

# **ABSTRACT**

## **The iPad & Autism**

### **An Investigation into the Grace Application and how iOS Devices may Offer Effective Alternatives to Traditional Intervention Methods in Aiding Communication and Learning in Children with Autistic Spectrum Disorders.**

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This research paper analyses the potential benefits of utilising iOS technologies as an aid for communication and learning in children with autistic spectrum disorders. The emergence of touch controlled consumer electronics such as the iPad in recent years has allowed for new and exciting opportunities in creating innovative ways to tackle some of the impairments faced by children with autism. This paper examines these opportunities from a theoretical perspective and investigates some of the key concepts and issues surrounding the use of interactive technology as an aid for children affected by these disorders. The aims of this are to highlight some core insights into the design process of applications targeted at an end user base consisting of children with autism, and determine the effectiveness of iOS technology as a potential alternative to some traditional intervention methods such as the Picture Exchange Communication System (PECS).

To carry out this research, the iOS application “Grace” designed for aiding communication in children with autism has been selected for analysis. Grace has been scrutinized in terms of interface design, and a detailed comparison with its traditional equivalent method, the Picture Exchange Communication System has been conducted. Through the application of theory extracted from the literature review in the areas of autism and interactive design, several findings have been made.

The findings of this study conclude that from a theoretical point of view, iOS technologies are a promising alternative to more traditional methods in aiding with communication and learning. In many ways, the use of an iPad is a more appropriate solution to aiding communication and learning in children with autism, particularly in terms of practicality and individuality. However, acknowledgment is made that further study is required in order to shape a firm empirical basis for these findings.