# ABSTRACT

Early identification and diagnosis are the solutions to get students on the right road to dealing with the problems related to autism and overcoming them. The technique to diagnose visual perception problems in autistic students is manually employed and the hands-on technique is utilised. A systematic manual has been developed and is used to diagnose visual perception problems in autistic students. The aim of the study is to develop Vi-Per Games as a tool for special education teachers to diagnose visual perception problems. These diagnostic tools can assist and help teachers to diagnose their students without the teachers needing to have any experience and knowledge of diagnosing visual perception. Studies have shown that using games has many benefits and helps autistic students. The objectives of this study are (i) To develop serious games to identify visual perception problems for autism students, (ii) To validate the accuracy and perception of the teachers towards the use of serious game for autism students and (iii) To test autism student towards the use of the Vi-Per Games for diagnosing visual perception problems in students with autism. The participants were ten (10) autistic students and five (5) special education teachers. The autistic students from special education classes were selected using pre-test and post-test procedures. The experiment was conducted at SEAMEO SEN Regional Centre for Special Education, Melaka, Malaysia. The experiment measured the accuracy of using the developed serious games and to obtain the perception of the teachers towards the use of the games for diagnosing visual perception problems in autistic students. The results positively shown that the use of Vi-Per Games can help teachers diagnose visual perception problems in autistic students and can replace manual and conventional tests. Overall, the findings show that using the serious game approach effectively engages autistic students as compared to using the conventional approach in the diagnosis of visual perception problems in autistic students, as compared to the conventional methods of diagnosis. Thus, these approach can be implemented in classroom for diagnosing visual perception problems by various autism organization.