Title

Children's and adults' perceptions of child necessities in Hong Kong

Authors' names & affiliations

Maggie K. W. Lau*

School of Graduate Studies / Asia-Pacific Institute of Ageing Studies / Centre for Social Policy and Social Change, Lingnan University, Room 102/5, 1/F, B.Y. Lam Building, 8 Castle Peak Road, Tuen Mun, Hong Kong

E-mail: maggielau2@ln.edu.hk

Tel: + 852 2616 7428

David Gordon

School for Policy Studies, University of Bristol, 10 Woodland Road, BS8 1TZ, UK

E-mail: dave.gordon@bristol.ac.uk

Phone: +44 (0)117 954 6761

Mary F. Zhang

School for Policy Studies, University of Bristol, 10 Woodland Road, BS8 1TZ, UK

E-mail: mary.zhang@bristol.ac.uk

Phone: +44 (0)117 331 0473

Jonathan Bradshaw

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

E-mail: jonathan.bradshaw@york.ac.uk

Phone: +44 (0) 1904 321239

*Correspondence should be addressed to: maggielau2@ln.edu.hk

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Abstract

There is growing interest in child poverty and well-being in East Asia. However, empirical studies predominantly adopt "expert-led" measures (such as adult-derived child deprivation measures), which usually assume that parents or guardians provide reliable reports about all their children's needs and that the allocation of household resources is effectively equal across all members. Studies of child poverty from a child-rights or child-agency perspective are rare in East Asia. Using a consensual deprivation approach, this article examines the extent of agreement between children and adults about which child possessions and activities constitute necessities of life in Hong Kong. The data are drawn from the second wave of the Strategic Public Policy Research project – Trends and Implications of Poverty and Social Disadvantages in Hong Kong: A Multi-disciplinary and Longitudinal Study. A total of 595 adults and 636 school-aged children from the first wave of the study were re-interviewed and asked if they considered 16 possessions and activities as essential for children in contemporary Hong Kong. The results showed that adults were significantly more likely to believe that almost all material and social deprivation items were necessities compared with their children, even after controlling for individual-level (i.e., gender and birthplace) and household-level factors (i.e., number of children in the household, number of working adults and household income). The findings highlight the importance of incorporating children's views into our understanding of child poverty.

Keywords: poverty, consensual deprivation, child necessities, socially perceived necessities, Hong Kong

1. INTRODUCTION

The importance of a multi-dimensional poverty measure incorporating monetary poverty and child-specific deprivation indicators is widely recognised (Abe & Pantazis, 2014; Lau, 2005; Lau et al., 2015b; Qi & Wu, 2014; Saunders et al., 2014). However, empirical studies in this field predominately adopt "expert-led" measures of child poverty and assume that parents or guardians both understand and reliably report all their children's needs. However, parents and children may differ in their beliefs about what possessions and activities are necessary. Parents tend to prioritise needs related to health, education and development (Lau et al., 2015a; Main, 2013). Children realise the importance of these needs, but they also highlight resources needed for fitting into peer norms and building relationships (Lau et al., 2015a; Main & Pople, 2012; Main, 2013; Redmond et al., 2016). Children may also conceal their needs from their parents if they know that their family is suffering from financial stress (Redmond, 2008; Ridge, 2002; Skattebol et al., 2012; van der Hoek, 2005).

A focus on a child perspective not only takes into consideration children's feelings but also supports children's rights as enshrined by the normative framework of the United Nations Convention on the Rights of the Child (Main, 2018; Minujin et al., 2006; Rees & Main, 2015; Ridge, 2002; UNICEF Office of Research, 2007). Research has shown the detrimental long-term consequences for growth and development of those who grow up in low-income families (Blanden & Gibbons, 2006; Wagmiller & Adelman, 2009). Poverty is also costly to society in terms of extra pubic money spent to cope with the negative impacts of deprivation (Bradshaw, 2001), for example, higher rates of physical and mental illness (Hirsch, 2006 & 2008) and lower educational attainment with concomitantly lower economic productivity in the long term (Blanden, et al., 2008; Griggs & Walker, 2008).

Recent scientific advances from national and international child well-being projects (e.g., Good Childhood Reports by the Children's Society, Australian Child Well-being Project, and the International Survey of Children Well-being by Children's Worlds) add important insights into our knowledge of child poverty and well-being based on children's own views about their lives (Main & Pople, 2012; Redmond et al., 2016; Rees & Main, 2015). Some studies have also explored child poverty, deprivation and subjective well-being specifically from children's own perspectives in the United Kingdom (Goswami, 2014; Main & Bradshaw, 2012) and South Africa (Barnes & Wright, 2012). However, no study in Asia has compared the judgement of children and adults in the same survey and only Main's (2013) recent study has done this in the United Kingdom.

In this article, we adopted Mack and Lansley's (1985) consensual deprivation approach (also see Gordon & Pantazis, 1997; Lansley & Mack, 2015) to offer a comparative analysis of the necessities of life as determined by adults and children within the same households in Hong Kong. Drawing on data from the second wave of the Hong Kong Poverty and Social Exclusion Study (PSEHK), this article reports, for the first time, evidence of adults' and children's own assessments about what constitutes a minimum standard of living for children in contemporary Hong Kong. The PSEHK was chosen, because it provides evidence on how a combined low-income and deprivation poverty measure complements and supplements the official poverty line to reflect the multifaceted social reality of poverty in Hong Kong. This combined low-income and multiple deprivation measure enables an assessment of the dynamic nature of poverty in Hong Kong. The poor are defined as those people with low income who are excluded from participation in the normal activities and lack the normal possessions which most people in Hong Kong take for granted. People are not poor if they have (i) a high income and a high standard of living; (ii) a low standard of living but a high income (rising); or (iii) a low income but a high standard of living

(*vulnerable*). The PSEHK poverty measure has defined the poor as those with an equivalised gross household income below HK\$6,250 and who also suffered from multiple deprivations (two items or more). A cross-sectional survey of poverty found that 21% were poor, 20% were vulnerable to poverty, 6% were rising out of poverty and 53% were not poor (i.e., they had a high income and a high standard of living) in 2012 (see Lau et al., 2015b).

2. A CONSENSUAL APPROACH TO MEASURE POVERTY & DEPRIVATION

The limitations of the conventional income poverty measures are widely recognised. Knowledge of a person's income at a single point in time is not necessarily sufficient to determine if s/he is poor. The relative income approach identifies the "poor" as those with a low income irrespective of their actual living standards. As Ringen (1988) argued, "income is not the only resource that determines what we get, other relevant resources are skills, thrift, 'connections' and the like" (p.358). The actual living standards may vary among different households having identical economic resources but owing to different expenditure pressures and variations in the ability of transforming money into living standards. Both *direct* and *indirect* methods have been widely used to measure poverty, but neither is entirely adequate on its own (Bradshaw & Finch, 2003; Ringen, 1988). Whelan and Whelan (1995) argued that "the combination of the income and deprivation indicator approach offer the opportunity both to measure poverty more accurately and to provide a more complete picture of the life-style of the poor" (p.48).

Empirical evidence underpins the concept that income poverty and deprivation are two interrelated but distinct indicators of vulnerability in society. A relatively low overlap between income poverty and deprivation measures in cross-sectional surveys indicates that both measures play distinct roles in identifying vulnerable social groups (Bradshaw & Finch, 2003; Pantazis et

al., 2006; Perry, 2002; Saunders et al., 2008; Saunders et al., 2014; Dermott & Main, 2018). For instance, Bradshaw and Finch's (2003) analyses of overlaps in dimensions of poverty (i.e., lacking socially perceived necessities; being subjectively poor and having a relatively low income) found that, "the more dimensions people are poor on, the more they are unlike the non-poor and the poor on only one dimension, in their characteristics and in their social exclusion" (p.513). The findings further implied that "accumulation might be a better way of using overlapping measures of poverty than by giving priority to one dimension over another" (Bradshaw & Finch, 2003, p.513). Lau et al.'s recent study (2015b) found that the official Hong Kong income poverty threshold is able to identify some of the poorest households. However, those households with both a low income and suffering from multiple deprivation (i.e., the PSEHK poor group) are not always be identified as "poor" using the official income poverty measure. These poor families are likely to require both financial support and other anti-poverty interventions to help them improve their standard of living.

The relative deprivation approach to poverty measurement is based upon the work of Peter Townsend (1979) who defined poverty in terms of objective contemporary living standards and social norms. He argued that (p.31):

"Individuals, families and groups in the population can be said to be in poverty when they lack the resources to obtain the types of diet, participate in the activities and have the living conditions and amenities which are customary, or at least widely encouraged or approved, in the societies to which they belong. Their resources are so seriously below those commanded by the average individual or family that they are, in effect, excluded from ordinary living patterns and activities."

Townsend defines poverty as a relative and multi-dimensional sociological phenomenon. This approach has laid the foundation for poverty studies in the United Kingdom (Bramley & Bailey, 2018; Dermott & Main, 2018; Gordon et al., 2000; Gordon & Pantazis, 1997; Pantazis et al., 2006) and extended its influence into different parts of the world informing poverty studies in Europe (Halleröd et al., 2006; Nolan & Whelan, 2010; van den Bosch, 2001), Australia (Saunders et al., 2018; Saunders et al., 2008), Asia (Abe & Pantazis, 2014; Saunders & Chen, 2015; Saunders et al., 2014) and Africa (Nobel et al, 2008; Nandy & Pomati, 2015). For instance, Chow's (1982) pioneering study of poverty in an affluent city made use of Townsend's relative deprivation approach and developed culturally relevant deprivation indicators reflecting the "style of living" in Hong Kong.

The PSEHK study, which aims to construct reliable and valid adult and child deprivation indices, draws upon the Poverty and Social Exclusion Study 2012 in the United Kingdom (see www.poverty.ac.uk) and poverty studies in Hong Kong (e.g., Chow, 1982; Saunders et al., 2014; Lau & Gordon, 2017). The multiple deprivation index (MDI) incorporates 18 material and social deprivation possessions and activities (e.g., fresh fruit or vegetables at least once a day, a meal out with other children at least once a month) constituting the necessities of life for children in contemporary Hong Kong society (see Lau et al., 2015b, Table 4, p.46). A brief review of Hong Kong poverty research has been described in detail elsewhere (Chow, 2015; Lau et al., 2015b).

In response to a critique that Townsend's operational method fails to adequately distinguish choice from constraint (Piachaud, 1987), Mack and Lansley (1985) developed the consensual deprivation or socially perceived necessities approach, which emphasises that a minimum standard of living should be determined by the public rather than by academics or professional experts (also see Lansley & Mack, 2015). This *consensual* approach to poverty assumes that there is "a high

degree of consensus amongst different groups in their perceptions of what are necessities" (Pantazis et al., 2000, p.4). An "unacceptable" standard of living may "cover not only the basic essentials for survival (such as food) but also access, or otherwise, to participating in society and being able to play a social role" (Pantazis et al., 2000, p.3–4).

The consensual approach places public assessment about the necessities of life at the centre of the research process. Using a representative survey, the consensual method aims to capture public understanding of what is an unacceptable minimum standard of living. Possessions and activities attracting 50% or more public support were considered consensually agreed and thus categorised as socially perceived necessities. This approach subsequently laid the foundation for academic surveys of poverty in Asia (Abe & Pantazis, 2014; Lau et al., 2015b; Saunders & Chen, 2015; Saunders et al., 2014; Wong et al., 2015). However, these previous studies adopted adult-reported child poverty measures, which assume that the allocation of household resources is effectively equal across all members (Bennett, 2013; Pantazis et al., 2006). Recent empirical evidence has suggested that parents and children may sometimes differ in their emphasis on children's needs (Lau et al., 2015a; Main & Pople, 2012; Redmond et al., 2016; Sixsmith et al., 2007).

There is an increasing recognition of the value of measuring children's own views about their daily lives and well-being (Main & Pople, 2012; Redmond et al., 2016). However, there has been only limited evidence of child-derived deprivation indicators (Barnes & Wright, 2012; Main & Bradshaw, 2012; Saunders et al., 2018). Such a focus on children's own perspectives not only takes into consideration children's feelings but also supports children's rights as enshrined by the normative framework of the United Nations Convention on the Rights of the Child (Main, 2018; Minujin et al., 2006; Rees & Main, 2015; Ridge, 2002; UNICEF Office of Research, 2007). This

research provides evidence of how and why children's voices should be integrated into child poverty studies and poverty reduction strategies.

3. METHODS

3.1 Procedures & sample

Data used in this work are from the second wave (Time 2) 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 project aims to investigate the current trends and implications of poverty and social exclusion in Hong Kong. The project includes three specific research streams: (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 association between poverty and health inequalities (i.e., Poverty, Disadvantages and Health Inequality, PDHI); and to investigate the impact of poverty, inequality and social disadvantages on children's well-being (i.e., Poverty, Disadvantages and Children's Well-Being, PDCW).

The first wave of the *Living Standards Survey* was undertaken via face-to-face interviews from June 2014 to August 2015. The sample was drawn from two sources: (i) a re-interview of respondents to the HKCSS 2011 and PSEHK 2012 surveys who had provided re-contact permissions (Hong Kong Council of Social Service, 2012; Lau, et al., 2015b); and (ii) a new random sample address taken from the 2011 Population Census. A two-stage stratified sample design was adopted to obtain the new sample. A random sample of living quarters was selected, followed by the random selection of one adult (aged 18 and over) from each household. All children from age 10 to 17 from each sampled household were invited to complete the PDCW questionnaire. The sampling procedure of the first wave of the *Living Standards Survey* has already

been described in detail elsewhere (Chung et al., 2018; Lau & Bradshaw, 2018; Wong et al., 2018). The *second* wave of this survey re-interviewed the first wave survey respondents between February 2016 and March 2017. The total number of re-interviewed adults and children was 2,282 (response rate of 67%) and 804 (response rate of 79%), respectively.

This article focuses on adults' and children's perceptions of child necessities by drawing upon adult-reported PSDE and child-derived PDCW survey data in the second wave of the survey. The total number of re-interviewed adults and school-aged children living in the same households were 595 and 636, respectively. The adult sample was defined as those whose age was 18 or above and who answered at least 17 out of 19 child necessity items in the adult questionnaire. The child sample was defined as those school-aged children who were between age 10 and 17 at Time 1 and answered at least 20 out of the 21 child necessity items in the child questionnaire (see **Table 1**).² Some children aged 16 or 17 at Time 1 were aged 18-19 when they were re-interviewed in the second wave of the survey. However, for the purposes of this research, we consider this group of respondents as "children" not "adults" for two reasons. Firstly, this was a longitudinal study and so these respondents were asked the deprivation questions again in the second wave of the survey using the children version rather than the adult version of the questionnaire. Secondly, in order to follow recommended best scientific practice to minimise selection bias (e.g., removing responses that are not outliers), we included those child respondents in the following analysis. Further discussion is provided in the Results section (**Table 2**) below.

<Insert TABLE 1 here>

This comparative analysis has three specific objectives: (1) to present, for the first time, evidence of the differences and/or similarities between adults and children in their perceptions of

the minimum acceptable living standards for children in Hong Kong; (2) to examine the extent to which the generational differences were manifested *within* the same household, considering that adults and the children were exposed to the same contextual factors; and (3) to explore the factors which may account for any of the differences that existed. Heatmaps, scatterplots and relative risk analyses were produced to explore the differences in perceptions of child necessities between adults and children. Multi-level logistic regressions were performed to address the issue of generational differences in the perception of necessities within the same household.

3.2 Measures

3.2.1 Child- vs. adult-derived necessities of life

Table 1 shows a full list of the child- and adult-reported child-specific possessions and activities derived from PDCW and PSDE questionnaires, respectively (i.e., a total of 21 and 19 possessions and activities, respectively). A total of 16 material and social deprivation items were included for further analyses. Items 1 to 12 were designed to measure material deprivation and the remaining four items were used to gauge social deprivation (Guio et al., 2017; Lau et al., 2015b; Main & Bradshaw, 2014; Pantazis et al., 2006). The items include:³

- 1. Properly fitted shoes (fitted shoes)
- 2. Able to have some new clothes (new clothes)
- 3. Enough warm clothes for cold weather (warm clothes)
- 4. Brand name trainers (brand name trainers)
- 5. Outdoor leisure equipment (outdoor leisure equipment)
- 6. Your own mobile phone (*mobile phone*)
- 7. A computer device with internet connection at home (a computer with internet)

- 8. Some pocket money each week to spend on yourself (pocket money)
- 9. School uniform of correct size (school uniform)
- 10. Educational games (educational games)
- 11. Books at home suitable for your ages (suitable books)
- 12. A suitable place at home to study or do homework (suitable place to study)
- 13. A meal out with friends at least once a month (*meal out with friends*)
- 14. A family day trip at least four times a year (family day trip)
- 15. Participation in extra-curricular activities (extra-curricular activities)
- 16. Tutorial lessons after school (tutorial lessons)

To obtain accurate point and error estimates, we took into consideration the complex-sample-design features of the study, including sampling weights, clusters and strata (see Chung et al., 2018; Lau et al., 2015b; Saunders et al., 2014). Child respondents reported "which items are necessary, which all children should not have to do without" with responses — "Necessary" vs. "Desirable but not necessary". Adult respondents reported "which items are essential for children in Hong Kong today" with responses — "Yes" vs. "No". Items attracting positive responses from 50% or more respondents were considered as consensually agreed and thus categorised as socially perceived "necessities". The child deprivation indicators encompassed 14 possessions and activities which allowed for children's social participation and the development of relationships with family, friends and teachers. The reliability of the deprivation scale was tested and found to be good, i.e., the measure only suffers from a relatively small amount of random error. The KR-20 Cronbach's alpha of the 14 child deprivation items was .83 (alpha coefficient > 0.7 indicates high reliability in social science research).^{4,5}

3.2.2 Socio-demographic characteristics: Control variables for multilevel logistic regressions

Age (in years), gender (male vs. female) and migrant status (non-Hong Kong born vs. Hong Kong born) of children and adults were used as control variables for the logistic regression analyses. All respondents were asked about their birthplaces. Since children and adults 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, these groups were combined as "non-Hong Kong born" and the rest as "Hong Kong born".

Data derived from the PSDE household survey was used to identify the number of children living in the household and whether the children were living in households experiencing income poverty and/or having no adults in paid work (i.e., jobless households). 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.

3.3 Statistical analysis

We were interested in learning if the univariate differences in adults' and children's perceptions of necessities persisted, when the variances in individual characteristics and household contextual factors were taken into consideration. To investigate this question, we conducted a series of multilevel logistic regression analyses. Multilevel modelling is applied as it enables us to distinguish between the within- and between-level effects on the outcomes, and logistic regression is particularly suitable when the outcomes are binary (Sommet & Morselli, 2017). In this study, the within-household comparisons can only make sense when both the adults(s) and the child(ren) have participated in the interviews. For this reason, this part of analysis was based on those households from which at least one adult and one child had answered the relevant questions. This

pairing-procedure reduced the total sample to 996 individuals ($N_{\text{children}} = 574$, $N_{\text{adults}} = 422$) from 422 households.⁷

The logistic regression analyses were performed using *MPlus* 8, the default method for regressions with categorical outcomes is maximum-likelihood estimation (Muthén & Muthén, 2010). The outcome variables were binary for which "no/not necessary" was coded as "0" and "yes/necessary" was coded as "1". The predictive variable (i.e., Group) was also binary with "being a child" as "0" and "being an adult" as "1". We controlled for two individual-level characteristics, i.e., gender and birthplace and three household-level factors, i.e., number of working adults (one adult, two adults, three or more adults — dummy coded), number of children in the household, and equivalised household income (ranging from 1 to 5 — households in higher quintile were more affluent — dummy coded).⁸

For each outcome (i.e., a possession or an activity perceived as necessary or not), we started with a null model which only included the intercept (i.e., M1). In the second model (i.e., M2), we included all the control variables at both levels. The third model (i.e., M3) incorporated the predictor (adult vs. child). To examine the possibility that the regression coefficients between the predictor and the outcome may vary across households, in the final models (i.e., M4s), we allowed for random slopes. We repeated the above analysis procedure for all the 14 deprivation items and activities. Given that the models were nested, the improvement in the fit of a model in comparison with the previous one was examined by the changes in deviance (i.e., -2*log-likelihood) and degrees of freedom, which correspond to a chi-square distribution (see Muthén, Muthén, & Asparouhov, 2016).

4. RESULTS

4.1 Socio-demographic profiles of the study sample

In total, 636 school-aged children together with 595 adults in the same households were reinterviewed to answer questions about children's necessities. Among the children, 288 (45%) were female; 285 (45%) were between age 10 to 14, 250 (39%) aged 15-17 and 101 (16%) aged 18-19 (their age was below 18 in the first survey wave). About 85% of the children (N = 541) were born in Hong Kong, while the others were born in mainland China or other places. Among the adults, 66% were female and their average age was 47.3 (SD = 13.3). About 58% of the adults (N = 346) were in the non-Hong Kong born group (see **Table 2**). Non-response and stratification weights were applied to correct for sampling biases.

<Insert TABLE 2 here>

4.2 Overall differences between adults and children

Both adults and children believed that minimum needs extended beyond basic subsistence, and should incorporate social roles, obligations and participation in contemporary Hong Kong society. Possessions and activities to meet children's basic needs included "school uniform", "fitted shoes" "warm clothes" and so forth. Technology items (e.g., "mobile phone" and "a computer device with an internet connection") and participation in social and extra-curricular activities (e.g., "meal out with friends") were perceived as essential for children's education and social inclusion.

Table 3 shows that adults perceived all possessions and activities as necessary (ranging from 69% to nearly 100% support). In comparison, children viewed most possessions and activities as necessary (ranging from 53% to 95%), except "a family day trip" and "brand name trainers". Hence, only 14 items had majority support from both the adults and the children.

As illustrated in **Figure 1**, adults, compared with children, were more likely to believe that all 14 items measuring material and social deprivation were necessities. The ranking of the 14 items *within* each group demonstrated some degree of congruence in adult and child opinions about the necessities of life for children. Despite the seeming agreement, it is noticeable that all the items showed significant generational differences, except "mobile phone" (relative risk = .97, p = .31). For instance, there was a striking contrast between children's and adults' perceptions of child necessities concerning "school extras" (e.g., "participation in extra-curricular activities", "a computer with internet" and "tutorial lessons"), which are possessions and activities that are considered to be essential for children's educational and social development in many rich societies (Bramley & Besemer, 2011).

<Insert TABLE 3 here>

<Insert FIGURE 1 here>

4.3 Within-family differences between adults and children

For all 14 sets of models, M2s (the models with only control variables) showed significant improvement over M1s (the null models), and M3s (the fixed-slope models with both the predictive and the control variables) again significantly improved by comparison with M2s. For M4s (the random-slope models), some of them demonstrated slight improvements over M3s. However, none of the variations of the slope between the predictor and the outcome were significant, indicating that the regression coefficients did not vary significantly across households. Thus, for parsimony, we only report the fixed-slope models (i.e., M3s) in **Table 4**.9

To interpret the results, take the first logistic model (fitted shoes) as an example. In this model, the regression coefficient was 2.90 (SE = 0.65, p < .000), which corresponds to an odds ratio of 18.2. It suggests that the odds of adults perceiving "fitted shoes" as necessary were about 18 times higher than those of the children in the same household. Applying the same strategy, we can interpret the regression coefficients in the other models. Overall, all the regression coefficients of the predictive variable "Group" were statistically significant, after controlling for individual- and household-level confounding variables. Consistent with the previous univariate analyses, the logistic regression results suggested that being an adult or a child can significantly predict if a possession or an activity was perceived as necessary or not.

The largest discrepancies in adults' and children's perceptions were found in the items of "new clothes" (OR = 30.3, p < .000), "fitted shoes" (OR = 18.2, p < .000), "suitable books" (OR = 13.4, p < .000), as well as "school uniform" (OR = 11.1, p < .00). It means that, within the same household, adults were much more likely to consider these items as necessary for children, whereas children were much less likely to hold the same opinions. On the other hand, there were relatively smaller discrepancies in adults' and children's perceptions of the technology items , i.e., "mobile phone" (OR = 2.3, p < .000) and "internet" (OR = 2.7, p < .000); those about education, i.e., "educational game" (OR = 4.2, p < .000), "extra-curricular activities" (OR = 6.2, p < .000) and "tutorial" (OR = 6.5, p < .000); as well as those relevant to social activities and participation, i.e., "meal out" (OR = 5.7, p < .000) and "pocket money" (OR = 6.6, p < .000). Taken together, the generational differences in the perceptions of child necessities were manifested within the same household, with some possessions and activities showing larger cross-generational differences than the others.

The impact of household income on the perceptions of necessities was also found to be marginally but nevertheless statistically significant. Equivalised household income was divided into five categories, defining households belonging to the bottom quintile as living in poverty (i.e., annual household income below HKD 7,500.00). For most possessions and activities, household income quintile did not affect the perception of necessities, except for "fitted shoes" "new clothes" and "school uniform". For these three items related to children's appearance, there were significant differences between households at the bottom vs. at the top of the income continuum. In comparison with families at the bottom of the household income continuum, families at the top were significantly less likely to consider these items as necessary for children. In addition, for "new clothes", families at the third quintile (annual household income between HKD 9389.72 and HKD 11500.00) were also marginally but significantly less likely to consider this item as necessary in comparison with families in the lowest income group (OR = .45, p = .04).

<Insert TABLE 4 here>

5. DISCUSSION & CONCLUSION

This article drew upon the findings of the second wave of the SPPR study to examine the trends and implications of poverty and social exclusion in Hong Kong. The article reported the extent of agreements between children and adults on which children's possessions and activities constituted the necessities of life in contemporary Hong Kong society. In line with previous studies, adults and children perceived that minimum needs extended beyond basic subsistence needs. Fulfilling customary social roles, obligations and being able to participate in contemporary Hong Kong society are considered to be necessities (Main & Bradshaw, 2012; Redmond et al., 2016;

Saunders et al., 2018). The generational differences between adults and children were also manifested *within* the same household. Adults placed more emphases on needs related to education and development (e.g., "suitable books", "extra-curricular activities" and "tutorial lessons"; see Lau et al., 2015a; Main, 2013). Children realised the importance of these needs, but they also highlighted resources needed for fulfilling their social roles and obligations (e.g., "meal out with friends", "pocket money", "mobile phone" and "a computer with internet"; see Main & Pople, 2012; Main, 2013; Redmond et al., 2016).

These empirical findings from both adult and child perspectives about the lives of Hong Kong children provide important insights which are of relevance to the Commission on Children's (CoC) agenda. Short-term and long-term policies are needed to maintain a healthy and enabling learning environment that helps children balance study, family and leisure time for achieving whole-person development. Secondly, this work helps to advance the practice of poverty measurement in Hong Kong, and it contributes to the CoC's development of child-specific indicators for monitoring health and well-being (Commission on Children, 2018: Paragraph 6(f)).

There is an increasing recognition of the potential policy value of people's assessments of their well-being (see Stiglitz et al., 2010). This research adds important insights into our knowledge of child poverty and child well-being through the lens of children's own views about their lives. It also highlights the importance of consulting children about policies which affect their lives. These findings are based on a relatively small sample of children and adults living in the same households. Larger longitudinal studies would be needed to examine how the perception of necessities changes and evolves amongst young adults as they transition from education to work, from their parental homes to forming their own independent families.

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TABLE 1 Child- and adult-reported necessities of life for children in Hong Kong¹

Child-reported items (21 items)	Adult-reported items (19 items)	Type ²
Diet, Footwear and Clothing		
Not included in child questionnaire	1. Three meals a day	M
Not included in child questionnaire	2. Fresh fruit or vegetables at least once a day	M
Not included in child questionnaire	3. Meat/fish/vegetarian equivalent at least twice	M
	a day	
1. Properly fitted shoes	4. Properly fitted shoes	M
2. School uniform of correct size	5. School uniforms of correct size	M
3. Able to have some new clothes	6. Able to afford some new clothes	M
4. Enough warm clothes for cold weather	7. Enough warm clothes for cold weather	M
5. Brand name trainers	8. Brand name trainers	M
Children's Items		
6. Outdoor leisure equipment	9. Outdoor leisure equipment	M
7. Your own mobile phone	10. Mobile phone for children aged 10 or older	M
8. A computer device with internet connection at	11. A computer device with internet connection at	M
home	home	
9. Educational games	12. Educational games	M
10. Books at home suitable for your ages	13. Books at home suitable for their ages	M
Accommodation and Facilities		
11. A suitable place at home to study or do	14. A suitable place at home to study or do	M
homework	homework	
12. Somewhere nearby like a park where you can	Not included in adult questionnaire	M
safely spend time with your friends		
13. Access to public transport like the railway	Not included in adult questionnaire	M
networks or bus services		
Children's Own Money		
14. Some pocket money each week to spend on	15. Pocket money for his/her own	M
yourself		
15. Some money that you can save each month,	Not included in adult questionnaire	M
either in a bank or at home		
Children's Social and Extra-curricular Activities		
16. Presents on special occasions	Not included in adult questionnaire	M
17. Go out with friends or family for leisure	Not included in adult questionnaire	M
activities at least once a month		
18. A meal out with friends at least once a month	16. A meal out with friends at least once a month	S
19. A family day trip at least four times a year	17. A family day trip at least four times a year	S
20. Participation in extra-curricular activities	18. Participation in extra-curricular activities	S
21. Tutorial lessons after school	19. Tutorial lessons after school	S

Note:

- 1. In total, 16 child-specific items and activities were included for further analyses as they were answered by both adults and children within the same households.
- 2. M-Material deprivation items; S-Social deprivation items.

TABLE 2 Sociodemographic profiles of the study samples at Time 2¹

	Children	Adults
	(N = 636)	(N = 595)
Individual characteristics		
Gender		
Female	288	394
Male	348	200
Age		
10-14	285	
15-19	351 ²	8 ^{3,4}
20-39		133
40-59		352
60 or above		101
Mean Age (SD)		47.3 (13.3)
Birthplace		
Hong Kong	541	248
Other places	93	346
Household characteristics		
Number of working adults in the household		
0	75	55
1	238	225
2	263	246
3+	59	67
Equivalised household income		
1st quintile (lowest)	156	129
2nd quintile	102	85
3rd quintile	137	126
4th quintile	97	74
5th quintile (highest)	136	164
Number of siblings / children		
0	351	173
1	232	291
2	33	115
3+	20	16

Note:

^{1.} Figures may not be added up to total N due to missing data.

^{2.} There was a total of 101 *re-interviewed* school-aged children who were below 18 at Time 1 and their ages became 18-19 at Time 2.

^{3.} There was a total of eight adults aged 19 at Time 2.

^{4.} See more detailed explanations about the definition of age groups and the selection of respondents in the manuscript.

TABLE 3 Children and adult perceptions of necessities of life: Heat mapping and relative risk ratios

	Child-d	erived neces	ssities $(N = 0)$	636)	Adult	-derived nec	cessities (N	= 595)	Relative risk (RR)				
Items	Necessary (%)	SE	95	CI	Yes (%)	SE	95	95 CI		RR 95 CI		sig	
School uniform	94.9	.010	.925	.966	99.3	.003	.985	.997	.957	.936	.978	**	
Fitted shoes	91.2	.012	.886	.933	99.1	.004	.978	.997	.922	.897	.947	**	
Warm clothes	90.2	.013	.873	.924	99.8	.002	.984	1.000	.909	.884	.934	**	
Suitable place to study	86.8	.014	.837	.893	95.5	.011	.927	.973	.896	.860	.932	**	
A computer with internet	86.3	.015	.832	.890	90.2	.012	.875	.924	.954	.912	.996	.03	
Pocket money	84.6	.015	.814	.874	90.7	.014	.875	.932	.916	.874	.959	**	
Mobile phone	82.3	.016	.789	.852	84.2	.016	.807	.872	.974	.923	1.025	.31	
Suitable books	75.0	.020	.710	.787	94.5	.012	.917	.964	.778	.726	.829	**	
Extra-curricular activities	71.5	.019	.676	.752	89.1	.014	.860	.916	.802	.744	.860	**	
Meal out with friends	66.5	.020	.624	.704	87.1	.015	.839	.898	.761	.696	.827	**	
Educational games	56.7	.022	.523	.611	84.2	.016	.807	.872	.684	.605	.763	**	
New clothes	56.1	.022	.517	.605	93.0	.013	.900	.951	.601	.529	.673	**	
Tutorial lessons	53.0	.023	.485	.575	81.3	.017	.777	.844	.665	.577	.753	**	
Outdoor leisure equipment	52.9	.022	.485	.572	85.8	.016	.823	.887	.620	.539	.702	**	
Family day trip	40.1	.022	.358	.445	72.6	.020	.686	.763	.570	.461	.679	**	
Brand name trainers	37.3	.021	.333	.415	69.4	.020	.653	.733	.539	.425	.654	**	

Note: ** indicates significant relative risk ratios between the two groups at p < .001.

TABLE 4 Multi-level logistic regression outcomes

]	FITTED	SHOES		NEW CLOTHES				LEISURE EQUIPMENT				MOBILE PHONE			
MODEL RESULTS	Estimate	S.E.	P-Value	OR	Estimate	S.E.	P-Value	OR	Estimate	S.E.	P-Value	OR	Estimate	S.E.	P-Value	OR
Intercept	-3.68	1.03	0.00		-0.82	0.56	0.15		0.13	0.44	0.80		-1.27	0.50	0.01	
GROUP (Adult = 1)	2.90	0.65	0.00	18.21	3.41	0.39	0.00	30.27	2.37	0.29	0.00	10.71	0.83	0.25	0.00	2.30
SEX (Female = 1)	0.85	0.41	0.04	2.35	-0.12	0.23	0.62	0.89	0.03	0.21	0.87	1.03	0.04	0.21	0.86	1.04
BIRTHPLACE (HK = 1)	-0.07	0.56	0.90	0.93	-0.13	0.31	0.68	0.88	0.16	0.26	0.55	1.17	0.03	0.26	0.92	1.03
NOCHILD	-0.06	0.28	0.83	0.94	-0.19	0.19	0.30	0.83	-0.04	0.14	0.78	0.96	0.20	0.17	0.22	1.23
WORKADU (1)	0.06	0.74	0.93	1.06	0.87	0.48	0.07	2.40	0.46	0.38	0.23	1.58	0.07	0.40	0.86	1.07
WORKADU (2)	0.44	0.79	0.57	1.56	0.19	0.49	0.70	1.21	0.33	0.42	0.43	1.39	-0.17	0.43	0.69	0.84
WORKADU (3)	1.77	1.18	0.14	5.86	0.71	0.67	0.29	2.04	0.60	0.59	0.31	1.82	0.46	0.64	0.47	1.58
HHINCOME (1)	0.63	0.84	0.46	1.87	-0.08	0.44	0.85	0.92	-0.12	0.40	0.77	0.89	0.19	0.39	0.62	1.21
HHINCOME (2)	-0.72	0.70	0.31	0.49	-0.79	0.38	0.04	0.45	-0.25	0.34	0.46	0.78	-0.22	0.33	0.50	0.80
HHINCOME (3)	-0.78	0.77	0.31	0.46	-0.31	0.44	0.48	0.73	-0.14	0.38	0.72	0.87	0.22	0.39	0.57	1.25
HHINCOME (4)	-1.68	0.69	0.02	0.19	-0.85	0.42	0.04	0.43	-0.26	0.37	0.48	0.77	0.35	0.36	0.33	1.42
-2*log		338.34 ((df = 13)			875.41	(df = 13)			1007.98	(df = 13)			787.43 ((df = 13)	
			RNET				L OUT				MONEY				UNIFORM	
	Estimate	S.E.	P-Value	OR	Estimate	S.E.	P-Value	OR	Estimate	S.E.	P-Value	OR	Estimate	S.E.	P-Value	OR
Intercept	-1.92	S.E. 0.55	P-Value 0.00		-0.29	S.E. 0.42	P-Value 0.49		Estimate -1.58	S.E. 0.68	P-Value 0.02		Estimate -3.74	S.E. 1.20	P-Value 0.00	
GROUP (Adult = 1)	-1.92 0.97	S.E. 0.55 0.28	P-Value 0.00 0.00	2.65	-0.29 1.75	S.E. 0.42 0.25	P-Value 0.49 0.00	5.73	-1.58 1.89	S.E. 0.68 0.38	P-Value 0.02 0.00	6.63	-3.74 2.41	S.E. 1.20 0.65	P-Value 0.00 0.00	11.13
GROUP (Adult = 1) SEX (Female = 1)	-1.92 0.97 -0.06	S.E. 0.55 0.28 0.25	P-Value 0.00 0.00 0.82	2.65 0.94	-0.29 1.75 -0.08	S.E. 0.42 0.25 0.20	P-Value 0.49 0.00 0.69	5.73 0.92	Estimate -1.58 1.89 0.11	S.E. 0.68 0.38 0.26	P-Value 0.02 0.00 0.68	6.63 1.11	-3.74 2.41 0.75	S.E. 1.20 0.65 0.41	P-Value 0.00 0.00 0.07	11.13 2.11
GROUP (Adult = 1) SEX (Female = 1) BIRTHPLACE (HK = 1)	-1.92 0.97 -0.06 0.10	S.E. 0.55 0.28 0.25 0.29	P-Value 0.00 0.00 0.82 0.73	2.65 0.94 1.10	-0.29 1.75 -0.08 0.35	S.E. 0.42 0.25 0.20 0.24	P-Value 0.49 0.00 0.69 0.15	5.73 0.92 1.41	-1.58 1.89 0.11 0.39	S.E. 0.68 0.38 0.26 0.36	P-Value 0.02 0.00 0.68 0.28	6.63 1.11 1.48	-3.74 2.41 0.75 0.89	S.E. 1.20 0.65 0.41 0.51	P-Value 0.00 0.00 0.07 0.08	11.13 2.11 2.42
GROUP (Adult = 1) SEX (Female = 1) BIRTHPLACE (HK = 1) NOCHILD	-1.92 0.97 -0.06 0.10 -0.10	S.E. 0.55 0.28 0.25 0.29 0.17	P-Value 0.00 0.00 0.82 0.73 0.54	2.65 0.94 1.10 0.90	-0.29 1.75 -0.08 0.35 -0.06	S.E. 0.42 0.25 0.20 0.24 0.12	P-Value 0.49 0.00 0.69 0.15 0.63	5.73 0.92 1.41 0.94	-1.58 1.89 0.11 0.39 -0.05	S.E. 0.68 0.38 0.26 0.36 0.22	P-Value 0.02 0.00 0.68 0.28 0.84	6.63 1.11 1.48 0.96	-3.74 2.41 0.75 0.89 -0.51	S.E. 1.20 0.65 0.41 0.51 0.35	P-Value 0.00 0.00 0.07 0.08 0.14	11.13 2.11 2.42 0.60
GROUP (Adult = 1) SEX (Female = 1) BIRTHPLACE (HK = 1) NOCHILD WORKADU (1)	-1.92 0.97 -0.06 0.10 -0.10 0.61	S.E. 0.55 0.28 0.25 0.29 0.17 0.45	P-Value 0.00 0.00 0.82 0.73 0.54 0.17	2.65 0.94 1.10 0.90 1.83	-0.29 1.75 -0.08 0.35 -0.06 0.20	S.E. 0.42 0.25 0.20 0.24 0.12 0.33	P-Value 0.49 0.00 0.69 0.15 0.63 0.54	5.73 0.92 1.41 0.94 1.23	Estimate -1.58 1.89 0.11 0.39 -0.05 0.19	S.E. 0.68 0.38 0.26 0.36 0.22 0.53	P-Value 0.02 0.00 0.68 0.28 0.84 0.73	6.63 1.11 1.48 0.96 1.21	-3.74 2.41 0.75 0.89 -0.51 1.53	S.E. 1.20 0.65 0.41 0.51 0.35 0.84	P-Value 0.00 0.00 0.07 0.08 0.14 0.07	11.13 2.11 2.42 0.60 4.60
GROUP (Adult = 1) SEX (Female = 1) BIRTHPLACE (HK = 1) NOCHILD WORKADU (1) WORKADU (2)	-1.92 0.97 -0.06 0.10 -0.10 0.61 0.17	S.E. 0.55 0.28 0.25 0.29 0.17 0.45 0.48	P-Value 0.00 0.00 0.82 0.73 0.54 0.17 0.72	2.65 0.94 1.10 0.90 1.83 1.19	-0.29 1.75 -0.08 0.35 -0.06 0.20 -0.29	S.E. 0.42 0.25 0.20 0.24 0.12 0.33 0.35	P-Value 0.49 0.00 0.69 0.15 0.63 0.54 0.40	5.73 0.92 1.41 0.94 1.23 0.75	-1.58 1.89 0.11 0.39 -0.05 0.19 -0.38	S.E. 0.68 0.38 0.26 0.36 0.22 0.53 0.56	P-Value 0.02 0.00 0.68 0.28 0.84 0.73 0.51	6.63 1.11 1.48 0.96 1.21 0.69	-3.74 2.41 0.75 0.89 -0.51 1.53 1.77	S.E. 1.20 0.65 0.41 0.51 0.35 0.84 0.88	P-Value 0.00 0.00 0.07 0.08 0.14 0.07 0.04	11.13 2.11 2.42 0.60 4.60 5.88
GROUP (Adult = 1) SEX (Female = 1) BIRTHPLACE (HK = 1) NOCHILD WORKADU (1) WORKADU (2) WORKADU (3)	-1.92 0.97 -0.06 0.10 -0.10 0.61 0.17 1.26	S.E. 0.55 0.28 0.25 0.29 0.17 0.45 0.48 0.69	P-Value 0.00 0.00 0.82 0.73 0.54 0.17 0.72 0.07	2.65 0.94 1.10 0.90 1.83 1.19 3.52	-0.29 1.75 -0.08 0.35 -0.06 0.20 -0.29 0.05	S.E. 0.42 0.25 0.20 0.24 0.12 0.33 0.35 0.52	P-Value 0.49 0.00 0.69 0.15 0.63 0.54 0.40 0.93	5.73 0.92 1.41 0.94 1.23 0.75 1.05	Estimate -1.58 1.89 0.11 0.39 -0.05 0.19 -0.38 0.59	S.E. 0.68 0.38 0.26 0.36 0.22 0.53 0.56 0.83	P-Value 0.02 0.00 0.68 0.28 0.84 0.73 0.51 0.48	6.63 1.11 1.48 0.96 1.21 0.69 1.80	Estimate -3.74 2.41 0.75 0.89 -0.51 1.53 1.77 2.31	S.E. 1.20 0.65 0.41 0.51 0.35 0.84 0.88 1.36	P-Value 0.00 0.00 0.07 0.08 0.14 0.07 0.04 0.09	11.13 2.11 2.42 0.60 4.60 5.88 10.09
GROUP (Adult = 1) SEX (Female = 1) BIRTHPLACE (HK = 1) NOCHILD WORKADU (1) WORKADU (2)	-1.92 0.97 -0.06 0.10 -0.10 0.61 0.17	S.E. 0.55 0.28 0.25 0.29 0.17 0.45 0.48	P-Value 0.00 0.00 0.82 0.73 0.54 0.17 0.72	2.65 0.94 1.10 0.90 1.83 1.19	-0.29 1.75 -0.08 0.35 -0.06 0.20 -0.29	S.E. 0.42 0.25 0.20 0.24 0.12 0.33 0.35	P-Value 0.49 0.00 0.69 0.15 0.63 0.54 0.40	5.73 0.92 1.41 0.94 1.23 0.75	-1.58 1.89 0.11 0.39 -0.05 0.19 -0.38	S.E. 0.68 0.38 0.26 0.36 0.22 0.53 0.56	P-Value 0.02 0.00 0.68 0.28 0.84 0.73 0.51	6.63 1.11 1.48 0.96 1.21 0.69	-3.74 2.41 0.75 0.89 -0.51 1.53 1.77	S.E. 1.20 0.65 0.41 0.51 0.35 0.84 0.88	P-Value 0.00 0.00 0.07 0.08 0.14 0.07 0.04	11.13 2.11 2.42 0.60 4.60 5.88 10.09 0.96
GROUP (Adult = 1) SEX (Female = 1) BIRTHPLACE (HK = 1) NOCHILD WORKADU (1) WORKADU (2) WORKADU (3) HHINCOME (1) HHINCOME (2)	-1.92 0.97 -0.06 0.10 -0.10 0.61 0.17 1.26 -0.13 -0.48	S.E. 0.55 0.28 0.25 0.29 0.17 0.45 0.48 0.69 0.43 0.39	P-Value 0.00 0.00 0.82 0.73 0.54 0.17 0.72 0.07 0.77 0.21	2.65 0.94 1.10 0.90 1.83 1.19 3.52 0.88 0.62	-0.29 1.75 -0.08 0.35 -0.06 0.20 -0.29 0.05 0.27 0.51	S.E. 0.42 0.25 0.20 0.24 0.12 0.33 0.35 0.52 0.34 0.31	P-Value 0.49 0.00 0.69 0.15 0.63 0.54 0.40 0.93 0.44 0.11	5.73 0.92 1.41 0.94 1.23 0.75 1.05 1.30	Estimate -1.58 1.89 0.11 0.39 -0.05 0.19 -0.38 0.59 0.60 0.63	S.E. 0.68 0.38 0.26 0.36 0.22 0.53 0.56 0.83 0.48 0.46	P-Value 0.02 0.00 0.68 0.28 0.84 0.73 0.51 0.48 0.22 0.17	6.63 1.11 1.48 0.96 1.21 0.69 1.80 1.82 1.88	Estimate -3.74 2.41 0.75 0.89 -0.51 1.53 1.77 2.31 -0.04 -1.11	S.E. 1.20 0.65 0.41 0.51 0.35 0.84 0.88 1.36 0.96 0.90	P-Value 0.00 0.00 0.07 0.08 0.14 0.07 0.04 0.09 0.97 0.22	11.13 2.11 2.42 0.60 4.60 5.88 10.09 0.96 0.33
GROUP (Adult = 1) SEX (Female = 1) BIRTHPLACE (HK = 1) NOCHILD WORKADU (1) WORKADU (2) WORKADU (3) HHINCOME (1)	-1.92 0.97 -0.06 0.10 -0.10 0.61 0.17 1.26 -0.13	S.E. 0.55 0.28 0.25 0.29 0.17 0.45 0.48 0.69 0.43	P-Value 0.00 0.00 0.82 0.73 0.54 0.17 0.72 0.07 0.77	2.65 0.94 1.10 0.90 1.83 1.19 3.52 0.88	-0.29 1.75 -0.08 0.35 -0.06 0.20 -0.29 0.05 0.27	S.E. 0.42 0.25 0.20 0.24 0.12 0.33 0.35 0.52 0.34	P-Value 0.49 0.00 0.69 0.15 0.63 0.54 0.40 0.93 0.44	5.73 0.92 1.41 0.94 1.23 0.75 1.05 1.30	Estimate -1.58 1.89 0.11 0.39 -0.05 0.19 -0.38 0.59 0.60	S.E. 0.68 0.38 0.26 0.36 0.22 0.53 0.56 0.83 0.48	P-Value 0.02 0.00 0.68 0.28 0.84 0.73 0.51 0.48 0.22	6.63 1.11 1.48 0.96 1.21 0.69 1.80 1.82	-3.74 2.41 0.75 0.89 -0.51 1.53 1.77 2.31 -0.04	S.E. 1.20 0.65 0.41 0.51 0.35 0.84 0.88 1.36 0.96	P-Value 0.00 0.00 0.07 0.08 0.14 0.07 0.04 0.09 0.97	11.13 2.11 2.42 0.60 4.60 5.88 10.09 0.96
GROUP (Adult = 1) SEX (Female = 1) BIRTHPLACE (HK = 1) NOCHILD WORKADU (1) WORKADU (2) WORKADU (3) HHINCOME (1) HHINCOME (2)	-1.92 0.97 -0.06 0.10 -0.10 0.61 0.17 1.26 -0.13 -0.48	S.E. 0.55 0.28 0.25 0.29 0.17 0.45 0.48 0.69 0.43 0.39	P-Value 0.00 0.00 0.82 0.73 0.54 0.17 0.72 0.07 0.77 0.21	2.65 0.94 1.10 0.90 1.83 1.19 3.52 0.88 0.62	-0.29 1.75 -0.08 0.35 -0.06 0.20 -0.29 0.05 0.27 0.51	S.E. 0.42 0.25 0.20 0.24 0.12 0.33 0.35 0.52 0.34 0.31	P-Value 0.49 0.00 0.69 0.15 0.63 0.54 0.40 0.93 0.44 0.11	5.73 0.92 1.41 0.94 1.23 0.75 1.05 1.30	Estimate -1.58 1.89 0.11 0.39 -0.05 0.19 -0.38 0.59 0.60 0.63	S.E. 0.68 0.38 0.26 0.36 0.22 0.53 0.56 0.83 0.48 0.46	P-Value 0.02 0.00 0.68 0.28 0.84 0.73 0.51 0.48 0.22 0.17	6.63 1.11 1.48 0.96 1.21 0.69 1.80 1.82 1.88	Estimate -3.74 2.41 0.75 0.89 -0.51 1.53 1.77 2.31 -0.04 -1.11	S.E. 1.20 0.65 0.41 0.51 0.35 0.84 0.88 1.36 0.96 0.90	P-Value 0.00 0.00 0.07 0.08 0.14 0.07 0.04 0.09 0.97 0.22	11.13 2.11 2.42 0.60 4.60 5.88 10.09 0.96 0.33

	EDUCATIONAL GAME			SUITABLE BOOKS				SUITABLE PLACE TO STUDY				EXTRA-CURRICULAR ACTIVITIES				
	Estimate	S.E.	P-Value	OR	Estimate	S.E.	P-Value	OR	Estimate	S.E.	P-Value	OR	Estimate	S.E.	P-Value	OR
Intercept	-0.36	0.41	0.37		-2.52	0.66	0.00		-1.77	0.56	0.00		-0.36	0.47	0.45	
GROUP (Adult = 1)	1.44	0.22	0.00	4.22	2.59	0.38	0.00	13.38	1.64	0.36	0.00	5.14	1.83	0.27	0.00	6.22
SEX (Female = 1)	0.12	0.19	0.53	1.12	0.09	0.23	0.69	1.10	0.88	0.25	0.00	2.41	0.03	0.22	0.88	1.03
BIRTHPLACE (HK = 1)	-0.07	0.22	0.77	0.94	-0.24	0.34	0.48	0.79	0.26	0.34	0.45	1.29	0.37	0.28	0.19	1.44
NOCHILD	-0.14	0.13	0.28	0.87	-0.29	0.21	0.16	0.75	-0.24	0.17	0.17	0.79	0.04	0.15	0.82	1.04
WORKADU (1)	0.56	0.34	0.10	1.75	-0.58	0.51	0.25	0.56	0.18	0.48	0.71	1.20	0.92	0.40	0.02	2.50
WORKADU (2)	0.28	0.36	0.44	1.32	-0.97	0.54	0.07	0.38	-0.65	0.53	0.22	0.52	0.62	0.44	0.16	1.86
WORKADU (3)	0.99	0.48	0.04	2.68	-0.81	0.65	0.21	0.44	-0.84	0.65	0.19	0.43	0.23	0.60	0.70	1.26
HHINCOME (1)	-0.08	0.33	0.80	0.92	0.35	0.46	0.44	1.42	0.32	0.47	0.49	1.38	-0.24	0.43	0.58	0.79
HHINCOME (2)	-0.20	0.31	0.51	0.82	0.53	0.42	0.21	1.70	0.66	0.44	0.13	1.94	-0.36	0.38	0.34	0.70
HHINCOME (3)	0.01	0.35	0.98	1.01	-0.07	0.44	0.87	0.93	0.77	0.51	0.13	2.16	-0.11	0.43	0.80	0.90
HHINCOME (4)	-0.44	0.32	0.17	0.65	0.00	0.43	1.00	1.00	0.64	0.45	0.15	1.90	-0.38	0.42	0.36	0.69
-2*log		1038.35	(df = 13)			726.85	(df = 13)			546.44	(df = 13)			882.19 (df = 13	
		TUTO	DRIAL													
	Estimate	S.E.	P-Value	OR												
Intercept	-0.43	0.45	0.34													
GROUP (Adult = 1)	1.87	0.23	0.00	6.50												
SEX (Female = 1)	-0.03	0.19	0.89	0.97												
BIRTHPLACE (HK = 1)	0.18	0.23	0.43	1.19												
NOCHILD	-0.09	0.15	0.54	0.91												
WORKADU (1)	0.04	0.38	0.92	1.04												
WORKADU (2)	-0.23	0.41	0.57	0.79												
WORKADU (3)	0.29	0.55	0.60	1.34												
HHINCOME (1)	-0.08	0.39	0.85	0.93												
HHINCOME (2)	-0.39	0.36	0.28	0.68												
HHINCOME (3)	-0.05	0.40	0.90	0.95												
HHINCOME (4)	-0.53	0.39	0.18	0.59												
-2*log		1007.98	(df = 13)													

Notes:

- Number of observations varied from 912 (i.e., warm clothes) to 976 (i.e., fitted shoes) due to missing data.
 Number of strata was 35 and number of clusters was 417 (except "extra-curricular activities" which had 416 clusters).
- 3. Complex-sample-design features incorporated in the models.4. "Warm clothes" was not included. See Endnotes 10.

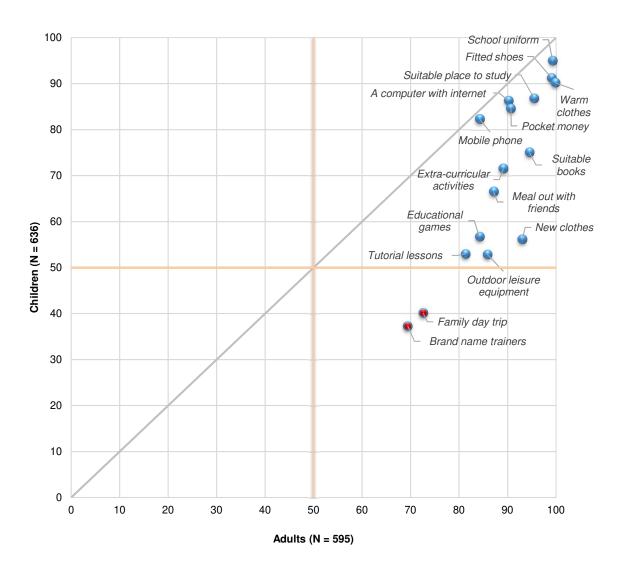


FIGURE 1 Differences between children's and adults' perceptions of necessities of life (%)

ENDNOTES

¹ The former Commission on Poverty chaired by the Financial Secretary was established in 2005 and dissolved after the submission of Report of the Commission on Poverty in 2007. In 2013, the CoP was reestablished, and an official poverty line was set for the first time in Hong Kong (Government of the Hong Kong Special Administration Region, 2013).

The selected 595 adults were significantly younger than the non-selected 3,249 adults (t = 2.26, p = .02). Moreover, the adult sample contained more women (t = -7.62, p < .00) and non-Hong Kong born participants (t = 2.11, p = 0.04) than the non-selected one. The 636 children did not differ significantly from the other 397 children who did not answer the survey questions in terms of sex (t = 1.44, p = .15) and birthplace (t = .14, p = .89). However, as this study focused on school-aged children, the selected sample was, not surprisingly, significantly older than the non-selected one (t = -28.54, p < 0.00). The selected 1,231 individuals belonged to 656 households. The selected 656 households, compared with the 823 non-selected households, had significantly more children (t = -32.71, p < .00) and more working adults (t = -4.96, p < .00). However, the household income of the selected households was not significantly different from the non-selected households (t = 1.08, t = 0.28).

³ Abbreviations are in the brackets at the end of the items.

⁴ We also tested the internal consistency of the items in different age groups of children. The results showed that the items demonstrated an acceptable level of consistency across different age groups. Likewise, the KR-20 score of the 16 adult-deprivation items was .79, with that of .73 for the 12 material-deprivation items and .71 for the four social-deprivation items. The results thus indicated that the items were a reliable measure of child- vs. adult-derived necessities for life.

⁵ A possession or an activity was considered as "necessary" when its absolute value passed the 50% cut-off point (i.e., over 50% of the sample saw it as "necessary", see Lansley & Mack, 2015; Pantazis et al., 2006; Saunders et al., 2008). Within the complex-sample framework, we were able to examine the 95% CI of classifying a possession item or an activity as a necessity. For instance, about 53% of child respondents viewed "outdoor leisure equipment" as necessary. Despite that this absolute value was above 50%, the lower bound of its 95% CI was only 47%, which failed to pass the 50% threshold. Hence, although we still included this item as a necessity, it is worth noting that this item may not be considered as a necessity in other samples.

⁶ This study uses an equivalence scale which divides household income by the square root of household size (OECD, 2013).

⁹ The only exception was "warm-clothes". There was no variation in this variable for the adult group, because all the adults included in the analysis agreed that this item was necessary for the children. For this reason, logistic regression was not performed for this item.

¹⁰ The Commission on Children was established in June 2018. Its target group covers children aged under 18 with a specific focus on children aged 14 or below. The Commission's initial work plan covers the following issues: (1) children's education needs (e.g. support for special education needs); (2) initiatives for ethnic minority children (e.g. support for Chinese language learning); (3) children's healthy development (e.g. medical needs and mental health); (4) protection of children (e.g. prevention of violence or neglect; and social work services for kindergartens and primary schools); and (5) compiling data on children.

https://www.info.gov.hk/gia/general/201805/31/P2018053100340.htm?fontSize=1.

⁷ The reason why some logistic regression results were different from the overall relative risk test results was because the logistic regression sample was a reduced sample in which only households having one adult respondent and at least one child respondent were included.

⁸ 1st quintile included households which had an annual income below HKD 7500.00, 2nd quintile included households which had an annual income from HKD 7501.00 to HKD 9389.71, 3rd quintile included households which had an annual income from HKD 9389.72 to HKD 11500.00, 4th quintile included households which had an annual income from HKD 11500.01 to HKD 13863.62, and 5th quintile included households which had an annual income above HKD 13863.63.