# Associations between perceived material deprivation, social support, and violent victimization among Chinese children

## Abstract (250 words)

**Background**

Evidence has consistently shown that poverty is associated with the violent victimization of children. Most studies have used family income as a predictor of child poverty. However, it is unclear how multidimensional material deprivation perceived by children is associated with their victimization experiences.

**Objectives**

This study aimed to examine the association between children's perceived material deprivation and self-reported violent victimization, as well as the role of perceived social support in mediating this relationship.

**Participants and Setting**

This cross-sectional school-based study included 445 children aged between 8 and 16 years living in Shenzhen, China.

**Methods**

The conventional crime module of the Juvenile Victimization Questionnaire (JVQ), the material deprivation index based on the Poverty and Social Exclusion in Hong Kong (PSEHK) project, and the multidimensional scale of perceived social support (MSPSS) were employed to measure children's experiences of violent victimization, material deprivation, and perceived social support.

**Results**

This study discovered that, when income and other factors were controlled for, children's perceived material deprivation was positively associated with self-reported violent victimization ($\beta = 0.31$, $p < .01$). However, the role played by material deprivation was undermined by high levels of perceived social support, demonstrating the full mediating relationship between perceived material deprivation and violent victimization.

**Conclusion**

The findings of this study underline the importance of understanding and reducing children's perceived material deprivation in poverty alleviation and child victimization prevention. Social support is vital for children who perceive themselves as living in deprived circumstances.

*Keywords:* poverty, child safety, migrant children, perceived social support.

**Introduction**

Child poverty is a severe, persistent, and structural problem. Worldwide, it is estimated that one in six children lives in extreme poverty (Silwal et al., 2020). Even more children are multidimensionally poor, struggling with a lack of food, housing, health care, and education. In addition to the striking geographic differences in the prevalence of child poverty worldwide, structural factors such as economic inequality and the demographic attributes of children and their families also lead to child poverty. A substantial body of evidence shows that poverty has negative impact on child development in terms of physical and mental health, cognitive development, academic outcomes, behaviors, and safety (Chaudry & Wimer, 2016). In recent years, the association between poverty and child victimization has received increasing attention. Evidence has consistently shown that individual- and neighborhood-level poverty is associated with child abuse and neglect, involvement in bullying, and exposure to community violence (Bywaters et al., 2016; Graif & Matthews, 2017; Jansen et al., 2012; Maguire-Jack & Font, 2017; McLeigh et al., 2018; Napoletano et al., 2015). While definitions and measurements of poverty are heavily debated (Featherstone et al., 2019), most research on child victimization uses income, employment status, or educational level as indicators of family socio-economic circumstances. Multidimensional poverty among children, which can reflect their actual living standards, has been studied less frequently as a risk factor for child victimization. Applying a child-centric approach, the current study aims to provide evidence for the association between material deprivation and violent victimization among Chinese children.

**Monetary and Child-Centric Approaches to Child Poverty Assessment**

Family economic hardship has traditionally been assessed based on household income, which is considered to be a useful unidimensional approach (Schenck-Fontaine et al., 2020). Children are identified as living in poverty if their household income is lower than the poverty line set by the government. In China, the Minimum Living Security Scheme (MLSS) poverty line was designed to identify families living in poverty. It varies significantly between rural and urban areas and from province to province. However, despite the comparable child poverty rates between rural and urban areas of China, there are significant disparities regarding living environments, nutrition, and access to health care and education between urban and rural children in China (Qi & Wu, 2019). In addition, children can experience deprivation at any level of family income (Gershoff et al., 2007). Thus, a unidimensional approach that uses income cannot capture the whole picture of deprivation, including materials, facilities, and services that are vital in preventing child maltreatment.

Consequently, a multidimensional approach has also been used to understand the negative impacts of deprivation on child development and family functioning (Ge & Wang, 2019; Hoolda Kim, 2019; Lau & Bradshaw, 2018; Torsheim et al., 2004). Multidimensional measures explore the dynamics of child poverty and can provide a clearer map with which to design poverty alleviation policy. In recent years, there has been growing interest in adopting a child-centric perspective in this field, in order to understand children's views about poverty (Lau & Bradshaw, 2018; Saunders & Brown, 2020). Children may have limited knowledge about the details of their family income, but they can express their opinions about the resources invested in their development. The child-centric approach not only identifies

children who consider themselves poor, but also examines how and to what extent

deprivation affects children's well-being. By understanding child poverty within a framework

that is advocated by the UN Convention on the Rights of the Child (Redmond, 2008), we can

provide a rationale for addressing child poverty and improving child well-being.

**Material Deprivation and Child Victimization**

Material deprivation refers to a situation in which children's needs for nutrition,

housing, healthcare, and education are not met. Thus, material deprivation is often causally

related to poor child well-being outcomes. Poverty also compromises child well-being and

increases the risk for abuse and violence through their developmental context (i.e., their

family and community). The first mechanism of material deprivation in this context is known

as the Family Stress Model, which posits that economic hardship can lead to parental stress;

under such stress, families may be more prone to compromised marital and parental

relationships and harsh or neglectful parenting (Conger et al., 1994; Warren & Font, 2015).

Another mechanism through which poverty affects children's well-being is the "context of

chaos", which includes substandard housing, community disorganization, and violence

(Chaudry & Wimer, 2016). Children from low-income families can face higher levels of

chaos, which has adverse impact on their socioemotional adjustment (Evans et al., 2005).

Many studies have examined poverty as a significant risk factor for child

victimization. A large body of literature shows that children living in low-income families

and environmental poverty are more likely to experience abuse, violence, and crime. At the

macro-level, there is a strong social gradient in child maltreatment across the spectrum of

socioeconomic status (SES), with the total and type-specific rates of child maltreatment

increasing with county child poverty rate (Hyunil Kim & Drake, 2018). At the community-level, low-income disorganized neighborhoods can also put children at the risk of experiencing violence and abuse (Graif & Matthews, 2017; McLeigh et al., 2018). At the micro-level, the disparity in family affluence between adolescents increases the risk of bullying victimization and perpetration at school (Jiang, 2020; Napoletano et al., 2015). While producing important evidence regarding the impacts of poverty, most studies use official poverty reports or family socioeconomic status when studying the association between poverty and victimization. It is necessary to incorporate children's perspectives into studies of child poverty and victimization by measuring their perceived material deprivation.

**The Role of Social Support**

Social support is important for child development. Social interactions with family members, peers, and environmental contexts represent a crucial part of children's social support. Support provided by these significant people in children's lives positively contributes to their well-being (Fan & Lu, 2020; Turner et al., 2012). There has been intense research interest in exploring the role social support plays in preventing and reducing the adverse impact of violence and abuse against children. For example, social support can operate as a protective factor against bullying victimization and perpetration (Mishna et al., 2016; J. Wang et al., 2009). Declines in family or peer support are associated with child victimization and poly-victimization (Hamby et al., 2016). Further, social support can mediate the relationship between exposure to school and family violence and children's mental health (J.-K. Chen & Wei, 2013; Seeds et al., 2010).

Research has found that children's life satisfaction is negatively related to their perceived material deprivation and is positively associated with social support they receive (Lau & Bradshaw, 2018). However, it is unclear whether or not social support can reduce the negative influence that poverty has produced. According to the mechanisms explaining how material deprivation affects child well-being, parents under stress due to economic hardship may not be capable of providing adequate care and support to their children, and an environment of chaos may not be supportive of child development. Therefore, in the current study, we hypothesize that social support may mediate the association between deprivation and children's well-being outcomes.

**A Focus on Child Poverty in Urban China**

Despite its rapid economic growth, China is still a developing country, with huge disparities between urban and rural areas in terms of income, health care, and other public services. Therefore, a great deal of attention has been paid to rural children, especially the victimization experiences of left-behind children whose parents (one or both) migrate to cities for work (M. Chen & Chan, 2016; Hu et al., 2018; Q. Wang & Liu, 2020). Hu and colleagues (2018) found that child poverty is significantly and consistently associated with the experience of violence and abuse among rural left-behind children. However, child poverty in urban China has received much less research attention compared to the problem in rural areas or when it is caused by urban-rural disparities, resulting in a large knowledge gap (Qi & Tang, 2015). Hukou (household registration in a city) type is a significant structural risk factor contributing to child poverty in urban areas. Certain individual or contextual factors

also increase the risk of poverty, including parents' lower education level and having a greater number of siblings (Qi & Wu, 2016).

Research has shown that migrant children living in poverty are at higher risk of mental health conditions and have less family support and lower levels of quality of life (Cao & Liu, 2015; Sun et al., 2019). However, little is known about how poverty is associated with victimization among urban Chinese children. Despite the rapid urbanization process and construction of public infrastructure, many cities have a fundamental lack of affordable housing, which can negatively impact child well-being. High incomes in cities do not guarantee that child poverty does not exist. Thus, a multidimensional perceived material deprivation measurement was used in the current study to examine child poverty in urban areas.

**The Current Study**

Research on the association between material deprivation and child violent victimization is limited, and previous studies show that social support can reduce the risk of child victimization. As a result, this study, conducted using a sample of urban Chinese children, aims to address the following objectives: 1) to examine the association between children's perceived material deprivation and self-reported violence victimization; and 2) to examine the role of social support in mediating the relationship between children's perceived material deprivation and self-reported victimization.

## Methodology

### Research Site

Shenzhen is the fastest growing city in China in terms of population and economy and has become a tier-one city (other tier-one cities include Beijing, Shanghai, and Guangzhou). As a hub for migrants searching for work opportunities, Shenzhen is the fifth most populous city in China, with population estimates exceeding 20 million (46% migrant population). Shenzhen's GDP per capita ranks first among mainland cities, which can be attributed to the large migrant population; meanwhile, the disparity of wealth is increasing, and housing is becoming increasingly unaffordable (K. Li et al., 2020). However, due to the unique household registration (hukou) system in China, migrants are excluded from most public housing and have limited access to education and health care (Tong et al., 2020). In Shenzhen, a nuclear family with a child below 18 years of age can receive a minimum allowance of approximately 4,000 RMB per month under the MLSS.

We conducted a cross-sectional study to examine children's perspectives regarding child-friendly communities, including their perceived material deprivation, social support, and experiences of conventional crime. In order to include enough migrant child participants, we administered school-based surveys. From May 2020 to July 2020, we invited children and their parents from four schools to participate in the present study. Questionnaires were distributed to the children and were completed in their classrooms. Parents or guardians provided informed consent and completed an online survey to enable us to collect information on the children's household backgrounds. On average, the child participants took 30 minutes to complete the questionnaire; the parents took approximately 15 minutes. In

accordance with the Research Ethic Committee guidance of the University (details removed

for blind review; ████████████████████████████████), ethical approval was

required before the data collection process. In order to guarantee the privacy of children and

enhance the validity of the responses, all questionnaires were anonymous. All children were

told they could the quit the survey at any time. The study used aggregated rather than

individual-linked data. In total, 481 children participated in the questionnaire surveys; 168

reported themselves as migrant children and 291 reported themselves as local children. We

finally included 445 samples in the analysis because 36 of them missed responses in the key

variables (missing rate = 7.5%). We compared the distributions of the sample with missing

data and those without missing data and found no difference; thus, we could assume the

values were missing completely at random (MCAR; J. Li & Yu, 2015).

**Measures**

Violent victimization was assessed by children's reports of their experience of

conventional crime in the preceding year. The Chinese version of the JVQ has been validated

among Chinese children and all subscales showed good internal consistency (Chan et al.,

2011). We employed the conventional crime module (eight items) of the Juvenile Crime

Questionnaire, including robbery, theft, and kidnap. Children rated each item on a six-point

scale ranging from "never (0)" to "five times or more (5)", indicating how often the

descriptions in the items had occurred in the preceding year. The Cronbach's α of the violent

victimization among this sample was 0.73. The sum score of the eight items was used as an

indicator of children's violent victimization experience. Higher scores indicate a higher

prevalence of conventional crime. We also counted the occurrence of each item; if the child

reported any item occurring, his/her experience of violent crime is counted as one, or else zero.

Material deprivation was assessed using a child deprivation index, including diet, footwear and clothing, items for children, accommodation and facilities, and children's own money. This index was developed by the Poverty and Social Exclusion in Hong Kong (PSEHK) project and is composed of 17 necessities that meet an acceptable standard of living (Lau, 2012). The items evaluated the material deprivation of the children by asking them whether they had each item or did each activity in question and, if they did not have or do it, whether this was because of choice or a lack of affordability. Respondents rated each item on a three-point scale ranging from "have (0)", "don't have and didn't want (1)", to "didn't have and can't afford (2)". The Cronbach's alpha of the scale is 0.65, indicating acceptable internal consistency. The final score for material deprivation was calculated by summing the scores of all items; therefore, a higher score indicates a greater degree of material deprivation.

Perceived social support measures children's perceptions of the extent to which they can access support from people in their social network; it has often been used as an indicator of social support (Demaray & Malecki, 2002). Evidence has shown that perceived social support appears to have a stronger influence on child well-being than the actual level of social support received (J.-K. Chen & Wei, 2013). We employed the multidimensional scale of perceived social support (MSPSS; Zimet et al., 1988) to assess children's perceived support from significant others (four items), friends (four items), and family (four items). Participants rated each item on a seven-point scale ranging from "strongly disagree (1)" to "strongly agree (7)", indicating the extent to which the descriptions in the items were

characteristic of their experiences in their social relationships. The Cronbach's α of the perceived social support scale was 0.94, showing satisfactory reliability. The sum score of the 12 items was used as an indicator of children's perceived social support. A higher score indicates a higher level of perceived social support.

We also collected children's socio-demographic information. We included each child's age in years, gender (female = 1), number of siblings, household income, living arrangement (lives with both parents = 1), hukou (holds a Shenzhen hukou = 1), and homeownership (parents own their house = 1) as the controls. The children's age, number of siblings, and household income are continuous and interval variables; the others were coded as dummy variables.

**Statistical Analyses**

The current study aims to examine the predictors of self-reported violent victimization among school-age children and assess the mediation role of social support. First, we performed descriptive analysis to summarize all of the variables, including the means and standard deviations of the numerical variables and the percentage distribution of the categorical variables. Second, bivariate correlation analysis was performed to examine the correlation between pairs of variables. Third, we employed multivariate regression across three models to assess the association of violent victimization with all independent variables. The socio-demographic characteristics of the children and their families were first entered into Model 1, including age, gender, hukou, living arrangement, and homeownership. Material deprivation and perceived social support were then added in Models 2 and 3, respectively, on the basis of Model 1. Fourth, the Baron-Kenny approach and bootstrapping

were performed to test the direct and indirect effects of perceived social support in the above mechanism. The results demonstrate the extent to which the effect of material deprivation on violent victimization can be mediated by perceived social support. All analyses were run in SPSS 25.

## Results

### Sample Profile

Table 1 describes the profiles of the sample. In the sample, the mean age of all of the children was 12.18 years (SD = 1.83), ranging from 8 to 16 years. A total of 53.2% of these children were boys and 46.8% were girls. Most of the children's household incomes were over 4,000 RMB (87.8%), which was relatively low compared to the local per capita income (4,301 RMB/month) in 2019 (Shenzhen Statistics Bureau & NBS Survey Office in Shenzhen, 2020). Over 89% of the children lived with both parents. About 63% of the children owned a local hukou, and 59% of the children's parents were homeowners. The mean score of the PSEHK-2012 scales was 1.19 (SD = 1.65), ranging from 0 to 17. The average score of the children's perceived social support was 60.03 (SD = 12.68). A total of 42.2% of the children in the sample reported the experience of at least one type of violence in the preceding year among eight types of conventional crimes. The mean score of the children's violent victimization was 2.25 (SD = 4.28), demonstrating wide variance in the responses.

*Table 1 about here*

**Correlates of Violent Victimization: Socio-demographics, Deprivation, and Social Support**

Table 2 shows the correlations between pairs of variables. Material deprivation was negatively associated with the children's perceptions of social support ($r = -0.16$, $p < 0.001$), but was positively correlated with self-reported violent victimization ($r = 0.13$, $p < 0.001$). Meanwhile, the children's perceived social support was negatively correlated with violent victimization ($r = -0.18$, $p < 0.001$). The correlations of the demographics with material deprivation and perceived social support were all not significant at the 5% significance level. In addition, violent victimization shows a weak and significant correlation with children's household income ($r = -0.10$, $p < 0.05$).

*Table 2 about here*

Table 3 demonstrates the association of self-reported violent victimization with all individual and household socio-demographics (Model 1), material deprivation (Model 2), and perceived social support (Model 3). The variance inflation factor (VIF = 1.09) test indicated that there was no multicollinearity problem in the present data. In Model 1, only the coefficient for household income was statistically significant ($\beta = -0.19$, $p < .05$). Model 2 included material deprivation on the basis of Model 1. In Model 2, the coefficient for the material deprivation was statistically significant, with the coefficient for household income becoming insignificant. A one unit increase in material deprivation was associated with a 0.31 increase ($p < .05$) in violent victimization, holding all else constant. Model 3 included the perceived social support variable on the basis of Models 1 and 2. It shows that a one unit increase in children's perceived social support was associated with a 0.06 decrease ($p < .01$)

in the violent victimization score, holding all else constant. The coefficient of material

deprivation decreased to 0.26 and became statistically insignificant. In addition, living with

both parents was found to be associated with decreased victimization experiences ($\beta = -1.64$,

$p < .05$).

The $F$ value of Model 3 is 3.23 ($p < 0.001$), which reflects a highly significant

relationship between violent victimization and the set of independent variables. In addition,

SPSS reported that R-squared ($R^2$) = 0.07, which reflects the way in which about 7% of the

variance in the violent victimization could be explained by the independent variables in

Model 3. The increased $R^2$ from Model 1 to Models 2 and 3 could be attributed to material

deprivation and perceived social support.

*Table 3 about here*

**Mediation Role of Perceived Social Support**

We tested the mediation model to examine the direct and indirect effects of

perceived social support on the relationship between perceived material deprivation and

violent victimization using Model 4 and the PROCESS program (Hayes, 2013). This program

employs an SPSS macro-adoption bootstrapping strategy. Each test was performed with

5,000 replicates and accelerated at the 95% confidence interval (Duan, 2016). As shown in

Figure 1, there was a significant indirect effect of children's lack of material well-being on

children's security through the children's perception of social support, at $b = 0.09$, 95% CI

[0.02, 0.19]. However, the direct effect was not statistically significant. Therefore, perceived

social support completely mediated the relationship between material deprivation and violent victimization.

*Figure 1 about here*

**Discussion**

Poverty affects children more than adults and the effects can be detrimental to child development and well-being. As child poverty is a multidimensional phenomenon that cannot be solely measured by family income, in this study, child poverty is considered in monetary terms and measured using perceived material deprivation as an indicator. The results of the study address the key research question in terms of the relationship between child poverty and violent victimization. We found that urban children who reported lower household incomes and higher levels of material deprivation were more likely to experience violent victimization, which is consistent with earlier research conducted in rural China (Hu et al., 2018). Though household income level was negatively correlated with children's self-reported victimization experiences, the association became insignificant after adjusting for perceived material deprivation. Furthermore, our results suggest a salient association between children's perceived material deprivation and violent victimization when household income and other demographics are controlled for. Thus, this child-centric, multidimensional approach can be considered a promising measurement of poverty, as well as a predictor of child safety. The insignificant association of household income with child victimization may be due to the drawbacks of using the income approach. First, the income approach cannot provide information about whether or not a child's developmental needs are being met. Second, children also have needs that cannot be supported by families' financial resources,

but rather can only be met through the surrounding environment, such as the accessibility of public services and basic infrastructure (Qi & Wu, 2016). As a high income does not guarantee that a family fulfills a child's needs, our results demonstrate the necessity of using a multidimensional approach when studying child poverty and well-being.

Though hukou type has been found to exert significant impact on child poverty (Qi & Wu, 2016), in the current study, children without a Shenzhen hukou were more likely to come from families with higher household incomes and those who own a tenure. As a result, holding a hukou or not was not associated with violent victimization among children. This may reflect a section bias, as migrant children can only attend private schools that charge high tuition fees. The current study also did not identify whether having siblings was protective or harmful, as sibling conflicts and positive sibling relationships can both exist within a family.

The current study also found that, despite the significant association between material deprivation and violent victimization, the role that child poverty plays was fully mediated by perceived social support. The effect of child poverty was undermined by higher levels of social support, which echoes previous findings regarding left-behind children (Wang & Liu, 2020). This result also demonstrates that living with both parents was associated with decreased victimization experiences. Thus, social support from significant others, friends, and family is an important buffer against the negative impacts of material deprivation and serves as a protective factor against violent victimization.

**Limitations and Implications for Future Research**

Several limitations should be considered when interpreting the findings of this paper. First, our findings are restricted to a convenience sampling method in one district of Shenzhen, which cannot represent the entire child population in urban China. As the mechanism may vary in different population groups, communities, and cities, the findings should be interpreted with caution. In addition, even though children may experience multiple forms of vulnerability and disadvantages beyond low household income, in the current study, we cannot identify the influence of access to basic infrastructure and public services, due to the sampling limitation. Second, we used a cross-sectional design to measure the children's experience of violent victimization in the preceding year, material deprivation, and perceived social support, under the assumption that material deprivation and social support precede violent victimization. However, the current study does not posit any conclusions about causal relationships, which may require more rigorous longitudinal designs.

Therefore, on the basis of the current study, future research should employ larger sample sizes from different regions in China. The inclusion of heterogeneous communities will in turn enable the inclusion of broader measures in terms of the levels of deprivation in the community and social inclusion, which could also significantly contribute to violent victimization. A longitudinal design is also necessary to examine the causal relationship between poverty and victimization, as well as the effectiveness of poverty alleviation measures.

**Implications for Practice and Policy**

Regarding child protection services, tailored services to address material deprivation would be useful in terms of preventing violent victimization. The pathway through which material deprivation is linked to child victimization also provides recommendations for the design of social services. Since the effect of poverty can be mediated by children's perceived social support, interventions focusing on enhancing social support may be useful in reducing the negative impacts of child poverty. The COVID-19 pandemic has caused widespread economic downturns and poverty-related stress in families. In addition to increasing children's material well-being to nurture their development, it is also important to provide parental support to protect children from abuse and neglect (Brown et al., 2020).

Though the child deprivation rate has declined dramatically across multiple dimensions in the past decades, child poverty is still a severe problem in China, which calls for policies to further address children's needs (Qi & Wu, 2016). The findings of the current study suggest that efforts need to be made to use multidimensional deprivation and child-centric approaches when identifying vulnerable children, understanding the levels of child poverty, and monitoring progress in child poverty reduction. This comprehensive and accurate approach can help policymakers to allocate resources more efficiently and maximize the benefits provided to children and families (Wagle, 2008). Child protection policies should also aim to satisfy children's developmental needs and protect them from violence and abuse. In addition to the conventional cash transfers approach to helping vulnerable children and families, a more comprehensive strategy of social security should be implemented to reduce multiple forms of material deprivation among children.

**Conclusion**

In this study, material deprivation was found to significantly contribute to children's experiences of violent victimization when child and household socio-demographics were held constant. The results evidence the mediation role of children's perceived social support in the relationship between material deprivation and violent victimization. We conclude with recommendations to guide future policies aiming to reduce material deprivation and enhance social support, which can have beneficial effects on child safety. Public health policymakers should pay attention to elevating the social support provided to children living in poverty, in order to mitigate the likelihood of violent victimization.

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**Table 1**

*Summary of descriptive analysis (N = 445)*

| | n | % |
|---|---|---|
| | $M \pm SD$ | Range |
| Age | 12.18±1.83 | 8-16 |
| Gender | | |
|    Male | 235 | 53.2% |
|    Female | 207 | 46.8% |
| Number of siblings living together | 0.91±0.846 | 0-3 |
| Monthly household income (RMB) | | |
|   1 (no income) | 6 | 1.5% |
|   2 (0-999) | 5 | 1.2% |
|   3 (1,000-1,999) | 10 | 2.5% |
|   4 (2,000-2,999) | 12 | 3.0% |
|   5 (3,000-3,999) | 16 | 4.0% |
|   6 (4,000-4,999) | 19 | 4.7% |
|   7 (5,000-5,999) | 61 | 15.1 % |
|   8 (6,000-7,999) | 49 | 12.2% |
|   9 (8,000-9,999) | 63 | 15.6% |
|   10 (10,000-14,999) | 65 | 16.1% |
|   11 (15,000-19,999) | 29 | 7.2% |
|   12 (>=20,000) | 68 | 16.9% |
| Live with both parents | 397 | 89.2% |
| Hold a Shenzhen Hukou | 268 | 62.8% |
| Homeowner | 254 | 59.3% |
| Material deprivation | 1.19±1.65 | 0-17 |
| Perceived social support | 60.03±12.68 | 5-77 |
| Violence victims | 188 | 42.2% |
| Violent victimization (counting) | 2.25±4.28 | 0-28 |

**Table 2**

*Bivariate correlation of violent victimization with material deprivation, perceived social support, and socio-demographics (N = 445)*

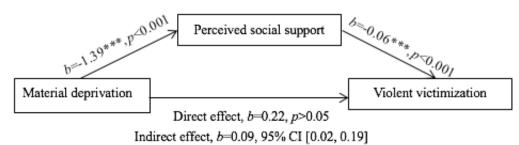| Variables | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|---|---|---|---|---|---|---|---|---|---|
| (1) Age | 1.000 | | | | | | | | |
| (2) Gender | 0.03 | 1.000 | | | | | | | |
| (3) Number of siblings living together | 0.05 | 0.05 | 1.000 | | | | | | |
| (4) Household income | 0.16*** | 0.01 | 0.00 | 1.000 | | | | | |
| (5) Live with both parents | -0.01 | -0.06 | 0.04 | 0.02 | 1.000 | | | | |
| (6) Hold a Shenzhen hukou | -0.11* | 0.03 | 0.14** | -0.19*** | -0.08 | 1.000 | | | |
| (7) Homeowner | 0.31*** | 0.07 | 0.03 | 0.24*** | -0.04 | -0.38** | 1.000 | | |
| (8) Material deprivation | -0.04 | 0.00 | 0.06 | -0.05 | -0.08 | 0.03 | -0.02 | -1.000 | |
| (9) Perceived social support | -0.08 | 0.00 | -0.03 | 0.06 | 0.07 | -0.02 | -0.10* | -0.16*** | 1.000 |
| (10) Violent victimization | -0.06 | -0.06 | 0.01 | -0.10* | 0.03 | -0.02 | 0.02 | 0.13** | -0.18*** |

Note: $*p < .05$, $**p < .01$, $***p < .001$.

**Table 3**

*Association of violent victimization with socio-demographics, material deprivation, and perceived social support (N = 381)*

| Variable | Model 1 β(95%CI) | Model 2 β(95%CI) | Model 3 β(95%CI) |
|---|---|---|---|
| **Socio-demographic factors** | | | |
| Age | -0.16 (-0.41,  0.10) | -0.15 (-0.40,  0.11) | -0.20 (-0.45,  0.05) |
| Gender | -0.52 (-1.42,  0.37) | -0.52 (-1.41,  0.37) | -0.50 (-1.37,  0.38) |
| Number of siblings living together | 0.24 (-0.30,  0.78) | 0.19 (-0.35,  0.73) | 0.20 (-0.33,  0.73) |
| Household income | -0.19* (-0.36,  -0.01) | -0.17 (-0.35,  0.00) | -0.15 (-0.32,  0.03) |
| Live with both parents | -1.34 (-2.87,  0.19) | -1.34 (-2.86,  0.18) | -1.64* (-3.15,  -0.13) |
| Hold a Shenzhen hukou | -0.33 (-1.34,  0.68) | -0.33 (-1.34,  0.67) | -0.43 (-1.42,  0.57) |
| Homeowner | 0.48 (-0.55,  1.52) | 0.429 (-0.53,  1.52) | 0.36 (-0.66,  1.38) |
| **Material deprivation** | | 0.31* (0.03,  0.56) | 0.22 (-0.04,  0.48) |
| **Perceived social support** | | | -0.06** (-0.10,  -0.03) |
| **Model summary** | | | |
| F (Df) | 1.65 (7) | 2.16 (8) | 3.23 (9) |
| P value | 0.120 | 0.030 | 0.001 |
| $R^2$ | 0.03 | 0.04 | 0.07 |
| Adj $R^2$ | 0.01 | 0.02 | 0.05 |
| $\Delta R^2$ | - | 0.01 | 0.03 |

Note: $*p < .05.$ $**p < .01.$ $***p < .001.$

**Figure 1**

*Mediating effect of perceived social support on the association of the material deprivation with violent victimization*



Controls
- Age
- Gender
- Number of siblings living together
- Household income
- Live with both parents
- Hold a Shenzhen Hukou
- Homeowner