
Article:
Lau, Maggie and Bradshaw, Jonathan Richard (2018) Material Well-being, Social Relationships and Children's Overall Life Satisfaction in Hong Kong. Child Indicators Research. pp. 182-205. ISSN: 1874-8988

https://doi.org/10.1007/s12187-016-9426-7

Child Ind Res
DOI 10.1007/s12187-016-9426-7

Material Well-being, Social Relationships and Children's Overall Life Satisfaction in Hong Kong

Maggie Lau[1] · **Jonathan Bradshaw**[2]

Accepted: 4 October 2016

Abstract There has been growing research interest into child poverty and child well-being in Asia. However the development of qualitative and quantitative data in the field predominately adopts 'expert-led' or adult-derived measures of child poverty. This article aims to explore variations in children's overall life satisfaction by their socio-demographic characteristics and social relationships in Hong Kong. Data used in this article is drawn from the first wave of the Strategic Public Policy Research (SPPR) project– 'Trends and Implications of Poverty and Social Disadvantages in Hong Kong: A Multi-disciplinary and Longitudinal Study'. This article reports, for the first time evidence based on a child-derived material deprivation index - thereby addressing the limitations in traditional adult-derived child poverty measures. The study found that child deprivation explained more of the variation in children's overall life satisfaction than traditional adult-reported income poverty. Further analyses showed that children's perceived positive relationships with family and teachers, perceived strong social support from family, and experience of being bullied were associated with their life satisfaction.

Keywords Children · Material deprivation · Social relationships · Life satisfaction · Hong Kong

✉ Maggie Lau
maggielau98@gmail.com

[1] Department of Public Policy, City University of Hong Kong, Tat Chee Avenue, Kowloon Tong, Hong Kong

[2] Department of Social Policy and Social Work, University of York, Heslington, York, YO10 5DD, UK

1 Introduction

The importance of a multi-dimensional measure of child well-being is now widely recognized. It not only encompasses material well-being (measured by income poverty and deprivation indicators) but also includes relationships, child education, child physical and mental health, housing and living environment, risk and safety, and subjective well-being (Ben-Arieh et al. 2014; Bradshaw 2015; Guio et al. 2012; Main and Bradshaw 2012; UNICEF 2007, 2016). There has been growing interest in child deprivation indicators in the Asian context. But the development of the deprivation indicators continues to be 'expert-led' (Wong et al. 2015) and presumes parents to be the representatives of children's needs in quantitative studies (Abe and Pantazis 2014; Hong Kong Council of Social Service 2012; Lau et al. 2015a; Qi and Wu 2014). There has been only limited evidence of child-derived deprivation indicators (Saunders and Chen 2015). Empirical evidence has shown that deprivation is a better indicator of child well-being than traditional child poverty measures (Bradshaw and Finch 2003; Goswami 2014; Main and Pople 2012). It is recognised that it is important to incorporate children's perspectives into studies of child poverty and child well-being to increase the creditability of the findings (Lee and Yoo 2015; Lietz et al. 2014; Main and Bradshaw 2012; Pople et al. 2015).

Increases in GDP in the developed countries are no longer related to positive subjective well-being (Stiglitz et al. 2010; Wilkinson and Pickett 2009). Studies provided evidence that incorporating objective indicators of well-being and subjective measures of the quality of life contribute to a better understanding of its determinants, moving beyond family income and material deprivation (Ben-Arieh et al. 2014; Currie et al. 2012; Goswami 2014; Pople et al. 2015; Stiglitz et al. 2010).

Comparative evidence has shown that the social context of children's lives are associated with variation in children's health and well-being (Bradshaw et al. 2013; Currie et al. 2012; Klocke et al. 2014). Social relationships with family, peers and school played a significant role in explaining variations in their health and well-being, including quality of parent-children relationships (e.g. shared activities) (Ferguson 2006; Raley 2014), perception of relationships with parents and teachers (e.g. being respected and treated fairly at home and school) (Goswami 2012; McAuley and Rose 2014; Rees and Main 2015), norms of reciprocity and trust at home and school (McPherson et al. 2014), feeling of safety at home and school (Dufur et al. 2015; Huebner et al. 2014), and experience of being bullied (Klocke et al. 2014). However, the existing evidence might have limited generalisability as most factors contributing to positive and negative child well-being so far identified in the field were based on western societies (with some exceptions, Kim and Main 2016; Rees et al. 2016; Rees and Main 2015, See also: www.isciweb.org).

The primary aim of this article is to explore variations in children's overall life satisfaction by socio-demographic characteristics and social relationships in Hong Kong, by drawing from the main findings from the first wave of the Strategic Public Policy Research (SPPR) project.[1] Specifically, this study has two objectives: (1) to present, for the first time evidence based on child-reported material deprivation index

[1] Further discussion is provided in the Section 2 below.

derived from survey data – thereby addressing the limitations in traditional approach to adult-derived child poverty measures; and (2) to examine relative effects of socio-demographic characteristics, and positive and negative qualities of relationships on children's life satisfaction.

2 Methods

2.1 Procedure and Sample

Data used in this article is drawn from the first wave of the Strategic Public Policy Research (SPPR) project – 'Trends and Implications of Poverty and Social Disadvantages in Hong Kong: A Multi-disciplinary and Longitudinal Study' (http://www.poverty.hk). The primary objective of the SPPR project is to measure and gauge the current trends and implications of poverty and social disadvantages in Hong Kong. Specifically, this project has three main objectives: (1) to measure the extent and nature of poverty, deprivation and exclusion in Hong Kong (i.e. Poverty, Social Disadvantages and Exclusion, **PSDE**); (2) to assess the interaction between poverty and health inequalities (i.e. Poverty, Disadvantages and Health Inequality, **PDHI**); and, (3) to investigate the impacts of poverty, inequality and social disadvantages on children's health and well-being (i.e. Poverty, Disadvantages and Children's Well-Being, **PDCW**).

The data from the PDCW stream is derived from school-aged children between 10 and 17. Data collection of the PDCW stream involves two stages. Stage one used focus groups to generate qualitative data which helped to develop indicators for the second stage of the study, involving a random household survey in Hong Kong, designed to assess the relationship between poverty, deprivation, and children's well-being from their own perspectives. Stage two involved administering a questionnaire to obtain quantitative information on children's living standards and related circumstances (i.e. The Hong Kong Standard of Living Survey - 'The Living Standards Survey'). This article focuses on the associations between child-reported deprivation, social relationships and children's life satisfaction by drawing upon the results from PDCW survey data. Household income and adults in paid work within the household is obtained from the adult-reported PSDE survey data.

The first wave of the Living Standards Survey was conducted between May 2014 and July 2015 by the Policy 21 Limited. Face-to-face interviews were undertaken with 2282 individuals aged 18 or over. The sample was drawn from two sources:

(1). A re-interviewing of respondents to the HKCSS 2011 and PSEHK 2012 surveys ($n = 195$); and respondents to the PSEHK 2012 survey ($n = 107$) who had provided re-contact permission (Hong Kong Council of Social Service 2012; Lau et al. 2015b); and
(2). A new random sample addresses taken from the 2011 Population Census ($n = 1980$).

A two-stage stratified systematic sample design was used to obtain the new sample. A random sample of quarters was selected and then one adult (aged 18 or over) was

selected at random from each sampled household. The response rate from the three samples combined was 60.2 %.[2]

All children aged 10 to 17 from each sampled household were invited for the completion of the PDCW questionnaire. There was a total of 911 children aged 10 to 17 (including working youth on part-time or full-time basis) in the 690 sampled households. Face-to-face interviews were conducted with 805 children aged 10 to 17 in the sampled household (i.e. 'Poverty, Social Disadvantages and Child Well-Being' (PDCW) survey). The response rate was 88.4%. This article used a sample of 793 full-time students aged 10 to 17 for further analyses. The PDCW survey included questions about child-derived necessary items and activities, time spent with family and friends, perceived social supports from family, friends and school teachers, well-being at school (e.g. experience of being bullied), health behaviours (e.g. dietary behaviour), health conditions (e.g. physical and mental health), perceptions of social relationships, feeling of safety at home and school, and satisfaction with life as a whole and domain specific satisfaction.

2.2 Measures

2.2.1 Material Well-Being

Material Deprivation A child-derived index of material deprivation was used to identify *poor* and *non-poor* groups of children. Compared to traditional adult-derived measures of child poverty (i.e. income-based and multiple deprivation measures), the child-derived index could distinguish poor children from poor families. The material deprivation index was created based on qualitative and quantitative research with children. The material deprivation index was created based on qualitative and quantitative research with children.[3] Children were asked, from a list of 21 child items and activities, to indicate whether they thought the items and activities were 'necessary' which all children should have to do without. Items and activities attracting 50% or more children were considered consensually agreed and thus categorized as socially perceived 'necessities'. Then, children were asked whether they 'had', 'didn't have but

[2] Adult-reported data on the PSDE and PDHI streams aims to collect information on people's living conditions and circumstances. The re-interviewing of respondents were asked, from a list of 41 adult and child items, covering various domains (e.g. food, clothing, health, housing and social and family activities), to indicate whether they thought these items and activities were 'necessary' which all adults /children should have to do without. Items and activities attracting 50 % or more public support were considered consensually agreed and thus classified as socially perceived 'necessities'. Then, all respondents were asked to indicate whether they had an item or did an activity and, if they did not, to distinguish if this was due to a lack of money (affordability) or choice (personal preference). The survey included questions about a number of other topics such as income, subjective poverty, housing and living environment, public and private services, social networks and support, health behaviours (e.g. dietary behaviour, physical activity and exercise), and health conditions (e.g. physical and mental health, anxiety and depression) and healthcare utilization, to obtain contextual information about people's wider circumstances.

[3] The focus group methodology aims to address two key questions from children's own perspectives: (1) what are the conditions for a good life?; and (2) which life dimensions (e.g. material situation and social relationships) do children think are important in their lives? To help stimulate focus group discussion, a list of necessities for children adapted from past studies was provided. Children were encouraged to add to, or delete from this list or to amend them as they see fit. A list of 21 child items and activities was informed by this qualitative work with children.

would like', or 'didn't have and didn't want' each item. The child deprivation index encompasses 14 items and activities which allow for children's social participation and development of relationships with family, friends and teachers. Scalability of the items was tested using Cronbach's Alpha, with a coefficient of .744. A scale was computed by summing the number of items which children lacked and wanted such that a higher score indicating a greater degree of deprivation. The items and activities in the index include (Table 1):

- Enough warm clothes for cold weather *(Enough warm clothes)*[4]
- Your own mobile phone *(Mobile phone)*
- A computer device with internet connection at home *(A home computer)*
- A meal out with friends at least once a month *(A meal out with friends)*
- Somewhere nearby where you can safely spend time with your friends *(A safe place with friends)*
- Some pocket money each week to spend on yourself *(Pocket money)*
- Some money that you can save each month *(Saving money)*
- Access to public transport like the railway networks or bus services *(Access to public transport)*
- Go out with friends or family for leisure activities at least once a month *(Leisure activities with friends/family)*
- School uniform of correct size *(School uniform)*
- Educational games *(Educational games)*
- Books at home suitable for your ages *(Books for suitable ages)*
- A suitable place at home to study or do homework *(A suitable place to study)*
- Participation in extra-curricular activities *(Extra-curricular activities)*

Income Poverty and Children in Jobless Households Data derived from the PSDE household survey was used to identify whether children living in households experiencing income poverty and/or having no adults in paid work (i.e. jobless households).[5] Income poverty was measured by equivalised household income quintile from the subsample of families with children[6]. Children were defined as poor if they were living in families in the bottom quintile. Both the child-derived deprivation index and the adult-derived income poverty measure were used to ascertain how these material well-being indicators influenced child life satisfaction (Table 1).

2.2.2 Relationships with Family, Friends and Teachers

This article focuses on the effects of positive and negative aspects of relationships with family, friends and teachers on children's life satisfaction.

[4] Abbreviation are shown in bracket at the end of each item.
[5] Children in jobless households are more likely to be experienced income poverty (Lietz et al. 2015; UNICEF 2007).
[6] This study uses an equivalence scale which divides household income by the square root of household size (OECD 2013).

Table 1 Material well-being, social relationships and children's overall life satisfaction measures

Domain	Components	Indicators	Response range
Material well-being	Child deprivation index *14-item: α = .744*	Enough warm clothes	Enforced lack of item: Yes (1), No (0)
		Mobile phone	A deprivation score: Sum of 14-item[@]
		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	
	Household income[#]	Equivalised household income quintiles	1st quintile (lowest) (1) to 5th quintile (highest) (5)
	Jobless household[#]	Number of adults in paid work within the household	None (0) to 3+ (3)
Home and family	Time spent with family	Talking together	Not at all (1) to Every day (4) *Mean of 4-item*
		Having fun together	
		Having meals together	
		Learning together	
	Perception of parent–child relationships	Your parents (or the people who look after you) respect your opinions	Never (1) to Most of the time (5) *Mean of 2-item*
		Your parents (or the people who look after you) treat you fairly	
	Perceived social support from family	Support you would get if you needed practical help*	A lot (1) to None at all (4) *Mean of 3-item*
		Support you would get if you could talk to your parents*	
		Support you would get if you could needed someone to give advice*	
	Feeling of safety	Feel safe at home*	Very safe (1) to Very unsafe (5)
Friends	Time spent with your friends	Talking together	Not at all (1) to Every day (4) *Mean of 4-item*
		Having fun together	
		Meeting to study (apart from at school)	
		Hanging out with friends	
	Experience of being bullied	Whether you have been bullied in the past couple of months*	I have not been bullied (1) to Several time a week (5)

Table 1 (continued)

Domain	Components	Indicators	Response range
	Perceived social support from friends	Support you would get if you could talk to your friends*	A lot (1) to None at all (4)
	Perception of peer relationship	You feel your friends are nice to you	Never (1) to Most of the time (5)
School and teachers	Perceived social support from teachers	Support you would get if you can talk to your teachers*	A lot (1) to None at all (4)
	Perception of connectedness to teachers	Your teachers respect your opinions Your teachers treat you fairly	Never (1) to Most of the time (5) *Mean of 2-item*
	Feeling of safety	Feel safe at school*	Very safe (1) to Very unsafe (5)
Children's overall life satisfaction	Life satisfaction	Your life as a whole*	Very satisfied (1) to Very dissatisfied (5)

[#] Adult-reported items

*Negatively worded item (reverse coded). Higher scores on the scales indicate better performance in each component

[@] A deprivation score from 0 to 5+ where a higher score indicates a greater degree of deprivation

Home and family Family relationships encompasses four components and eleven indicators measuring interpersonal interactions between parents and children, perception of child-parent relationships, feeling of reciprocity and trust, and feeling of safety at home (Table 1).

'Time spent with family' component included four items of frequency of activities did with family ('talking together'; 'having fun together'; 'having meals together'; and 'learning together'). They were assessed using a 4-point scale with 1 = 'Not at all' and 4 = 'Every day'. The mean of the four items was computed such that a higher score indicating a close parent–child relationship.

'Perception of parent–child relationships' component was measured by two items - frequency of parents (or the people who look after you) 'respect your opinions' and 'treat you fairly'. The questions were assessed using a 5-point scale (1 = 'Never', 2 = 'Rarely', 3 = 'Occasionally', 4 = 'Often', 5 = 'Most of the time'). The mean of the two items was computed such that a higher score indicating positive child-parent relationships.

'Perceived social support from family' component refers to three items of the amount of support would get if children 'needed practical help', 'could talk to parents', and 'needed someone to give advice'. They were assessed using a 4-point scale with 1 = 'A lot' and 4 = 'None at all'. The responses were reversely coded. The mean of the three items was computed such that a higher score indicating a strong reciprocity norm between parents and children.

'Feeling of safety at home' component was measured by one indicator - 'feel safe at home'. It was assessed by a 5-point scale with 1 = 'Very safe' and 5 = 'Very unsafe'. The responses were reversely coded such that a lower score indicating a lower level of family relationships.

Friends The measure of peer relationships consists of four comp-onents and seven indicators measuring interpersonal interactions with friends, perception of connectedness to friends, and positive and negative affect friendship (Table 1).

'Time spent with friends' component was measured by *four* items of frequency of activities did with friends ('talking together'; 'having fun together'; 'meeting to study (apart from at school)' and 'hanging out with friends'). The questions were assessed using a 4-point with 1 = 'Not at all' and 4 = 'Every day'. The mean of the four items was computed such that a higher score indicating positive peer relationships.

'Experience of being bullied' component was measured by a single question – 'have you been bullied in the past couple of months?' This question was assessed using a 5-point scale with 1 = 'I have not been bullied' and 5 = 'Several time a week'. The responses were reversely coded such that a lower score indicating negative affect friendship.

'Perceived social support from friends' component was assessed by a single question – 'the amount of support you would get if you could talk to your friends'. This question was assessed using a 4-point scale with 1 = 'A lot' and 4 = 'None at all'. The responses were reversely coded such that a higher score indicating positive affect friendship.

'Perception of peer relationships' component was assessed by a single item – 'how often do you feel your friends are nice to you?' using a 5-point scale with 1 = 'Never' and 5 = 'Most of the time' such that a higher score indicating positive peer relationships.

School and teachers Relationships with teachers encompasses three components and four indicators measuring perception of student-teacher relationships, feeling of reciprocity and trust, and feeling of safety at school (Table 1).

'Perceived social support from teachers' component was assessed by a single item - 'the amount of support would get if you can talk to your teachers', using a 4-point scale with 1 = 'A lot' and 4 = 'None at all'. The responses were reversely coded such that a lower score indicating a weak norm of reciprocity between student-teacher relationships.

'Perception of connectedness to teachers' component was measured by two indicators: frequency of your teachers 'respect your opinions' and 'treat you fairly'. The questions were assessed using a 5-point scale with 1 = 'Never' and 5 = 'Most of the time' such that a higher score indicating positive student-teacher relationships.

'Feeling of safety at school' component was measured by one single item - 'feel safe at school'. This question was assessed by a 5-point scale with 1 = 'Very safe' and 5 = 'Very unsafe'. The responses were reversely coded such that a lower score indicating a lower level of social relationships at school.

2.2.3 Child Subjective Well-Being

The components of self-reported well-being consists of 'eudaimonic' (or psychological well-being) and 'hedonic' well-being (or subjective well-being). The psychological well-being concerns with people's mastery, purpose in life and autonomy. The subjective well-being consists of two main elements, including cognitive evaluations of one's life (i.e. satisfaction with life as a whole and domain specific satisfaction), and positive (e.g. joy and pride) and negative (e.g. pain and worry) emotions (or affects) at a particular point in time (Rees et al. 2013, 2016; Stiglitz et al. 2010).

Due to data availability from the SPPR project, the current study is limited to the children's subjective well-being measure. 'Life satisfaction' component was assessed by a single item – 'satisfaction with your life as a whole' (i.e. 'children's overall life satisfaction'), using a 5-point scale with 1 = 'Very satisfied' and 5 = 'Very dissatisfied'. The responses were reversely coded such that a lower score indicating a lower level of overall life satisfaction (Table 1). The 'children's overall life satisfaction' indicator which is part of child subjective well-being is used as the dependent variable for the regression analysis to examine the relative effects of socio-demographic characteristics and social relationships on children's overall life satisfaction.

2.2.4 Socio-Demographic Characteristics: Control Variables

All children were asked where they were born. Since children in each of non-Hong Kong born groups (including 'Mainland China', 'Macau', 'Taiwan' and 'elsewhere outside Hong Kong') consisted of only a small proportion of the study sample, this group was combined as 'non-Hong Kong born children' and the rest as 'Hong Kong born children'.

Age (in years), gender (male vs. female) and migrant status (non-Hong Kong born children vs. Hong Kong born children) were used as control variables for regression analysis.

All domains, components and indicators measuring children's life satisfaction by socio-demographics and social relationships are summarized in Table 1.

3 Results

The socio-demographic characteristics of children aged 10 to 17 in this study was presented in Table 2. Among the 793 participants included in the analysis, 54.5 % were boys and 45.5 % were girls. The average age was 13.8 (SD = 2.3) for boys and girls. 15.1 % of the participants were non-Hong Kong born children. A majority of children are studying either at government (4.8 %) or aided school (87.1 %). A higher proportion of boys (38.6 %) lacked but wanted at least 2 or more child items compared to 32.6 % for girls.

Table 3 presents the relationship between family income and child deprivation which distinguishes poor children from poor families. The proportion deprived of five or more items was higher among children in the bottom quintile whilst 71 % of children in the highest quintile families were deprived of 1 or fewer items. However, there were about one-third non deprived children in families in the lowest

quintile (30.7 %). These children may be protected from deprivation by their parents who sacrifice their own needs. On the other hand, there was children in the highest quintile families deprived of 3 to 4 items (10.1 %); and 29 % deprived of two or more items. These results show that level of income is not a perfect indicator of a child's material circumstances. Not all poor children are deprived and some non-poor children are deprived. Hence the value of child derived deprivation measures.

Table 4 summarizes relationships with family, friends and school teachers and life satisfaction among children with differing socio-demographic characteristics. Boys had relatively weaker interpersonal interactions with their parents and friends than girls. Girls perceived that they would get more support from family and friends than boys. Younger children spent more time with their families compared to their seniors. Older children had a lower level of life satisfaction than the younger ones. Children in families with low material well-being (i.e. experienced income poverty and/or multiple deprivation) were more likely to be bullied in the past couple of months. Children who were more deprived were more likely to have negative perceptions of relationships with their parents and teachers, to perceive a lower level of social support from their family, friends and teachers, and to have a lower level of life satisfaction than the non-deprived children.

Table 5 shows the association between children's life satisfaction and positive and negative qualities of relationships. The social context of children's lives, such as 'perceived parent-child relationship' and 'feeling safe at home'; 'perception of peer relationships' and 'experience of being bullied'; and 'perceived connectedness to teachers' and 'feeling safe at school', were significantly associated with children's life satisfaction.

Table 6 reports the results of the ordinal regression analysis. It is observed that children's age, material deprivation, perceived positive relationships with family and teachers, perceived strong social support from family, and experience of being bullied all contributed statistically significant in explaining variations in life satisfaction. Older children had a lower level of life satisfaction (Odds ratio = .82, Wald = 16.837, p = .000) than the younger ones. Unlike the traditional adult reported income poverty measures, child deprivation played a significant role in explaining variation in children's overall life satisfaction. Children who had experience of being bullied had a lower level of life satisfaction (Odds ratio = .50, Wald = 5.936, p = .015). On the contrary, children who perceived a positive relationships with family (Odds ratio = 2.47, Wald = 26.844, p = .000), perceived a high level of social support from family (Odds ratio = 2.28, Wald = 15.804, p = .000), and perceived a close connection to teachers (Odds ratio = 1.80, Wald = 12.726, p = .000) had a higher level of life satisfaction.

4 Discussion

This article has explored the extent to which socio-demographics and supportive social relationships explained variations in children's life satisfaction. The evidence on children's life satisfaction might inform efforts to improve the quality of children's lives. Results indicate the relative effects of socio-demographic characteristics and social

Table 2 Socioeconomic and demographic characteristics of the study sample ($N = 793$)

	Boys	Girls	Total
Total	54.5 % (432)	45.5 % (361)	793
Age[a]			
10	11.3 % (49)	12.5 % (45)	11.9 % (94)
11	9.3 % (40)	10.2 % (37)	9.7 % (77)
12	13.7 % (59)	10.2 % (37)	12.1 % (96)
13	9.0 % (39)	10.5 % (38)	9.7 %(77)
14	13.9 % (60)	12.5 % (45)	13.2 % (105)
15	13.7 % (59)	13.3 % (48)	13.5 % (107)
16	12.5 % (54)	13.3 % (48)	12.9 % (102)
17	16.7 % (72)	17.5 % (63)	17.0 % (135)
Mean (SD)	*13.8 (2.3)*	*13.8 (2.4)*	*13.8 (2.3)*
Place of birth[a]			
Mainland China or elsewhere	13.9 % (58)	16.5 % (58)	15.1 % (116)
Hong Kong	86.1 % (360)	83.5 % (293)	84.9 % (653)
School type			
Government school	4.2 % (17)	5.6 % (19)	4.8 % (36)
Aided school	85.1 % (342)	89.5 % (306)	87.1 % (648)
Private school	3.5 % (14)	1.5 % (5)	2.6 % (19)
School under the Direct Subsidy Scheme	6.5 % (26)	2.6 % (9)	4.7 % (35)
International school	0.5 % (2)	0.6 % (2)	0.5 % (4)
Caput school	0.2 % (1)	0.3 % (1)	0.3 % (2)
Number of working adults in the household[a]			
0	9.0 % (39)	8.3 % (30)	8.7 % (69)
1	38.4 % (166)	41.8 % (151)	40.0 % (317)
2	42.8 % (185)	39.6 % (143)	41.4 % (328)
3+	9.7 % (42)	10.2 % (37)	10.0 % (79)
Equivalised household income[a]			
1st quintile (lowest)	19.4 % (81)	21.2 % (74)	20.2 % (155)
2nd quintile	18.7 % (78)	21.2 % (74)	19.8 % (152)
3rd quintile	22.8 % (95)	23.5 % (82)	23.1 % (177)
4th quintile	17.0 % (71)	16.6 % (58)	16.8 % (129)
5th quintile (highest)	22.1 % (92)	17.5 % (61)	20.0 % (153)
Enforced lack of child items			
0	41.3 % (160)	46.2 % (146)	43.5 % (306)
1	20.2 % (78)	21.2 % (67)	20.6 % (145)
2	11.9 % (46)	15.8 % (50)	13.7 % (96)
3–4	14.0 % (54)	10.8 % (34)	12.5 % (88)
5+	12.7 % (49)	6.0 % (19)	9.7 % (68)

[a] Adult-reported items

[b] Number of cases are shown in bracket

[c] Figures may not be add up to total N due to missing data

[d] All percentages are column percentages except for total gender

Table 3 Percentage of deprived children in each quintile of family income

	Deprived items					*N*
	0	1	2	3–4	5+	
1st quintile (lowest)	30.7 % (39)	18.1 % (23)	15.7 % (20)	17.3 % (22)	18.1 % (23)	127
2nd quintile	39.4 % (56)	24.6 % (35)	11.3 % (16)	14.1 % (20)	10.6 % (15)	142
3rd quintile	42.9 % (67)	26.3 % (41)	15.4 % (24)	9.0 % (14)	6.4 % (10)	156
4th quintile	49.1 % (57)	19.8 % (23)	10.3 % (12)	12.9 % (15)	7.8 % (9)	116
5th quintile (highest)	58.0 % (80)	13.0 % (18)	13.8 % (19)	10.1 % (14)	5.1 % (7)	138
Total	44.0 % (299)	20.6 % (140)	13.4 % (91)	12.5 % (85)	9.4 % (64)	679

[a] Number of cases are shown in bracket

[b] All percentages are row percentages

relationships on life satisfaction. The pattern of variations were similar to those seen among children in other developed countries.

This study produced evidence that child-reported indicators of material deprivation contributed more to explaining variations in children's life satisfaction compared to adult-reported income poverty measures (Main 2014; Pople et al. 2015). In line with previous studies, there was a downward trend in children's life satisfaction with age (Moore et al. 2014; Pople et al. 2015; Rees and Main 2015). This raises interesting questions for future research to explore the extent to which its relevance to the pressure to fulfil expectations when children grow up (Leung and Shek 2011).

Perceived positive relationships with family and teachers (e.g. being respected and treated fairly at home and school) (Goswami 2012; McAuley and Rose 2014; Rees and Main 2015), and supportive environments (e.g. experience of being bullied) (Currie et al. 2012; Dufur et al. 2015; Huebner et al. 2014; Klocke et al. 2014) appeared to have significant effects on children's life satisfaction (Goswami 2014; Pople et al. 2015).

The empirical findings of this study have important implications for current policy and future research development. First, the link between children's experience of material deprivation and their life satisfaction appears to be amenable to policy initiatives. The material deprivation index was useful to differentiate poor children from poor families. Results supported previous studies that some parents who were experiencing income poverty might sacrifice their own needs to provide for children (Main and Bradshaw 2016; Middleton et al. 1997; Ridge 2009). Financial and social support should be prioritized to children who are in disadvantaged socioeconomic positions. Second, it is important that future research explores the reasons why some parents in the highest income quintile may restrict their children to have items enabling them to conform to the norms of their peers. Research findings from adults and children's perspectives on what the conditions are good for children's lives clearly have policy implications. Findings imply the prominence of children's voices for services and programmes developed for children which can better suit their needs. Third, there were links between children with low life satisfaction and negative perceived quality of relationships; experience of being bullied; perceived a lower level of social support. Children's low life satisfaction associated with these risk factors are

Table 4 Relationships with family, friends and school teachers, and life satisfaction by socio-demographics

	N	Mean rank	Sig.	N	Mean rank	Sig.	N	Mean rank	Sig.	N	Mean rank	Sig.	N	Mean rank	Sig.	N	Mean rank	Sig.	N	Mean rank	Sig.
	Time spent with family			Perception of parent–child relationship			Perceived social support from family			Feeling of safety at home			Time spent with your friends			Experience of being bullied			Perceived social support from friends		
Gender																					
Male	393	341.51	.002	431	392.47	.624	432	375.08	.004	429	382.26	.105	395	345.56	.011	429	386.71	.089	432	377.68	.006
Female	333	389.45		360	400.22		359	421.18		356	405.95		331	384.90		358	402.73		360	419.09	
Age																					
10.00	87	414.01	.000	93	391.82	.062	94	418.29	.711	92	441.52	.267	87	282.74	.003	93	364.11	.077	94	372.02	.290
11.00	66	391.26		77	445.35		77	417.23		77	402.65		67	361.69		76	372.01		77	362.09	
12.00	88	391.31		96	368.88		96	417.40		96	382.54		90	371.49		95	382.37		96	397.19	
13.00	70	417.19		77	457.25		77	400.58		77	408.49		70	419.23		76	392.72		77	432.40	
14.00	99	333.78		105	366.86		104	371.38		103	367.86		95	391.23		105	403.28		104	406.38	
15.00	101	378.35		107	389.31		107	380.27		107	375.70		96	382.58		107	400.37		107	373.72	
16.00	89	343.42		102	383.50		102	385.58		102	396.97		90	368.24		102	417.50		102	400.97	
17.00	126	290.47		134	392.47		134	389.81		131	382.62		131	345.44		133	406.04		135	419.27	
Place of birth																					
Mainland China /elsewhere	106	329.06	.204	116	368.56	.401	116	346.34	.044	116	368.67	.465	110	349.30	.813	114	395.14	.254	116	370.75	.436
Hong Kong	597	356.07		651	386.75		651	390.71		645	383.22		596	354.28		650	380.28		652	386.95	

Table 4 (continued)

	N	Mean rank	Sig.	N	Mean rank	Sig.	N	Mean rank	Sig.	N	Mean rank	Sig.	N	Mean rank	Sig.	N	Mean rank	Sig.	N	Mean rank	Sig.
	Time spent with family			Perception of parent–child relationship			Perceived social support from family			Feeling of safety at home			Time spent with your friends			Experience of being bullied			Perceived social support from friends		
Whether having adults in paid work																					
No adults	62	326.41	.143	69	297.20	.000	69	358.74	.151	69	420.30	.244	63	312.95	.044	68	340.34	.000	69	398.24	.943
At least one adult	664	366.96		722	405.44		722	399.56		716	390.37		663	368.30		719	399.08		723	396.33	
Equivalised household income																					
1st quintile (lowest)	138	339.17	.603	154	327.10	.002	155	362.05	.432	154	383.89	.525	142	303.63	.005	154	351.54	.036	155	394.62	.567
2nd quintile	139	362.69		151	379.33		152	380.15		149	369.58		140	349.26		150	392.50		152	367.84	
3rd quintile	158	367.76		177	389.76		177	372.85		175	363.69		161	380.80		176	389.48		177	378.95	
4th quintile	120	343.99		129	391.56		128	403.05		127	383.85		116	386.75		128	385.97		128	372.41	
5th quintile (highest)	146	338.68		153	425.35		152	399.62		153	399.22		145	344.67		152	383.00		153	399.84	
Enforced lack of child items																					
0	286	338.47	.482	306	395.78	.000	306	379.44	.000	302	361.41	.010	281	361.28	.000	303	359.15	.000	306	368.08	.004
1	132	319.19		145	339.01		145	370.11		145	353.89		137	319.58		142	350.78		145	376.86	
2	89	336.98		96	332.63		95	335.78		95	366.40		92	292.75		96	370.72		96	342.96	
3–4	83	305.90		86	300.65		88	290.56		85	320.39		81	301.99		88	329.14		88	301.02	
5+	63	305.03		68	264.65		68	286.89		68	284.70		61	265.25		68	295.13		68	305.39	

Table 4 (continued)

	N	Mean rank	Sig.	N	Mean rank	Sig.	N	Mean rank	Sig.	N	Mean rank	Sig.	N	Mean rank	Sig.
	Perception of peer relationship			Perceived social support from teachers			Perception of connectedness to teachers			Feeling of safety at school			Overall life satisfaction		
Gender															
Male	430	382.28	.070	432	402.25	.414	431	380.09	.031	431	396.49	.942	432	390.96	.367
Female	358	409.18		360	389.60		359	414.00		360	395.41		361	404.23	
Age															
10.00	91	374.23	.242	94	409.77	.891	93	401.73	.256	94	434.80	.229	94	455.13	.000
11.00	77	381.05		77	383.45		77	382.04		76	399.76		77	443.99	
12.00	95	364.63		96	411.60		96	362.09		96	389.09		96	384.61	
13.00	77	418.99		77	382.97		77	432.70		77	432.69		77	437.68	
14.00	104	370.46		104	405.67		105	365.24		105	361.62		105	379.00	
15.00	107	406.71		107	379.94		107	408.97		107	393.05		107	408.84	
16.00	102	402.99		102	383.48		100	424.46		101	393.67		102	376.21	
17.00	135	425.32		135	407.59		135	392.83		135	381.66		135	335.66	
Place of birth															
Mainland China /elsewhere	116	357.72	.149	116	360.96	.190	115	368.88	.424	116	369.38	.397	116	362.38	.186
Hong Kong	648	386.94		652	388.69		651	386.08		651	386.60		653	389.02	

Table 4 (continued)

	N	Mean rank	Sig.	N	Mean rank	Sig.	N	Mean rank	Sig.	N	Mean rank	Sig.	N	Mean rank	Sig.
	Perception of peer relationship			Perceived social support from teachers			Perception of connectedness to teachers			Feeling of safety at school			Overall life satisfaction		
Whether having adults in paid work															
No adults	68	357.17	.120	69	386.97	.702	68	355.71	.118	68	381.43	.546	69	362.07	.141
At least one adult	720	398.03		723	397.41		722	399.25		723	397.37		724	400.33	
Equivalised household income															
1st quintile (lowest)	154	372.53	.823	155	396.62	.496	154	374.13	.447	154	377.71	.122	155	359.37	.397
2nd quintile	150	382.63		152	359.32		151	364.81		152	359.37		152	377.79	
3rd quintile	177	391.82		177	376.71		177	406.81		177	408.12		177	398.08	
4th quintile	128	368.34		128	395.80		128	383.31		128	361.70		129	383.12	
5th quintile (highest)	153	388.49		153	389.29		153	377.09		153	398.07		153	397.08	
Enforced lack of child items															
0	305	369.07	.000	306	380.67	.002	305	365.82	.020	306	354.67	.325	306	368.27	.004
1	145	372.28		145	350.20		145	374.29		145	352.89		145	365.57	
2	95	362.97		96	338.73		96	339.01		96	377.44		96	353.64	
3–4	87	322.90		88	299.10		88	320.45		87	324.57		88	327.11	
5+	67	231.77		68	314.01		68	296.47		68	332.12		68	279.74	

Note: Kruskai Wallis Test

Table 5 Correlations between children's overall life satisfaction and relationships with family, friends and teachers

		1	2	3	4	5	6	7	8	9	10	11	12
1	Overall life satisfaction	1	.221**	.375**	.238**	.330**	.112**	.106**	.124**	.217**	.158**	.294**	.295**
2	Time spent with family		1	.299**	.229**	.191**	.308**	.061	.120**	.092*	.124**	.101**	.110**
3	Perception of parent–child relationship			1	.303**	.346**	.101**	.154**	.125**	.251**	.160**	.391**	.278**
4	Perceived social support from family				1	.207**	.151**	.048	.539**	.135**	.547**	.115**	.108**
5	Feeling of safety at home					1	.014	.121**	.176**	.186**	.103**	.218**	.315**
6	Time spent with friends						1	.085*	.273**	.244**	.131**	.031	.057
7	Experience of being bullied							1	.079*	.236**	−.020	.099**	.146**
8	Perceived social support from friends								1	.188**	.418**	.069	.090*
9	Perception of peer relationships									1	.053	.212**	.177**
10	Perceived social support from teachers										1	.169**	.103**
11	Perception of connectedness to teachers											1	.420**
12	Feeling of safety at school												1

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

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

Table 6 Ordinal regression: children's overall life satisfaction, socio-demographics and social Relationships

	N	Estimate	Std. Error	Wald	df	Exp B	95% Confidence Interval		Sig
							Lower	Upper	
Threshold – Overall life satisfaction									
1 = dissatisfied /very dissatisfied	16	−1.015	.955	1.128	1	.36	.06	2.36	.288
2 = neither satisfied nor dissatisfied	131	1.854	.942	3.875	1	6.39	1.01	40.46	.049
Factors									
Gender									
1 = Male	369	−.015	.212	.005	1	.98	.65	1.49	.942
2 = Female	300	0	.	.	0	1.00	.	.	.
Equivalised household income									
1 = 1st quintile (lowest)	125	−.188	.350	.291	1	.83	.42	1.64	.590
2 = 2nd quintile	138	−.581	.335	3.004	1	.56	.29	1.08	.083
3 = 3rd quintile	155	−.265	.333	.634	1	.77	.40	1.47	.426
4 = 4th quintile	115	−.226	.359	.396	1	.80	.39	1.61	.529
5 = 5th quintile (highest)	136	0	.	.	0	1.00	.	.	.
Enforced lack of child items									
0 = 0	295	.929	.341	7.430	1	2.53	1.30	4.94	.006
1 = 1	137	.971	.373	6.779	1	2.64	1.27	5.49	.009
2 = 2	90	1.146	.410	7.819	1	3.15	1.41	7.02	.005
3 = 3-4	83	1.076	.398	7.300	1	2.93	1.34	6.41	.007
4 = 5+	64	0	.	.	0	1.00	.	.	.
Experience of being bullied									
1 = Yes	84	-.693	.284	5.936	1	.50	.29	.87	.015
2 = No	585	0	.	.	0	1.00	.	.	.
Covariates									
Age	669	−.198	.048	16.837	1	.82	.75	.90	.000
Perception of parent–child relationships	669	.904	.174	26.844	1	2.47	1.75	3.47	.000
Perceived social support from family	669	.823	.207	15.804	1	2.28	1.52	3.41	.000
Perception of connectedness to teachers	669	.588	.165	12.726	1	1.80	1.30	2.49	.000

Dependent Variable: Children's overall life satisfaction (OLS)

significantly important for policy interventions. Finally, this research produced a reliable child-derived index of deprivation index which is socially and cultural relevant to the Chinese context. This study will benefit researchers who work on child poverty related issues in the other regions.

There are limitations to this study. Data used for this analysis are cross-sectional in nature. The identified associations in this analysis can be verified using the second wave of the SPPR survey data in order to draw any causal conclusion. The current

study is limited to the children's subjective wellbeing measure because of data availability. Given the limitations, this article reports, for the first time evidence based on a child-derived material deprivation index - thereby addressing the limitations in traditional adult-derived child poverty measures. The findings can advance our understanding of variations in children's overall life satisfaction in Hong Kong, and provide evidence for policy and practice.

Acknowledgments This study was fully supported by a grant from the Central Policy Unit of the Government of the Hong Kong Special Administrative Region and the Research Grants Council of the Hong Kong Special Administrative Region, China (Project No. 4003-SPPR-11). The authors would also like to thank Dr Anne Crowley, Professor David Gordon, Dr Gill Main, Ms Christina Pantazis, Dr Eileen Sutton and the 'Social Disadvantages, Well -being and Health in Hong Kong (SDWH-HK)' project team for their useful and constructive comments on focus group topic guide and/or survey questionnaire of this project.

References

Abe, A., & Pantazis, C. (2014). Comparing public perceptions of the necessities of life across two societies: Japan and the United Kingdom. *Social Policy and Society, 13*(1), 69–88. doi:10.1017/S1474746413000420.

Ben-Arieh, A., Casas, F., Frønes, I., Korbin, J. E. (2014). Multifaceted concept of child well-being. In A. Ben-Arieh, F. Casas, I. Frønes, & J. E. Korbin (Eds.), *Handbook of child well-being* (pp. 1–27). Springer Netherlands. doi:10.1007/978-90-481-9063-8_134. Accessed 16 January 2015.

Bradshaw, J. (2015). Child Poverty and child well-being in international perspective. In E. Fernandez, A. Zeira, T. Vecchiato, C. Canali (Eds.), *Theoretical and empirical insights into child and family poverty* (pp. 59–70). Springer International Publishing. doi:10.1007/978-3-319-17506-5_4. Accessed 31 March 2016.

Bradshaw, J., & Finch, N. (2003). Overlaps in dimensions of poverty. *Journal of Social Policy, 32*(4), 513–525. doi:10.1017/S004727940300713X.

Bradshaw, J., Martorano, B., Natali, L., & de Neubourg, C. (2013). Children's subjective well-being in rich countries. *Child Indicators Research, 6*(4), 619–635. doi:10.1007/s12187-013-9196-4.

Currie, C., Zanotti, C., Morgan, A., Currie, D., de Looze, M., Roberts, C., et al. (2012). *Social determinants of health and well-being among young people. Health Behaviour in School-aged Children (HBSC) study: international report from the 2009/2010 survey*. Copenhagen: WHO Regional Office for Europe, 2012 (Health Policy for Children and Adolescents, No. 6). http://www.euro.who.int/__data/assets/pdf_file/0003/163857/Social-determinants-of-health-and-well-being-among-young-people.pdf.

Dufur, M. J., Hoffmann, J. P., Braudt, D. B., Parcel, T. L., & Spence, K. R. (2015). Examining the effects of family and school social capital on delinquent behavior. *Deviant Behavior, 36*(7), 511–526. doi:10.1080/01639625.2014.944069.

Ferguson, K. M. (2006). Social capital and children's wellbeing: a critical synthesis of the international social capital literature. *International Journal of Social Welfare, 15*(1), 2–18. doi:10.1111/j.1468-2397.2006.00575.x.

Goswami, H. (2012). Social relationships and children's subjective well-being. *Social Indicators Research, 107*(3), 575–588. doi:10.1007/s11205-011-9864-z.

Goswami, H. (2014). Children's subjective well-being: socio-demographic characteristics and personality. *Child Indicators Research, 7*(1), 119–140. doi:10.1007/s12187-013-9205-7.

Guio, A. C., Gordon, D., Marlier, E. (2012). *Measuring material deprivation in the EU: indicators for the whole population and child-specific indicators*. European Union: European Union. http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-RA-12-018/EN/KS-RA-12-018-EN.PDF.

Hong Kong Council of Social Service. (2012). *Report of research study on deprivation and social exclusion in Hong Kong*. Hong Kong: HKCSS.

Huebner, P. E. S., Hills, K. J., Jiang, X., Long, R. F., Kelly, R., Lyons, M. D. (2014). Schooling and children's subjective well-being. In A. Ben-Arieh, F. Casas, I. Frønes, & J. E. Korbin (Eds.), *Handbook of child well-being* (pp. 797–819). Springer Netherlands. doi:10.1007/978-90-481-9063-8_26. Accessed 9 March 2016.

Kim, S., & Main, G. (2016). Comparing child subjective well-being in South Korea and the UK: testing an ecological systems approach. *Child Indicators Research*, 1–14. doi:10.1007/s12187-016-9373-3.

Klocke, A., Clair, A., & Bradshaw, J. (2014). International variation in child subjective well-being. *Child Indicators Research, 7*(1), 1–20. doi:10.1007/s12187-013-9213-7.

Lau, M., Gordon, D., Pantazis, C., Sutton, E., & Lai, L. (2015a). Including the views of the public in a survey of poverty and social exclusion in Hong Kong: findings from focus group research. *Social Indicators Research, 124*(2), 383–400. doi:10.1007/s11205-014-0802-8.

Lau, M., Pantazis, C., Gordon, D., Lai, L., & Sutton, E. (2015b). Poverty in Hong Kong. *China Review*, *15*(2), 23–58. https://muse.jhu.edu/journals/china_review/v015/15.2.lau01.html. Accessed 29 January 2016.

Lee, B. J., & Yoo, M. S. (2015). Family, school, and community correlates of Children's subjective well-being: an international comparative study. *Child Indicators Research, 8*(1), 151–175. doi:10.1007/s12187-014-9285-z

Leung, J. T. Y., & Shek, D. T. L. (2011). Expecting my child to become "dragon" – development of the Chinese Parental Expectation on Child's Future Scale. International Journal on Disability and Human Development, 10(3), 257–265. doi:10.1515/ijdhd.2011.043

Lietz, P., O'Grady, E., Tobin, M., McEntee, A., Redmond, G. (2015). *The ACWP questionnaire: Results of the Field Trial. Phase Three Report for the Australian Child Wellbeing Project*. Flinders University, the University of NSW and the Australian Council for Educational Research. www.australianchildwellbeing.com.au.

Main, G. (2014). Child poverty and children's subjective well-being. *Child Indicators Research, 7*(3), 451–472. doi:10.1007/s12187-014-9237-7.

Main, G., & Bradshaw, J. (2012). A child material deprivation index. *Child Indicators Research, 5*(3), 503–521. doi:10.1007/s12187-012-9145-7.

Main, G., & Bradshaw, J. (2016). Child poverty in the UK: measures, prevalence and intra-household sharing. *Critical Social Policy, 36*(1), 38–61. doi:10.1177/0261018315602627.

Main, G., & Pople, L. (2012). *Missing out: a child centred analysis of material deprivation and subjective well-being*. London: The Children's Society.

McAuley, P. C., & Rose, W. (2014). Children's social and emotional relationships and well-being: from the perspective of the child. In A. Ben-Arieh, F. Casas, I. Frønes, & J. E. Korbin (Eds.), *Handbook of child well-being* (pp. 1865–1892). Springer Netherlands. doi:10.1007/978-90-481-9063-8_162. Accessed 9 March 2016.

McPherson, K. E., Kerr, S., McGee, E., Morgan, A., Cheater, F. M., McLean, J., & Egan, J. (2014). The association between social capital and mental health and behavioural problems in children and adolescents: an integrative systematic review. *BMC Psychology, 2*, 7. doi:10.1186/2050-7283-2-7.

Middleton, S., Ashworth, K., & Braithwaite, I. (1997). *Small fortunes: spending on children, childhood poverty and parental sacrifice. York: Joseph rowntree foundation*. York: Joseph Rowntree Foundation.

Moore, D. K. A., Murphey, D., Bandy, T., Lawner, E. (2014). Indices of child well-being and developmental contexts. In A. Ben-Arieh, F. Casas, I. Frønes, & J. E. Korbin (Eds.), *Handbook of child well-being* (pp. 2807–2822). Springer Netherlands. doi:10.1007/978-90-481-9063-8_139. Accessed 23 June 2015.

OECD. (2013). *OECD framework for statistics on the distribution of household income, consumption and wealth*. OECD Publishing. doi:10.1787/9789264194830-en.

Pople, L., Rees, G., Main, G., Bradshaw, J. (2015). *The good childhood report 2015*. The Children's Society and the University of York. http://www.childrenssociety.org.uk/sites/default/files/TheGoodChildhoodReport2015.pdf.

Qi, D., & Wu, Y. (2014). Child poverty in China-a multidimensional deprivation approach. *Child Indicators Research, 7*(1), 89–118. doi:10.1007/s12187-013-9203-9.

Raley, D. S. (2014). time use, inequality, and child well-being. In A. Ben-Arieh, F. Casas, I. Frønes, J. E. Korbin (Eds.), *Handbook of child well-being* (pp. 999–1031). Springer Netherlands. doi:10.1007/978-90-481-9063-8_35. Accessed 9 March 2016.

Rees, G., & Main, G. (2015). *Children's views on their lives and well-being in 15 countries: A report on the Children's Worlds survey, 2013-14*. York: Children's Worlds Project. http://www.isciweb.org/_Uploads/dbsAttachedFiles/ChildrensWorlds2015-FullReport-Final.pdf.

Rees, G., Goswami, H., Pople, L., Bradshaw, J., Keung, A., Main, G. (2013). *The good childhood report 2013*. The Children's Society and the University of York.

Rees, G., Andersen, S., Bradshaw, J. (2016). *Children's views on their lives and well-being in 16 countries: a report on the Children's Worlds survey of children aged eight years old, 2013-15*. Children's Worlds Project (ISCWeB).

Ridge, T. (2009). *Living with poverty: a review of the literature on children's and families' experiences of poverty. (No. DWP Research Report No. 594.)*. London: DWP.

Saunders, P., & Chen, K.-M. (2015). Deprivation and the well-being of children and young people in Taiwan. *Asia Pacific Journal of Social Work and Development, 25*(2), 80–95. doi:10.1080/02185385.2015.1049650.

Stiglitz, J., Sen, A., & Fitoussi, J.-P. (2010). *Mismeasuring our lives: why GDP doesn't add up*. New York: The New Press.

UNICEF. (2007). *Child poverty in perspective: an overview of child well-being in rich countries (Innocenti Report Card 7)*. Florence: UNICEF Office of Research.

UNICEF. (2016). *Fairness for children: a league table of inequality in child well-being in rich countries* (Innocenti Report Card 13). Florence: UNICEF Office of Research. https://www.unicef-irc.org/publications/pdf/RC13_eng.pdf.

Wilkinson, R. G., & Pickett, K. (2009). *The spirit level: why more equal societies almost always do better*. London: Allen Lane.

Wong, Y.-C., Wang, T.-Y., & Xu, Y. (2015). Poverty and quality of life of Chinese children: from the perspective of deprivation. *International Journal of Social Welfare, 24*(3), 236–247. doi:10.1111/ijsw.12115.