Experiential Design – Rethinking relations between people, objects and environments

• Paper / Proposal Title:

Digital Tools for Children with Autism:

Enhancing sensory development and the recognition of faces and emotions

• Author(s) Name:

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• University or Company Affiliation:

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• Abstract (300 words):

This research assumes that neuro-typical people are responsible for understanding and responding to kids with autism in their communication practices and seeks to enable children with ASD the ability to practice standard communication and recognize faces and emotions in order to improve social communications with individuals who do not understand autistic communication.

Research shows that children who experience a lack of sensory development develop problems in education and learning (Bennet Brown, N., Dunn, W. 2010). Many children with autism may show central nervous system irregularities that can affect the required visual input that allows for face recognition. This may, as well, limit the visual understanding that is required for the development and activation of facial processing

As will be shown in this thesis research, there is great opportunity for positive interventions in the facial and emotional recognition in a sensory processing environment for some children with autism through this thesis research. This thesis creates an environment that includes facial recognition tools while supporting sensory issues, like auditory, touch and visual, with digital technology and digital feedback. This thesis seeks to create a connection between face and emotion recognition and sensory satisfaction in order to enhance learning with the help of sensory stimuli. This following research addresses some of the problems experienced by autistic children, and responds by creating a sensory environment and app that offers features of digital learning; it is hoped that this research will help these kids to learn necessary context better and will create a relaxed and fun environment just for the benefits of free play.

- **Author(s) Biography (200 words each):**

  Mehnaz is an Industrial Designer with Interactive Design experience. She has been working in design industry both in Europe and Canada for more than two decades in various areas of design such as manufacturing, store planning, furniture design, interaction design and jewellery design. She completed her Master in Design degree at OCAD University in Digital Futures department after exploring the needs and future of Industrial Design discipline. Recently teaching at OCAD University, Industrial Design Department.

  Mehnaz believes in and works for connecting digital technology with physical products while executing as well as at the innovation stage of product development. She pursues the idea of fundamentals of design matter for benefits of physicality of product development and works to fill the gap between two worlds to reshape and connect user experiences with digital technology. She gives seminars, and creates workshops with various universities in Europe and in Canada. She has been recently working on development of her thesis project “The Face and Emotion Recognition to Enhance Learning in Children with Autism” with South Asian Autism Awareness Center (SAAAC). Mehnaz holds publications in Industrial Design and Design for Health.