

Non-Verbal Ability and Clinical Diagnosis of Primary One School Children with Poor Academic Performance

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ABSTRACT

Introduction	Paediatricians and Medical Officers in government clinics are facing an increasing number of children screened and referred by schools who has poor academic performance. This process aims to detect children who have diagnosable conditions which prevent them from performing well in studies.
Objective	To document non-verbal ability of primary one school children referred with poor academic performance and their clinical diagnosis after assessment by Paediatrician.
Methods	All primary one school children referred by the schools to Lau King Howe Memorial Children Clinic for the year 2010 were prospectively studied. They underwent Naglieri Non-Verbal Ability Test [®] (NNAT) and assessment by Paediatricians with special interest in development and behavioural paediatrics. Other developmental and behavioural assessment tools such as Childhood Behavioural Checklist, Behavioural Rating Scales, neurodevelopmental profile and Griffiths Mental Development Scales – Extended Revised were also used whenever appropriate. Children previously known to the clinic for developmental disabilities were excluded.
Results	Results of the NNAT were analysed and presented using standard statistical tests. Majority of this group of children were diagnosed to have specific learning difficulty (e.g. dyslexia), borderline intellectual ability and/or Attention Deficit Hyperactive Disorder. Very few of them were diagnosed to have intellectual disability. More analysis were performed to study the relationship among NNAT results, clinical diagnosis and demographic data. Emotional health of these children were specifically looked at by using the Childhood Behavioural Checklist.
Discussion	Literature has supported the link between adult health outcome and their childhood learning experience. Students' performance (especially academic) has been decided as one of the government's key performance indicator. With the active schools screening and referral, it is important to recognize that majority of these children who are not previously known to health professional has different learning needs, instead of the diagnosable "intellectual disability". Therefore, it is important to address these children's ability and strengths, and offer them an educational program that works best for them. A one-model fit all "special education" that is currently available need urgent revision.
Conclusions	The altermate aim of this screening-referral-diagnosis process is to to help children with learning difficulty to achieve their learning potential. This study documents the non-verbal ability and clinical diagnosis of primary one school children previously not known to health professional. Majority of these school children do not have intellectual disability. A more realistic education system and targeted program which look at their strengths should be offered.