The effects of mobile apps on autistic students in UAE

تأثير تطبيقات الهاتف المتحرك على طلاب التوحد في دولة الإمارات العربية المتحدة

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Abstract

Children with autism are individuals who are facing difficulties in the social and communication skills. There are many researches that explored the use of information technology in the interventions of autistic students. One of the recent technologies that was shown to be effective is mobile apps. This case study investigates the use of a mobile app (called Picaa) that provides five main activities (association, puzzle, exploration, memory and sorting). All these activities can be personalized and adapted by the educator to be ready for each child. The study was conducted in Sharjah autism centre in UAE over a period of four months on five students with autism. The effectiveness of the app was measured over five main skills. We while the app significantly improved the skills of most children we studied, we identify practical challenges that were faced by therapists while using the app. We propose a set of recommendations that target the Arab world.
أخلاصة

أطفال التوحد هم أفراد يواجهون صعوبات في المهارات الاجتماعية والتواصل. هناك الكثير من الأبحاث التي تستعرض استخدام تقنيات المعلومات مع طلاب التوحد. تطبيقات الهاتف المتحرك واحدة من أحدث التقنيات التي أثبتت فعاليتها في مجال التوحد. دراسة الحالة هذه تبحث في تطبيق هاتف متحرك يسمى بيكا الذي يتضمن خمس نشاطات رئيسية (الجمعية، اللغز، الاستكشاف، الذاكرة والترتيب). جميع هذه الأنشطة يمكن تكييفها وجعلها مخصصة بواسطة المعلم على حسب احتياجات طالب التوحد. دراسة الحالة تم تطبيقها في مركز الشارقة للتوحد بدولة الإمارات العربية المتحدة خلال مدة أربعة أشهر على خمسة طلاب توحد. فعالية التطبيق تم قياسها من خلال خمس مهارات أساسية. بالرغم من أن التطبيق أثر بشكل فعال في تحسن مستوى معظم طلاب دراسة الحالة إلا أنه تم تحديد بعض التحديات التي واجهتها المعالجين خلال استخدام التطبيق. لقد تم اقتراح توصيات التي تستهدف طلاب التوحد بالعالم العربي.
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