EYE TRACKER AND EARLY DETECTION

Autismo Burgos
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BBMIRADAS: EARLY SCREENING

The use of eye-tracking technology in the detection of autism spectrum traits in a sample of babies at ages of 24 months

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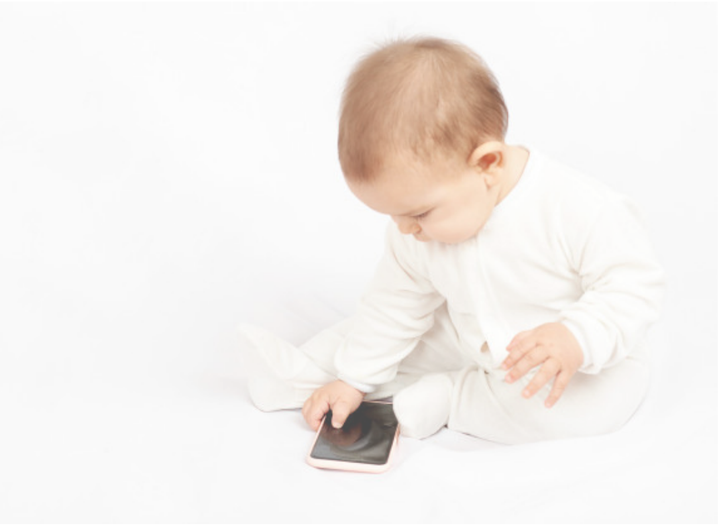

1

The aims

Previously steps: Why? What? How? When? Where?

2

A deep focus in our research

How are we going to do it? What variables influence? How do we design the videos? How are we going to collect information?

3

Ideation

We brainstorm to get the final idea.

4

Teamwork

We do the necessary steps to deliver the result.

5

Results and further steps

Results and limitations are they are illuminating the needs and future of research

The aims

Design Process: Previously steps: Why? What? How? When? Where?

01

Previously research

There is a growing consensus about the importance of early autism detection and the viability of conducting **eye-tracking** studies in babies to facilitate any **red flag** as quickly as possible (Klin et al., 2002; Jones et al., 2008; Pierce et al., 2011; Matson et al., 2011; Zwaigenbaum et Penner, 2018).

02

Research

Using **AOI,s** approache we have been developed specific videos about iinteraction and **sharing attention**
To this purpose, we developed a data driven method focused in distinctions of social and non social areas and also exploring defining dynamic norms of v**isual exploration in iinteraction** and the attention two characters shared with regards to an object or action were involved

03

Participants. Instruments

Sample of **25 babies up to 24 months** of age who were evaluated with five videos were also administered the M-CHAT revised screening tool, the ADOS-T, and an assessment of the social monitoring of the gaze through qualitative and quantitative criteria

2 A deep focus in our research

The Previous work

The **markers of an atypical developmen**t, typical of the autism spectrum, that stand out with greater reliability in early detection are: between six and nine months visual fixations and a strange **visual examination,** repetitive and unusual exploration of parts of objects, absence of **intentional-spontaneous acts** of communication, absence of age-appropriate **phonemic development,** absence of **joint-coordinated look,** affective and babbling in communicative-social interactions, decreased eye contact and poor social interest and involvement in joint games (Zwaigenbaum et al, 2005)

Our aims

Examine differences between high risk autism (familiar predisposition), perinatal risk and control, studying also factors as cultural issues, socio-economical level...

The main goal is detection and intervention as early as we can

We are also interested in find possible red flags about development basis in sleep, feeding, crawling, babble, crying and early markers such as moral development or social perception and orientation

The data is being collected at 11 corresponding time points with the following months of age: 2, 3, 4, 5, 6, 9, 12, 15, 18, 24 and 36