



# Family Needs among Parents of Children with Autism (ASD) in Hong Kong

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# Presentation Aim and Outline

1. Illustrate why and how to assess family needs
2. Explore the family needs in Hong Kong
3. Discuss implications and future direction

Background

Research objectives

Method

Part 1 Exploratory Factor Analysis

Part 2 Important & unmet needs

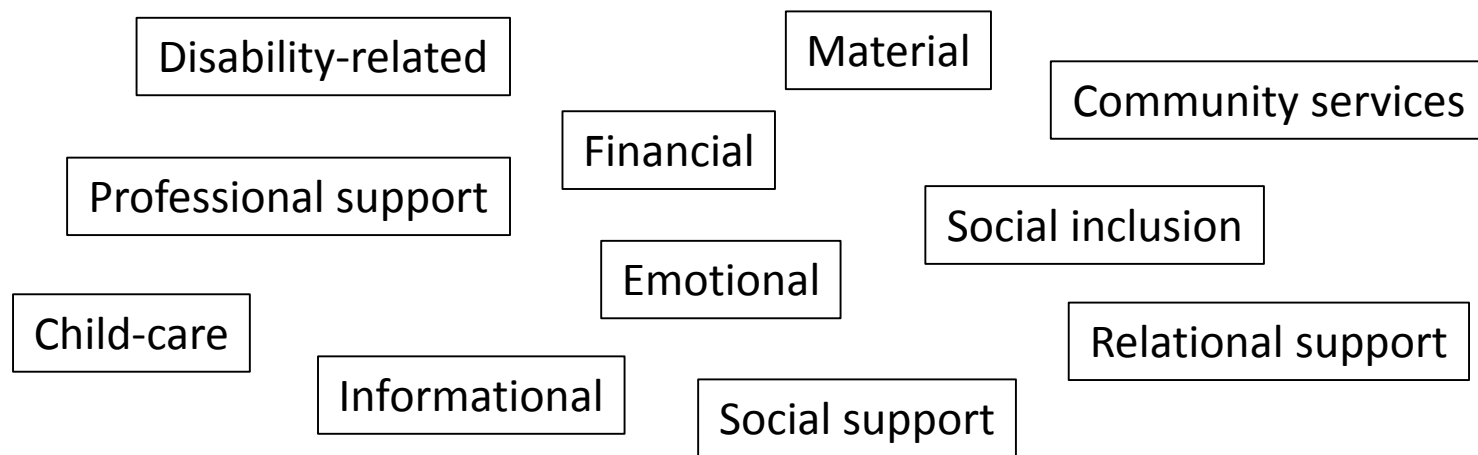
Discussion & Implications



# 1. Background



# Assessing Family Needs



(Brotherson et al., 2010; Chiu, Turnbull, & Summers, 2013; Derguy et al., 2015; McCabe, 2008; Samuel, Hobden, LeRoy & Lacey, 2012)

**Guide policy & service development  
But NO clear theory explaining Family Needs**

# Conceptualisation of family needs

Current study conceptualised Family Needs into two levels:

Important needs	The perceived level of <b>importance</b> of a particular need
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Unmet needs	The perceived level of <b>dissatisfaction</b> on an important need
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# Family Needs Research

1. Majority were western studies; except one large study conducted in China (中國精神殘疾人及親友協會, 2014)
2. Primarily focused on Important needs:  
e.g.
  - Derguy et al., 2015
  - Hodgetts, Zwaigenbaum & Nicholas, 2014
3. Varying measurements
  - Qualitative vs. Quantitative



## 2. Research Objectives



# Research Objectives

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- Part 1 – Explore underlying needs domains
- Part 2 – Explore whether parents perceive these needs as “important” and “unmet” ( i.e. currently not satisfied)





# 3. Method



# Measurements

## 1. Family Needs Questionnaire (FNQ)

- 51 items (Siklos & Kerns, 2006)
  - Further modified & translated to a Chinese version (Cheung et al., 2014)
- 14 items developed by the team from focus group interviews
  - Include additional localised items

Total  
65  
items

## 2. General Health Questionnaire (GHQ-12)

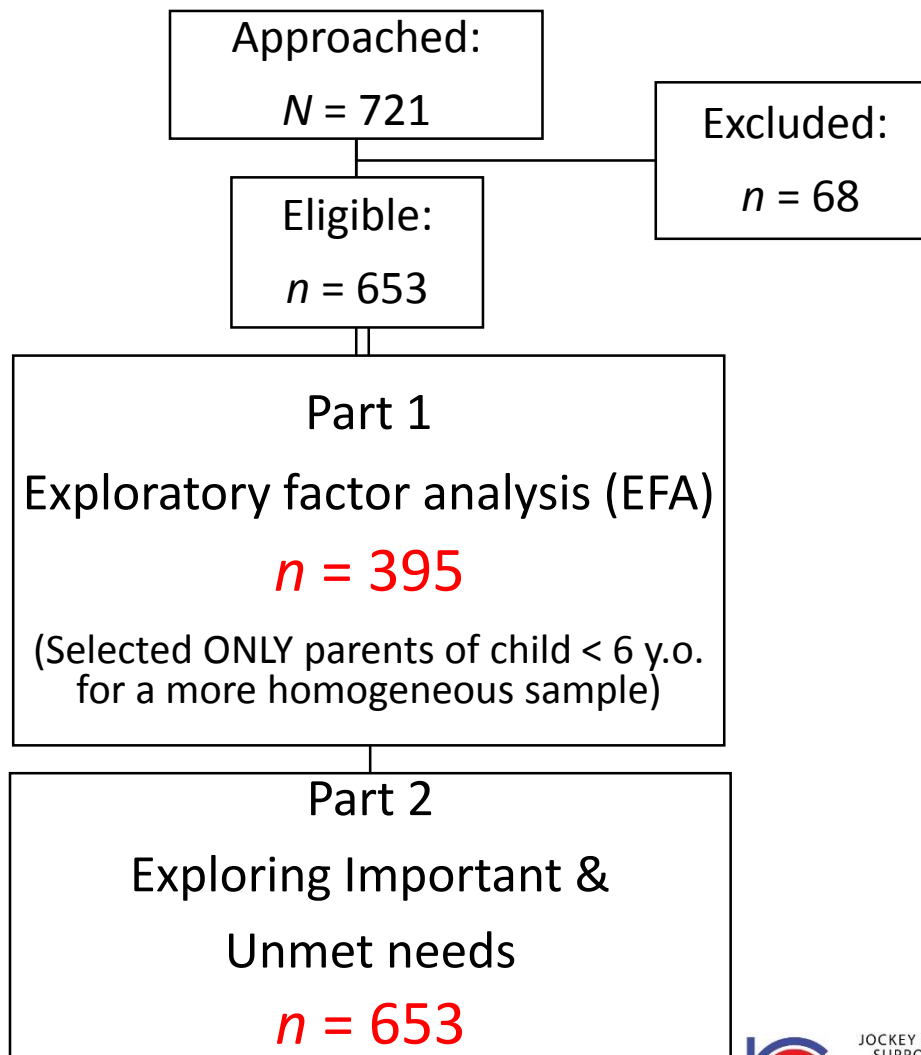
- Measure psychological well-being

## 3. Demographic information



# Participants and procedures

- Convenient Sampling
- 3NGOs, Parent Association & online forum
- Anonymous hard-copy or online survey from 30th Apr to 30th Jun 2016



# Data analyses

## Part 1 – Exploratory Factor Analysis:

- FACTOR was used to conduct analysis
  - Takes polychoric correlation matrix into account
- Promin rotation
- Structure identification: items loading  $>.3$

## Part 2 – Exploring Important and Unmet needs:

- Descriptive statistics



## 4. Part 1

# EFA Results: Needs Domains



# Part 1: Demographic information

<b>Children (n=395)</b>		
	Frequency	Percentage
<b>Age (in years)</b>	M=4.9 (SD=1.1)	-
<b>Sex</b>		
Male	338	85.6
Female	57	14.4
<b>Concurrent schooling status</b>		
Nursery or below	52	13.2
Kindergarten	208	52.7
Primary	1	0.3
Special school	134	33.7
Missing	1	0.3
<b>Time since diagnosis (in years)</b>	M=2.3 (SD=1.3)	-



## Part 1: Demographic information

<b>Parents (n=395)</b>		
	Frequency	Percentage
<b>Age (in years)</b>	M=38.2 (SD=5.2)	-
<b>Sex</b>		
Male (Father)	70	17.7
Female (Mother)	325	82.3
<b>Education level</b>		
Primary	4	1
Secondary	185	46.9
Diploma	56	14.2
University or higher	150	38
<b>Occupational status</b>		
Part-time	30	7.6
Full-time	181	45.8
Stay at home parent	177	44.8
Unemployed/Retired/Studying	5	1.6
Missing	1	0.3



## Part 1: Demographic information

<b>Parents (n=395)</b>		
	Frequency	Percentage
<b>Marital status</b>		
Married	363	91.9
Co-habited/Re-married	3	0.8
Single/Widowed/Divorced/Separated	25	6.3
<b>Monthly Family income</b>		
Below \$5,000	9	2.3
\$5,000-\$9,999	14	3.5
\$10,000-\$19,999	101	25.6
\$20,000-\$29,999	78	19.7
\$30,000-\$39,999	54	13.7
\$40,000 or above	133	33.7
Missing	6	1.5





# Psychometric Properties & factor structure

	<u>Factor 1</u> Professional Support for Child Needs	<u>Factor 2</u> Government & Community Support Needs	<u>Factor 3</u> Parent Psychosocial Support Needs	<u>Factor 4</u> Child's Social Health Support Needs
No. of items	17	17	22	5
<i>M (SD)</i>	3.38 (.44)	3.18 (.52)	3.18 (.45)	3.52 (.45)
Skewness	-.45	-.61	-.62	-.52
Cronbach's alpha	.900	.902	.906	.760
Eigenvalue	24.99	3.24	2.69	1.83
% of variance explained	40.30	5.23	4.33	2.95

- Identified 4 factors, explaining **53%** of total variance
- Good internal reliability
- Good inter-factor correlation (Pearson  $r$ : .56 - .74)



# Part 1: EFA Summary

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1. First attempt to use factor analysis to identify underlying factors
2. Four identified domains:
  - 2 were Child-related
  - 1 was Parent-related
  - 1 was Government and Community-related
3. Guide a more systematic and holistic approach on assessing family needs



## 5. Part 2

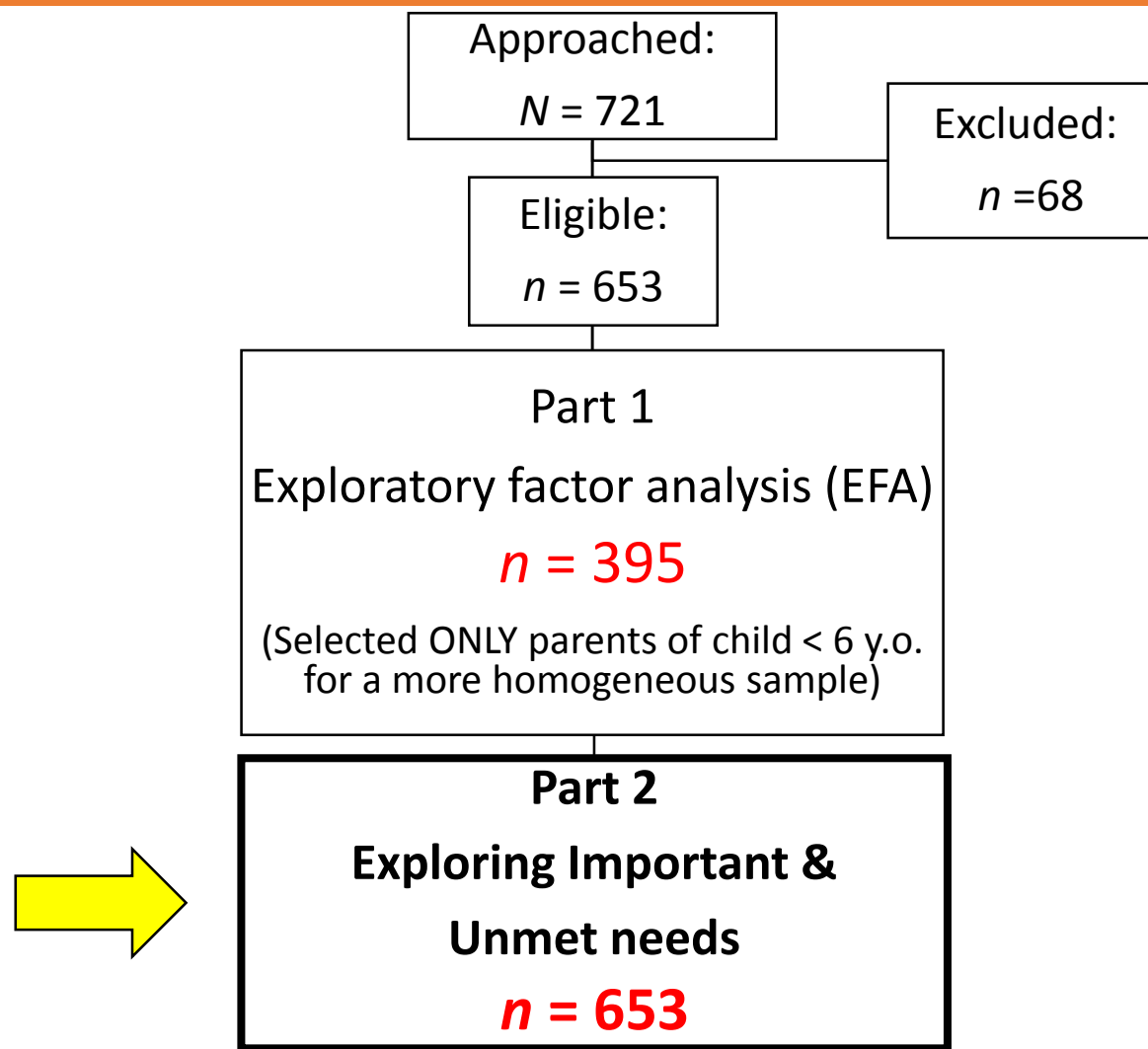
Are these needs...

Important?

Met by current services?



# Participants and procedures



# Part 2: Demographic information

Variables	Preschool	Primary	Secondary	Special School	
No. of parents <b>(Total n=653)</b>	271	102	54	226	
<b><u>Sex of child</u></b>					$\chi^2(3)=2.92,$ $p=.554$
Male	233(86.0%)	82(80.4%)	44(81.5%)	188(83.2%)	
Female	38(14.0%)	20(19.6%)	10(18.5%)	38(16.8%)	
<b><u>Age of child</u></b>					$F(4,610)=138.11,$ $p<.001$
Mean (SD)	M=4.93 (SD=1.55)	M=8.94 (SD=2.23)	M=18.22 (SD=4.98)	M=8.43 (SD=6.00)	



## Part 2: Demographic information

Variables	Preschool	Primary	Secondary	Special School	
<b><u>Sex of participant</u></b>					$\chi^2(3)=6.79,$ $p=.079$
Male	45(16.6%)	11(10.8%)	4(7.4%)	43(19.0%)	
Female	225(83.0%)	91(89.2%)	50(92.6%)	182(80.5%)	
Missing	1(0.4%)	0(0%)	0(0%)	1(0.4%)	
<b><u>Age of participant</u></b>					$F(4,617)=54.86,$ $p<.001$
Mean (SD)	M=37.95 (SD=5.05)	M=43.23 (SD=5.62)	M=49.39 (SD=6.41)	M=41.57 (SD=7.71)	
<b><u>Marital status of participants</u></b>					$\chi^2(6)=1.71,$ $p=.945$
Single	4(1.5%)	3(2.9%)	1(1.9%)	6(2.7%)	
Married/ co-habited/ re-married	249(91.9%)	93(91.2%)	49(90.7%)	208(92.0%)	
Widowed/ divorced/ separated	15(5.5%)	6(5.9%)	4(7.4%)	11(4.9%)	
Missing	3(1.1%)	0(0%)	0(0%)	1(0.4%)	



## Part 2: Demographic information

Variables	Pre-school	Primary	Secondary	Special School	
<b>Monthly family income</b>					$\chi^2(15)=18.12$ , $p=.256$
<\$5,000	5(1.8%)	1(1.0%)	2(3.7%)	5(2.2%)	
\$5,000-\$9,999	10(3.7%)	5(4.9%)	2(3.7%)	11(4.9%)	
\$10,000-\$19,999	66(24.4%)	16(15.7%)	10(18.5%)	54(23.9%)	
\$20,000-\$29,999	54(19.9%)	14(13.7%)	7(13.0%)	46(20.4%)	
\$30,000-\$39,999	36(13.3%)	15(14.7%)	4(7.4%)	31(13.7%)	
>\$40,000	95(35.1%)	49(48.0%)	28(51.9%)	71(31.4%)	
Missing	5(1.8%)	2(2.0%)	1(1.9%)	8(3.5%)	
<b>Education level of participants</b>					$\chi^2(12)=21.71$ , $p=.041$
Primary or below	2(0.7%)	3(2.9%)	2(3.7%)	5(2.2%)	
Junior high school (F.1-F.3)	28(10.3%)	8(7.8%)	6(11.1%)	27(11.9%)	
Senior high school (F.4-F.7)	95(35.1%)	23(22.5%)	19(35.2%)	93(41.2%)	
Diploma	45(16.6%)	14(13.7%)	8(14.8%)	27(11.9%)	
University degree or above	101(37.3%)	54(52.9%)	19(35.2%)	73(32.3%)	
Missing	0(0%)	0(0%)	0(0%)	1(0.4%)	
<b>Occupational status of participants</b>					$\chi^2(9)=6.30$ , $p=.709$
Part-time	26(9.6%)	11(10.8%)	7(13%)	23(10.2%)	
Full-time	124(45.8%)	48(47.1%)	22(40.7%)	94(41.6%)	
Unemployed/ retired/studying	5(1.8%)	6(5.9%)	2(3.7%)	8(3.5%)	
Stay home dad/mum	116(42.8%)	37(36.3%)	23(42.6%)	99(43.8%)	
Missing	0(0%)	0(0%)	0(0%)	2(0.9%)	



# At-risk mental health

	Preschool	Primary school	Secondary school	Special School	
GHQ-12 Mean (SD)	4.78 (2.81)	4.39 (2.64)	4.33 (3.19)	4.56 (2.68)	$F(3,633)=.768,$ $p=.512$

- GHQ-12 total score:  $M=4.59$  ( $SD=2.77$ )
  - 4 as cut-off (Wong & Poon, 2010)
  - Around 60% of parents scored  $>4$
  - at-risk for possible psychological distress





# Important Needs: High average score

(Range: 1-4)

School status \ Needs Factors	Professional Support for Child Needs	Government & Community Support Needs	Parent Psychosocial Support Needs	Child's Social Health Support Needs
Pre-school (n=271)	3.40 (SD=.43)	3.24 (SD=.54)	3.20 (SD=.44)	3.52 (SD=.44)
Primary (n=102)	3.33 (SD=.44)	3.28 (SD=.50)	3.30 (SD=.42)	3.63 (SD=.39)
Secondary (n=54)	3.38 (SD=.57)	3.35 (SD=.65)	3.40 (SD=.53)	3.69 (SD=.41)
Special school (n=226)	3.30 (SD=.49)	3.23 (SD=.56)	3.13 (SD=.48)	3.46 (SD=.51)

Average score for all 4 domains >3



# Unmet Needs: High average %

Needs Factor Schooling status	Professional Support for Child Needs	Government & Community Support Needs	Parent Psychosocial Support Needs	Child's Social Health Support Needs
Pre-school ( <i>n</i> = 271)	80%	80%	77%	86%
Primary School ( <i>n</i> = 102)	86%	86%	77%	87%
Secondary School ( <i>n</i> = 54)	89%	87%	81%	87%
Special School ( <i>n</i> = 226)	79%	86%	75%	83%



# Part 2: Discussions

- All 4 domains are generally rated as “important” and “unmet” by parents across schooling groups
- **Lower Unmet % on Parent Psychosocial Support**
  - more fulfilled by current services?
  - Or less concerned by parents?
- The average high **GHQ score** suggested parents require support for their psychological well-being
- Highest ranked item
  - “I need to get a break from my responsibilities” “我需要於各樣的責任中有喘息的空間”
- HKU Systematic Review on interventions for parents of ASD children targeting on their psychological well-being
  - Few studies (9/28) on parent psychological support and family leisure programs, most are child-oriented



# Implications – Service development

- Parents may require professional advice to
  - Distinguish their needs and wants
  - **PRIORITIZE** their needs and services

- **Family-centred service:**

Family well-being as a whole (Tint & Weiss, 2016)

- Child
- Parent
  - Emerging services, e.g. CBT, Narrative Therapy, Happy Parenting
- Family
  - Family fun day



# Implications - Policy

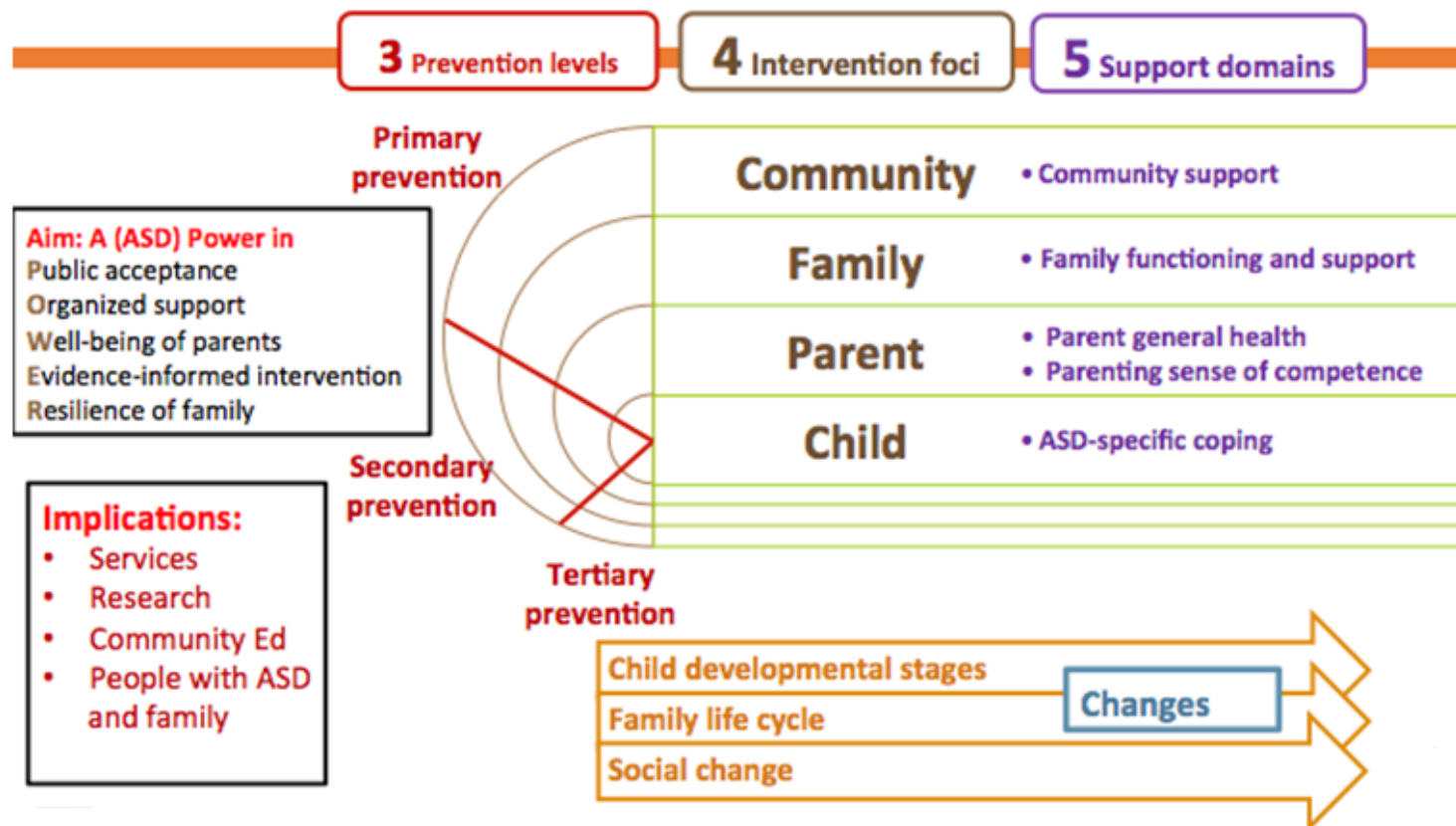
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- Enhance public awareness and understanding
- Long-term: develop policy and legislation to protect welfare of the autism community



# Implications – Theory & Research

## The A-POWER Family Support Framework 「喜伴力行」家庭支援服務框架



# Limitations & Strengths

- Limitations

- Cross-sectional study, not a representative sample
- Self-reported diagnosis with no verification
- Not consider influences of child's functioning level and symptoms severity, as well as utilization of current support services
- FNQ: lack established convergent & divergent validity

- Strengths

- Large sample size → quite a representative no. for the autism population in HK
- FNQ: good psychometric properties (good reliability & inter-factor correlation)
- Added items reflect localised characteristics



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