

FAMILIA Y EDUCACIÓN: ASPECTOS POSITIVOS

**COMUNICAÇÃO NÃO-VERBAL NO SETTING DA CONSULTA EM ODONTOPEDIATRIA  
NON-VERBAL COMMUNICATION IN THE PEDIATRIC DENTISTRY APPOINTMENT SETTING****Maria do Rosário de Fátima Martins Dias**

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*Fecha de recepción: 6 de octubre de 2012**Fecha de admisión: 15 de marzo de 2013***ABSTRACT**

The outcome of any treatment performed in a dental medicine appointment setting is invariably contingent on the quality of the relationship established by the relational pair dentist – patient. In pediatric dentistry, it is nowadays well-known that some disruptive behavior expressed by children during appointments result from dentists' ill-suited communication acts. The current study draws on strategies inherent to non-verbal communication and accesses how non-verbal signs, sent by both, dentists and patients, during pediatric dentistry appointments, are perceived. The methodological procedure consisted in the application of two original questionnaires per group/sample: 208 children aged 6-10 years (G1); 221 dental care practitioners (G2) - dentists and dental medicine students undergoing clinical internship. Those questionnaires provide an instrument for analyzing non-verbal, subliminal signs, sent by children and doctors, allowing thus for an eventual adjustment of pediatric dentistry intervention strategies used in the context of dentist - child relationship.

**Keywords:** Pediatric Dentistry; Nonverbal Communication; Health education

**RESUMO**

O desfecho de qualquer tratamento realizado no setting da consulta de medicina dentária é variavelmente contingente à qualidade da relação estabelecida pelo par relacional médico dentista - paciente. Em odontopediatria, sabe-se que alguns comportamentos disruptivos expressados pelas crianças durante as consultas resultam de actos de comunicação não ajustados por parte dos médicos dentistas. Nesse enquadramento, e suportado na comunicação não-verbal, o presente estudo avalia de que forma os sinais não-verbais emitidos durante a consulta em odontopediatria, quer

**COMUNICAÇÃO NÃO-VERBAL NO SETTING DA CONSULTA EM ODONTOPEDIATRIA  
NON-VERBAL COMMUNICATION IN THE PEDIATRIC DENTISTRY APPOINTMENT SETTING**

pelos médicos dentistas, quer pelos pacientes-crianças, são percebidos. O procedimento metodológico consistiu na aplicação de dois questionários originais a dois grupos: 288 crianças com idades compreendidas entre os 6 e os 10 anos de idade (G1); 221 médicos dentistas e estudantes finalistas de medicina dentária. Os questionários consubstanciam-se num instrumento que permite a análise dos sinais não-verbais subliminares enviados por crianças e médicos, permitindo um eventual ajustamento das estratégias na intervenção no contexto da relação médico dentista-criança.

**Palavras-chave:** Odontopediatria, comunicação não-verbal, Educação para a saúde

**INTRODUCTION**

Verbal and non-verbal communications are interlinked in a meta-communication function, where non-verbal complements, reinforces, emphasises or, paradoxically, contradicts, that which is being delivered in the verbal message (Corraze, 1982; Lemos, 2006). Some authors state peremptorily that, in health contexts, particularly in specialties like Pediatric Dentistry, verbal communication is highly compromised (Dias, Amorim, Freches & Guilherme, 2006), a situation that forces the dentist to resort to their communication skills in order to interpret the non-verbal signs delivered by children (Cook, 1971; Reis, Dias & Leal, 2007). In a pediatric dentistry appointment setting, the outcome of any treatment is invariably contingent on the quality of the relationship established by the relational pair dentist – child. We are nowadays aware that some disruptive behaviours expressed by children during the course of dental appointments are due to an «*ill-adjusted communication*» act on the part of the dentist: results show the existence of blatant divergences in the way in which dentist and children apprehend, express and codify the same non-verbal signs in the ‘*relational context*’ of the appointment (Morais, Dias, Ventura, Simões & Silva, 2012). Manifestations of anxiety are typically associated with sensations of «*imminent danger*» that appear to somehow put the safety of the subject in jeopardy, or conveyed in the expression of sentiments of tension and anguish (Costa, 1998). When associated with dental treatments, fear triggers patent psycho-physiological reactions (Rolim, Moraes, Cesar & Junior, 2004): children refusing to open their mouth, banging their hands in protest, shunning from treatment by means of turning their head away, or even crying (Colares, Caraciolo, Miranda, Araújo & Guerra, 2004). We know that the most frequent manifestations of anxiety are, in reality, autosomal symptoms: uneven breathing, fainting-like sensations, urinary urgency, palpitations, tachycardia, perspiration, tremors, rubor and gastrointestinal symptomatology (Issáo, Guedes-Pinto, 1998; Morais, 2011). In fact, if one adds the ‘*visually persecutory*’ clinical equipment to the therapeutic setting, *i.e.*, if one also takes into account the smells, the instruments and the lights, the entire instrumental setting can understandably be perceived by the child as highly threatening, and even more so when one considers the compounding effect brought about by the submissive and virtually immobilised position the child is subject to for purposes of examination, quite likely to work as a precipitating factor in triggering marked manifestations of anxiety (Costa, 1998; Dias, Amorim, Freches & Guilherme, 2006).

The subjective perception of fear also appears to bear significant weight in the «*obstruction of strategies*» of early detection of pathological processes with varying degrees of seriousness, and it furthermore contributes to power up refusal mechanisms when it comes to look for early oral health-care in childhood (Hittelman, & Bahn, 2006; Morse, 2002). In fact, children with higher levels of fear and/or anxiety are precisely those who exhibit more carious teeth and a higher number of untreated caries-related lesions (Kinirons & Stewart, 1998; Rantavuori, Lahti, Hausen, Seppä & Karkkainen, 2004; Reis, Dias & Leal, 2008; Reis, Dias & Leal, 2011; Townend, Dimigen & Fung, 2000). In light of this, and in order to change children’s behavior in the therapeutic setting, it becomes paramount

## FAMILIA Y EDUCACIÓN: ASPECTOS POSITIVOS

to understand the reason for the child's non-compliance with treatments during the course of the dental appointment, and to understand how one can contribute to help them acquire more cooperative behaviors (Allen, 2006; Dias, Amorim, Esteves, Reis & Duque, 2006).

The present research attempts thus to assess '*signs of non-verbal communication*' in the context of the relational communication established between the pediatric dentist and the child in the course of dental appointments. The research analytical model followed in this study focused on the analysis of non-verbal signs inherent to the categories *Tone of Voice*, *Look*, and *Psycho-Physiological Manifestations of Fear and Anxiety*, delivered either by the child or the dentist.

## METHOD

Two innovative instruments (questionnaires) were designed for purposes of analyzing non-verbal, subliminal, signs issued by dentists and perceived by children-patients, as well as issued by children-patients and perceived by dentists. The instruments feature 22 questions, scored on a five-point Likert scale, and organised into three elementary categories: (i) *Tone of Voice*; (ii) *Look*; (iii) *Psycho-Physiological Manifestations of Fear and Anxiety*.

A total of 221 dentists, 32% male and 68% female, aged between 20 and 57 years ( $A=24$ ;  $SD=5$ ), and 208 children (52% female and 48% male), aged between 6 and 10 years ( $A=8$ ;  $SD=1$ ) [idem] took part in the current study. Among the dentists surveyed, *circa* 79% are students of dental medicine, 18% hold a (post-Bologna) Master degree and 24% hold a (pre-Bologna) medical degree in dental medicine, and 5% hold a PhD in dental medicine. Approval for studies involving human subjects was given by the Review Board of Egas Moniz Multidisciplinary Research Center in Health Psychology.

## RESULTS

We will present the most significant results obtained from the analysis performed on both samples collected in the present study.

In the category *Tone of Voice*, results show the majority of dentists (72%) stating that they adjust their tone of voice to the physical distance at which their child-patient is, and that they do not let hypercriticism, censure (91%) and/or infantilization (95%) to be manifested when they address children-patients; answers obtained from the latter seem to corroborate those statements (57%, 86% and 88%, respectively). As to the category *Look*, clinical practitioners say that children tend to look insistently to the instruments when these appear to them to be menacing, but only half the children surveyed state that they do so during the appointment.

In the category *Psycho-Physiological Manifestations of Fear and Anxiety*, the Dentists answers often disagreed with the children's. It was observed that 77% of the Dentists say that children *Never* tend to develop 'bodily tics' as a result of fear of being in the dentist chair, contrasting with 6% indicating that in their opinion it *Almost Always* succeeds. [Figure 1] When questioned regarding the possible development of 'bodilytics' as a result of fear of being in the dentist's chair, 5% of the children say that it *Never* happens, unlike the 58% who state that it *Almost Always* occurs. 66% of the Dentists questioned believe that if the children move their body away from the Dentist it is *Almost Always* because they feel uncomfortable and only 2% say that it *Never Happens*. [Figure 2] 52% of children say they *Never* move away from the body of the dentist because they feel uncomfortable. Meanwhile, only 19% of children say they *Almost Always* do.

It was observed that 66% of the Dentists stated that the children tend to cry *Almost Always* when a procedure becomes uncomfortable and only 2% of Dentists said that it *Never* occurred.

**COMUNICAÇÃO NÃO-VERBAL NO SETTING DA CONSULTA EM ODONTOPEDIATRIA  
NON-VERBAL COMMUNICATION IN THE PEDIATRIC DENTISTRY APPOINTMENT SETTING**

[Figure 3] On the children's point of view, the same question had the following answers: 11% stated that this happened Almost Always and 52% say that they *Never* feel like crying. 71% of Dentists stated that the children's posture is *Almost Always* tense as they enter the Dentists' office and only 1% say that it *Never* happens. [Figure 4] Meanwhile, only 9% of children assume to have a posture *Almost Always* tense when entering the office, as opposed to 76% of children who replies that they *Never* do.

The responses obtained regarding the frequency with which Dentists observe the manifestation of alarm signals even in the absence of pain, are as follows: 1% answered *Never* and 59% *Almost Always*. [Figure 5] 68% of children believe that they *Never* emit signals and 8% of respondents stated that they *Always* and *Almost Always* do.

Regarding the frequency with which the Dentists combine a gesture with the child to stop the clinical procedure in case of pain, the vast majority (79%) of Dentists indicates that they *Always* do, 16% stated that they *Almost Always* combine and only 1% say they *Never* do. [Figure 6] This conclusion was really important considering that 71% of patients said they *Almost Always* feel more control in the same situation, while only 4% say they *Almost Never* feel more control when the Dentist combines the signal with them. [Figure 7]

**DISCUSSION/CONCLUSION**

Results show an '*empirical harmony*' concerning non-verbal signs exhibited and later decoded both by dentists and children, particularly in the categories '*Tone of Voice*' and '*Look*'. There is, however, a clear discrepancy between the way children believe they express some non-verbal signs and the way those same signs are later represented at the level of *Psycho-Physiological Manifestations of Fear and Anxiety*.

The vast majority of children do not seem to be aware of giving out some of the signs associated with fear and anxiety. In fact, exhibiting tics, retracting one's body while in the chair, weeping or beginning to cry when feeling uncomfortable, adopting clearly rigid and guarded postures and gestures are manifestations not significantly pointed out by the surveyed children. Along the same line, children are also seemingly unaware of the fact that they tend to give out signs of alarm when they are anxious, even when they are not in pain. Even though unperceived by the children, all these non-verbal manifestations are significantly decoded by dentists. The noted disparities could paradoxically point towards manifestly unconscious disruptive behaviors, where children, under *emotional stress*, seem as if deprived of sensory perception concerning some of the non-verbal signs they themselves give out. With respect to the fact that children feel intimidated when the dentist makes brusque movements, one could interpret it along the lines of an 'apparent fluctuating aggressiveness', felt as persecutory by the child, for such movements are likely to be unconsciously converted in *Psycho-Physiological Manifestations of Fear and Anxiety*.

On the other hand, there exists, on the part of dentists, a 'therapeutic awareness' concerning some behaviors that increment the child's safety and cooperation in the course of clinical procedures, which include the dentist adopting a vocabulary appropriate to the child's age and providing information on every procedure that is being performed. Following this line of understanding, the absence of touch in its therapeutic aspect is seen by dentists as one of the non-verbal signs likely to cause discomfort in children – a fact that is further confirmed by the children surveyed.

However, dentists say that they *always* pre-agree with the child-patient a sign designed to indicate to the dentist that the clinical procedure should be halted because the patient is feeling pain. Scientific literature clearly encourages the mentioned conduct, for (i) the absence of such thought-

## FAMILIA Y EDUCACIÓN: ASPECTOS POSITIVOS

fulness towards the patient leads to an increase in the levels of anxiety (Frias-Bulhosa, 1996; Petry, Toassi, Scota & Foshesato, 2006) and (ii) the patient's feeling of lack of control is considered a risk factor for directly-conditioned fears (Logan, Baron, Keeley, Law & Stein, 1991; Singh, Moraes & Ambrosano, 2000). Accordingly, such 'therapeutic gesture' allows the patient to keep, at the level of their imaginary, the symbolic equivalent of a modicum of control over the therapeutic procedure, which in turn amplifies the patient's feeling of safety.

Overall, we saw that these instruments hold observational gains and that it constitutes a reliable analytical tool of subliminal non-verbal signs issued by children when in a dental appointment setting. The inclusion of *relational communication strategies* in both undergraduate and post-graduate dental medicine academic curricula may contribute to a better empowerment of future dentists in their professional everyday life (Reis, Dias & Leal, 2011). In fact, it should be stressed that it is crucial for these healthcare professionals to respond appropriately to the behavioral reactions of the child-patient, in that the child dentist intervention is also anchored in a bio-psycho-social reality.

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**COMUNICAÇÃO NÃO-VERBAL NO SETTING DA CONSULTA EM ODONTOPEDIATRIA  
NON-VERBAL COMMUNICATION IN THE PEDIATRIC DENTISTRY APPOINTMENT SETTING**

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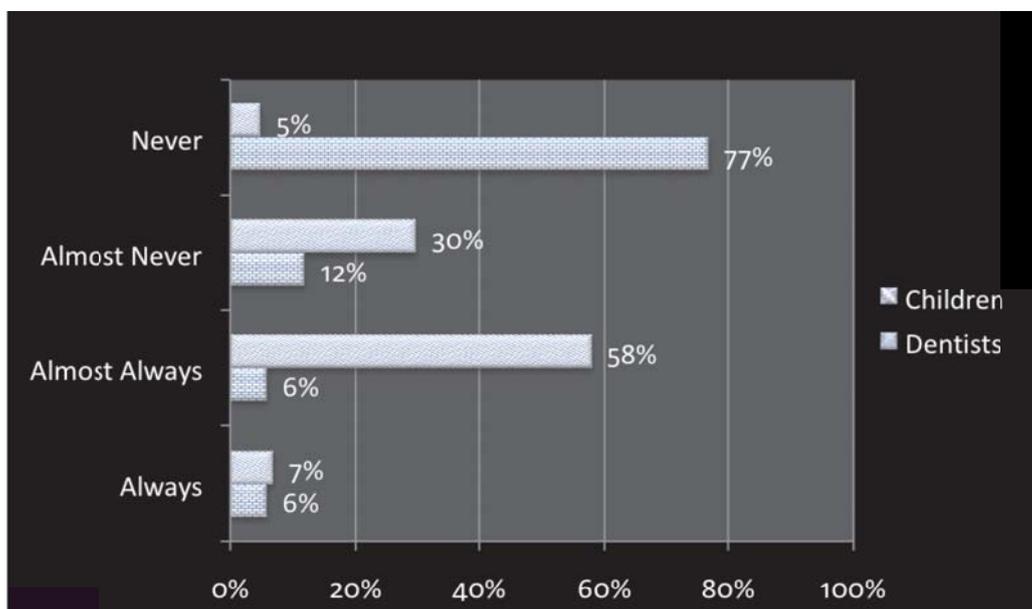
**FIGURES**

Figure 1: Manifestation of 'bodily tics' on the part of the children, as a result of fear of being in the Dentist chair

FAMILIA Y EDUCACIÓN: ASPECTOS POSITIVOS

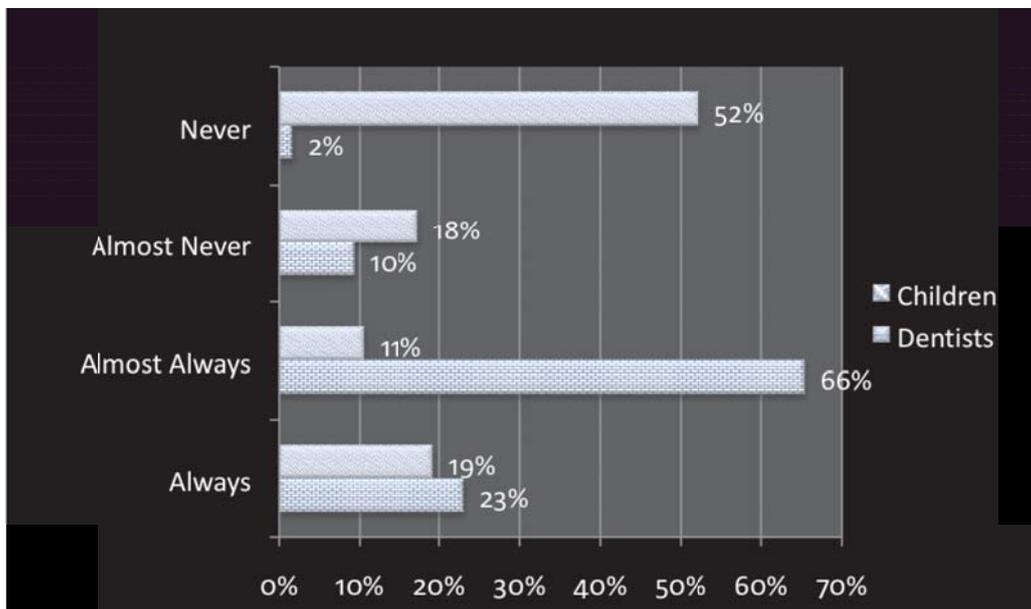


Figure 2: Perception as to child withdrawal or avoidance / manifestations of discomfort on the part of the child

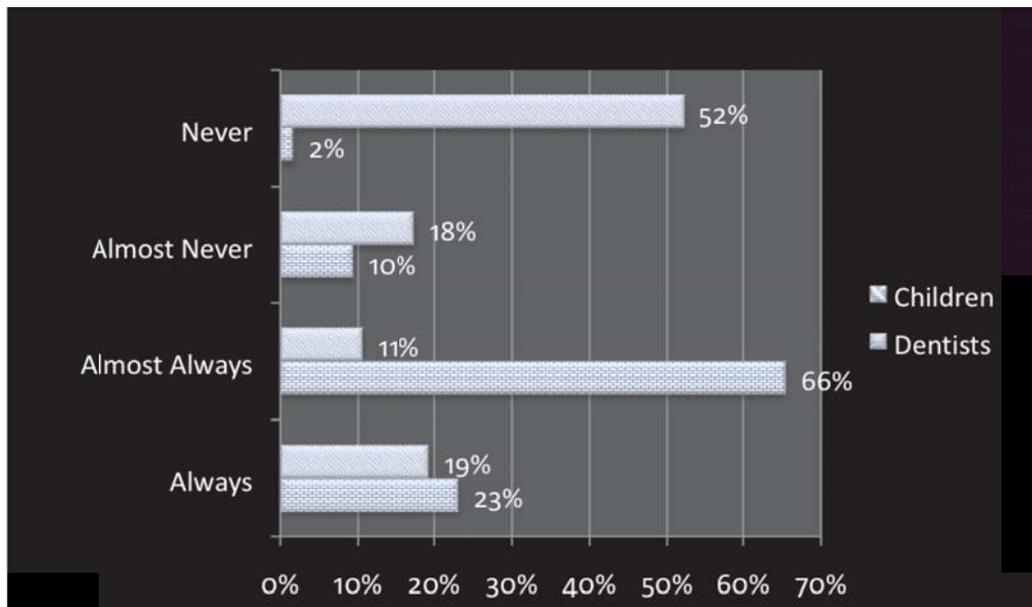


Figure 3: Manifestations of weeping and crying on the part of the child/presence of uncomfortable procedures

**COMUNICAÇÃO NÃO-VERBAL NO SETTING DA CONSULTA EM ODONTOPEDIATRIA  
NON-VERBAL COMMUNICATION IN THE PEDIATRIC DENTISTRY APPOINTMENT SETTING**

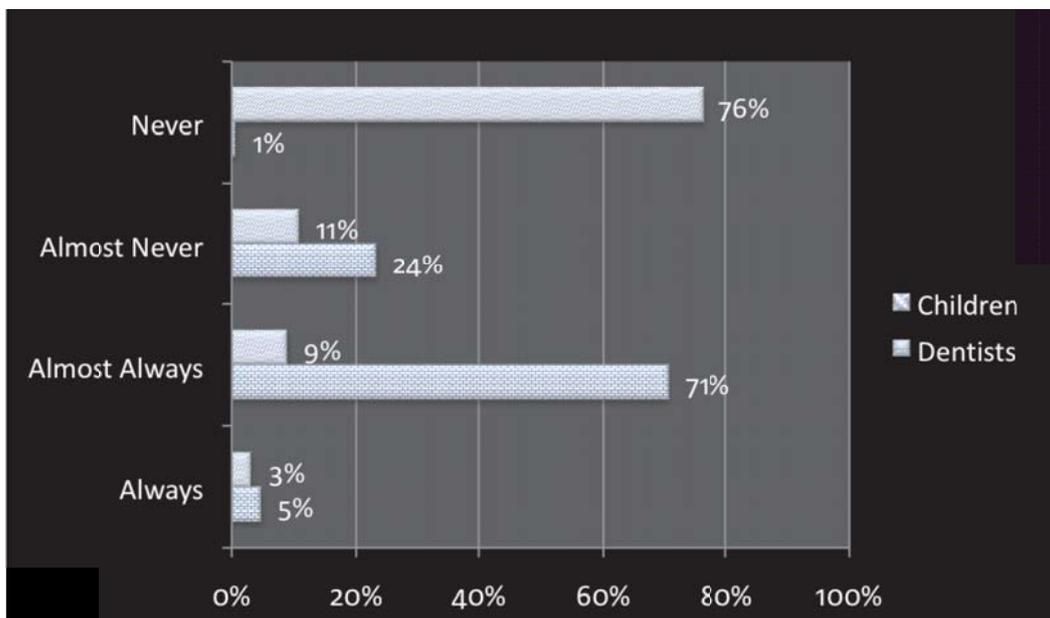


Figure 4: Manifestation of a tense posture on the part of the children /appointment setting

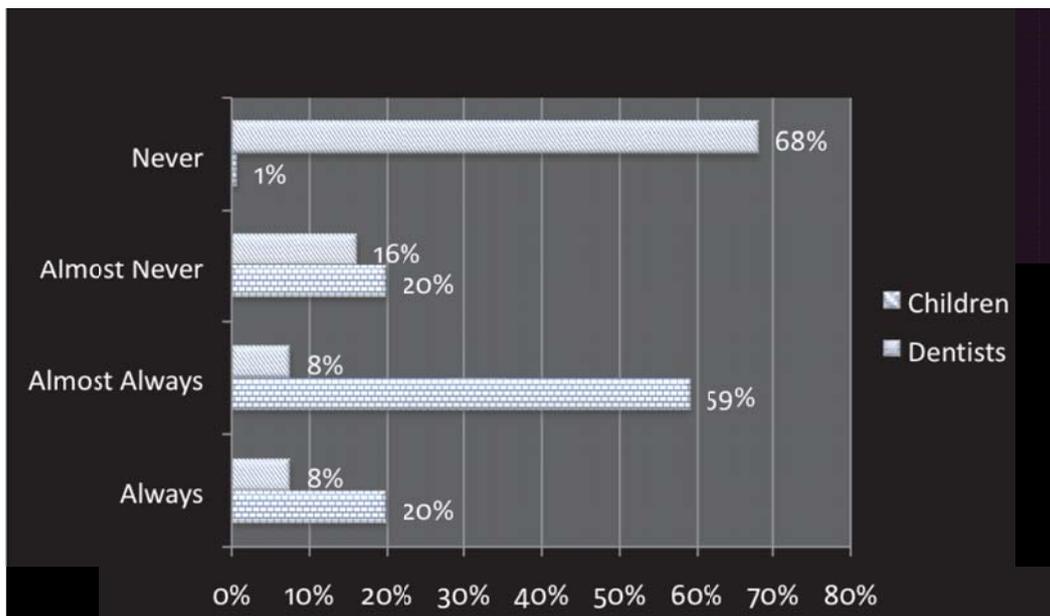


Figure 5: Manifestation of signs of alarm on the part of the child in the absence of pain

FAMILIA Y EDUCACIÓN: ASPECTOS POSITIVOS

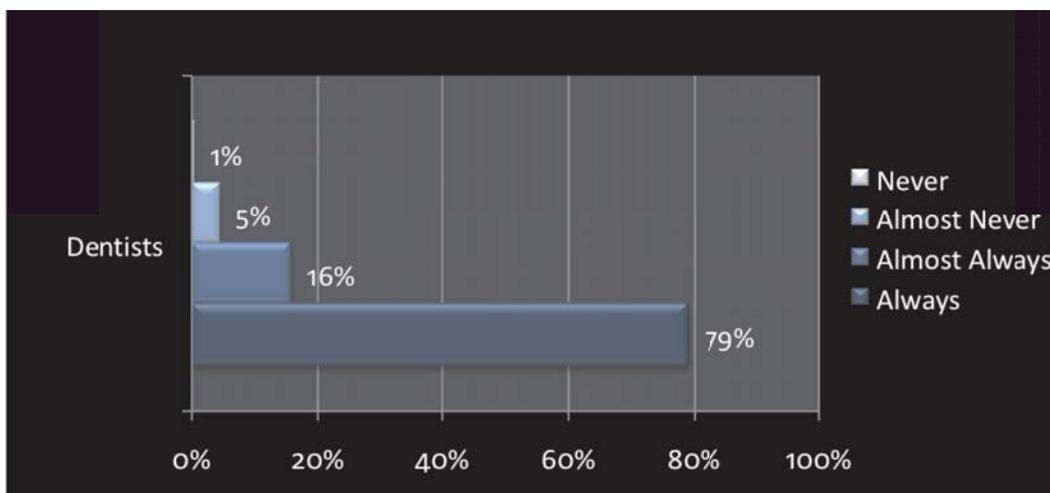


Figure 6: Dentists usually combine a gesture with the children to stop the clinical procedure, in presence of pain

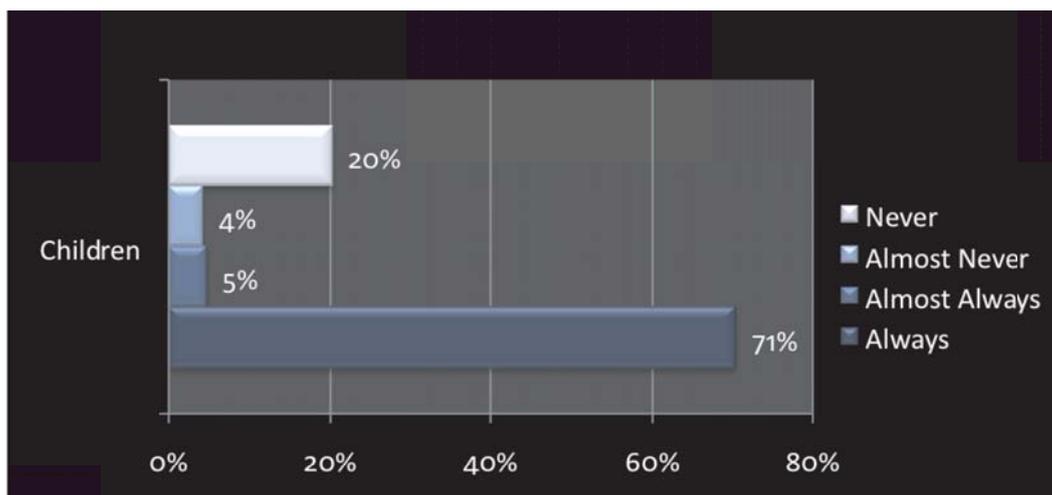


Figure 7: Children feel more secure when the Dentist combines a gesture to stop the clinical procedure, in presence of pain.

