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**Material well-being, quality of relationships and problem behaviours of Hong Kong children**

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**Outline**

- *An overview of socio-economic circumstances of Hong Kong*
- *Background of the research project*
- *Research methods and key findings*
- *Discussion and policy implications*

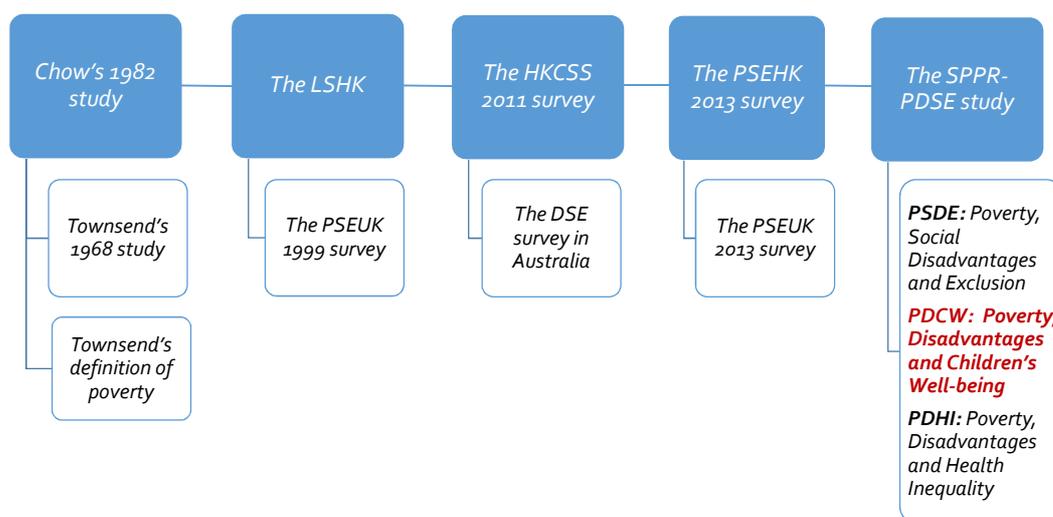
### Key socio-demographic and economic indicators in Hong Kong

Indicators	Year	
<b>Human Development Index (HDI) rank</b> [HDR 2016, Table 1]	2015	12 (out of 188)
<b>Population by age</b> [HK in Figures]	2016	7.375 millions
0-14 years		11.5%
15-24 years		72.3%
65 years and over		16.2%
<b>Percentage of persons aged 10 and over who had used the Internet during the 12 months before enumeration</b> [THS Report No. 62, 2017]	2015	
10-24 years		99.8%
Overall		87.5%
<b>GDP per capita (at current market price)</b> [HK in Figures]	2016	HK\$ 339,273
<b>Unemployment rate by age</b> [Population in HK, Table 2]	2015	
15-19 years		14.2%
20-29 years		5.9%
Overall		3.3%
<b>Gini-coefficient</b> [2011 Population Census, 2016 Population By-Census (2012; 2017), Table 8.1]	2011 / 2016	
Original household income		0.537 / 0.539
Post-tax household income		0.521 / 0.524
<b>Poverty rate by age</b> [HK Poverty Situation Report 2015, Figures 2.9 and 2.16]	2015	
0-17 years		23.2% / 18.0%*
18-64 years		13.6% / 10.1%*
65 years and over		44.8% / 30.1%*
Overall		19.7% / 14.3%*

Note: \* pre-intervention / post-intervention (recurrent cash).

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### Background



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### Research objectives

- The study is a **multi-institution, inter-disciplinary longitudinal study** consisting of **three main research streams** which aim to measure and gauge the current trends and implications of poverty and social disadvantages in Hong Kong.
  - **Poverty, Social Disadvantages and Social Exclusion (PDSE)**: To measure the extent and nature of poverty, deprivation and exclusion in Hong Kong and the effectiveness of current policy initiatives in tackling poverty
  - **Poverty, Disadvantages and Health Inequality (PDHI)**: To examine the interaction between poverty and health inequalities
  - **Poverty, Disadvantages and children's well-being (PDCW)**: To investigate the impacts of poverty, inequality and social disadvantages on young people's health and well-being

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### Research team

- **Poverty, Social Disadvantages and Social Exclusion (PDSE)**
  - Wong Hung\* (Principle investigator) and Chen Ji-Kang (Department of Social Work, CUHK)
  - Bo Huang and Joanna Lee (Department of Geography and Resource Management, CUHK)
  - Peter Saunders (The University of New South Wales)
- **Poverty, Disadvantages and Health Inequality (PDHI)**
  - Roger Chung\*, Samuel Wong, Sian Griffiths, Martin Wong and Jonson Lau (The Jockey Club School of Public Health and Primary Care, CUHK)
- **Poverty, Disadvantages and children's well-being (PDCW)**
  - Maggie Lau Ka-wai\* (Lingnan University)
  - Joshua Mok Ka-ho (Lingnan University)
  - David Gordon and Christina Pantazis (University of Bristol)
  - Jonathan Bradshaw (University of York)

\*Research stream leader

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### **Poverty, Disadvantages and children's well-being (PDCW): Background**

- Explore how **child-context interactions** (e.g. family, peers, schools, neighbourhood) shaping children's development [Bronfenbrenner and Morris, 1998]
- **A multi-dimensional construct of child well-being** [Ben-Arieh et al 2014]
  - From survival to well-being – moving beyond basic need of development
  - Combined negative and positive aspects of children's lives
  - From well-becoming (i.e. children's future) to well-being (i.e. children's current status)
  - [UNICEF Innocenti Report Cards](#)
- Incorporating **children's perspectives** into studies of child poverty and child well-being
- Overlaps in dimensions of poverty (i.e. **Income poverty, deprivation and subjective poverty**) [Bradshaw and Finch, 2003; Bradshaw and Holmes, 2010]
- Incorporating **"objective"** indicators of well-being and **"subjective"** measures of the quality of life [Pople et al 2015; Stigilitz et al 2010]
  - Children's perceptions, evaluations, and aspirations regarding their own lives
  - [Good Childhood Reports](#) [e.g. Main and Pople, 2012: A child-centered analysis of material deprivation and subjective well-being]
  - [The Children's Worlds](#)

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### **PDCW: Key concerns**

- What are the **impacts** of poverty, inequality and social disadvantages on young people's health and well-being?
- What are **children's perspectives** on key issues related to their well-being?
  - a) What are the conditions for a good life?
  - b) Which life dimensions (e.g. material situation, time use, and social relationships, etc.) do children think are important in their lives?

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### **PDCW: Mixed methods research**

**\*Target population:** School-aged children aged 10 – 17 completed the SDQ (n=783)

- 1) **Focus group interviews** (e.g. a list of necessities for children)
- 2) **Survey data**
  - **Material well-being** - Indirect vs. direct poverty measures - Income poverty and child-derived deprivation [Bradshaw and Finch 2003]
  - **Home and family** (e.g. Perceived social support from family)
    - Friends
  - **School and teachers** (e.g. like being at school, felt pressure by school work; experience of being bullied)
    - Time use
  - **Physical and mental health** (e.g. Dietary, physical exercises)
    - **Strengths and Difficulties Questionnaire (SDQ)**
  - Overall life satisfaction, and domain specific satisfaction

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### **A list of necessities for children**

- |   |   |
|---|---|
| <del>1</del> Properly fitted shoes  | 12 Some pocket money each week to spend on yourself                           |
| <del>2</del> Able to have some new clothes  | 13 Some money that you can save each month, either in a bank or at home       |
| 3 Enough warm clothes for cold weather  | 14 Access to public transport like the railway networks or bus services       |
| <del>4</del> Brand name trainers  | 15 Go out with friends or family for leisure activities at least once a month |
| <del>5</del> Outdoor leisure equipment  | 16 School uniform of correct size   |
| 6 Your own mobile phone   | 17 Educational games  |
| 7 A computer device with internet connection at home                              | 18 Books at home suitable for your ages                                       |
| 8 A meal out with friends at least once a month                                   | 19 A suitable place at home to study or do homework                           |
| <del>9</del> Presents on special occasions  | 20 Participation in extra-curricular activities                               |
| <del>10</del> A family day trip at least four times a year                        | <del>21</del> Tutorial lessons after school                                   |
| 11 Somewhere nearby like a park where you can safely spend time with your friends |   |

Note: Seven items failed the reliability tests and were excluded from the final deprivation index. These items have been crossed out from the final list.

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**Children's deprivation items - Reliability analysis**

	Cronbach's Alpha if Item Deleted
Pocket money	.716
Saving money	.717
Extra-curricular activities	.723
Leisure activities with friends/family	.725
A safe place with friends	.726
A suitable place to study	.727
A meal out with friends	.728
Books for suitable ages	.728
Mobile phone	.731
Educational games	.731
School uniform	.738
A home computer	.739
Access to public transport	.739
Enough warm clothes	.741

Overall alpha .744

**Strengths and Difficulties Questionnaire Scores - Reliability analysis**

	Cronbach's Alpha if Item Deleted
Emotional problems	0.731
Hyperactivity	0.754
Conduct problems	0.766
Peer problems	0.795
Total difficulties	0.746

Overall alpha .800

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**Material well-being, social relationships and problem behaviours of Hong Kong Children**

Domain	Components	Indicators	Response range
<b>FAMILY AND SCHOOL CONTEXTS</b>			
<i>(1) Home environment</i>			
Material well-being	Household income <sup>a</sup>	Equivalised household income quintiles	1 <sup>st</sup> quintile (lowest) (1) to 5 <sup>th</sup> quintile (highest) (5)
	Child deprivation index	Enough warm clothes	Enforced lack of item: Yes (1), No (0)
		Mobile phone	A deprivation score (i.e. Sum of 14-item <sup>b</sup> ) from 0 (1) to 5+ (4)
		A home computer	
		A meal out with friends	
		A safe place with friends	
		Pocket money	
		Saving money	
		Access to public transport	
		Leisure activities with friends/family	
		School uniform	
		Educational games	
		Books for suitable ages	
		A suitable place to study	
Extra-curricular activities			
<i>(2) School environment</i>			
Well-being at school	Pressure of doing school work <sup>c</sup>	How pressure you felt by doing school work	Not at all (1) to A lot (4) Reverse coded: A lot (1) to A little /Not at all (3)
Relationships with peers	Experience of being bullied <sup>d</sup>	Whether you have been bullied in the past couple of months	I have not been bullied (1) to Several time a week (5) Reverse coded: Yes (1), No (2)

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**Material well-being, social relationships and problem behaviours of Hong Kong Children**

Domain	Components	Indicators	Response range
<b>PERCEIVED SOCIAL RELATIONSHIPS</b>			
Perceived social relationships	Parent-child relationships	Your parents (or the people who look after you) respect your opinions	Never (1) to Most of the time (5) Reverse coded: Below average (0) to Average or higher (1)
		Your parents (or the people who look after you) treat you fairly	
	Peer relationship	You feel your friends are nice to you	
	Connectedness to teachers	Your teachers respect your opinions Your teachers treat you fairly	
<b>THE STRENGTHS AND DIFFICULTIES QUESTIONNAIRE (SDQ)</b>			
SDQ <sup>d</sup>	Emotional problems (5-item)	Somatic symptoms, worries, unhappy, nervous in new situations, and fears	Not true (0) to Certainly true (2)
	Conduct problems (5-item)	Tempers, obedient, fights or bullies, lies or cheats, and steals	
	Hyperactivity (5-item)	Restless, fidgety, easily distracted, thinks before acting, and good attention	
	Peer problems (5-item)	Solitary, has good friend, generally liked, picked on or bullied, and better with adults than old children	
	Total difficulties score	A total difficulties score based on 20 items	

Notes: <sup>a</sup> Adult-reported items

<sup>b</sup> A deprivation score from 0 to 5+ where a higher score indicates a greater degree of deprivation.

<sup>c</sup> Negatively worded item (reverse coded). Higher scores on the scales indicate better performance in each component.

<sup>d</sup> The scoring instructions for 4-17 year olds (self-administered) is available at: [http://www.sdqinfo.org/py/sdqinfo/b3.py?language=Englishqz\(UK\)](http://www.sdqinfo.org/py/sdqinfo/b3.py?language=Englishqz(UK)).

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**SDQ three-band categorization scores for the study sample aged 10-17 (N=783)**

	Emotional problems	Conduct problems	Hyperactivity	Peer problems	Prosocial behaviours	Total difficulties
Normal	88%	73%	85%	64%	71%	73%
Borderline	5%	11%	9%	29%	19%	13%
Abnormal	8%	16%	6%	7%	10%	14%
Cut-off points for 'abnormal'	7-10	5-10	7-10	6-10	0-4	20-40

Note: Figures do not add up to 100% due to rounding.

Source: Instructions in English for scoring by hand SDQs for 4-17 year olds, available at: <http://www.sdqinfo.com/py/sdqinfo/co.py>.

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**Prevalence rates and influential factors associated with children's emotional and behavioural problems<sup>a</sup>**

	Percentage	95% CI <sup>b</sup>	p-value
<b>Total</b>	<b>13.5</b>	<b>11.3, 16.1</b>	
Gender <sup>c</sup>			0.24
Boys	14.9	11.8, 18.6	
Girls	12.0	9.0, 15.8	
Age <sup>c</sup>			<b>0.01</b>
10-14	<b>16.3</b>	9.3, 23.3	
15-17	10.0	4.3, 15.7	
Place of birth <sup>c</sup>			0.21
Non-HK born	17.2	11.4, 25.2	
HK born	12.9	10.5, 15.7	
Equivalentised household income quintiles <sup>c</sup>			0.068
1st quintile (lowest)	19.1	13.7, 26.1	
2nd quintile	15.8	10.8, 22.5	
3rd quintile	9.0	5.6, 14.3	
4th quintile	11.8	7.2, 18.7	
5th quintile (highest)	11.3	7.1, 17.5	
Number of deprived items			<b>&lt;0.001</b>
0	8.9	6.1, 12.7	
1	11.9	7.5, 18.3	
2	11.6	6.4, 19.7	
3-4	<b>16.7</b>	10.1, 26.2	
5+	<b>31.3</b>	21.5, 43.3	

**Prevalence rates and influential factors associated with children's emotional and behavioural problems<sup>a</sup>**

	Percentage	95% CI <sup>b</sup>	p-value
Perception of parent-child relationships <sup>d</sup>			<b>&lt;0.001</b>
Below average	<b>21.5</b>	17.0, 26.7	
Average or higher	9.3	7.0, 12.1	
Perception of peer relationship <sup>d</sup>			<b>&lt;0.001</b>
Below average	<b>38.0</b>	29.1, 47.8	
Average or higher	9.4	7.5, 11.9	
Perception of connectedness to teachers <sup>d</sup>			<b>&lt;0.001</b>
Below average	<b>20.3</b>	15.9, 25.5	
Average or higher	9.6	7.3, 12.5	
Pressured by school work <sup>d</sup>			<b>&lt;0.001</b>
A lot	<b>34.5</b>	25.2, 45.2	
Some	10.4	7.7, 13.8	
A little /Not at all	11.5	8.4, 15.6	
Experience of being bullied <sup>d</sup>			<b>&lt;0.001</b>
Yes	<b>30.3</b>	22.1, 40.0	
No	11.1	8.9, 13.7	

Notes: <sup>a</sup>The cut-off score of the SDQ (Total difficulties) is 20.

<sup>b</sup>The adjusted Wald interval (<https://measuringu.com/wald/>).

<sup>c</sup>Adult-reported items.

<sup>d</sup>Negatively worded items (reverse coded).

**Matrix of correlations among the predictors of children's emotional and behavioural problems**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 Gender	1	0.002	-0.034	-0.060	-.094*	-0.043	0.057	0.010	0.060	0.065	-0.064	-0.002	-.071*	-0.055	-.083*	<b>-.211**</b>
2 Age		1	-.144**	0.048	-.196**	-0.059	.123**	-0.006	0.057	.094**	<b>-.095**</b>	-0.009	-.102**	-0.055	-.152**	.044
3 Place of birth			1	.080*	-0.071	0.058	-0.041	0.034	0.025	0.019	-0.001	-0.014	-0.009	0.015	0.008	.027
4 Equivalised household income quintiles				1	<b>-.189**</b>	0.020	0.060	.151**	0.041	0.051	<b>-.093*</b>	-.084*	-0.071	-0.033	-.098**	.025
5 Number of deprived items					1	<b>-.110**</b>	<b>-.141**</b>	<b>-.220**</b>	<b>-.224**</b>	<b>-.169**</b>	<b>.209**</b>	<b>.156**</b>	<b>.126**</b>	<b>.168**</b>	<b>.187**</b>	<b>-.175**</b>
6 Pressured by school work						1	0.065	.091*	0.047	.088*	<b>-.166**</b>	-.223**	-0.061	-.116**	-.071*	.023
7 Experienced of being bullied							1	.147**	.261**	.130**	<b>-.279**</b>	-.209**	-.175**	-.158**	-.327**	.065
8 Perceived parent-child relationships								1	.244**	.345**	<b>-.284**</b>	-.196**	-.255**	-.230**	-.185**	<b>-.234**</b>
9 Perceived peer relationship									1	.179**	<b>-.301**</b>	-.230**	-.175**	-.179**	-.350**	<b>-.148**</b>
10 Perceived connectedness to teachers										1	<b>-.259**</b>	-.174**	-.232**	-.203**	-.185**	<b>-.223**</b>
11 Total Difficulties Score											1	.831**	.760**	.780**	.635**	<b>-.362**</b>
12 Emotional problems												1	.471**	.530**	.412**	<b>-.125**</b>
13 Conduct problems													1	.502**	.354**	<b>-.338**</b>
14 Hyperactivity														1	.268**	<b>-.354**</b>
15 Peer problems															1	<b>-.321**</b>
16 Prosocial																1

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

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**Regression analysis: children's emotional and behavioural problems, socio-demographics and social relationships**

	Model 4	
	Beta	Sig.
<i>Personal characteristics</i>		
Gender	-.041	.252
Age	-.021	.561
Place of birth	-.035	.326
<i>Family economic status</i>		
Equivalised household income	-.024	.519
Number of deprived items	.074	.054
<i>School environment</i>		
Pressured by school work	-.129	<b>.000</b>
Experience of being bullied	-.189	<b>.000</b>
<i>Perceived Social Relationships</i>		
Perceived parent-child relationships	-.146	<b>.000</b>
Perceived peer relationship	-.159	<b>.000</b>
Perceived connectedness to teachers	-.114	<b>.003</b>
R Square	.012	<b>.217</b>
Adjusted R Square	.008	.205
R Square Change	.012	<b>.075</b>
F	2.617	.050
		17.434
		<b>.000</b>

Dependent variable: Total Difficulties scores.

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### ***Discussion and policy implications***

- *Findings imply the prominence of children's voices for services and programmes developed for children which can better suit their needs.*
- *Problem behaviours of Hong Kong children associated with risk factors (e.g. negative perceived quality of relationships, experience of being bullied and school work pressure) are significantly important for policy interventions.*
- *Financial and social support should be prioritized to children who are in disadvantaged socioeconomic positions.*

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*~ Thank you ~*

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