DOI: 10.1111/spol.12536

SPECIAL ISSUE

WILEY

Comparing income poverty gap and deprivation on social acceptance: A mediation model with interpersonal communication and social support

Yin Zhang¹ | Hung Wong² | Ji-Kang Chen² | Vera M. Y. Tang³

Correspondence

Yin Zhang, Department of Journalism, Hong Kong Baptist University, Kowloon Tong, Kowloon, Hong Kong S.A.R. Email: zhangyin@hkbu.edu.hk

Funding information

Strategic Public Policy Research Funding Scheme, Grant/Award Number: 4003-SPPR-11

Abstract

In many developed countries or regions, wide income disparities increase the difficulty in reducing poverty. In their day-to-day lives, poor people often feel less accepted by the society. The failures in communicating with social groups and receiving social support lead to negative consequences on individual well-being and higher level of social exclusion. Based on the debate upon alternative approaches to conceptualizing and operationalizing poverty, this study attempts to verify a mediation model with data from a household survey (N = 1,202) in Hong Kong. The results of structural equation modelling reveal that deprivation is a more powerful indicator than income poverty for specifying the negative relations of poverty with interpersonal communication, social support, and social acceptance; the negative impact of deprivation on social acceptance can be reduced by two significant mediators of interpersonal communication and social support. The results are discussed in terms of directions for future research and policy and welfare intervention.

KEYWORDS

deprivation, interpersonal communication, poverty, social acceptance, social support

¹Department of Journalism, Hong Kong Baptist University, Hong Kong

²Department of Social Work, Chinese University of Hong Kong, Hong Kong

³Lingnan University, Hong Kong

1 | INTRODUCTION

Poverty reflects a situation in which people lack the resources required to meet their basic needs for living. One of the important purposes of poverty research is to highlight the failings of economic and social policies and draw attention to where and how many actions are needed. Although economic growth has delivered material prosperity to many societies, the benefits have disproportionately benefited the rich, and not enough has been done to improve the quality of life of poor individuals. Long-standing forms of inequality persist, whereas gaps are opening in new aspects of life (UNDP, 2019). Wide income disparities in developed countries or regions such as Hong Kong increase the difficulty in alleviating poverty (Saunders, Wong, & Wong, 2014a). Inequality in Hong Kong is growing. The median monthly household income of the top decile was 44 times greater than that of the lowest decile in 2016, an increase from 34 times in 2006 (Oxfam Hong Kong, 2018). According to the Hong Kong Government, more than 1.37 million people in Hong Kong were living below the poverty line in 2017 (Government of the Hong Kong Special Administrative Region, 2002). The Gini coefficient of Hong Kong was 0.539, compared with 0.411 in the United States and 0.458 in Singapore (Census and Statistics Department of HKSAR, 2017). The new statistics sparked questions from lawmakers and social workers about the effectiveness of the government's poverty-alleviation measures (Lam, 2017). Against this background, the present study attempts to investigate the relationships between poverty and the factors of interpersonal communication, social support, and social acceptance.

This study contributes to the ongoing debate on the measurement and operationalization of poverty by comparing the indicators from two assessment approaches. In many places, income-based measures are extensively used by researchers and governments to measure poverty and classify poor populations. Nevertheless, the conventional measures of income poverty have often been criticized (e.g., Borooah, 2005; Bradshaw & Finch, 2003). In contrast, deprivation analysis builds on the essential goods and services available to individuals, families, and groups in the population, which is determined and experienced by the people of a given society (Townsend, 1979). This debate is important to government policy execution and social support system development, not just because it defines who is vulnerable and requires help but also because it leads to several crucial questions related to anti-poverty campaigns: What is the purpose for poverty alleviation? What is the appropriate way in which the society should help the poor people? In what specific way (addressing which aspect) should we help them?

Poverty not only leads to pressure in terms of meeting life expenses and shortages in financial resources but also affects individuals' socio-psychological well-being. Experiences of discrimination, isolation, and loneliness are often found among poor populations in Hong Kong (Crabtree & Wong, 2013; Wong, 2008; Wong & Lee, 2001). A number of factors have contributed to this trend. For example, disadvantages caused by poverty prevent people from participating in social activities and civil engagement and restrict their ability to social integration. Poverty leads to a decrease in interpersonal communication and social support, which is consistent with the previous findings of a negative relationship between poverty and adverse impacts on life satisfaction and happiness (e.g., Lee, Law, & Tam, 2018; Millar & Ridge, 2009). In recent years, social inclusion has been a focus of social policy in many countries (Chan, Evans, Ng, Chiu, & Huxley, 2014). This study investigates the negative effects of poverty on social acceptance and the mediating role of interpersonal communication and social support. The results provide policy implications for anti-poverty strategy.

Empirically, this study focuses on the effects of two poverty indicators on social acceptance and the mediation paths through interpersonal communication and social support. This article is organized as follows: Following the introduction, the second section reviews the literature on the concepts addressed in the study. The third section provides a brief summary of measures and sample characteristics, whereas the main findings are presented and analysed in the fourth section. Finally, the fifth section provides a concluding discussion on the findings, limitations of the study, and directions for future research.

2 | LITERATURE REVIEW

2.1 | Income poverty and deprivation

Defining and measuring poverty are always the first challenges for researchers, social workers, and policymakers for guiding anti-poverty policies. Ongoing scholarly debate emphasizes that the conceptualization and operationalization of poverty are essential in poverty and quality of life research because they identify the vulnerable individuals. Researchers have developed competing approaches to assess poverty and classify objects for poverty alleviation.

One method that has been widely used is income-based or monetary measures (Haveman, 2009). This involves identifying the gap between received income (individual or household) and a specific threshold (i.e., the poverty line), which reflects the necessary financial level to meet existing needs. A person is regarded as "poor" if his or her income (or expenditure) falls below a poverty line value. This form of operationalization underlines the ability of income to support a minimum standard of living (e.g., Lee & Chou, 2016) and is easy to assess. However, critics argue that this type of assessment cannot capture other dimensions of poverty and quality of life, such as assets, consumption, debt, opportunities for development, and social well-being (Bradshaw & Finch, 2003; Chan & Chou, 2016; Ringen, 1988; Sherraden, 1991; Whelan & Maître, 2007).

Moreover, if simply assessed by their income figures, low- or no-income populations may fail to demonstrate their ability to obtain or maintain available resources as well as how they survive at an acceptable standard of living. For example, most equivalence scales based on income level make no allowance for the decline in monetary income and changes in (material) needs for living among old people, and this can bias the estimates of poverty status for this group (Chou & Lee, 2017). Moreover, the assessment is unable to distinguish the rich elderly with sufficient property or investments from the real poor through a single-dimensional criteria.

Alternatively, the asset- (or item-)based approach focuses more on how the underlying concept "deprivation" is conceived. Deprivation analysis examines whether people's lack of possessions falls below a critical threshold by constructing a "possessions index" to measure the number (or proportion) of items from a prescribed list of necessities for basic survival (Nolan & Whelan, 1996; Townsend, 1979). It is developed from the socially perceived necessities approach and builds upon relativity and consensus theories (Saunders, 2011). The deprivation measures focus directly on people's actual ability to acquire the necessities to meet their basic needs (Ringen, 1988). When identifying deprivation, the emphasized affordability of basic items allows more room for both economic resources other than income (e.g., wealth or credit) and noneconomic resources (e.g., education or dental care), which can be relied upon in times of need (Saunders et al., 2014b).

Recent studies have proposed a capability approach to poverty measures, where poverty is viewed as the deprivation of certain basic capabilities (Hick, 2012). Both capability and the asset-based approaches conceptualize poverty as deprivations in real life and question the central role often afforded to income in poverty measurement. The discussion suggests that poverty should not be presumed as a consequence of low income, or that at least it should not be defined on the basis of monetary income alone (Alkire & Foster, 2011a; OECD, 2011). The multidimensional framework of the capability approach is good for cross-society comparison and resource allocation, although it is sometimes difficult to operationalize in multivariate models empirically. Because many interconnected aspects that poor people experience in daily life are related to the umbrella term of poverty, such as education, labour, health, housing, and childhood (Alkire & Foster, 2011b). The antecedent and subsequent variables are not easy to distinguish.

The choice between approaches would not be critical if the estimates produced by the methods were similar in reflecting the extent and nature of poverty. However, some findings reveal that income poverty was not highly correlated with deprivation (e.g., Bradshaw & Finch, 2003; Borooah, 2005; Saunders, Naidoo, & Griffiths, 2007; OECD, 2008, pp. 190–193). Recent literature shows a preference for deprivation measures rather than the conventional income poverty line setting (Callan, Nolan, & Whelan, 1993; Nolan & Whelan, 1996; Boarini & d'Ercole, 2006; Whelan & Maître, 2007). This trend reflects the recognition of conceptual and practical limitations of the income-

based approach, combined with increasing awareness of the need to ground the estimates more firmly in the living conditions that people are able to attain and align them more closely with community norms about acceptable minimum standards (Boarini & d'Ercole, 2006; Saunders, 2011; also see OECD, 2008, pp. 178–179).

The above discussion is in line with the growing community concern over poverty and the ongoing debate over poverty policy in Hong Kong. The majority of local policy research and implementation still uses an income poverty approach, only differing in terms of how and where to draw the poverty line (e.g., Chan & Chou, 2016; Lee & Chou, 2016). After many years of debate, the Commission on Poverty of Hong Kong (2013) established a controversial official (government-endorsed) poverty line in Hong Kong. Specifically, the poverty threshold was set as half of the median household income adjusted by household size, which is a relative income-based poverty measurement. The main reasons for this are that information regarding household income is widely available in administrative and census data and it is easily understood, internationally comparable, and typically reflects families' most important sources of income for meeting their living standards, according to the Hong Kong SAR Government (Commission on Poverty of Hong Kong, 2013, 2016). Since that time, the monetary-based threshold has become a primary reference for poverty policy intervention and allocation of welfare resources. One implication for social welfare policy is the distribution of recurrent cash in order to fill the income poverty gap. But whether and how the monetary subsidy can ensure accessible and affordable services for health management and engagement in social activities remain questionable (Chou & Lee, 2017; Saunders, Wong, & Wong, 2014a). Based on the ongoing debate, this study intends to validate the international trend within the local context by comparing the effects of income poverty and deprivation on several consequential indicators. When poverty is understood as deprivation rather than purely as a lack of income or shortage of financial resources (Beja, 2013; Madonia, Cracolici, & Cuffaro, 2013; Narayan, Patel, Schafft, Rademacher, & Koch-Schulte, 2000; OECD, 2011; Stiglitz, Sen, & Fitoussi, 2009), the investigation of quality of life and living conditions is more focused on the social support that poor people could have and the subjective wellbeing they perceive. Therefore, the main research question this study asks is as follows:

RQ: Does deprivation serve as a better indicator than income poverty on subsequent variables and to what extent?

2.2 | Social acceptance and poverty

Poverty may cause advantages to accrue for some individuals while being denied to others. The discussion on social exclusion or inclusion has received substantial attention in recent years, often as a concept allied to that of poverty. Social exclusion and disadvantage prevent individuals from participating in various social activities (Hatfield, 2004) or restrict their ability to create and maintain social support, leading to low levels of social acceptance (Hawthorne, 2006; LaVeist, Sellers, Brown, & Nicherson, 1997). The discussion on social exclusion has largely focused on relational issues and exclusion from the benefits of social protection and the right to social development (Hartley, 2004; Rodgers, Gore, & Figueiredo, 1995), usually with conclusive arguments in support of inclusive community and social well-being as policy goals to manage poverty in many societies.

Social exclusion is a broad issue that is affected by influences at various levels. Burchardt, Le Grand, and Piachaud (2002) elaborate the construct from four perspectives: (a) consumption, where individuals lack the capacity to purchase goods and services; (b) production, where individuals are unable to find employment; (c) involvement, in local and national politics and organizations; and (d) social interaction and family support. Thus, empirical investigations of social exclusion examine the subjective feeling of social acceptance and its relations with the abovementioned perspectives experienced in daily life. In this study, we define social acceptance as the subjective well-being people perceived based on living experiences of being valued and respected as well as the feeling that one is congruent with other people, groups, and society. Previous studies have identified the effects of socio-economic status on social acceptance at both the community and society levels (Béland, 2007; Green & Rodgers, 2001; Stewart et al., 2009). In many places around the world, there are powerless groups that suffer from poverty, social exclusion,

and barriers to social mobility (Marlier & Atkinson, 2010). Therefore, one of the missions of many ongoing antipoverty campaigns is to make the powerless feel more included and respected by the mainstream society.

Building an inclusive society has long been a stated objective of Hong Kong. A range of policy initiatives have been developed to support the underprivileged and vulnerable groups through education, employment, housing, and other supports or services (e.g., Hong Kong SAR Government, 2017). Practically, the promotion of social acceptance is not abstract but highly relevant to the local politics in places such as Hong Kong. Although social exclusion has yet to emerge as a major social issue, the growing awareness of poverty and income inequality highlights the insufficient community support despite the material prosperity of the city (Saunders, Wong, & Wong, 2014b). Previous studies have shown that specific groups face exclusion as a result of economic and social policy failings, including the elderly (e.g., Lee & Chou, 2016), immigrants from the Chinese mainland (e.g., Law & Lee, 2006), unemployed youth (e.g., Wong & Ying, 2006), and women who have been subjected to violence (e.g., Chan & Chan, 2003). Studies of social acceptance are grounded in the identification of social disadvantage, considering actual living conditions and community expectations (Saunders et al., 2014b) and critically rethinking the social separation between what is judged as advantageous and disadvantageous to human well-being (Hartley, 2004). Based on the above discussion and the alternative operationalization of poverty, we hypothesize the following:

H1a: Income poverty has a negative effect on social acceptance.

H1b: Deprivation has a negative effect on social acceptance.

2.3 | Social support and interpersonal communication

In order to alleviate the negative effects of poverty and enhance social acceptance among poor people, social support is suggested as an important aspect at the frontline of anti-poverty campaigns (Böhnke, 2008). Social supports refer to the material, emotional, and social resources provided by different levels of the social system to people in need to help them cope with life stressors. Social supports contribute to individuals' sense of self-efficacy and social well-being. The receipt and provision of support enhance belonging and reduce isolation, helping individuals to feel more accepted and valued in the society (Brown, Nesse, & Vinokur, 2003; Siedlecki, Salthouse, Oishi, & Jeswani, 2014). However, people living on low incomes and in deprived conditions, particularly those who are older, disabled, or single, often face isolation, loneliness, and a lack of emotional support. A previous study recognized the impact of both tangible and close emotional support for poor people (Green & Rodgers, 2001). Decades of social support research have demonstrated that a lack of social support may even lead to negative physical and mental health outcomes (e.g., House, Landis, & Umberson, 1988; Wright & Bell, 2003). Locally, the community sector and support for the poor have been criticized for being undeveloped in Hong Kong (La Grange & Yung, 2001). One reason for this might be due to the conventional poverty policy interventions and allocation of welfare resources, which are primarily based on the operational definition of the income gap threshold. The social support system for poor people was selective and yet comprehensive. Therefore, it is reasonable to test how the lack of social support in daily life reinforces the decrease in social acceptance perceived by poor people. The following hypotheses are thus offered:

H2: Social support has a positive effect on social acceptance.

H3a: Income poverty has a negative effect on social support.

H3b: Deprivation has a negative effect on social support.

The literature has identified a number of intervening variables that further complicate the relationship between social support and well-being outcomes. Those variables include differences in individual coping styles and adaptation to stressful situations (Pierce, Sarason, & Sarason, 1996; Zeidner, Matthews, & Shemesh, 2016) and perceptions of support providers and recipients in the context which support takes place occurs (Edwards & Noller, 1998). Among these variables, social relationships and interpersonal communication play a significant role in determining people's adaptive functioning and well-being (Wills, 1985). Deficits in interpersonal communication competence could account for the smaller social support network sizes and lower levels of satisfaction among both more anxiously attached and more avoidantly attached individuals (Anders & Tucker, 2005). Conventional sociopolitical research indicates that different interpersonal relationships are influential to the creation of social capital (i.e., trusted and supportive communities) and have implications for individual well-being (e.g., Cattell, 2001; Morrow, 2009). Discussions on neighbourhood and community building have also emphasized the role of interpersonal communication in receiving and providing emotional support, experienced belonging, and establishing lasting friendships, as effective interpersonal interactions can satisfy people's social psychological needs and enhance their subjective well-being (Zhang, Xu, & Hou, 2018). Individuals have frequent communication with social acquaintances, characterized by an exchange of instrumental, emotional, and affirmational support with friends, neighbours, or family. This tends to nurture a stronger sense of community and belonging, which is essential to social acceptance (Fisher, Sonn, & Bishop, 2002). Thus, we hypothesize the following:

H4a: Interpersonal communication has a positive effect on social support.

Previous research indicated that interpersonal communication was the main means to promote inclusion and oppose discrimination (Chan et al., 2014). This is because communication helps people to understand others' points of view and allows their voices and needs to be heard. Hence, the capacity of interpersonal communication is considered to be an explanatory factor for social acceptance, and it plays an important role in facilitating the social support one would receive from family, friends, social acquaintances, and communities. Take the elderly as an example. Older persons who have more frequent communication with family and friends are more likely to receive sufficient daily care as well as financial and emotional support (Lee & Kwok, 2005). An early study demonstrated that remaining connected with different social contacts and frequent communication are beneficial to older persons' receipt of social support and psychological well-being (Phillips, Siu, Yeh, & Cheng, 2008). Thus, we hypothesize the following:

H4b: Interpersonal communication has a positive effect on social acceptance.

Nowadays, due to the rise of social media and the rapid development of communication technologies, people have more communication channels to stay connected with each other. However, poverty often hampers social interaction and effective interpersonal communication because of poor living conditions. For instance, the working poor usually need to work long hours, and the rhythm of their families' daily lives involves large blocks of family, self-care, and leisure activities (Roy, Tubbs, & Burton, 2004). In order to earn a living, the breadwinner of a family must work so much that there may be insufficient time to communicate with his or her children and elderly parents, relatives, or friends. In Hong Kong, the situation is even worse for poor families with senior member(s) and single-parent families; in such cases, the nonmonetary support given to the elderly and children was found to be insufficient (Cheung, 2015; La Grange & Yung, 2001). Moreover, insufficient interpersonal communication leads to less useful information exchange and fewer lifelong learning opportunities from various social sources, according to sociological studies on the effect of social networks and social capital on self-achievement and social mobility (Cattell, 2001; Granovetter, 1973). Poor people tend to lag behind the majority of society in new technology adoption and enrolment in social activities. Some might even feel shy or ashamed to take an active social role. This inability to communicate with others may prevent poor individuals from receiving the support they need or fostering a strong perception of social acceptance (Stewart et al., 2009). Thus, we hypothesize the following:

H5a: Income poverty is negatively correlated with interpersonal communication.

H5b: Deprivation is negatively correlated with interpersonal communication.

The hypotheses are summarized in Figure 1. A mediation model between poverty and social acceptance through interpersonal communication and social support will be tested. The model emphasizes the protective roles of social support and interpersonal communication and answer the research question regarding the explanatory power of income poverty compared with deprivation. Deprivation better differentiates poor people who perceive lower social acceptance and have insufficient interpersonal communication and social support. Particularly, the following hypotheses are presented:

H6: Deprivation has a stronger effect on social support than income poverty.

H7: Deprivation has a stronger effect on social acceptance than income poverty.

3 | METHODS

3.1 | Data and sampling

The data came primarily from an interdisciplinary collaborative research project on social disadvantages, well-being, and health in Hong Kong. Face-to-face questionnaire interviews were conducted during two time periods. The first wave of survey field work lasted from June 2014 to August 2015. A sample of 25,000 addresses and 200 segments was obtained from the Hong Kong Census and Statistics Department, based on the Census and Statistics Department frame of quarters. We adopted a two-stage stratified sampling, which first stratified records in the frame of quarters by geographical area (i.e., respondents' living areas by District Council) and then by type of quarters (i.e., public and private housing). A systemic replicate sampling technique with fixed sampling intervals and nonrepetitive random numbers was used to select the sampling units. Eventually, 4,947 addresses were sampled with 3,791 valid cases, of which 2,282 households were successfully enumerated. Within each household, one family member aged 18 or above was selected as a target respondent using the last birthday method (for methodology details and analyses of the first wave of data, see Chung et al., 2018a, 2018b; Lau & Bradshaw, 2018).

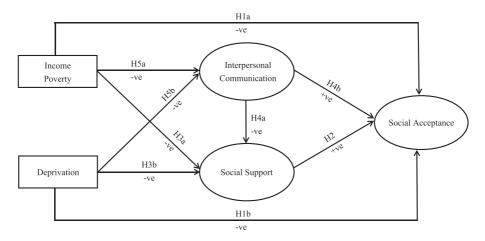


FIGURE 1 Hypothesized structural model

The second wave of survey data was used in this study, which was obtained during the period from February 2016 to March 2017. Of the 2,282 completed cases in the first wave, 1,480 household respondents participated in the call-back survey fieldwork. The main reason for the decrease in sample size was mainly due to losing contact or absence from home during the interview times. This issue was particularly pronounced among those living in private housing. Other reasons for missing cases included change of address, vacation, and death.

The final sample for analysis included 1,202 respondent cases, providing valid answers to the questions about demographics, poverty and deprivation status, and any other key variables in the current study. The data were weighted according to the age and sex distribution of the Hong Kong population in the most recent census.

3.2 | Measures

Specific measurement items were adopted to assess the variables in this study. Both the survey commissioner and the research team verified the validity and reliability of the measures at different execution stages.

The concept of poverty was measured by the indicators of the relative income poverty gap and necessities deprivation, which follow the monetary and item-based approaches. Based on the above operational definitions, we used the official poverty line (in monthly income) and respondent's income as a reference to calculate the difference between two figures to reflect income poverty (i.e., relative income poverty gap = individual monthly income—official poverty monthly income). A negative value for the relative gap indicates that the respondent's income is below the estimated monetary level required to meet existing needs to live in Hong Kong. Official poverty refers to the preintervention poverty threshold of domestic households by household size in the Hong Kong Poverty Situation Report 2016 (Commission on Poverty of Hong Kong, 2015, 2017). Specifically, people who lived in a household below the official poverty line in 2016 (i.e., one-person household: HK\$4,000; two-person household: HK\$9,000; three-person household: HK\$15,000; four-person household: HK\$18,500; five-person household: HK\$19,000; and six-person and above household: HK\$20,000) were classified as "officially poor." The income-based poverty measure was a relative figure. People who lived in a household with equivalized household income below half of the median equivalized household income (i.e., HK\$6059.2) based on all households in this study were classified as "relative poor."

To measure poverty from the operational definition of deprived necessities, we constructed a Deprivation Index (DI-23). The respondents were asked whether they perceived a list of material-based and social items as necessities in the social and family lives of the majority of the Hong Kong population. The item selection built upon the result of The Poverty and Social Exclusion in Hong Kong project (Gordon, Lau, Pantazis, & Lai, 2014) The resulting 23-item DI was used to assess whether the respondents could afford the list of materials and social necessities, with 18 items related to material deprivation and five items related to social deprivation. The Cronbach's α of the DI was .833. An accumulative score was computed, with a higher figure indicating that more necessities were deprived from a respondent's social and family life.

Social acceptance was measured by a three-question index. Participants were asked to indicate whether they had the following experiences in their daily life: being "treated friendly by other people," "understood by other people," and "treated with respect by other people" (Cronbach's α = .660). A higher cumulative score (ranging from 0 to 3) reflected the respondent's positive feelings about being treated friendly, understood, and respected by other people in their life.

Social support was measured by three items, including "I have someone to look after me and help with housework when I am sick"; "I have someone to find when I needed practical help around my home (e.g., moving heavy furniture)"; and "I can find help when I needed someone to give advice about an important decision in your life (e.g., changing jobs, moving housing)." The three items broadly covered the circumstances in which an individual might receive support for instrumental needs in daily life. The items were rated on a 4-point Likert scale with higher scores reflecting higher levels of social support. The internal consistency of the scale was satisfactory (Cronbach's $\alpha = .86$).

Interpersonal communication was measured by three questions. The operational definitions included the frequency of interpersonal communication on two levels. Respondents were asked how often they communicated with friends and family (a) in person and (b) through other communication channels (e.g., telephone and social media). The questions were measured on a 6-point Likert scale ranging from 1 (seldom; i.e., less than once a month) to 6 (always; i.e., everyday). Specific to the possible life experiences of poor people, an additional question regarding "whether any specific reason prevent the respondents from meeting up with family and friends more often" was also asked.

4 | RESULTS

All the variables included in the model and their intercorrelations are shown in Table 1.

We used IBM SPSS AMOS version 23 for Windows to build the structural equation modelling (SEM) for hypotheses testing. Based on the literature review and hypotheses inferences, we structured the model as shown in Figure 1, in which both the income poverty gap and deprivation were defined as anxogenous factors with the rest of three variables endogenous.

The results indicated a satisfactory fit of the proposed model: χ^2 = 140.83 (df = 36, p < .05), χ^2/df = 3.91, CFI = 0.97, NFI = 0.96, IFI = 0.97, RMSEA = 0.049 (90% CI [0.04, 0.06]). Generally, 22% of the variance in social acceptance was explained (see Figure 2).

Significant direct effects of deprivation were found on interpersonal communication (β = -.14, p < .001), social support (β = -.29, p < .001), and social acceptance (β = -.20, p < .001). Thus, H5b, H3b, and H1b were supported. Respondents with higher levels of social support felt more socially accepted (β = .19, p < .001). H2 was also supported. Comparatively, the effects of the income poverty gap on interpersonal communication (β = -.04, n.s.), social support (β = -.08, p < 0.01), and social acceptance (β = .03, n.s.) were weaker and less significant. Both H1a and H5a were rejected, while H3a was supported. Interpersonal communication was found to be significantly correlated with social support (β = .26, p < 0.001) and social acceptance (β = .28, p < 0.001), supporting H4a and H4b.

Comparatively, the model revealed that deprivation is a more significant indicator for specifying the associations among poverty, social support, and social acceptance. Thus, H6 and H7 were supported.

To further examine the paths from deprivation and income poverty to social acceptance, mediation effects were found by the SEM. The indirect effects of income poverty gap on social acceptance were significant for social support (β = -.03, ps < .05). The results further indicated that the indirect correlation between income poverty and social acceptance needs to be explained by other factors, such as social support. The results also indicated that the negative impact of deprivation on social acceptance could be reduced by the intervention of interpersonal communication (β = -.12, ps < .01) and social support (β = -.09, ps < .01). An indirect effect of deprivation on social support via interpersonal communication was also found (β = -.04, ps < .01), indicating that effective interpersonal communication can facilitate the social support received by the poor. The indirect effects of major variables on social acceptance were verified by a bootstrap test (two-tailed significance BC) in the final model.

TABLE 1 Correlation results among major variables

	1	2	3	4	5
1. Income poverty gap	1.00				
2. Deprivation index	0.29***	1.00			
3. Interpersonal communication	-0.11***	-0.12***	1.00		
4. Social support	-0.17***	-0.33***	0.22***	1.00	
5. Social acceptance	-0.08**	-0.27***	0.21***	0.30***	1.00

Note. N = 1,202.

^{**}p < .01; ***p < .001.

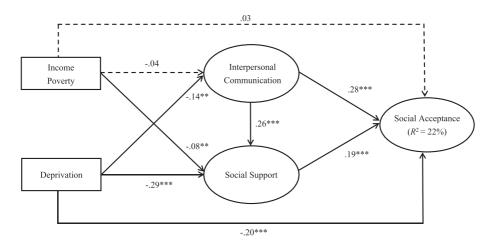


FIGURE 2 Modelling of income poverty and deprivation on social acceptance mediated by interpersonal communication and social support

In summary, the SEM results provide empirical evidence for theoretical discussion and policy review. Comparatively, income poverty is transient, whereas deprivation tends to be chronic, and the money-metric definition does not always capture living standards, particularly among the elderly, the unemployed, and adolescents. For people who are living in poverty, low/no income is just one of the possible statuses, and it is insufficient to reflect the multi-dimensional quality of life. Thus, even though income poverty is somehow associated with social acceptance in the multivariate model, the effect is indirect, being mediated by other social factors (i.e., interpersonal communication and social support). Meanwhile, interpersonal communication and social support play a mediating role in enhancing social acceptance for the poor people.

5 | DISCUSSION

The choice of approach and measure affects the estimation of poverty status and leads to different implications for the social groups that are most affected by related policy reforms. The present study demonstrates that deprivation is a more sensitive poverty measure of people with low social acceptance and insufficient social support and interpersonal communication. The findings suggest that the current poverty policy intervention and allocation of welfare resources based on income threshold should be critically reviewed. Like many western societies, the structural problem of the aging population is becoming normal in Hong Kong, which makes the monetary assessment less valid because most elderly individuals no longer receive any wage income after the age of 65. Some elderly individuals are not necessarily poor, but those who are vulnerable cannot be easily identified through income or monetary measures. The implication for the long run is that it is difficult to address the poverty problem simply by improving economic conditions alone (Saunders et al., 2014b). Some people cannot meet their basic needs because of social exclusion rather than a lack of money. Hence, policy should focus on ensuring that the poor can meet their specific needs in day-to-day living and allocate resources to improve their quality of life. In addition to monetary support, issues faced by poor people, such as limited access to health care, discrimination in the labour market, information asymmetry, difficulty in accessing public services, and limited financial instruments due to language or ethnicity barriers, are more crucial factors for estimating who is most at risk of poverty.

The research on poverty and social acceptance is analytically and operationally relevant at all levels of policymaking. Building an inclusive society in which people with different backgrounds feel welcomed and accepted is becoming increasingly difficult in many places around the world. Moreover, in the long run, the exclusion of poor

people from political and economic power and the divided communities will threaten democracy and civil society. One extreme consequence could be that a sense of low social acceptance might result in urban rioting and the disaffection of social members, especially young people who lack social mobility.

Thus, achieving an inclusive society is a goal with universal appeal. Living in poverty can lead to profound consequences in individuals' social lives. The conceptual model proposed in this study promotes the mediating roles of interpersonal communication and social support for social inclusion. It is suggested that efficient interpersonal communication and social interaction with family, friends, and others can facilitate social support from available resources and supporting networks. If an individual fails to stay connected with family, friends, and community, the social support system will be less effective in providing buffers from life stresses. More effective policy and welfare interventions that reduce the harm resulting from stressors may be needed to prevent the social exclusion problems among poor and ageing populations. An array of new social services could be developed for people with needs related to living necessities, communication, and social support. The results of the current study are potentially useful for policymakers in the anti-poverty campaign. The government can take a proactive role in assisting interventions to strengthen social support networks for poor people. Resources could be invested in communities to promote communication among stakeholders. In turn, this could enhance the social well-being and quality of life of the poor population in Hong Kong.

There are several limitations to the current study. First, the measures of the key constructs were adopted from a large questionnaire survey dataset. Because of the length and other practical constraints, each construct only had a few measurement items. Although a multiple-item strategy was adopted to ensure measurement reliability, the items used could only be regarded as indicators of each construct rather than a comprehensive examination of all details. Future studies should further explore the relationships between deprivation and particular communication and social support attributes (e.g., communication via social networks and types of social support). Second, an asset-based measurement was adopted to measure poverty (deprivation) in the current study. Although the generation of the deprivation index was contextualized and the statistical results demonstrated strong explanatory power of the subsequent variables, the measurement still has its limitations. For example, there could be inclusion and exclusion errors in selecting beneficiaries of social protection programmes using proxy-means testing. Future research is therefore needed to replicate and further verify the deprived item list in Hong Kong. Third, a one-directional relationship from poverty and deprivation to social acceptance was proposed in the current study. Nevertheless, empirical evidence stemming from the discrimination literature suggests a reverse relationship going from social acceptance to income poverty (e.g., Lee, Biglan, & Cody, 2018). We recognize that the reverse feedback among all the considered variables should not be ignored. Future studies should further examine the mutual dynamics in social reality. A longitudinal analysis is required to verify the causality.

ACKNOWLEDGEMENT

The work described in this paper 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 Hong Kong Special Administrative Region, China (Project No. 4003-SPPR-11).

ORCID

Yin Zhang https://orcid.org/0000-0002-9647-2269

Hung Wong https://orcid.org/0000-0001-8326-9766

Ji-Kang Chen https://orcid.org/0000-0001-7762-3888

Vera M. Y. Tang https://orcid.org/0000-0001-5342-9116

REFERENCES

- Alkire, S., & Foster, J. E. (2011a). Understandings and misunderstandings of multidimensional poverty measurement. *Journal of Economic Inequality*, *9*, 289–314. https://doi.org/10.1007/s10888-011-9181-4
- Alkire, S., & Foster, J. E. (2011b). Counting and multidimensional poverty measurement. *Journal of Public Economics*, 95, 476–487. https://doi.org/10.1016/j.jpubeco.2010.11.006
- Anders, S. L., & Tucker, J. S. (2005). Adult attachment style, interpersonal communication competence, and social support. Personal Relationships, 7, 379–389.
- Beja, E. (2013). Subjective well-being approach to the valuation of international development: Evidence for the millennium development goals. *Social Indicators Research*, 111, 141–159. https://doi.org/10.1007/s11205-011-9987-2
- Béland, D. (2007). The social exclusion discourse: Ideas and policy change. *Policy & Politics*, 35, 123–139. https://doi.org/10. 1332/030557307779657757
- Boarini, R., & d'Ercole, M. M. (2006). Measures of Material Deprivation in OECD Countries. Working Paper No. 37, Directorate for Employment, Labour and Social Affairs, Paris: OECD.
- Böhnke, P. (2008). Are the poor socially integrated? The link between poverty and social support in different welfare regimes. *Journal of European Social Policy*, 18, 133–150. https://doi.org/10.1177/0958928707087590
- Borooah, V. K. (2005). Bridging the gap between the measurement of poverty and of deprivation. *Applied Economics Letters*, 12, 383–389. https://doi.org/10.1080/13504850500068095
- Bradshaw, J., & Finch, N. (2003). Overlaps in dimensions of poverty. *Journal of Social Policy*, 32, 513–525. https://doi.org/10.1017/S004727940300713X
- Brown, S. L., Nesse, R. M., Vinokur A. D., & Smith, D. M, (2003). Providing social support may be more beneficial than receiving it: Results from a prospective study of mortality. *Psychological Science*, 14, 320–327. https://doi.org/10.1111/1467-9280.14461
- Burchardt, T., Le Grand, J., & Piachaud, D. (2002). Introduction. In J. Hills, J. Le Grand, & D. Piachaud (Eds.), *Understanding social exclusion*. Oxford: Oxford University Press. https://doi.org/10.1007/3-540-45419-5_1
- Callan, T., Nolan, B., & Whelan, C. T. (1993). Resources, deprivation and the measurement of poverty. *Journal of Social Policy*, 22, 141–172. https://doi.org/10.1017/S0047279400019280
- Cattell, V. (2001). Poor people, poor places, and poor health: The mediating role of social networks and social capital. *Social Science & Medicine*, 52, 1501–1516. https://doi.org/10.1016/S0277-9536(00)00259-8
- Census and Statistics Department of HKSAR. (2017). Gini Coefficient Edited by household size, 2006, 2011 and 2016 (Table E305). Retrieved from https://www.censtatd.gov.hk/hkstat/sub/sp459.jsp?productCode=D5321605
- Chan, A. L. S., & Chou, K. L. (2016). Immigration, living arrangement, and poverty risk for older adults in Hong Kong. *International Journal of Social Welfare*, 25, 247–258. https://doi.org/10.1111/ijsw.12187
- Chan, K., Evans, S., Ng, Y., Chiu, M. Y., & Huxley, P. J. (2014). A concept mapping study on social inclusion in Hong Kong. Social Indicators Research, 119, 121–137. https://doi.org/10.1007/s11205-013-0498-1
- Chan, K. W., & Chan, F. Y. (2003). Included or excluded? Housing battered women in Hong Kong. *Critical Social Policy*, 23, 526–546. https://doi.org/10.1177/02610183030234005
- Cheung, K. C. (2015). Child poverty in Hong Kong single-parent families. *Child Indicators Research*, 8, 517–536. https://doi.org/10.1007/s12187-014-9256-4
- Chou, K. L., & Lee, S. Y. (2017). Superimpose material deprivation study on poverty old age people in Hong Kong study. Social Indicators Research, 139, 1015–1036.
- Chung, G. K., Chung, R. Y., Chan, D. C., Lai, F. T., Wong, H., Lau, M. K., Wong SY Yeoh, E. (2018a). The independent role of deprivation in abdominal obesity beyond income poverty. A population-based household survey in Chinese adults. *Journal of Public Health*. https://doi.org/10.1093/pubmed/fdy161
- Chung, R. Y., Chung, G. K., Gordon, D., Wong, S. Y., Chan, D., Lau, M. K., ... Wong, H. (2018b). Deprivation is associated with worse physical and mental health beyond income poverty: a population-based household survey among Chinese adults. *Quality of Life Research*. https://doi.org/10.1007/s11136-018-1863-y
- Commission on Poverty of Hong Kong. (2013). Hong Kong Poverty SituationRreport 2012. Retrieved July 1, 2018, from https://www.povertyrelief.gov.hk/pdf/2012_Poverty_Situation_Eng.pdf
- Commission on Poverty of Hong Kong. (2015). Hong Kong Poverty Situation Report 2014. Retrieved July 1, 2018, from http://www.povertyrelief.gov.hk/pdf/poverty_report_2014_e.pdf
- Commission on Poverty of Hong Kong. (2016). Hong Kong Poverty Situation Report 2015. Retrieved July 1, 2018, from https://www.povertyrelief.gov.hk/pdf/poverty_report_2015_e.pdf
- Commission on Poverty of Hong Kong. (2017). Hong Kong Poverty Situation Report 2016. Retrieved July 1, 2018, from https://www.povertyrelief.gov.hk/eng/pdf/Hong_Kong_Poverty_Situation_Report_2016(2017.11.17).pdf
- Crabtree, S. A., & Wong, H. (2013). 'Ah cha'! The racial discrimination of Pakistani minority communities in Hong Kong: An analysis of multiple, intersecting oppressions. *British Journal of Social Work*, 43(5), 945–963. https://doi.org/10.1093/bjsw/bcs026

- Edwards, H., & Noller, P. (1998). Factors influencing caregiver-care receiver communication and the impact on the well-being of older care receivers. *Health Communication*, 10, 317–342. https://doi.org/10.1207/s15327027hc1004_2
- Fisher, A. T., Sonn, C. C., & Bishop, B. J. (Eds.). (2002). The Plenum series in social/clinical psychology. Psychological sense of community: Research, applications, and implications. New York, NY, US: Kluwer Academic/Plenum Publishers. http://dx. doi.org/10.1007/978-1-4615-0719-2
- Gordon, D., Lau, M., Pantazis, C., & Lai, L. (2014). Poverty and Social Exclusion in Hong Kong: First Results from the 2013 Living Standards Survey. Retrieved from https://poverty.hk/images/en/PSEHK_1st_report_Eng_Rev_02082014.pdf.
- Government of the Hong Kong Special Administrative Region (2018). Hong Kong poverty situation report 2017. Hong Kong: Office of the Government Economist Financial Secretary's Office and Census and Statistics Department.
- Grange, L., & Yung, B. (2001). Aging in a tiger welfare regime: The single elderly in Hong Kong. *Journal of Cross-Cultural Gerontology*, 16, 257–281. https://doi.org/10.1023/A:1011932006955
- Granovetter, M. S. (1973). The strength of weak ties. American Journal of Sociology, 78, 1360–1380. https://doi.org/10. 1086/225469
- Green, B. L., & Rodgers, A. (2001). Determinants of social support among low-income mothers: A longitudinal analysis. *American Journal of Psychology*, 29, 419–441.
- Hatfield, M. (2004). Vulnerability of persistent low income. Horizons, 7(2), 19-26.
- Haveman, R. (2009). What does it mean to be poor in a rich society? In M. Cancian, & S. Danziger (Eds.), *Changing poverty, changing policies* (pp. 387–408). New York: Russell Sage Foundation.
- Hawthorne, G. (2006). Measuring social isolation in older adults: Development and initial validation of the friendship scale. Social Indicators Research, 77, 521–548. https://doi.org/10.1007/s11205-005-7746-y
- Hick, R. (2012). The capability approach: Insights for a new poverty focus. *Journal of Social Policy*, 41, 291–308. https://doi.org/10.1017/S0047279411000845
- Hong Kong SAR Government. (2017). The chief executive's policy address. Retrieved from https://www.policyaddress.gov. hk/2017/eng/highlights.html
- House, J., Landis, K. R., & Umberson, D. (1988). Social relationships and health. *Science*, 241, 540–545. https://doi.org/10. 1126/science.3399889
- Lam, J. (2017, November 17). Poverty in Hong Kong hits record high, with 1 in 5 people considered poor. South China Morning Post.
- LaVeist, T. A., Sellers, R. M., Brown, K. A. E., & Nicherson, K. J. (1997). Extreme social isolation, use of community-based senior support services, and mortality among African American elderly women. American Journal of Community Psychology, 25, 721–732. https://doi.org/10.1023/A:1024643118894
- Law, K.-Y., & Lee, K.-M. (2006). Citizenship, economy and social exclusion of mainland Chinese immigrants in Hong Kong. Journal of Contemporary Asia, 36, 217–242. https://doi.org/10.1080/00472330680000131
- Lau, M., & Bradshaw, J. (2018). Material well-being, social relationships and children's overall life satisfaction in Hong Kong. Child Indicators Research, 11(1), 185–205. https://doi.org/10.1007/s12187-016-9426-7
- Lee J. K. L., Biglan A., & Cody C. (2018). The Impact of Poverty and Discrimination on Family Interactions and Problem Development. In: Sanders M., Morawska A. (eds), *Handbook of Parenting and Child Development Across the Lifespan* (pp. 699–712). New York: Springer, Cham.
- Lee, W. K.-M., & Kwok, H.-K. (2005). Differences in expectations and patterns of informal support for older persons in Hong Kong: Modification to filial piety. *Aging International*, 30, 188–206.
- Lee, S. Y., & Chou, K. L. (2016). Trends in elderly poverty in Hong Kong: A decomposition analysis. *Social Indicators Research*, 129, 551–564. https://doi.org/10.1007/s11205-015-1120-5
- Madonia, G., Cracolici, M. F., & Cuffaro, M. (2013). Exploring wider well-being in the EU-15 countries: An empirical application of the Stiglitz Report. *Social Indicators Research*, 111, 117–140. https://doi.org/10.1007/s11205-011-9986-3
- Marlier, E., & Atkinson, A. B. (2010). Indicators of poverty and social exclusion in a global context. *Journal of Policy Analysis and Management*, 29, 285–304. https://doi.org/10.1002/pam.20492
- Millar, J., & Ridge, T. (2009). Relationships of care: working lone mothers, their children and employment sustainability. *Journal of Social Policy*, 38(1), 103–121.
- Narayan, D., Patel, R., Schafft, K., Rademacher, A., & Koch-Schulte, S. (2000). Voices of the poor: Can anyone hear us? Washington, DC: World Bank. https://doi.org/10.1596/0-1952-1601-6
- Nolan, B., & Whelan, C. T. (1996). Resources deprivation and poverty. Oxford: Clarendon Press.
- OECD (2011). How is life? In *Measuring well-being*. Paris: Organization of Economic Cooperation and Development Publishing. https://doi.org/10.1787/9789264121164-en
- Organisation for Economic Co-operation and Development (OECD) (2008). Growing unequal? Income distribution and poverty in OECD countries. Paris: OECD.
- Oxfam Hong Kong (2018). Hong Kong Inequality Report. Hong Kong: Oxfam Hong Kong.

- Phillips, D. R., Siu, O.-L., Yeh, A. G.-O., & Cheng, K. H. (2008). Informal social support and older person's psychological well-being in Hong Kong. *Journal of Cross-Cultural Gerontology*, 23, 39–55. https://doi.org/10.1007/s10823-007-9056-0
- Pierce, G. R., Sarason, I. G., & Sarason, B. R. (1996). Coping and social support. In M. Zeidner, & N. S. Endler (Eds.), *Handbook of coping* (pp. 434–451). New York: John Wiley & Sons, Inc.
- Ringen, S. (1988). Direct and indirect measures of poverty. Journal of Social Policy, 17, 351–365. https://doi.org/10.1017/S0047279400016858
- Rodgers, G., Gore, C., & Figueiredo, J. (Eds.) (1995). Social exclusion: Rhetoric, reality, responses. Geneva: ILO.
- Roy, K. M., Tubbs, C. Y., & Burton, L. M. (2004). Don't have no time: Daily rhythms and the organization of time for low-income families. Family Relations, 53, 168–178. https://doi.org/10.1111/j.0022-2445.2004.0007.x
- Saunders, P. (2011). Down and out: Poverty and exclusion in Australia. Bristol: Policy Press. https://doi.org/10.2307/j. ctt9qgkm3
- Saunders, P., Naidoo, Y., & Griffiths, M. (2007). Towards new indicators of disadvantage: Deprivation and social exclusion in Australia. Sydney: Social Policy Research Centre, University of New South Wales.
- Saunders, P., Wong, H., & Wong, W. P. (2014a). Deprivation and poverty in Hong Kong. Social Policy & Administration, 48, 556–575. https://doi.org/10.1111/spol.12042
- Saunders, P., Wong, H., & Wong, W. P. (2014b). Signposting disadvantage—Social exclusion in Hong Kong. *Journal of Asian Public Policy*, 7, 3–17. https://doi.org/10.1080/17516234.2013.873338
- Sherraden, M. (1991). Assets and the poor: A new American welfare policy. M. E. Sharpe.. https://doi.org/10.4324/9781315288376
- Siedlecki, K., Salthouse, T. A., Oishi, S., & Jeswani, S. (2014). The relationship between social support and subjective well-being across age. Social Indicators Research, 117, 561–576. https://doi.org/10.1007/s11205-013-0361-4
- Stewart, M. J., Markwarimba, E., Reutter, L. I., Veenstra, G., Raphael, D., & Love, R. (2009). Poverty, sense of belonging and experiences of social isolation. *Journal of Poverty*, 13, 173–195. https://doi.org/10.1080/10875540902841762
- Stiglitz, J. E., Sen, A. K., & Fitoussi, J. P. (2009). Report edited by the commission on the measurement of economic performance and social Progress. Paris: Commission on the Measurement of Economic Performance and Social Progress. Available at. www.stiglitz-sen-fitoussi.fr/en/index.htm
- Townsend, P. (1979). Poverty in the United Kingdom: A survey of household resources and standards of living. London: Allen Lane
- UNDP (2019). Human development report 2019: Focusing on inequality. New York, NY: United Nations Development Programme.
- Whelan, C. T., & Maître, B. (2007). Measuring material deprivation with EU-SILC: Lessons from the Irish survey. *European Societies*, 9, 147–173. https://doi.org/10.1080/14616690701217767
- Wills, T. A. (1985). Supportive functions of interpersonal relationships. In S. Cohen, & S. Syme (Eds.), *Social support and health* (pp. 61–82). New York: Academic.
- Wong, H. (2008). Research on poverty, discrimination and social exclusion: The plight of elders in remote areas—Part three of poverty and social exclusion research series. Hong Kong: Office of Hon. Ronny Tong Ka-wah SC, Legislative Councillor.
- Wong, H., & Lee, K. M. (2001). Trap, exclusion and future: A qualitative study of marginal workers in Hong Kong. Hong Kong: Oxfam Hong Kong. (in Chinese)
- Wong, V., & Ying, W. (2006). Social withdrawal of young people in Hong Kong: A social exclusion perspective. *Hong Kong Journal of Social Work*, 40, 61–92. https://doi.org/10.1142/S0219246206000064
- Wright, K. B., & Bell, S. B. (2003). Health-related support groups on the Internet: Linking empirical findings to social support and computer-mediated communication theory. *Journal of Health Psychology*, 8, 39–54. https://doi.org/10.1177/1359105303008001429
- Zeidner, M., Matthews, G., & Shemesh, D. O. (2016). Cognitive-social sources of wellbeing: Differentiating the roles of coping style, social support and emotional intelligence. *Journal of Happiness Studies*, 17, 2481–2501. https://doi.org/10.1007/s10902-015-9703-z
- Zhang, J., Xu, Y., & Hou, Y. (2018). Mediating role of interpersonal interactions between chinese farmers' social networks and their subjective well-being. *Social Behavior and Personality*, 46, 721–731. https://doi.org/10.2224/sbp.6730

How to cite this article: Zhang Y, Wong H, Chen J-K, Tang VMY. Comparing income poverty gap and deprivation on social acceptance: A mediation model with interpersonal communication and social support. *Soc Policy Admin.* 2019;53:889–902. https://doi.org/10.1111/spol.12536