Poverty, Perceived Economic Stress and Self-Esteem among Children from Impoverished Areas in China

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Abstract

Given children's dependence on families, the effect of poverty on child development and wellbeing is often explained by "family process models", such as family stress or the family investment (for reviews Dearing, 2008). As a consequence, children's economic resources and their agency are understudied in child poverty research, especially in terms of their potential influences on child psychosocial adjustment. The present study explores relationships among objective and subjective poverty indicators reported from both parents and children (family: annual income percentile, subjective poverty index; child: pocket money, perceived economic stress), and their associations with child self-esteem, using an adolescent (age 12-16) sample (N=601) from impoverished areas of China. The results of analyses using Structural Equation Models support the idea of a "child stress pathway", in which the amount of weekly pocket money and child's perceived economic stress mediate the relationship between family income and child self-esteem.

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Introduction

Although child poverty has been a research topic in academia in many years, childhood poverty is emerging as a new focus for social and economic development intervention and policy, due to its impact on the intergenerational transmission of poverty and inequality(Gershoff, Aber, & Raver, 2005; Holzer, Schanzenbach, Duncan, & Ludwig, 2007). Studies of child health and development in the last 20 years suggest that poverty has a wide and far-reaching impact on child wellbeing and development. Children who grew up in poor families were more likely to experience less optimal development in cognitive competence, school achievement and psychosocial adjustment, as compared to those from more affluent families (Conger et al., 1993; Dearing, 2008; Duncan, Brooks-Gunn, & Klebanov, 1994; McLoyd, 1990).

Psychosocial development is one of the major domains of social development. Usually, it refers to the development of personality, social attitudes and behaviors (Jessor, 1987). Psychosocial development occurs through interactions between individuals and social systems, which lead to changes in social cognition and adaptation (Yu & Xin, 2004). Self-esteem is often deemed the core component of psychosocial adjustment, and is defined as the self-evaluation of one's own worth (Rosenberg, 1965). Childhood and adolescent self-esteem are reported to be associated with many adulthood health and behavior outcomes, such as career development and income (Salmela-Aro & Nurmi, 2007), mental health(Guillon, Crocq, & Bailey, 2003), delinquency (Gershoff et al., 2005; Holzer et al., 2007), and age adjusted mortality rate (Baumeister, Campbell, Krueger, & Vohs, 2003) . The transition to adolescence is an especially sensitive period for self-esteem development.

In the research literature, child poverty is often defined as material deprivation or family economic poverty (UNICEF, 2007). A recent meta-analysis study suggested that there was a low but significant positive association between family economic indicators, such as family socioeconomic status (SES) and family income, and self-esteem (Twenge & Campbell, 2002). Furthermore, the magnitude of this effect

was larger among Asian cultures (Twenge & Campbell, 2002). The effect of poverty on child development is often explained by family process models (Dearing, 2008). These models state that because of children's dependence on family in early life years, family poverty would influence child outcome through family process, such as family stress pathway (Conger et al., 2002) and family investment pathway (Mistry, Biesanz, Chien, Howes, & Benner, 2008). The family stress pathway assumes that parental mental health and parenting patterns mediate the relationship between family poverty and child development; the family investment pathway focuses on home enrichment environment (such as books and toys) and parental emotional availability and time dedicated childcare as mediators. These models emphasize the social causation approach, which assumes that family and child outcomes are determined by socioeconomic status (Conger & Donnellan, 2007). However, they ignore the social selection approach, which proposes that individuals' attributes will influence their socioeconomic circumstances, and the interaction approach, which considers that both the social causation and the social selection processes are happening reciprocally across life-course (Conger & Donnellan, 2007).

Children's social cognition and activities might also mediate between their family environment and their psychosocial development. Studies suggested that children's perceptions of family economic stress might be different than their parents (Shek, 2003a, 2008) and might predict their sense of mastery (Conger, Conger, Matthews, & Jr, 1999). Compared to children's perceptions about current economic stress, their expectations for future stress have a stronger association with psychosocial adaptation (Shek, 2003b). A key question is what causes children's perceptions of economic stress. We propose that the economic resources "owned" by children play an important role in developing their perceptions of family economic stress, especially in adolescence. Although children's economic renounces mainly come from their parents, usually there are distinctions between parent's property and children's property. Pocket money is a typical economic resource allocated to children. Qualitative research shows that as

age increases, children gradually develop the idea of "ownership" (Blake, 2010) and change their view of pocket money from "parents' money" to "my money"(Shigeo, 2005). Since the allocation of resources among family members varies among families, the adverse impact of family circumstances, such as housing, could be amended or mitigated by children's property, such as pocket money and cell phones (Jonsson & Őstberg, 2004). In some cultures, parents will sacrifice their own quality of life to meet their children's needs (Kochuyt, 2004). Furthermore, pocket money might have a more direct influence on children's expenditures and social inclusion than family economic status (Attree, 2006; Elliott & Leonard, 2004) and might influence children's popularity(Olsson, 2007). These are important aspects of adolescents' daily life and shape how they feel and think about themselves. In sum, the economic activities and agency of children, especially adolescents, may play an important role in their psychosocial development, a role which has largely been overlooked in studies of poverty and child development.

Objectives

In this paper, we explore relationships among objective and subjective poverty indicators, derived from both parents and children reports, and their associations with child self-esteem, using cross-sectional survey data.

Sample and Data Collection

The analytical sample is from the Chinese part of the Global Study on Child Poverty and Disparities (2008). This study sampled families with children (defined as under 18 years old) in two impoverished counties. Purposive sampling was used to select villages from villages' strata, and then clustering sampling was used to select families from the chosen village. Structured interviews and self-administered questionnaires were administered to parents at home and to students at school. In this analysis, we restrict our attention to children who were 12 to 16 ages old. For the present analyses, the parent and child data were merged by family identifier. The final analytic dataset consists of 601 junior high school children (age: 13.89±1.16 years old) (Table 1).

Table 1 Gender and Grade Distributions of the Sample

Grade	Males		Females		Total
	n	%	n	%	n
7	130	53.1	115	46.9	245
8	74	49.0	77	51.0	151
9	92	44.9	113	55.1	205
Total	296	49.3	305	50.7	601

Measures

Four types of poverty indicators were used to capture different aspects of childhood poverty experience (Table 2). Parent-reported family poverty indicators are the Family per Capita Annual Income (annual income divided by family size) and Subjective Family Poverty Index (Likert scale). The parental poverty indicators were measured by Family Annual Income and Expenditure Scale developed for rural population in China. The poverty indicators derived from children's reports are Child Pocket Money (average weekly pocket money) and Child Current Economic Stress (CES) & Child Future Economic Stress (FES) for perceived economic stress. Child pocket money was collected by one item asking about the self estimation of money received weekly from parents. The Current Economic Stress Scale (CESS) (4 items, α=0.762, n=590) and Future Economic Worry Scale (FEWS) (8 items, α=0.848，n=558), developed and validated in Chinese adolescents (Shek, 2003b), were used to measure child perceived economic stress.

Table 2 Poverty Indicators Used by the Present Study

Report from	Economic Poverty (objective indictors)	Economic Stress (subjective indictors)
Parents	Family per Capita Annual Income	Subjective Family Poverty Index
Children	Child Pocket Money	Child Current Economic Stress

Child self-esteem was measured by the Chinese version of Rosenberg's Self-Esteem Scale (CRSES) (Wang, Wang, & Ma, 1999), a Likert scale of 10 items (Rosenberg, 1965) and widely used globally (Blascovich & Tomaka, 1991). We revalidated the CRESES using both Exploratory Factor Analysis and Confirmatory analysis, and identified 2 sub dimensions of global self-esteem: the negative aspect and positive aspect (r=-0.240). Item 9 was deleted due to low correlation to the other items. The adjusted CRSES had good internal consistency (α=0.690, n=585) in the study sample.

Data Analysis

Data management and exploratory data analysis has been done using PASW 18.0 (i.e. SPSS18.0 for Windows). Structural Equation Models (SEM) are used to explore the statistical relationships among the poverty indciators and self-esteem, and to test the hypothesized "Child Stress Pathway", which posits that family poverty influences child self-esteem through pocket money and perception of economic stress (Fig.1). Family and child demographic variables, such as family size, parental highest educational attainment year, and children's grade are controlled in the SEM analysis.

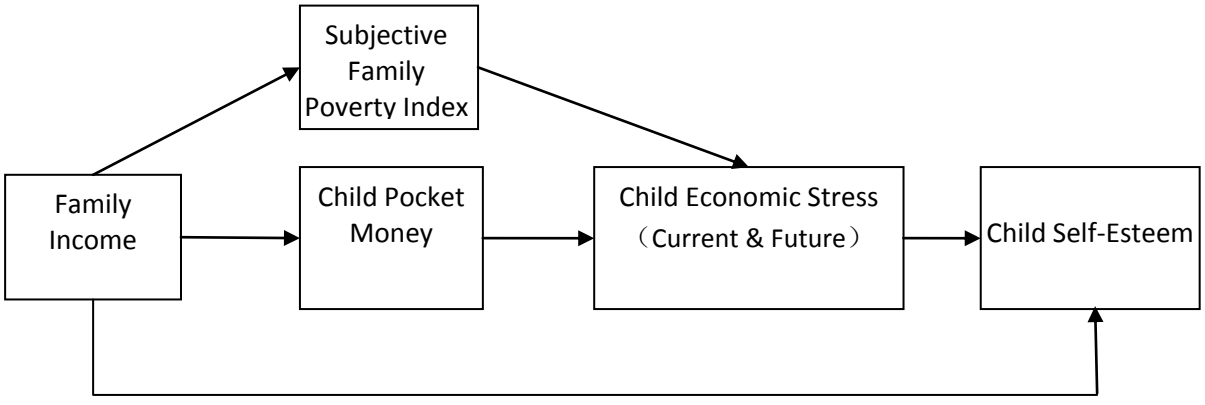

Fig. 1 Framework for Poverty and Child Self-Esteem Association with "Child Stress Pathway"

Results

SEM analysis results showed that child self-esteem was more strongly related to child reports of family poverty (weekly pocket money and the perceived current and future economic stress), than parent reports of family poverty. Furthermore, Children who reported higher current economic stress reported significantly more negative evaluations of self-esteem. The proposed structure equation model fitted the observed data adequately (Fig. 2) (χ^2=399.819, *df*=234, χ^2/df=1.709, *CFI*=0.993, *TLI*=0.995, *PNFI*=0.770, *RMSEA*= 0.034, *AIC*=579.819), supporting the hypothesis that the "Child Stress Pathway" mediates the association family poverty and child self-esteem, even when parents' perceived poverty was controlled.

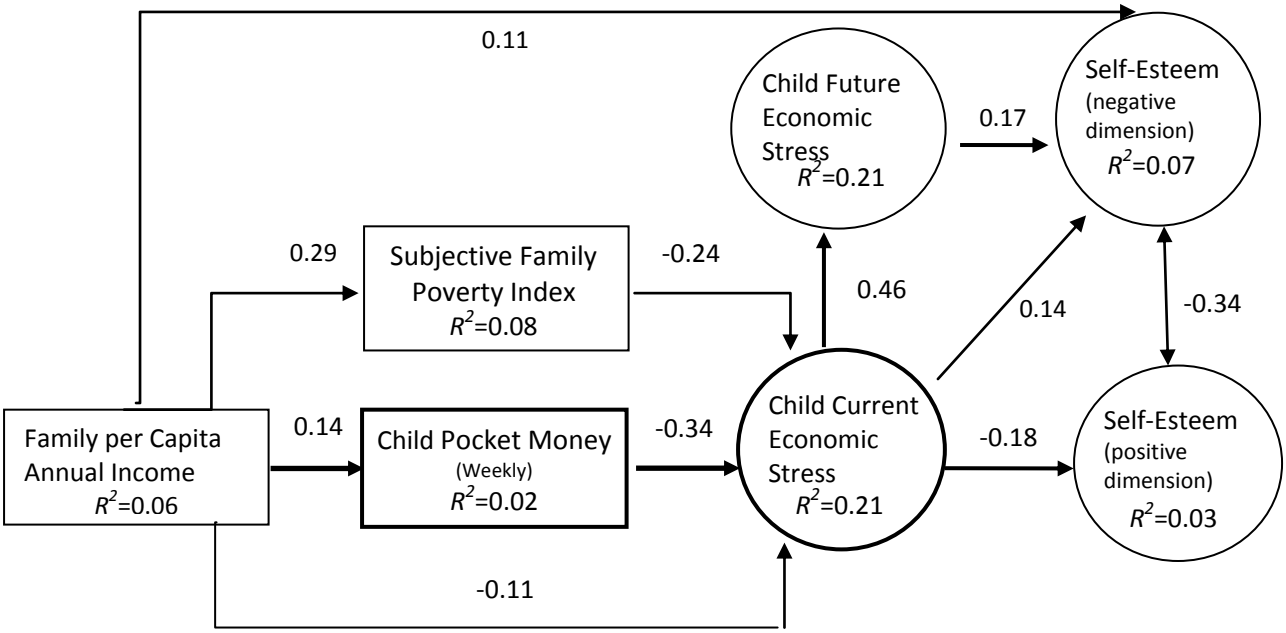

Fig. 2 The **SEM Model of Association between Family per Capita Annual Income and Self-Esteem Mediated by Child Current Economic Stress**

Note: Arrows in this figure show significant correlations (p<0.05), and the numbers on the arrows are path coefficients

Discussions

The present study adds knowledge to the literature by distinguishing the parental perspective and child perspective of childhood poverty experience and testing an alternative mechanism, the Child Stress Pathway, to explain the childhood poverty on child psychosocial development. This study suggested that the economic resource "owned" by children might reflect different experiences for children growing up in poverty, as compared to what the family economic indicators indicated. Furthermore, child perception of family economic situation differed from parents' perspective and might have a more direct influence on adolescent self-identification and psychosocial adjustment.

This study provides a unique opportunity to collect both parental and child report poverty indictors, which allows using SEM to test the proposed processes between poverty and child self-esteem. Strength of the study is the usage of validated measures of key poverty indictors. However, the generalizability and validity of the research results are compromised by the unique rural impoverished sample, and cross-sectional design and lack of control for the other covariates which may contribute to poverty and psychosocial development.

For future study, the agency role of children in the ecologically nested environment could be a new area to explore. In addition, more studies needs to be done to validate child reported poverty indicators, and to explore child economic resources and their economic socialization process, especially in disadvantaged conditions.

For policy implications, the results of the present study suggested incorporating more child oriented indicators into the child poverty measuring system, such as child economic resources and economic stress. Furthermore, except for intervene through parental factors, the results also pointed to another way to mitigate the poverty effect on child development. Interventions targeting at children owned "income" and their reactions to social and economic environment might promote their psychosocial adjustment.

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