experience. The aim of this study was to evaluate the perception of schoolchildren aged 05-12 years in relation to the dentist through the interpretation of drawings

Material and Methods

The sample consisted of 1015 students of both sexes aged 5-12 years from 10 public schools of Salvador, Brazil. The research project was approved by the Ethics Committee of the Dentistry School - Federal University of Bahia (FOUFBA) under protocol number 439 466. Data collection took place in November and December 2013.

Inclusion criteria were: children aged 05-12 years who wished to participate and obtained the Informed Consent Form (ICF) signed by their parents. Children with motor, neurological or mental disorders that prevented them of drawing and answering the semi-structured interview were excluded from the study.

The research project was presented to 25 schools (13 public and 12 private) of different areas of the city of Salvador-BA. In the ten institutions that agreed to participate, the survey was presented to students in each classroom and teachers were responsible for distributing the two copies of the ICF. All volunteers who met the inclusion and exclusion criteria were invited to participate and obtain the ICF signed by their parents or guardians to allow their inclusion in the study. In a second moment, signed ICFs were collected and children confirmed their interest in participating in the research. The sample size was defined by the inclusion of all volunteers suitable to participate in the research enrolled in schools that have allowed the performance of the study.

A questionnaire (consisting of two pages) was used to conduct a semi-structured interview. The first part included the volunteer's identification and the space for the drawing. Drawings were produced in classroom. Each volunteer should remain on his desk and talks, although not prohibited, were discouraged in the attempt to limit external influence in the personal expression of children. Students were informed that there was no right or wrong answer and should draw the main idea that came to their mind when thinking about the dentist.

After making the drawing, the volunteer responded, with the help of a researcher, on the meaning of what he drew and seven questions about previous dental experiences, information required for a better understanding of the subjective view of the drawing. The researcher responsible for data collection (RMC) was instructed not to make value judgment, never censor any representation produced and respond to questions asked encouraging personal expression of each volunteer.

Drawings were later divided into categories created based on the pilot study [16] "Drawings of students' perception on oral health", so that all the drawings were included in some category. The analysis of drawings was developed jointly by two dentists authors of this study using as theoretical background books and child psychology articles, human development psychology and studies of drawing interpretation, in addition to articles on children's perception of the dentist through drawings available in scientific literature as the script for interpretation of children's drawings in the dental office [6]. The results of the semi-structured study were tabulated after separation and evaluation of drawings into categories, thus facilitating the definition of specific data in each category and avoiding the interference of information from the semi-structured interview on the subjective analysis of drawings.

Data from semi-structured interviews were tabulated in Microsoft Excel 2010 software and presented using simple descriptive statistics (number and percentage).

Results

Males (521 volunteers - 51.3%) were more prevalent than females (494 volunteers - 48.6%). Figure 1 shows the distribution of volunteers in terms of age.

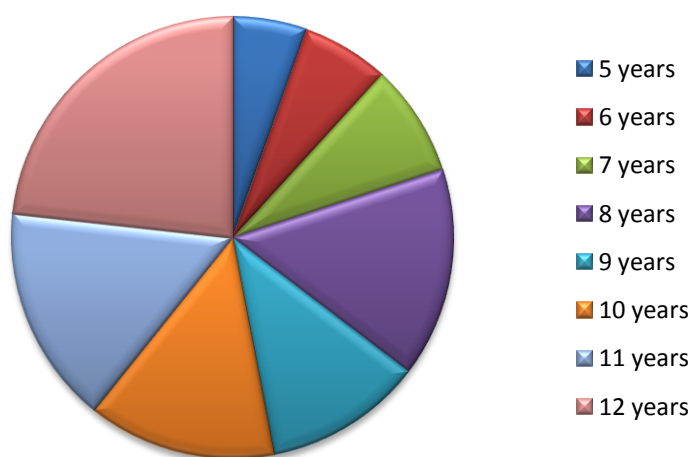


Figure 1. Distribution of 1015 volunteers in terms of age presented at the time of data collection.

The drawing category that showed the largest number of volunteers was "Procedures", with 238 (23.4%) drawings, followed by "Dental consultations", with 228 (22.4%), "Other Professionals", with 174 (17.1%) "Dentist", with 115 (11.3%), "Oral Health", with 71 (6.9%), "Miscellaneous", with 71 (6.9%), "Dental office", with 55 (5.4%), "Mouth", with 36 (3.5%) and "Pain / Fear", with 27 (2.6%).

The overall impression of drawings (neutral, positive, positive with conflict or negative) is present in Table 1, specified by category and integrated assessment. Tables 2, 3, 4, 5 and 6 show the presence of previous dental care experience, the number of previous dental consultations, the reason

for seeking dental care, the opinion of children about these experiences and what they felt during the consultation, respectively.

Table 1. Overall impression of drawings in all categories and in integrated assessment.

Category	n	Neutral	Positive	Positive with conflict	Negative
Procedures	238	20	55	113	50
Dental consultation	228	12	127	49	40
Other Professionals	174	22	75	38	39
Dentist	115	10	66	18	21
Oral Health	71	21	32	5	13
Miscellaneous	71	33	21	5	12
Dental office	55	24	21	5	5
Mouth	36	17	13	1	5
Pain / Fear	27	3	11	6	7
Total	1015	162	421	240	192
Percentage	(100%)	(15.9%)	(41.4%)	(23.6%)	(18.9%)

Table 2. Presence of previous dental care experiences.

Yes	No	Do not know
688	321	6
(67.7%)	(31.6%)	(0.5%)

Table 3. Number of previous dental consultations.

Less than 5 times	Between 5 and 10 times	More than 10 times	Do not know	Never Been to the Dentist
449	126	82	38	320
(44.2%)	(12.4%)	(8%)	(3.7%)	(31.5%)

Table 4. Reason for seeking previous dental appointments (main complaint).

Prevention	Treatment	Prevention and treatment	Do not know	Never Been to the Dentist
175	306	187	27	320
(17.2%)	(30.1%)	(18.4%)	(2.6%)	(31.5%)

Table 5. Evaluation of previous dental consultations.

Liked	Disliked	Indifferent	Do not know	Never Been to the Dentist
555	63	47	30	320
(54.6%)	(6.2%)	(4.6%)	(2.9%)	(31.5%)

Table 6. Description of the main feeling or sensation experienced during dental care.

Fear	Well, Better, Happy	Nervousness	Normal	Varied responses	Sad	Do not know	Never Been to the Dentist
142	133	107	97	34	10	172	320
(13.9%)	(13.1%)	(10.5%)	(9.5%)	(3.3%)	(0.9%)	(16.9%)	(31.5%)

Children were asked to describe the dentist in one word ("the dentist is ..."). Positive words totaled 805 (79.1%) responses, and "Good" accounted for 422 (41.5%) and "Doctor" by 35 (3.4%). Negative words were reported by 24 (2.2%) volunteers. The word "Bad" was the response for 4 (3.4%) children. No answer accounted for 186 (18.3%) volunteers.

Finally, they were asked about the origin of the idea of the drawing made. An imagined experience was the response for 661 (65.1%), experience lived for 268 (26.4%), family experience reported by 43 (4.2%) and experience reported by friends for 20 (1.9%). Twenty (1.9%) were unable to respond and 3 (0.2%) chose the option "Other".

Discussion

Of the total of 1015 volunteers, 688 (67.7%) reported having already been to the dentist at least once in life. In the last national epidemiological survey on oral health, the "SB Brasil 2010" [22] the prevalence of dental visit at the age of 12 years (sample of 7328 individuals) was 73.1% in northeast Brazil and 80.5% in the national average; no answer: 1.1% in northeast Brazil and 1.4% in the national average. The prevalence found in our study was lower than the regional and national average, but it is noteworthy that our sample included individuals aged 5-12 years and data of the "SB Brasil 2010" refer only to individuals aged 12 years; therefore older and more likely to have experienced a dental consultation.

Although a health promotion paradigm, only 175 (17.2%) volunteers sought the dentist for prevention reasons. In the "SB Brasil 2010" [22], this value was 35.1% in northeast Brazil and 38.3% in the national average (age 12 years). Most children (555 volunteers - 54.6%) reported to have liked the dental consultation. In the "SB Brasil 2010" [22], this positive perception was also observed regarding the evaluation of the last consultation (85.5% in northeast Brazil and 87.3% in the national average - age 12 years). Those who did not like the experience were 6.2% in the current survey; In the "SB Brasil 2010" [22]: 3% in northeast Brazil and 3.6% in the national average (age 12 years).

Negative feelings (fear, nervousness, sadness) were slightly more reported than positive feelings (well-being, improvement, happiness) during dental care. A significant portion was not able to describe what they felt. Nevertheless, 805 (79.3%) described the dentist using words with positive content. Therefore, negative feelings seem to be related to the dental care, not to the figure of the professional.

Imagined and lived experiences were the most important for making the drawings. Stories told by friends and family were not relevant as the source of origin of the main idea related to dentists.

Importantly, data were reported by children, and their accuracy is subject to factors such as level of cognitive development, memory and interest of each volunteer to answer questions.

Category "procedures" had the largest number of representations of the dentist. In the view of children, this professional is associated with tooth extraction or oral surgery in 122 (12%), professional prophylaxis in 31 (3%), orthodontics in 25 (2.4%), dentistry (fillings) in 11 (1%),

prosthesis in 5 (0.4%) and endodontics in 2 (0.1%) of drawings. Local anesthesia was represented by 14 (1.3%) volunteers. Ten (0.9%) drawings showed more than one procedure, and 20 (1.9%) expressed information such as topical application of fluoride or drawings with no details ("the dentist treating his tooth"). Rehabilitation procedures are more common than those of prevention. This may be associated with the previous experience of volunteers in this category because only 38 (3.7%) of them had been to the dentist only for preventive reasons.

In the pilot study of the current study [16], drawings made by 151 students aged 5-12 years from a public school of Salvador (BA) were analyzed. Categories "Miscellaneous" (21.8%), "Dental Care" (17.3%) and "Dental consultation" (15.2%) had the largest number of drawings - followed by "Dentist" (14, 5%), "Procedures" (8%), "Pain / Fear" (6%), "Dental office" (5.3%), "Other Professionals" (4.6%), "Health" (4%) and "Mouth" (3.3%). Although the characteristics of samples of both surveys, except for the numerical value, are similar (same city, age group and socioeconomic and cultural conditions), the results differed significantly regarding categories.

The main idea associated with dental professionals was someone who performs tooth extractions (Figure 2). This may be because volunteers are going through the mixed dentition period, but may also be related to stories reported by others. In the pilot study [16], allusion to tooth extraction was also very common: three fourths (8 drawings – of a total of 12) of "procedures" category were tooth extractions.



Figure 2. Drawing of "Procedures" category (male, 11 years, "he trying to extract his tooth").

Of the 228 (22.4%) drawings of "Dental consultation" category, 172 (16.9%) represented dental care ("examining", "caring", "seeing a tooth") (Figure 9). In 54 (5.3%), characters are in a previous time (moving to the dental office or waiting in the waiting room) and 2 (0.1%) in the time after consultation. Every moment was important and marked patients. The dental consultation experience seems to be much greater than its specific time. It starts when the patient leaves home and ends only upon his return. One hundred and sixty-two (15.9%) volunteer of this category had already been to the dentist.

Oral hygiene instruction was often represented during consultation. Other authors [17] also found that children were oriented by their dentists regarding oral hygiene procedures, so important to establish good oral health conditions.

Many volunteers had no knowledge about the dentist profession and graphically represented other healthcare professionals. Of the 174 (17.14%) drawings of "Other professionals" category (Figure 3), 78 (7.6%) are of medicine doctors and 4 (0.3%) of nurses. Eighty (7.8%) drawings amalgamated professionals, for example: medicine doctor installing braces, dentists vaccinating people, nurse working as dental health assistant (ASB) and dentist treating animals. Dentistry and Medicine were combined in 73 (7.1%) of drawings. Seven (0.6%) drawings were of hospitals and five (0.4%) of pain, injection, vaccine or disease. Drawings showed the lack of knowledge of volunteers about the dentist or differentiation of these from other healthcare professionals. They were unaware of the specific duties of the dentist and other professionals.

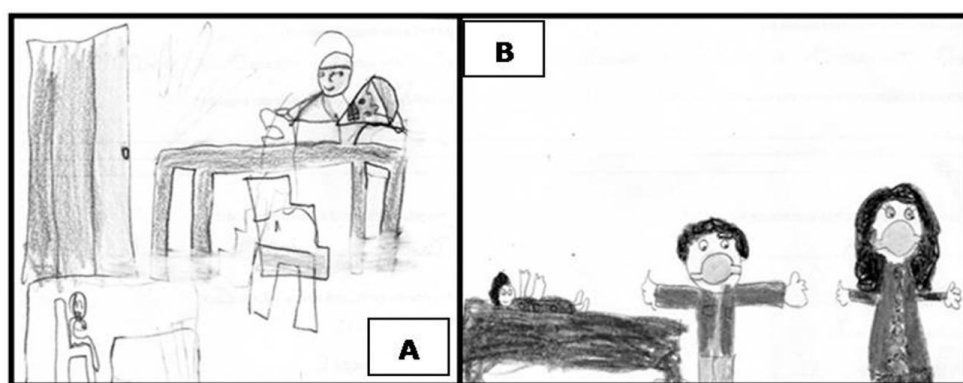


Figure 3. A- Drawing of "Dental consultation" category (8-year-old male: "He went to dentist to see his tooth"); B - Drawing of "Other Professionals" category (8-year-old female: "Me and the doctor").

Dentists were represented in all drawings of the "Dentist" category (Figure 4). Overall, dentists were drawn happy and without exaggerated disproportion compared to the size of the child or environment. In some drawings they are alone, in others they are accompanied by patients, staff or family. In the explanation of the drawings, volunteers said sentences like "the dentist is a hero to me, the doctor saves lives and the dentist saves our teeth", "the dentist is cool, polite and gentle" and "the dentist helps prevent diseases".

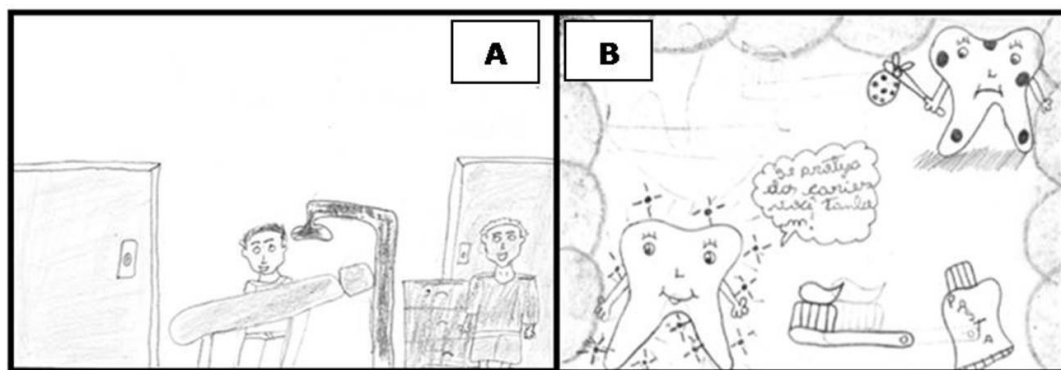


Figure 4. A - Drawing of "Dentist" category (11-year-old male: "A dentist and the patient"); B - Drawing of "Oral Health" category (12-year-old male, "a dentist told me it's always good to brush teeth after every meal").

Researchers [23] sought to identify the characteristics of the ideal dentist among 697 students from public schools of Pouso Redondo (Santa Catarina) and verify its relationship with anxiety to dental treatment. For this characterization, the principles of the Free Association of Words were adopted, in which two categories were created: personal characteristics and professional characteristics. The association between degree of anxiety and the characterization was determined by the chi-square test. Overall, when anxious and non-anxious subjects described the ideal dentist, they highlighted personal characteristics; however, comparing groups (anxious and non-anxious), higher frequency of this category was found among highly anxious subjects. This shows that people with higher levels of anxiety proportionally value more personal characteristics when describing the ideal professional.

In the fifth category, "Oral Health", 22 (2.1%) drawings showed tooth brushing, 8 (0.7%) drawings made comparison between before and after (clean tooth x dirty tooth sick tooth x treated tooth) and 41 (4%) were miscellaneous ideas (oral cleaning, dirty or decayed teeth, gingival bleeding, edentulous individuals) (Figure 4). In 38 (3.7%) drawings, toothbrush was present, but toothpaste was present only in 20 (1.9%) drawings and dental floss in 4 (0.3%).

The category corresponding to this category in our pilot study [16] was the "Oral Hygiene" category (which had the title changed to better represent the great complexity of ideas present in the current study). In the pilot study, the same pattern was observed: higher prevalence of toothbrush (24 drawings - 15.8%) compared to toothpaste (15 drawings - 9.9%), and low prevalence of dental floss (4 drawings - 2.6%). These data suggest that the toothbrush is viewed as the main oral hygiene instrument. Toothpaste is also regularly used, but the small amount of floss representations may suggest little knowledge and use of this key instrument for routine oral hygiene.

Drawings of "Oral Health" category recorded an indirect perception about the dentist: the moment in which children put into practice what they have learned from the professional, the need for intervention and treatment outcome.

Many volunteers have produced drawings not related to the subject (dentist, dentistry, oral health). These were brought together in the "Miscellaneous" category. Homes, people, nature, friends and family were the most common themes (Figure 6). Fifty-six (5.5%) drawings were produced by children aged 5-8 years, and 30 (2.9%) volunteers had not yet experienced a dental consultation. The lower cognitive development and the lack of previous experience were the main reasons for volunteers to have represented information different from the theme requested.

The physical environment was also important in volunteers' perceptions about the dentist. In the "Dental office" category, 28 (2.7%) drawings showed a general internal view of the dental office and 11 (1%) drawings showed the outside of it. In fragmented images, 12 (1.1%) are about the dental chair, 3 (0.2%) are about the micro-motor/turbine and 1 (0.09%) about the intra-oral mirror. The data presented show that the ambiance is often more important than the treatment performed in the formation of the child's individual perception, which reinforces the need to make the environment friendly and comfortable for patients (Figure 6).

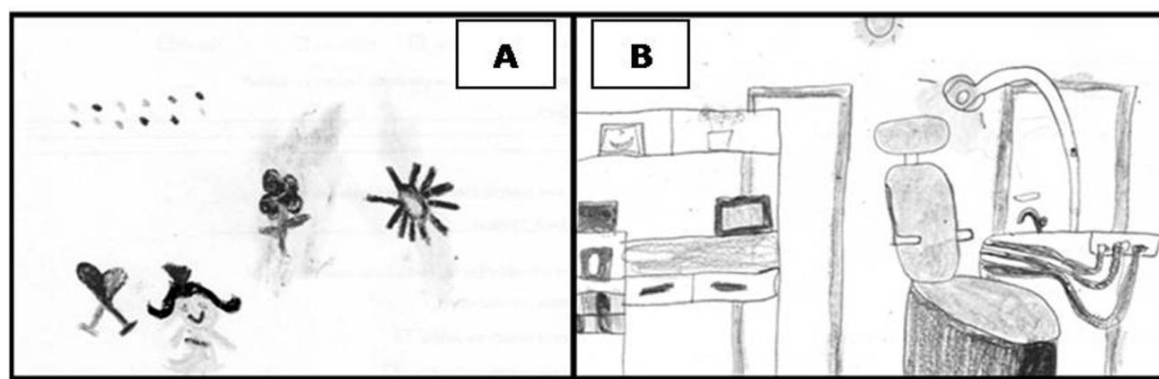


Figure 6. Drawing of the "Miscellaneous" category (5-year-old female: "A Garden"); B - Drawing of the "Dental office" category (12-year-old female: "When I visit the dentist I remember his office, so I have drawn an office").

Researchers [17] have developed an exploratory study of qualitative approach in order to know the perception of children about dental care. The target population was composed of children aged 4-9 years enrolled in public ($n = 40$) and private schools ($n = 36$) of Itajaí (SC). To collect data, the technique of drawing-story with theme was used. To structure data, four categories divided into subcategories were considered. The group to be investigated was identified, both from public and private schools, in which the dental environment category had the highest frequency (47.5% and 40.6%, respectively). The authors concluded that the context of the dental appointment is structured mainly by pleasant situations that are guided by educational and preventive practice, in addition to a humanized view of the Dentistry professional.

In another study [15], professionals carried out the analysis of pediatric patients' view of the dentist and the dental environment through interpretations of drawings associated with a specific questionnaire. The sample was composed of 32 children aged 7-8 years enrolled in a private school of the city of Belém (PA). Most (72%) was receptive to both dentist and treatment (66%) and it was concluded that the use of drawings associated with the questionnaire was an effective technique to find out the view that the child has about the dentist, the dental environment and the consultation time.

In the "Mouth" category, drawings focusing on the anatomical representation of the mouth or related structures were gathered (Figure 7). Sixteen (1.5%) drawings represented only a mouth with teeth, with at most a few changes such as the presence of braces or tongue. Nine (0.8%) drawings showed exclusively teeth. This kind of fragmented representation is more common in young children, but 22 (2.1%) drawings were made by volunteer aged 9-12 years.

The last category, "Pain / Fear", shows representations of painful and frightening experience. Fear and anxiety are not peculiarities of the dental treatment, also occurring in other contexts of medical treatment and health in general, especially when invasive procedures are part of the therapeutic routines. Fear of the dentist, however, has been caricatured as one of the most frequent and more intensely experienced [24].

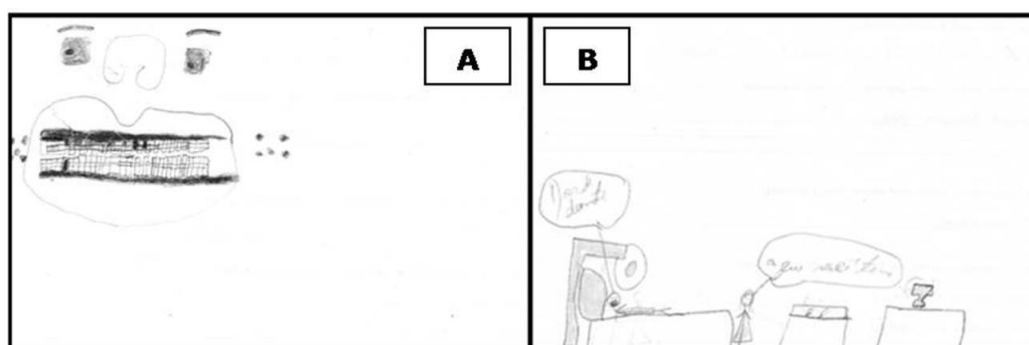


Figure 7. A - Drawing of the "Mouth" category (8-year-old male: "A tooth with braces"); B - Drawing of the "Pain / Fear" category (12-year-old female: "I remember I was at the dentist, I had a toothache. Then, the dentist made a cleaning and filled it not to hurt anymore").

Thirteen (1.2%) drawings had pain as their main reference. Pain was prior to dental care in 10 (0.9%) drawings, in 2 (0.1%), pain was triggered by an extraction and 1 (0.09%) by anesthesia. Pain was more related to a pre-existing condition than to that originated during treatment (Figure 7). It is quite likely that the lack of predictability and control, in addition to the expectation of pain work together, each adding effect on another to generate the fear response [2].

Fear representations totaled 14 (1.3%) drawings, and 3 (0.2%) were associated with tooth extraction, 2 (0.1%) to anesthesia (carpule) and 1 (0.09%) to the high or slow speed air driven. In others, characters appear during dental treatment crying and asking for help. Despite the negative content in the drawing or the volunteer's explanation about it, only in five (0.4%) drawings, characters appear with sad facial expressions.

Dentists [6] proposed elaborating a script for the interpretation of children's drawings related to the dentist aiming at their use in the approach of the child in the dental office. The sample consisted of 43 students aged 7-12 years from the public and private network of the city of João Pessoa (Brazil), who drew pictures related to their dentists. The interpretation of drawings was made by two examiners independently. The overall impression was positive in 28 drawings (65.1%), according to the first examiner, and 30 (68.9%) according to the second examiner.

In the present study, drawings with overall positive images ("positive image" and "positive image with conflict" categories) totaled 661 (65%). The study evaluated positive image with conflict drawings with features such as: dentists oversized in relation to the child or environment; facial expressions of the patient, professional or auxiliary staff in disharmony (some of them happy, others with pain, anger, apprehension or sadness); patient with fear; magnification of intra-oral objects.

Less than one in five children had negative subjective perception about the professional, confirming the positive image declared in semi-structured interviews and also verified in other studies that also used drawings for this type of assessment [6,15,16,17]. Only Amorin and Santos [14] found a predominantly hostile image, but concluded that what seems to lead to this is not exactly the dentist, but the instruments and equipment used when curative treatment becomes necessary.

The researcher responsible for data collection of this research was represented (alone or in a larger context) in 12 (1.1%) drawings. This shows little direct influence on the volunteers' perception. This influence should be limited, but will always exist in studies with this profile.

Even with a large sample, it was still not possible to generalize the results for children from Bahia and Brazil due to the sample size. The exclusion of children from private schools and the fact that the drawings were made individually, but in a group situation, can be considered study limitations. None of the twelve selected private institutions allowed the conduction of the research. Unlike public schools, where the project has always been presented to the principal or coordinator, in private schools, it was only possible to deliver the project (recorded on CD) to any person in charge. Only one school responded to the contact by phone and said it would not be possible because the research would delay the class schedule. All other private institutions have given no answer.

The drawings were made in classrooms due to logistical issues. Obtaining a room exclusive for the collection of data would be unfeasible and this isolated production would require too long time, which would make it impossible to collect data from as many volunteers as it actually occurred and the result would be less comprehensive.

Future research on the subject could evaluate the perception of students from private schools and assess the impact of the financial aspect on dental experiences. Thus, factors such as assessing whether the most prevalent procedures are the same of the public network, if the environment of a specific dental office for child care causes a greater impact, among other consequences of a service provided by a skilled professionals, could be studied.

The results of this study showed the sensory plurality felt by children during dental appointment. Not only procedures performed are perceived, but other factors such as interpersonal relationships, past information, smells and sounds, are also important in the formation of the reality of each child. Therefore, professionals should be aware that they need to tailor all these variables to obtain success in child care: to promote health through a pleasurable experience for the child.

Conclusion

Drawings were effective in representing the particular view of schoolchildren, revealed plurality and complexity of concepts and ideas related to the dentist. "Procedures", "Dental consultation" and "Other professionals" categories were those that had the highest number of drawings. In addition to procedures and consultation, professional behavior, knowledge transmitted to patients, the physical environment and experienced sensations were relevant sources of the main idea linked to the dentist. The volunteers' perception about the professional was positive both in the drawings as in the responses of the semi-structured interview.

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