

TDG Project Seminar:

# Individualized supports for college students with SpLD, ASD and ADHD

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# Terminologies

## Specific Learning Disabilities (SpLD) (特殊學習困難)

- Dyslexia (讀寫障礙)

## Autism Spectrum Disorder (ASD) (自閉症譜系障礙)

- Autism (自閉症)
- Asperger Syndrome (亞氏保加症)
- PP-NOS
- High-functioning Autism

## Attention-deficit/Hyperactivity Disorder (ADHD) (專注力不足/過度活躍症)

- Inattentive vs impulsive vs combined subtypes
- Attentional Deficit Disorder (ADD)



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## Supporting College Students with Special Need in Neurodevelopmental Disorders (SpLD, ASD and ADHD)

### Background

- The success of inclusive education in primary and secondary school in Hong Kong
- The mandatory school-based educational psychological services introduced by EdB since 2008
- the Education Bureau (2015) identified a growing need to ensure the inclusiveness of learning experience of students with disability in tertiary education
- the support for such students is still young at the tertiary education level



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# Supporting College Students with Special Need in Neurodevelopmental Disorders (SpLD, ASD and ADHD)

## Objectives (Summary)

- to examine learning experiences, needs, and challenges of students with neurodevelopmental disorder (SpLD, ASD and ADHD) at EdUHK
- to explore **benefit and role of a professional psychoeducational assessment** in promoting the learning experiences of students with neurodevelopmental disorders, as well as enhancing the teaching efficacy of their corresponding stakeholders



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All years (whole uni)/ Year 2019/20 (UGC, 2021)

<https://cdcf.ugc.edu.hk/cdcf/indepthAnalysis.action>

(UGC, 2021)

	Students with <b>SpLD</b>	Total number of students	Percentage of <b>SpLD students</b>
Student enrolment in Year 1	16	24550	<b>0.065%</b>
Total number of student enrolment	57	98942	<b>0.058%</b>
	Students with <b>ASD</b>	Total number of students	Percentage of <b>ASD students</b>
Student enrolment in Year 1	18	24550	<b>0.073%</b>
Total number of student enrolment	59	98942	<b>0.060%</b>
	Students with <b>ADHD</b>	Total number of students	Percentage of <b>ADHD students</b>
Student enrolment in Year 1	26	24550	<b>0.10%</b>
Total number of student enrolment	84	98942	<b>0.085%</b>

Statistics



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# Statistics:

Students with developmental disorder admitted in the year **2019-2020** across **Hong Kong**:

- ADHD—84
- ASD—59
- SpLD—57
- **(Total = 200)**

In **EdUHK** alone in 2019-2020:

- ADHD— <5
- ASD— <5
- SpLD—10
- **(Total < 20)**

The latest no. of registered students from the project is now 47,

- **24%** of the total number of students with ADHD, ASD or SpLD in Hong Kong UGC-funded programs.

UGC (2019)



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# Progress

Number of students **registered**: 47

Number of students **seen**: 35



Participating Universities:

CityU, CUHK, EdUHK, HKBU, HKU, HKUST, LU, PolyU



Various personnel/teachers had been interviewed from different universities: 48



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Period (MM/YY)	A brief summary of activities undertaken (with reference to the proposed implementation plan)	Type and number of participants / beneficiaries
06/2020	Commencement of recruitment of participants, Document Analysis	N/A
06/2020 – 02/2021	Focus groups and interviews	48
06/2020 – 02/2021	Clinical assessment to individual student participants + feedbacks for the students and the relevant stakeholders at EdUHK involved for their learning support	35
09/2020	Interim project dissemination (UGC-funded universities)	9
10/2020	Writing up the preliminary results of the project on the learning needs of the student participants	On-going
	• Publication in Open Access Journal ( <i>Scientific Reports</i> )	



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# Student's School Satisfaction

- Yielded mixed results
  - Though some required the extra time allowance, some others find it unnecessary
    - However, various types of academic supports may not be available (e.g. the use of computer, exam papers with colored layers, enlarged exam papers)
  - Most students needed a **study coach/buddy**
  - Other types of **non-academic supports** needed
  - Supports for **group projects/internship** is needed in many cases
    - Exposing SEN identity may be a concern
  - Students may have other **unassessed/undiagnosed** difficulties
  - All students needed additional **(individualized) supports** appropriate in the University context
    - All students needed clinical re-assessments



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# Findings - General

- Those who were diagnosed before entering university:
  - All students who received Special Examinations Accommodations in secondary school, received the same accommodations in university
- Those who were diagnosed but did not receive necessary accommodation in university:
  - Acknowledged the need to be reassessed
  - Suggested a number of unmet needs
  - Showed a lack of knowledge in search of professional assessments and diagnosis
- Common types of SEA:
  - Extra time allowance
  - Special supervised examination room
- Other supports:
  - Note-taking services
  - Counselling services



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# Common Effective Practices for Support



## Workshops for teachers

Arouse awareness  
Enhance efficacy for  
providing supports



## Individual support/accommodation recommendations

Disseminated to  
teachers at the  
beginning of the  
semester



## Purchase of supports and services

Technological devices  
Trainings  
Psychoeducational  
Assessments



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# Results from SEN support services providers from EdUHK and other universities:

- All parties welcomed this project, and even suggested educational psychologist's assessment could be a long-term service.
- All parties suggested facing difficulties in making suggestions on the appropriate supports for students with SpLD, ASD and ADHD related to:
  - Lack of relevant **past experience** with admission of such students
  - Lack of standardized guidelines from EDB or relevant government bodies
  - Limited choice of appropriate college-specific clinical assessment for students
  - Unclear of the appropriate professionals to seek for conducting assessment and making diagnosis for students
  - Identifying students with SEN status - unnecessary delay in the implementation of accommodations/ late and disorganized notification to the teaching staff



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# Results from teachers from EdUHK and other universities:

- All parties suggested facing difficulties in making suggestions on the appropriate supports for students with SpLD, ASD and ADHD related to:
  - Lack of understanding of students' special conditions
    - Identification and late notice
  - Lack of relevant past experience with teaching of such students
  - Lack of appropriate college-specific assessment and guideline for students
  - Lack of a formal and structured system receiving information of the students – a knowledge gap between different years/ among teachers/ between students and teachers



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# Terminologies Differentiation

Assessment	Diagnosis
<ul style="list-style-type: none"><li>• To find out the <b>actual needs</b></li><li>• To formulate support and accommodation plans</li></ul>	<ul style="list-style-type: none"><li>• A <b>formal label</b> of a disorder</li></ul>

Supports	Examination/Assignment Accommodations
<ul style="list-style-type: none"><li>• <b>Formal assessments may not be required</b></li><li>• Examples are: trainings, interventions, social/peers supports, mentoring, tutoring, etc</li></ul>	<ul style="list-style-type: none"><li>• Usually a <b>diagnosis is required</b></li><li>• Issues of <u>fairness</u></li><li>• Examples are: extra time allowance, special rooms, waiving of module/assessed part, modes of assignment, etc</li></ul>



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# Who can do the assessment and diagnosis?

## Depends

- Generally in Hong Kong, EPs can do assessments for SpLD, ASD and ADHD
- But the professionals who made the diagnosis depends of whether they are recognized:

	EP/CP	Psychiatrist	Paediatrician
SpLD	EDB, HKEAA, SWD		
ASD	EDB, HKEAA, SWD <sup>1,2</sup>	EDB, HKEAA, SWD	EDB, HKEAA, SWD*
ADHD	EDB, HKEAA, SWD <sup>1,2</sup>	EDB, HKEAA, SWD	EDB, HKEAA, SWD*

1. Only diagnosis made by some individual clinical psychologists or pediatricians are accepted

2. Assessment of learning needs is still required by EP (or CP) for SEA and supports



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**BUT EP's assessment is adequate for some public examinations/organization**



# Examples of Qualified Professionals for Assessments/Diagnosis

	HKEAA/EDB (reports from last 4 years)	TOEFL, GRE/GMAT (Reports from last 5 years, in English)	IELTS (Reports from last 2 years)
SpLD			
ASD			
ADHD			

# Common challenges



**Outdated  
assessments**



**Lack of EP's  
assessments**



**Lost/did not obtain  
important  
documents, e.g.**

EP's assessment reports  
Psychiatrist reports



**Did not receive SEA  
for HKDSE**

Does not mean the  
students have no  
difficulties



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# Suggestions: Levels and Directions of Supports

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## Teachers

Knowledge of supports and accommodations

Fully informed

Identification

- Suggestions of students to appropriate professionals/colleagues for assistance



## University/Students Supports Team

Transparent policies on students' registration and supports

Bi-directional communication of supports

Provision of clinical reassessments



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# Clinical Reassessments: Common Needs of students

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## Individualized assessments

- IEP

## Time

- Assignments
- Examinations

## Study and assignment guidance

- Structure
- Samples

## Socio-emotional

- Peers

## Placement/practicum

- Communication with supervisors

## Study/Career counselling



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# Pilot Training

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## Common underlying challenge

Executive functioning



## Trainings

Study/exams skills

Scheduling

Essay writing skills



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# scientific reports

 Check for updates

OPEN

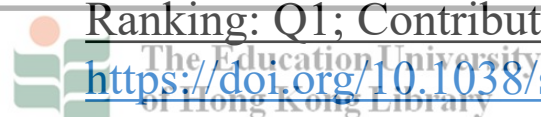
## Holistic processing of Chinese characters in college students with dyslexia

 Ricky Van-yip Tso<sup>1,2✉</sup>, Ronald Tsz-chung Chan<sup>1</sup>, Yin-fei Chan<sup>1</sup> & Dan Lin<sup>1</sup>

Expert face recognition has long been marked by holistic processing. Hence, due to the many visual properties shared between face perception and Chinese characters, it has been suggested that Chinese character recognition may induce stronger holistic processing in expert readers than in novices. However, there have been different viewpoints presented about Chinese character recognition, one of which suggests that expertise in this skill involved reduced holistic processing which may be modulated by writing experiences/performances. In this study we examined holistic processing in Chinese character recognition in adults with and without dyslexia, using the complete composite paradigm. Our results showed that the adults with dyslexia recognized Chinese characters with a stronger holistic processing effect than the typical controls. It seems that those with dyslexia relied overly on the visual spatial information of characters and showed deficits in attending selectively to their components when processing Chinese characters, which hindered the development of expert reading and writing skills. This effect was in contrast to previous perceptual expertise studies in which reduced holistic processing marked deficits in face/visual object recognition. This study is also the first to show that Chinese adults with dyslexia had persistent below average performances in Chinese literacy.

Holistic processing, according to Gestalt psychology, is defined as the processing of the whole of sensory inputs that are qualitatively different from their separable parts<sup>1,2</sup>. Considered to be a perceptual marker of visual expertise, holistic processing—a phenomenon found commonly in face recognition—has been researched and documented widely<sup>3</sup>. Other than its use in face recognition, some studies have suggested that it is also used in other types of visual objects in which within-category individualization is required<sup>4</sup>. For example, an association has been found between holistic processing and expert recognition of visual objects after participants were trained to recognize novel synthetic stimuli<sup>5</sup>. It is also found that training to individualize an artificial object type increased holistic processing<sup>6</sup>. A paradigm which can demonstrate holistic processing is the composite paradigm, which demonstrates a type of visual perception in which both featural and configural information are integrated and processed as a Gestalt<sup>7</sup> (see Fig. 1). The composite paradigm demonstrates holistic processing by inducing

Tso, R. V., Chan, R. T., Chan, Y., & Lin, D. (2021). Holistic processing of Chinese characters in college students with dyslexia. *Scientific Reports*, 11(1), 1973. (5-year IF: 4.576; Ranking: Q1; Contribution: first and corresponding author, <https://doi.org/10.1038/s41598-021-81553-5>)



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# Important Reminder

- Obtain assessment reports from EDB/NGO's
  - The EP shall ensure that the documentation of referrals is **treated as 'restricted' documents** and that all personal data is protected in accordance with the PDPO and related measures of the EDB, as well as handle request for copy of reports by parents and professionals. All documents shall be kept until the student (data subject) **reaches the age of 21 or for 5 years** counting from the date of referral (whichever the later date is).
  - Ask students to contact their secondary school
- [https://www.edb.gov.hk/attachment/en/edu-system/special/support/wsa/primary/SBEPS%20Report%20request%20form %20EDB%20webpage%20\(Eng\) %202019r.pdf](https://www.edb.gov.hk/attachment/en/edu-system/special/support/wsa/primary/SBEPS%20Report%20request%20form%20EDB%20webpage%20(Eng)%202019r.pdf)
- Obtain assessment reports from HA/CAC (Examples)
  - Medical Reports (*only certificates needed*)
- <https://www3.ha.org.hk/hkwc/forms/MedicalReportRequest/QMH.pdf>
  - Data access
- <https://www3.ha.org.hk/hkwc/forms/DataRequest/QMH.pdf>



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THANK YOU!

Q&A



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