Social Competence Training for Youth with ASD: Challenges and Opportunities

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The Overarching Challenge

- Can we do better in serving people with Autism Spectrum Disorder (ASD)?
- The "wonder kid of squash" :

The other challenges in working with youth with ASD

- Aim: To reduce the impacts of ASD on daily functioning:
- What to do?
- How to do it?
- How do we know what we are doing is effective?

Can we do better in serving people with Autism Spectrum Disorder (ASD)?

- Evidence for effective practice:
- Intensive training (40 hours/week for 2 years) based on Applied Behavior Analysis (ABA) for children before 6 years old. Success rate: 50%
- Training contents: developmental & global basis

What about working with youth with ASD?

- Intensive, individual & developmental/global approach - practical & effective ?
- If not, what else?

What is ASD? "Myth & Reality"

(The Psychologist, 2014)

A steady increasing prevalence. Why?

- 1980's: 4/10,000
- 2002: 6.4/1000
- 2006: 9/1,000
- 2008: 11.3/1,000
- 2012: 14.3/1,000

Centers for Disease Control & Prevention, USA, 2014

ASD, an evolving concept: Changes in DSM-5

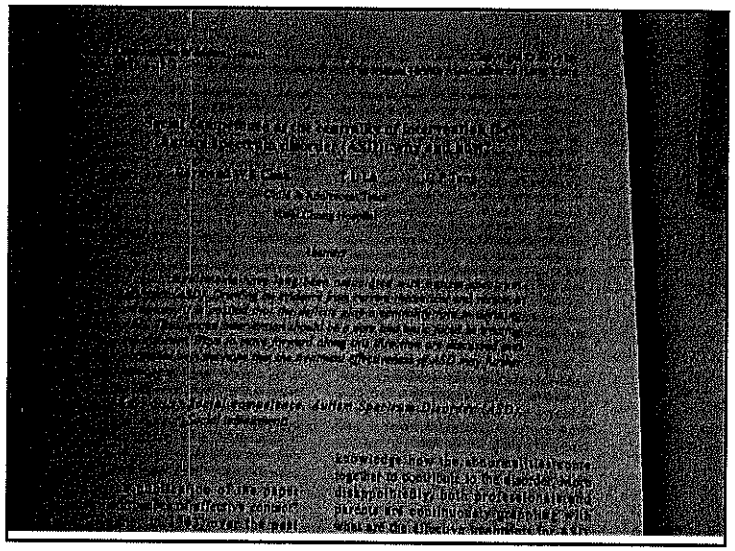
- Under Neurodevelopmental Disorder
- Adopting a spectrum (ASD) concept – no more distinction between various types of PDD
- 2 major defining deficits – social & behaviour; language considered not a distinct marker for ASD
- Age limit is replaced by social context

Making the picture more complicated: Co-morbidity

- IQ : 31% (MR).; 23% (limited) ; 46% (average or above) (CDC, 2014, Community Report on Autism).
- ADHD (Childhood,30%))
- Anxiety disorders (adolescence ,50%)
- Depression (adolescence/young adult · 50-70%)

Let's losing the gist: Social deficits are the cardinal signature features

- A more emphasis on social deficits across different developmental stages & multiple contexts
- Why "B" is a concern? Interfering with functioning in particular in the social domain



What is iREACH (賽馬會心志牽社交能力發展中心)?

- A community-based center
- Launched in September, 2014 with support from Jockey Club
- Focus on social competence development
- Target at youth with Autism Spectrum Disorder (ASD)

Aim: To reduce the impacts of ASD on daily functioning:

- A focus on social intervention
- What to do?

Social Intervention: The essential components

- Emotion regulation:
- ASD as "affective" disturbance (Kanner, 1943)
- Deficit in social-emotional reciprocity (DSM-5)
- Increasing prevalence rate of co-morbid anxiety & depression among youth with ASD

Social Intervention: The essential components

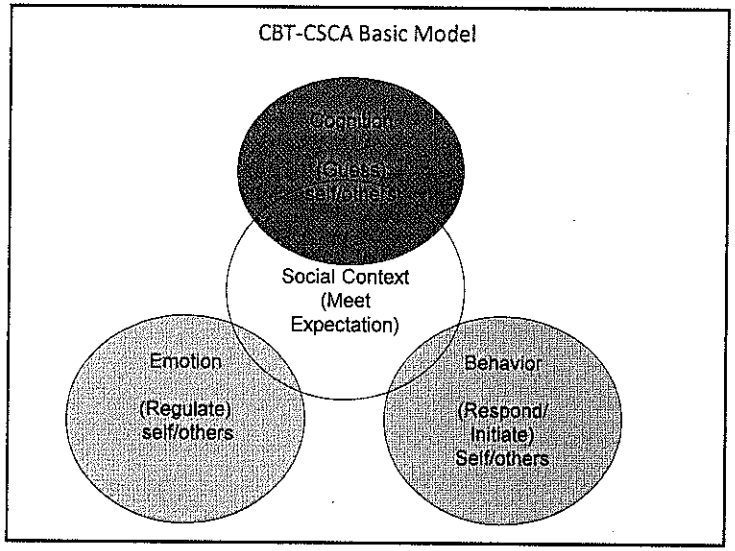
- Social cognition
- The development of theory of mind in ASD
- The necessity of it in coping with fluidity of social interactions

Social Intervention: The essential components

- Behavioural skills
- Learning more complex skills such as conversation, assertive defence.

Social Intervention: The essential components

- Social motivation & context-based knowledge:
- Integration, practice and application in common social situations



CBT-Context-based Social Competence Model for Autism (CBT-CSCA)
情、理、行、實況社交訓練
(Chan et al., 2014)

What are the domains of social competence?

- A confirmed 7-factor model (Yager & Iarocci, 2013)
- Behaviour:
- 1) Non-verbal Sending skills
- 2) Verbal conversation skills
- Emotion:
- 3) Demonstrating empathic concern
- 4) Emotion Regulation

The 7 domains of social competence

- Cognition:
- 5) Social inferencing
- Social Context:
- 6) Social motivation
- 7) Social knowledge

情、理、行、實況社交訓練 (CBT- Context-based Social Competence Training for Autism, CBT-CSCA)

- Our basic training protocol:
- 18 sessions, 1.5 hours each
- Session 1: Introduction & Social motivation
- Session 2-4: Social knowledge of common contexts & perspective taking
- Session 5: Active listening
- Session 6-9: Conversation skills
- Session 10-13: Emotion recognition & management of anxiety & anger

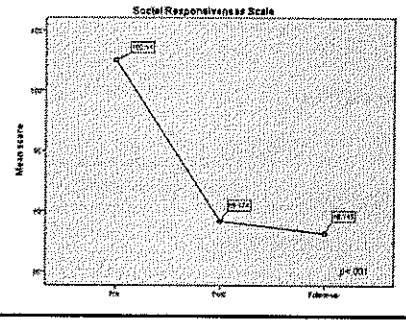
- Session 14-15: Social cognition, mind reading
- Session 16-18: Integration practice in different common social contexts, joint activities & graduation party.

- How do we know what we are doing is effective?

Trial running

- Period: 2012-2013
- Subjects: 82, M(89%), F(11%)
- Age: 12-18 years old
- Measure: SRS by parents
- Design: pre & post & 3-month follow-up
- Results: Significant improvement after completion of training (SRS score: 102 dropped to 89), improvement maintained at 3-month follow-up.

Results: Social Responsiveness Scale, pre & post & 3-month follow-up



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Developing social competence among high-functioning youth with autism spectrum disorders: A pilot experience in Hong Kong

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CBT-CSCA Groups at iREACH

- Youth & Adult groups
- Normal IQ & Limited IQ
- 1st wave data (Normal IQ, youth)
- Measurement: Multi-dimensional Social Competence Scale (Yager & Iarocci, 2013), self- and parent-rated.
- MSCS-C (Chinese version) has been validated locally (B. Leung, 2015).

Results

- Significant improvement in social competence after completion of CBT-CSCA group training
- Parent-rated: large effective size
- Self-rated: Medium to large effective size

Evaluation of CBT-CSCA Groups

A. Questionnaire data comparison : Parent-rated

		Pre		Post					
		Mean	S.D.	Mean	S.D.	t	sig.	Cohen's d	
MSCS	Social Motivation	2.73	0.59	3.03	0.53	2.73	0.013	0.585	*
	Social Inferencing	2.40	0.53	2.57	0.47	2.37	0.028	0.512	*
	Demonstrating Empathic Concern	2.73	0.61	2.98	0.58	3.34	0.003	0.714	**
	Social Knowledge	3.00	0.58	3.20	0.62	2.32	0.031	0.496	*
	Verbal Conversation Skills	2.46	0.49	2.88	0.39	4.48	0.000	0.976	***
	Nonverbal sending skills	2.94	0.56	3.14	0.56	2.07	0.051	0.441	
	Emotion Regulation	2.75	0.56	2.90	0.59	1.86	0.077	0.397	
	Total	2.71	0.40	2.96	0.41	4.06	0.001	0.867	***
Self developed assessment		3.44	0.63	3.79	0.61	3.97	0.001	0.828	***

N=22
Cohen's D: 0.2 (Small), 0.5 (Medium), 0.8 (Large)
* (p <.05), ** (p <.01), *** (p<.001)

Evaluation of CBT-CSCA Groups

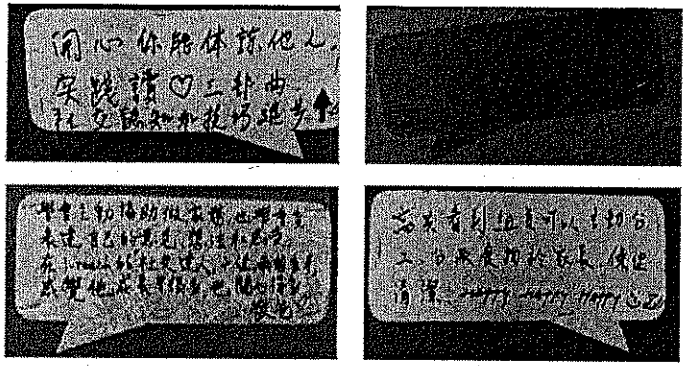
A. Questionnaire data comparison : Child-rated

			Pre		Post				
		N	Mean	S.D.	Mean	S.D.	t	sig	Cohen's d	
MSCS	Social Motivation	27	3.01	0.59	3.22	0.66	3.10	0.005	0.607	**
	Social Inferencing	27	3.18	0.40	3.36	0.56	1.86	0.075	0.372	
	Demonstrating Empathic Concern	27	3.21	0.68	3.44	0.66	2.17	0.039	0.419	*
	Social Knowledge	27	3.52	0.60	3.75	0.68	1.70	0.101	0.329	
	Verbal Conversation Skills	27	2.99	0.60	3.26	0.54	2.44	0.022	0.472	*
	Nonverbal sending skills	27	3.18	0.59	3.40	0.61	2.23	0.034	0.430	*
	Emotion Regulation	27	2.95	0.71	3.32	0.60	2.31	0.029	0.446	*
	Total	27	3.15	0.36	3.39	0.43	3.69	0.001	0.722	**
Self developed assessment		27	4.02	0.58	4.36	0.79	2.52	0.018	0.499	*
N=27										

Cohen's D: 0.2 (Small), 0.5 (Medium), 0.8 (Large)
* (p <.05), ** (p<.01), *** (p<.001)

Evaluation of CBT-CSCA Groups

B. Feedback & comments from parents and youths



Work in progress

- Apart from social competence, to analyze the impacts on:
- ASD symptoms (AQ-10)
- General psychopathology & emotions (CBCL & DASS)

Challenges ahead

- Further local validation of measures of effectiveness (e.g. from teacher)
- Development of training programme for people with ASD & developmental delay
- Development of training programme for adults with ASD
- Sharing of CBT-CSCA knowledge & skills
- Working with others on programme development & effectiveness study.

Finally, back to the question

- Can we do better?