Does Community Make a Difference?*

Effects of Social Capital in Multiple Contexts on the Psychosocial Adjustment of Chinese Migrant Children

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Abstract

Drawing upon a sample of 772 migrant children and their parents in Shanghai, China, this study investigated how the interactions of social capital embedded in a range of social contexts (i.e., family, school, peer, and community) influenced the psychosocial adjustment of Chinese migrant children. Results of multiple-group structural equation modeling revealed a moderating effect of community social capital on the associations between other dimensions of social capital and child psychosocial adjustment. Family social capital showed stronger effects when there was higher community social capital, while school social capital appeared to be most influential for children with lower community social capital. Peer social capital showed comparable effects on psychosocial adjustment regardless of the stock of community social capital, but was most important for children with limited resources in both the community and school. Implications of the research findings for theory, practice, policy and future research are discussed.

Key words: social capital; psychosocial adjustment; Chinese migrant children; moderating effect; structural equation modeling

Social Capital in Promoting the Psychosocial Adjustment of Chinese Migrant Children: Interaction across Contexts

Introduction

Social capital has been an increasingly popular concept in examining the social determinants of health and well-being (Kawachi, 2008; Portes, 1998; Putnam, 2000). Despite various proposed definitions, it is commonly acknowledged that social capital essentially refers to social resources that inhere in and flow through social relationships in various social contexts (Boudieu, 1986; Coleman, 1990; Lin, 2001). A large body of literature has demonstrated the significant role of social capital in the development of children and adolescents, including psychosocial adjustment (Coleman, 1988, 1990; Dorsey & Forehand, 2003; Morrow, 1999; Portes, 1998; Zhou & Bankston, 1994). Recent studies incorporate social capital embedded in various social contexts (e.g., family, school, neighborhood) into one integrative framework in order to examine and distinguish the effects of each dimension operating simultaneously (Wu et al., 2010). However, the conditional nature of these effects has yet to be explored. According to the ecological theory, a complete understanding of youth development requires taking into account the full range of social contexts, which are interrelated rather than isolated, while shaping the developmental processes (Bronfenbrenner, 1989; Rankin & Quane, 2002). In light of this growing consensus, it is reasonable to conceive that the operation of social capital embedded in one social context might not be independent but may depend on the stock of social capital in another context. Therefore, to fully understand the mechanisms by which multiple dimensions of social capital affect the adjustment and well-being of children and adolescents, it is important to investigate whether and how one dimension of social capital works in a particular way contingent on the existence and function of another dimension of social capital. Such research is limited in the literature.

To fill this gap, the present study investigated how social capital embedded in a range of social contexts (family, school, peer groups, and community) interacted to influence the psychosocial adjustment of migrant children in mainland China. Specifically, considering that community provides a larger context where family processes, school functions, and peer interactions take place, the major research question addressed in this study is: Does the level of community social capital moderate the effects of family, school, and peer social capital on the psychosocial adjustment of migrant children?

Psychosocial Adjustment of Migrant Children in Mainland China

Internal migration of mainland China is predominantly a rural-to-urban population flow. In recent years, increasing numbers of children have migrated to cities with their parents. According to the National Committee of Family Planning (2010), there were 211 million migrants in China by 2009; of these, 20.8 percent were children under age 14. In the city of Shanghai, there were 3.87 million migrants by the end of the year 2000, of which 320,000 were school-age children (Li, 2004). About 420,000 migrant children were receiving education in Shanghai by 2009 (Xinhua, 2009).

The continuously growing population of migrant children has drawn increasing attention. However, under China's household registration system (*hukou*), which is assigned at birth and designed to control rural-urban mobility, migrant children are not granted equal access to education, medical care, and many other social services, due to urban residence requirements. Large numbers of migrant children are thus denied entry into urban public schools and are forced to enroll in so-called "migrant children's schools", which are of significantly lower quality. A growing number of studies have demonstrated that, compared to their native urban counterparts, migrant children experience more depression, anxiety, loneliness, low self-esteem, and high self-humiliation (Hu, Fang, Lin & Liu, 2009; Li, Zou, Jin & Ke, 2008; Xu & Deng, 2010).

Effects of Social Capital on the Development of Children and Adolescents

Following the definition of Coleman (1990, p. 302), social capital refers to "social resources inherent in social relationships that facilitate a social outcome". It can occur at any level of social aggregation (Parcel & Menaghan, 1993), and is usually operationalized as the features and quality of social relationships in a range of social contexts, most notably the household, school, and neighborhood (Coleman, 1990; Lin, 2001; Furstenberg and Hughes, 1995; Portes, 1998).

There is well-established evidence that family social capital, the bonds between parents and children reflected in the time and attention that parents spend interacting with children and monitoring their activities (Coleman, 1990), is associated with a variety of educational, behavioral, and emotional outcomes, including decreased likelihood of dropping out (Coleman & Hoffer, 1987; Croninger & Lee, 2001), higher educational aspirations (McNeal, 1999), better academic performance (Coleman, 1988; White & Glick, 2000), fewer behavior problems (Parcel & Dufur, 2001; Parcel & Menaghan, 1993), and better social and emotional adjustment (Hagan et al., 1996). Social capital embedded in neighborhoods, i.e., community social capital, which consists of social relationships among resident adults and youths and encompasses norms, trust, sense of belonging to the community, and civic engagement (Coleman, 1988; Putnam, 1993), is also found to be predictive of various youth developmental outcomes such as lower levels of depression (Stevenson, 1998), decreased externalizing behaviors (Beyers, Bates, Pettit, & Dodge, 2003), better health-related quality of life (Drukker, Kaplan, Feron & Van Os, 2003), and increased social competency (Rankin & Quane, 2002).

In addition to family and community social capital, resources inherent in school and peer groups also play a significant role in the development of children and adolescents, although their effects have been less widely studied. Croninger and Lee's study (2001) found that school social capital, reflected by student-teacher relationships, largely reduced the probability of high-school

students' dropping out. Crosnoe (2004) also found that students performed better academically if they attended schools with stronger student-teacher bonds. With regard to the effect of social capital inherent in peer groups, Ream's study (2005) on Mexican-American achievement found peer social capital (assessed by the density, range, intimacy, and trusting level of peer relationships) to be a robust and fungible resource that bolstered the academic performance of secondary-school students.

The Interplay among Various Dimensions of Social Capital

Ecological theories propose that various components of the ecology of human development not only play independent roles in the development of children and youths, but are intertwined and exert synergistic effects (Bronfenbrenner, 1986). For example, the impact of family management on youth development may depend on characteristics of the community in which youths and families reside (Coley & Hoffman, 1996; Pettit, Bates, Dodge, & Meece, 1999). Applying this perspective to the study of social capital, it is reasonable to conceive that the functioning of social capital embedded in one social context is contingent on social capital inherent in another.

Parcel and Dufur (2001) illustrated three types of moderation effects when examining how family and school social capital work together to promote child achievement, including: 1) booster effects, when children who experience favorable conditions both at home and at school achieve better; 2) compensating effects, when a deficit in resources at home is partially compensated by supportive resources at school; and 3) threshold effects, when resources in both environments promote child achievement, but in combination have a more modest effect. Drawing on data from the National Longitudinal Survey of Youth, Parcel and Dufur's analysis (2001) demonstrated a "compensating effect" between family and school social capital, indicating that having access to higher levels of school social capital would buffer some of the negative effects of lower levels of family social capital. Using data from the National Longitudinal Study of Adolescent Health,

Crosnoe (2004) also examined the interaction between family and school social capital on youth academic performance, but identified a significant "booster effect"; that is, adolescents who had higher levels of social capital at school benefited more from social capital at home.

Empirical studies have also examined the interaction effects between family and community social capital. Building upon the premise that neighborhoods with more structural disadvantages and less collective efficacy may place more of the burden of socializing youth on the shoulders of parents, Beyers and colleagues (2003) used data from a longitudinal, multisite study to examine whether the actual protectiveness of parenting strategies and parent-adolescent relationship qualities vary with neighborhood characteristics. Their multilevel analysis found that neighborhood characteristics did not independently relate to youths' externalizing behaviors, but rather played a role in moderating the effects of parental monitoring on youth behavioral outcomes. Specifically, the association between the decrease in externalizing behaviors and parental monitoring was significantly more pronounced in youth living in neighborhoods with more residential instability. Rankin and Quane (2002) also tested the interactions between family management and neighborhood collective efficacy while examining the interrelated effects of neighborhoods, families and peers on inner-city African American youth. They found that parental monitoring exerted a stronger effect on youth social competency and problem behaviors in the desired direction when collective efficacy was low in the neighborhood, which reflected a compensatory effect. These studies support the contention that family social capital is especially important for youth development when insufficient stocks of social capital exist at the community level.

Taken together, evidence of the interactions between different dimensions of social capital demonstrates that the combined effects of social capital inherent in multiple social contexts might be more important than their additive effects alone. However, certain knowledge gaps remain. First, existing studies rarely incorporate various dimensions of social capital into one conceptual

framework, which restricts their ability to examine the mechanisms by which multiple dimensions of social capital interact to influence the child development. Second, as a result of the first gap, existing research has mostly examined the intersections of limited dimensions of social capital (e.g., family and community, or family and school). To advance our knowledge of the intricate social ecology that shapes youth development, it is necessary to recognize and investigate the intersections of social capital inherent in a full range of social contexts.

This study addressed these gaps by incorporating social capital embedded in multiple social contexts (i.e., family, school, peer, and community) into one conceptual framework, enabling an investigation of the interactions that influence the psychosocial adjustment of Chinese migrant children. Grounded on the ecological model (Bronferbrenner, 1998) that considered community as a larger context where family processes, school functions, and peer interactions take place, we first focused on the moderating role of community social capital on the associations between other dimensions of social capital and child psychosocial adjustment. Specifically, one major hypothesis tested in this study was that *social capital embedded in the family context would show stronger effects on the psychosocial adjustment of migrant children when there were lower levels of social capital accessible in the community*. The same compensating-effect hypothesis was also applied to examining whether the effects of school and peer social capital were stronger when community social capital was lower. Moreover, considering that school constitutes a relatively distal context (compared to family and peers) in a child's ecological system, we further hypothesized that, within each group of migrant children with higher or lower community social capital, *family and peer social capital would present stronger effects on child psychosocial adjustment when school social capital was at a lower level*, which again reflected a compensating effect as suggested by Parcel and Dufur (2001). The conceptual framework of this study is presented in Figure 1.

[Insert Figure 1 about here]

Methods

Participants and Procedure

Participants of the study were 815 4^{th}-9^{th} grade migrant students from 14 schools located in four administrative districts of Shanghai. The study employed a school-based multi-stage random sampling method. First, four administrative districts with the highest concentrations of migrants were selected. Three of the four districts provide education for migrant children in both public schools and migrant children's schools, while the fourth district has accommodated all migrant children in public schools. Second, a complete list of all public primary and secondary schools that accommodate both native and migrant students in each of the four districts, as well as all migrant children's schools in the first three districts, was obtained from the Educational Bureau. In each district, one public primary school and one public secondary school were randomly selected from the list of public schools. Likewise, in each of the first three districts, one primary and one secondary school were randomly selected from the migrant children's schools. Therefore, a total of eight public schools and six migrant children's schools were selected. Given that children attending public schools may come from families with higher socioeconomic status because they must afford higher tuition fees, sampling from both public and migrant schools helped ensure better coverage of migrant children. Third, a complete list of migrant students in the 4^{th}-9^{th} grades of the selected schools was obtained from the school officials, and 60 migrant students were randomly selected from each school. A total of 840 migrant students from eight public schools and six migrant schools were thus recruited for the study. One parent of each participating student, who considered himself/herself most knowledgeable of the student as well as the family and neighborhood environment, was also invited to participate.

Prior to the administration of the surveys, students were provided with the child/adolescent assent forms and were asked to take consent forms home to their parents. Students were eligible to

participate in the study if they completed the assent form and if their parents provided active written consent to their participation. Students who met the eligibility criteria completed a paper-and-pencil survey in their classrooms during a single class period (45-50 min) under the guidance of trained research staff. The surveys were identified only by a code number. Parents of the participating students completed a separate paper-and-pencil survey brought home by the students and returned to the research staff in sealed envelopes by the students. Following the consent procedure, 815 students participated in the study and completed the student survey, and 772 of their parents completed the parent survey. Therefore, the final sample used for analysis included 772 pairs of migrant children and parents. Full descriptive statistics of the sample are presented in Table 1.

[Insert Table 1 about here]

Measures

Outcome Variable

Psychosocial Adjustment was assessed as a latent construct composed of four related adjustment outcomes: 1) Self-esteem, measured by the Rosenberg Self-Esteem Scale (RSE) (Rosenberg, 1965); 2) Depression, measured by the Center for Epidemiological Studies Depression Scale for Children (CES-DC) (Faulstich et al., 1986); 3) Hostility, measured by the hostility subscale adapted from the Aggression Questionnaire (Buss & Perry, 1992); and 4) Life satisfaction, measured by the Satisfaction with Life Scale (SWLS) (Diener, 1985). Detailed information of each scale is presented in the Appendix; the Chinese versions of all four scales have been used and validated by previous studies (Li et al., 2008; Yan, Robins, & Lin, 2000). In this study, the standardized sum scores of the four scales, representing four distinct but correlated adjustment outcomes, were used as observed indicators to form the latent construct of psychosocial adjustment.

The scores of depression and hostility were reverse-coded so that their direction of variation would be consistent with that of self-esteem and life satisfaction.

Social Capital Variables

A validated standard measure that assesses various dimensions of social capital with consistent and systematic indicators has yet to be developed. Measures of social capital in this study drew upon existing indicators used by past studies, supplemented by scales and questions that tapped into specific operationalizations of social capital. Particularly they were designed to assess the feature and quality of social relationships within each social context—a proxy to the essence of social capital. Since most of the measures had not been applied in the Chinese context before, a rigorous procedure of translation was followed to ensure the accurate use of instruments. The procedure involved a team of two professional translators (one female and one male to control gender bias) independently conducting forward and backward translation in order to achieve cross-cultural equivalence. The measurements were also refined through a pilot test with a small sample of 100 migrant children to make sure they were culturally appropriate and readily understandable. Given the comprehensive measurement, the text below only gives a brief introduction of the measures used for each construct. Detailed information on each instrument is presented in the Appendix.

Family social capital was assessed by the quality of parent-child interaction and parental monitoring. Parent-child interaction was measured by the Parent-Child Relationship Inventory (PCRI) (Dixon, Fair, & Bernies, 2004), which assessed the behavioral, affective and cognitive components of the parent-child relationship from the child's perspective. Parental monitoring was measured by two self-designed scales that incorporated items used in previous studies, one asking about how often the parents were involved in their children's school activities or disciplined children at home, while the other examined the parents' knowledge of their children's whereabouts.

The standardized sum scores of the four subscales of the PCRI and the two parental monitoring scales were used as observed indicators to form the latent construct of family social capital.

School social capital was assessed by school climate and the quality of student-teacher relationships. School climate was measured by 10 items adapted from the Inventory of School Climate-Student Version (ISC-S) (Brand et al., 2003). Student-teacher relationships were measured by a seven-item scale which was used to assess school social capital in Croninger and Lee's (2001) study. The standardized sum scores of these two scales were used as observed indicators to form the latent construct of school social capital.

Peer social capital was assessed by the quality of peer relationships, using the Friendship Qualities Scale (FQS) (Bukowski, Hoza, & Boivin, 1994). The FQS identified five dimensions of friendship—companionship, conflict, help/aid, security, and closeness. The standardized sum scores of the five subscales were then used as observed indicators to form the latent construct of peer social capital.

Community social capital was assessed by four dimensions that captured the neighborhood characteristics through the responses of parents: social cohesion and trust in adults (SC & T-A), social cohesion and trust in children (SC & T-C), informal social control (ISC), and solidarity of the neighborhood. The SC & T-A was measured by a five-item collective efficacy scale developed by Sampson and colleagues (1997). Since the study focused on children, a separate seven item SC &T-C scale was used to assess bonds and trust particularly among children in the neighborhood. Questions of this scale had been used previously in a Dutch study on social capital and children's health-related quality of life (Drukker, Kaplan, Feron, & Van Os, 2003). Informal social control was measured by a five-item scale that examined the ability and willingness of adult neighbors to provide monitoring and social control for children living in the neighborhood. Development of the scale referred to the collective efficacy scale (Sampson et al., 1997) and was adapted to the Chinese

context. Solidarity of the neighborhood was measured by asking the participants to describe how strong were their feelings of togetherness with neighbors and their senses of belonging to the neighborhood. In data analysis of this study, since community social capital was tested as a moderator, the sum score of the twelve social cohesion and trust items, the five informal social control items, and the two solidarity items was median-split to create two subgroups characterized by high and low community social capital respectively.

Socio-demographic Variables

The socio-demographic variables included in the hypothesized model were gender, age, length of residence in the city, school type, family structure, family human capital, and family financial capital. Gender (1=female, 0=male), age (in years), and school type (1=public school, 0=migrant children's school) are self-explanatory. Length of residence was measured by the number of months the children had lived in the city. Family structure was examined by a binary variable (1=children living with both parents, 0=other family arrangements). Family human capital was assessed by parents' educational attainments, which influences the cognitive environment in a home (Coleman, 1988). In this study, parents reported their educational levels in seven categories ranging from "didn't go to or didn't graduate from elementary school (1)" to "university graduate or higher (7)". Family financial capital was assessed by three indicators: monthly household income, household equipment, and poverty index. Monthly household income, referring to income from all sources in the household, was reported by parents in 12 categories ranging from "lower than 100 RMB (1)" (about $15) to "More than 10000 RMB (12)" (about $1,500). Household equipment was measured by asking parents to indicate from a list of 10 the total number of electronic items (refrigerator, washing machine, computer, etc.) that their family possessed. The poverty index included three questions asking the parents how difficult it had been in the past year to purchase furniture or

household equipment that needed to be replaced, to buy food for their children, and obtain medical care for their children. Participants rated each question on a 5-point scale ranging from "very difficult (1)" to "not difficult at all (5)", with higher scores indicating a lower poverty level. The standardized scores of the household income, household equipment, and poverty index were used as three observed indicators to form the latent construct of family financial capital.

Data Analysis

Structural equation modeling (SEM) was conducted using Mplus 5.0 (Muthén & Muthén, 2007) to test the hypothesized models. SEM permits the use of latent constructs composed of multiple observed variables and allows for estimating the relationships among latent constructs while providing explicit estimates of measurement errors to increase the accuracy of analysis results (Byrne, 2001). Moreover, it offers a multiple-group approach that enables simultaneous model fitting for two (or more) samples at a time, which renders it an ideal method to test moderation effects. These features make SEM an especially well-suited technique for this study, given the hypothesized moderating effect of community social capital on the associations between other dimensions of social capital and the psychosocial adjustment of migrant children.

The multiple-group analysis followed a typical procedure with four steps (Astor et al., 2002; Byrne, 2001). First, the factor invariance of the six latent constructs (i.e., family, school, and peer social capital, family human and financial capital, and the psychosocial adjustment) across the high and low community social capital groups was tested before proceeding to the test of structural invariance, given that multiple-group analysis required establishing measurement invariance of latent factors at the first step to ensure that they were conceptually and statistically comparable between groups (Byrne, 2001; Muthén & Muthén, 2007). Second, a fully constrained model with the factor loadings, paths coefficients, and covariances constrained to be equal across groups was

tested to reveal whether the same theoretical model fit data from the two subgroups simultaneously. Third, based on the fully constrained model, the equality constraints on the three paths hypothesized to differ across groups (i.e., the paths linking family, school and peer social capital to child psychosocial adjustment) were released one at a time, which provided results on whether releasing each path would significantly improve the model fit (as indicated by a significant reduction in chi-square). Last, the final best-fitting model was identified as the one with the constraints on those paths detected from the third step being released together.

Multiple indices were used to assess the goodness of model fit, including: 1) the likelihood ratio test statistic (χ^2), where a non-significant χ^2 represents a closer fit of the hypothesized model to the perfect fit (Bollen, 1989); 2) the Comparative Fit Index (CFI), where values above 0.90 denote a good model fit (Bentler, 1990); and 3) the Root Mean Square Error of Approximation (RMSEA; Steiger, 1990), where values less than 0.05 indicate a "close fit" (Kline, 2005).

Results

Test of Measurement Model

Test of the multiple-group measurement model with factor loadings of all latent constructs constrained to be equal across high and low community social capital groups provided a good fit to the data ($\chi^2 = 554.923$, df = 370, $p<.001$, CFI = 0.963, RMSEA = .037) with CFI greater than .90 and RMSEA smaller than .05, suggesting factor equivalence between these two subgroups. All observed variables were significantly loaded on the corresponding latent constructs in the expected directions, suggesting that the selected indicators represented the underlying constructs in a statistically reliable manner, and the factor structures were the same for both groups. The standardized factor loadings of all indicators on each latent construct are presented in Table 2.

[Insert Table 2 about here]

Test of Structural Model

Of central interest in the study is the equality of paths from family, school, and peer social capital to the psychosocial adjustment of migrant children, while community social capital is at differential levels. Following the multiple-group approach in SEM, we first evaluated the fits of a series of alternative structural models with various degrees of constraints, in order to identify the best fitting model and examine the invariance of path coefficients. A summary of the comparison of model fits is presented in Table 3.

[Insert Table 3 about here]

Model 1 of Table 3 exhibited a fully-constrained model with all factor loadings and structural parameters set to be equal across the high and low community social capital groups. Based on model 1, model 2, 3, and 4 released the equality constraints on the three paths from family, school, and peer social capital to psychosocial adjustment, one at a time, allowing for free estimates of the path coefficients in each group. The significant decrease of chi square value from model 1 to model 2 ($\Delta\chi^2 = 7.054$, $\Delta df = 1$, $p<.01$) and from model 1 to model 3 ($\Delta\chi^2 = 5.956$, $\Delta df = 1$, $p<.05$) suggested that allowing the paths from family and school social capital to psychosocial adjustment to vary across groups would improve the overall fit of the model. However, the slight and non-significant decrease of χ^2 from model 1 to model 4 suggested that releasing the equal constraint on the path from peer social capital to psychosocial adjustment would not contribute to better model fit. Therefore, the final best-fitting model proved to be the one with the two paths from family and school social capital to psychosocial adjustment being released for free estimates while the path from peer social capital to psychosocial adjustment constrained to be equal across two subgroups.

The final multiple-group structural model provided a good fit to the data. Although the Chi-Square value ($\chi^2 = 861.911$, $df = 558$) was large and significant, mainly because of its sensitivity to large sample size, other goodness-of-fit indices demonstrated satisfying results: CFI (.943) was

above .90, and RMSEA (.038) was lower than .05. The total variances in the psychosocial adjustment of migrant children explained by this model were 55.2% and 66.1% respectively for the low and high community social capital groups.

As hypothesized, community social capital moderated the effect of family social capital on the psychosocial adjustment of migrant children, but as a booster effect instead of a compensating effect. The unstandardized path coefficients (used to compare the strength of effect of the same path across groups) showed that family social capital exhibited a stronger positive effect on children's psychosocial adjustment in the high community social capital group (B=.333, p <.001) than in the low community social capital group (B=.199, p <.01). Similarly, school social capital showed a stronger effect on the adjustment of children with higher community social capital (B=.442, p <.001) than of those with lower community social capital (B=.344, p <.01). Peer social capital was also significantly and positively associated with the psychosocial adjustment of migrant children, but at the same magnitudes for both high and low community social capital groups (B=.171, p <.01). A comparison of the standardized effects of various dimensions of social capital within each subgroup (note that standardized coefficients were used to compare the relative strengths of effects of various paths within one group) indicated that family social capital exerted the strongest impact on the psychosocial adjustment of migrant children with higher levels of community social capital (β=.385, p <.001), while school social capital appeared to be the most influential for migrant children with lower levels of community social capital (β=.462, p <.001). The standardized solution of the multi-group structural model is presented in Figure 2.

[Insert Figure 2 about here]

Of the socio-demographic variables, the effects of gender and school type were found to be mediated by family, school, and peer social capital on the psychosocial adjustment of migrant children in both high and low community social capital groups. Being male and attending public

schools were associated with higher levels of social capital of all kinds, which, in turn, predicted better psychosocial adjustment. Family social capital also mediated the effects of family human capital and financial capital; higher levels of educational attainment of parents and better economic conditions of the family were associated with higher levels of family social capital, which predicted better adjustment of children. In addition, school social capital mediated the effect of age on children's psychosocial adjustment: the younger the children, the stronger their bonds with teachers at school, and the better their psychosocial adjustment. A summary of the standardized direct, indirect and total effects of major predictor variables is presented in Table 4.

[Insert Table 4 about here]

Another two series of multiple group analyses were successively conducted within high and low community social capital groups to examine whether school social capital moderated the effects of family and peer social capital on the psychosocial adjustment of migrant children. Following the same procedure as illustrated above, the second-order interaction analysis identified a significant booster effect of school social capital in the low community social capital group. The final multi-group structural model with the path from family social capital to psychosocial adjustment being released for free estimates across the two groups with high and low levels of school social capital provided an acceptable fit to the data (χ^2 = 656.205, *df* = 475, CFI=.910, RMSEA=.045). Family social capital presented stronger effect on psychosocial adjustment for children with higher levels of school social capital (B=.466, p <.001) compared to those with lower levels of school social capital (B= .372, p <.001). The standardized coefficients also suggested that family social capital was a stronger predictor of child's psychosocial adjustment (β = .466, p <.001) than peer social capital (β = .303, p <.001) in the high school social capital group, while peer social capital was more influential (β = .523, p <.001) than family social capital (β = .372, p <.001) for children with lower levels of school social capital.

Discussion

This study represents a pioneer effort to examine the psychosocial adjustment of migrant children in mainland China as it relates to social capital embedded in a range of children's immediate social contexts, namely, the family, school, peer group, and community. It is aimed to examine in which spheres, and under what conditions, investments in social capital have the greatest payoffs for the psychosocial adjustment of migrant children. This study goes beyond the existing literature by considering the effects of parents, school and peers as situated in the larger neighborhood context and by testing the potential moderating effects of community social capital on the relationships among parental involvement, school bonds, peer relationships, and children's psychosocial adjustment. In order to better capture the intricate nature of human ecology by viewing major settings as intertwined rather than isolated from each other (Call & Mortimer, 2001), the focus of this study is not how each dimension of social capital operates on the psychosocial adjustment of Chinese migrant children, but rather on how these processes across multiple social contexts interact with each other in their effect on children's adjustment.

The results of this study provide clear evidence of the interactive nature among multiple dimensions of social capital. Consistent with the argument of Furstenberg (1993) that the effectiveness of family practices may differ with the quality of neighborhoods, one primary finding of this research suggests that community social capital does condition the effect of family social capital on the psychosocial adjustment of migrant children. However, instead of a compensating effect as demonstrated by some earlier research (Beyers et al., 2003; Rankin & Quane, 2002) and stated in our hypotheses, this study suggests a booster effect between family and community social capital. That is, the association between family social capital and child psychosocial adjustment is more pronounced if higher levels of social capital are present in the neighborhood. In other words, the benefits of parental involvement and monitoring for children's psychosocial adjustment are

greater in cohesive neighborhoods with higher levels of trust among residents and stronger social control over youth behaviors. The contingency of family social capital effect on the stock of community social capital implies that the effective functioning of families for the well-being of children relies on an overall support system in the larger neighborhood structure. In contrast, where there are lower levels of cohesion, trust, and informal social control in the neighborhood, though family social capital still exerts a significant effect, it does not make as big a difference as in capital-rich neighborhoods. Rigorous parental monitoring in a non-caring neighborhood climate might be perceived as overly restrictive, which counteracts the supposedly highly positive effect of family social capital on child psychosocial well-being.

The discrepancy in the functioning of family social capital may also come from the different strategies that parents use depending on the type of neighborhood they live in. As Coulton (1996) contends, parents may adjust their management styles to conform to the practice of the majority according to the normative climate of their neighborhoods. This could be especially true in the Chinese social context, where collectivity and conformity to the majority are granted paramount importance (Huang & Harris, 1973). Therefore, in neighborhoods where adults are more engaged in supervising children's behaviors, parents may assume greater responsibility in interacting with children and monitoring their activities, which leads to increased effectiveness of family social capital. Nevertheless, in neighborhoods lacking cohesion and social control, parents may not feel pressured to pay as much attention to their children, thus generally reducing the importance of family in the lives of children and rendering the effect of family social capital more modest.

In addition, when there are inadequate bonds and social resources in the neighborhood, children may spend much of their time in the school instead of in the neighborhood, and place heavier weight on their relationships with teachers rather than with neighbors. This provides a clue to understanding why, for children with access to lower community social capital, school social

capital is the most influential factor in their psychosocial adjustment. Furthermore, within the group of migrant children living in neighborhoods with lower social capital, the second-order interaction effect also indicates that the level of school social capital plays a significant role in modifying the effects of family and peer social capital. The function of family social capital in promoting children's adjustment is considerably enhanced if school provides a cohesive environment with stronger student-teacher relationships. In other words, migrant children who experience favorable conditions both at school and at home perform better in their psychosocial adjustment.

Study results also point out the significance of peer social capital in the circumstance of limited community and school resources. Through examination of the interaction among multiple dimensions of social capital, this study finds that peer social capital has a consistently significant effect on children's psychosocial adjustment regardless of the level of community social capital, albeit at a relatively smaller magnitude than that of family and school social capital. However, when resources embedded in the school and neighborhood are both inadequate, the quality of peer relationships becomes most important. This is conceivable, since similar to the struggle of identity formation experienced by immigrant children in Western contexts, migrant children in Chinese cities also face the challenge of identity transition. Settling in a different culture can have negative implications for an individual's sense of self and the way in which one understands and relates to others (Coll & Magnuson, 2005). Presumably, neighborhoods and schools are where children and youths spend much of their time in the day and provide an immediate context for their contact with the urban environment. However, when relationship ties within these two contexts are fairly weak, peer groups may serve as a significant source that children rely on for acceptance and support and to forge their self-identities in adapting to life change. Simply put, the increased importance of peer social capital in disadvantaged school and neighborhood circumstances reflects the needs of migrant children to achieve a balanced identity with both their place of origin and their current

urban environment. The bonds with parents in the family sphere represent more of a link with their original culture, while relationships in the neighborhood, school, and peer contexts provide the means of contact with the host culture. For migrant children to maintain healthy psychosocial adjustment, they need to rely on resources flowing through both kinds of relationship ties.

In summary, findings of this study contribute to our understanding of the mechanism by which different types of social capital interact with each other to influence the psychosocial adjustment of Chinese migrant children. The findings indicate a fairly important role of community – the benefits from other dimensions of social capital can be magnified by the stock of community social capital. Nevertheless, the results should be interpreted in light of several limitations. First, with a cross-sectional study design, the study could not establish rigorous causal relationships between social capital and the psychosocial adjustment of migrant children. There remains the possibility that better psychosocial adjustment of migrant children results in higher levels of social capital, rather than the other way around. Second, participants of the study were selected from elementary and junior high schools. This excludes migrant children who could not attend school in the city due to structural barriers or financial hardship, which restricts the generalizability of research findings to the entire population of migrant children. Third, measures of social capital in this study are based mainly on individual responses rather than on aggregate measures, which may compromise objectivity. Although using the responses of parents, an independent sample, to assess community social capital partly compensate for this limitation, more collective and objective measures of social capital should be used in future studies.

Implications for Theory, Practice, Policy, and Future Research

Despite the limitations noted above, the present study has multiple implications for the advancement of theory and for the design and delivery of social service programs and social policy.

It also points out promising directions for future research. First, the study advances the social capital theory by unraveling the mechanisms by which family, school, peer, and community social capital influence the psychosocial adjustment of migrant children jointly and interactively. Identifying the conditional nature of social capital effects increases the power of the theory in understanding the development of children as a function of intricate human ecology with intertwined contexts. Testing the theory in a non-Western context also potentially fortifies its cross-cultural validity and applicability.

Second, the significant effects of family, school, and peer social capital on children's psychosocial adjustment, as well as their relative strengths of effects contingent on the level of community social capital, have profound implications for the development of social service programs. On the one hand, social capital building can be an innovative approach to positive youth development. For example, in the family sphere, family service programs could be designed to assist parents in making greater investment of time and attention in their children's lives. In the school context, efforts can be made to facilitate positive interactions between students and teachers and to encourage teachers' increased care for students. In the community setting, public facilities can be built, creating opportunities for residents to interact, and fostering the culture of trust and mutual support. Moreover, the interactive booster effect between family and community social capital suggests that the combination of investment in multiple social contexts would be most effective in promoting the psychosocial adjustment of migrant children. A favorable social environment that facilitates positive youth development requires adequate social resources embedded in both proximal and distal contexts in the child's ecological system. This suggests forging partnerships among service professionals for an integrative social capital building approach.

On the other hand, the complex interplay among multiple dimensions of social capital also suggests that, for effectiveness and efficiency, intervention and prevention programs should be

tailored to subgroups of migrant children with access to different levels of social resources in the neighborhood and school. Specifically, for migrant children with lower levels of community social capital, school plays the most important role. Therefore, the focus of prevention programs would be promoting favorable school climates and student-teacher relationships. However, when social capital embedded in the community and school are both limited and not likely to improve, providing impetus and assistance for the construction of peer social capital is most effective for improved psychosocial adjustment of migrant children. In contrast, for migrant children with higher levels of community social capital, family appears to be most protective of their psychosocial adjustment, suggesting that strengthening social capital in the family domain would generate the highest benefit for these children and should be the focus of service programs.

Third, this study raises awareness among policymakers of the importance of taking active measures at the structural level to promote the adjustment and well-being of migrant children. The salience of community social capital for the adjustment of migrant children, as indicated by the research findings, alerts government to allocate more resources for empowering communities. Possible structural solutions include building favorable neighborhood environments, such as increasing safety and expanding public spaces for residents to interact and for children to play. This kind of strategic investment in community building is likely to be cost-effective, given that the benefits generated for migrant children through social capital inherent in other social domains can be magnified in a favorable community environment.

Last, this study also points out several directions for future research. First, social capital is not a static resource but continuously evolves as relationships develop. Migrant children in particular may experience substantial change in multiple dimensions of social capital as a consequence of their rural-to-urban migration. Further research should consider using a longitudinal design to track the changes of social capital and model the effect of these changes on the psychosocial adjustment

of migrant children. Second, a comparison of the social capital effects between migrant children living in the urban cities and other groups in the context of migration may yield more comprehensive understanding of their adaptation. Future research may consider using a comparative design to examine the adjustment of the urban-dwelling migrant children as compared to those who are left behind in the rural areas by their migrant parents, and those who return to the rural areas after living in the urban areas for a certain period of time.

In conclusion, the present study tests a comprehensive model delineating the effects of family, school, peer, and community social capital on the psychosocial adjustment of Chinese migrant children, particularly focusing on the interactions among various dimensions of social capital. It identifies the conditional nature of social capital effects and reveals the intricate mechanisms by which multiple social contexts intertwine with each other to influence child development. Based on knowledge of the effective functioning and complex interplay of multiple dimensions of social capital, this study proposes a social capital building approach in social services with migrant children, and suggests tailoring service programs to migrant children with differential levels of social capital in their various social contexts. Importantly, it indicates the need for combined investment in multiple social contexts. Further empirical studies on the multiplicative effects of social capital on a broader range of outcomes among a broader range of populations are expected to continue building scientific knowledge that informs practice and policy.

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References

Aseltine, R. H. (1995). A reconsideration of parental and peer influences on adolescent deviance. *Journal of Health and Social Behavior, 36,* 103-121.

Astor, R. A., Benbenishty, R., Zeira, A., & Vinokur, A. (2002). School climate, observed risky behaviors, and victimization as predictors of high school students' fear and judgments of school violence as a problem. *Health Education & Behavior, 29(6),* 716-736.

Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin, 107*, 238-246.

Beyers, J. M., Bates, J. E., Pettit, G. S., & Dodge, K. A. (2003). Neighborhood structure, parenting processes, and the development of youths' externalizing behaviors: A multilevel analysis. *American Journal of Community Psychology, 31*(1/2), 35–53.

Bollen, K.A. (1989). *Structural equations with latent variables*. New York: John Wiley & Sons.

Brand, S., Felner, R., Shim, M., Seitsinger, A., Gu, K., & Dumas, T. (2003). Middle school improvement and reform: Development and validation of a school-level assessment of climate, cultural pluralism and school safety. *Journal of Educational Psychology, 95,* 570-588.

Brooks-Gunn, J., Duncan, G. J., Klebanov, P. K., & Sealand, N. (1993). Do neighborhoods influence child and adolescent development? *American Journal of Sociology, 99*, 353-395.

Bronfenbrenner, U. (1986). Ecology of the family as a context for human development: Research perspectives. *Developmental Psychology, 22*(6), 723-742.

Bronfenbrenner, U. (1989). Ecological systems theory. In Vasta, R. (Ed.), *Six theories of child development: Revised formulations and current issues, Vol. 6*. Greenwich, Connecticut: JAI Press.

Bronfenbrenner, U., & Morris, P. A. (1998). The ecology of developmental processes. In W. Damon, & R. M. Lerner (Eds.), *Handbook of child psychology: Volume 1: Theoretical models of human development (5th ed.)* (pp. 993-1028). Hoboken, NJ: John Wiley & Sons Inc.

Bukowski, W.M., Hoza, B., & Boivin, M. (1994). Measuring friendship quality during pre and early adolescence: The development and psychometric properties of the Friendship Qualities Scale. *Journal of Social and Personal Relationships, 11,* 471–484.

Buss, A. H., & Perry, M. (1992). The Aggression Questionnaire. *Journal of Personality and Social Psychology, 63*(3), 452-459.

Byrne, B. M. (2001). *Structural Equation Modeling With AMOS: Basic Concepts, Applications, and Programming*. Mahwah, New Jersey: Lawrence Erlbaum Associates, Inc.

Call, K. T., & Mortimer, J. T. (2001). *Arenas of comfort in adolescence: A study of adjustment in context.* Mahwah, NJ: Erlbaum.

Coleman, J. S. (1961). *The adolescent society: The social life of the teenager and its impact on education*. Glencoe, IL: The Free Press.

Coleman, J. S. (1988). Social capital in the creation of human capital. *American Sociological Review*, *94*, s95-s120.

Coleman, J.S. (1990). *Foundations of Social Theory*. Cambridge, MA: The Belknap Press of Harvard University Press.

Coleman, J. S., & Hoffer, T. B. (1987). *Public and private schools: The impact of communities.* New York: Basic.

Coley, R. & Hoffman, L. W. (1996). Relations of parental supervision and monitoring to children's functioning in various contexts: Moderating effects of families and neighborhoods. *Journal of Applied Developmental Psychology, 17*(1), 51-68.

Coll, C. G., & Magnuson, K. (2005). The psychological experience of immigration: A developmental perspective. In M. M. Suárez-Orozco, C. Suárez-Orozco, & D. B. Qin (Eds.), The new immigration: An interdisciplinary reader. New York, NY: Routledge.

Coulton, C. J. (1996). Effects of neighborhoods on families and children: Implications for services. In A. J. Kahn & S. B. Kamerman (Eds.), *Children and their families in big cities* (p. 87-120). New York, NY: Cross-National Studies Program.

Croninger, R. G., & Lee, V. E. (2001). Social capital and dropping out of high school: Benefits to at-risk students of teachers' support and guidance. *Teachers College Record, 103*(4), 548-581.

Crosnoe, R. (2004). Social capital and the interplay of families and schools. *Journal of Marriage and Family, 66*, 267-280.

Diener, E., Emmons, R., Larsen, J., & Griffin, S. (1985). The Satisfaction with Life Scale. *Journal of Personality Assessment*, *49*(1), 71-75.

Dixon, M. D., Fair, S., & Bernies, E. (2004). An instrument to investigate the expectations of and experiences with the parent-child relationship: The parent-child relationship inventory. Paper presented at the National Communication Association Annual Convention, Chicago, IL.

Dorsey, S., & Forehand, R. (2003). The relation of social capital to child psychosocial adjustment difficulties: The role of positive parenting and neighborhood dangerousness. *Journal of Psychopathology and Behavioral Assessment, 25*(1), 11-23.

Drukker, M., Kaplan, C., Feron, F., & Van Os, J. (2003). Children's health-related quality of life, neighborhood socioeconomic deprivation and social capital: A contextual analysis. *Social Science & Medicine, 57*(5), 825-841.

Faulstich, M. E., Carey, M. P., & Ruggiero, L. (1986). Assessment of depression in childhood and adolescence: An evaluation of the Center for Epidemiological Studies Depression Scale for Children (CES-DC). *American Journal of Psychiatry, 143*(8), 1024-1027.

Furstenberg, F. F. (1993). How families manage risk and opportunity in dangerous neighborhoods. In W. J. Wilson (Ed.), *Sociology and the public agenda* (p. 231-258). Newbury Park, CA: Sage.

Furstenberg, F. F., & Hughes, M. E. (1995). Social capital and successful development among at-risk youth. *Journal of Marriage and the Family, 57*, 580-592.

Galambos, N. L., & Maggs, J. L. (1991). Out-of-school care of young adolescents and self-reported behavior. *Developmental Psychology, 27,* 644-655.

Hagan, J., MacMillan, R., & Wheaton, B. (1996). New kid in town: Social capital and the life course effects of family migration in children. *American sociological review, 61*, 368-385.

Huang, L. C., & Harris, M. B. (1973). Conformity in Chinese and Americans: A field experiment. *Journal of Cross-Cultural Psycho*logy, *4,* 427-434.

Kawachi, I., Subramanian, S. V., & Kim, D. (2008). Social capital and health. Springer Verlag, NY: LLC.

Kline, R. B. (2005). *Principles and practice of structural equation modeling (2nd ed.)*. New York: The Guilford Press.

Laird, R. D., Pettit, G. S., Dodge, K. A., & Bates, J. E. (1999). Best friendships, group relationships, and antisocial behavior in early adolescents. *Journal of Early Adolescence, 19,* 413-437.

Li, X., Zou, H., Wang, R., & Dou, D. (2008). Self-esteem of migrant children in Beijing and its relation to academic performance and student-teacher relationships. *Psychological Science, 31*(4), 909-913.

Lin, N. (2001). *Social capital: A theory of social structure and action*. New York: Cambridge University Press.

Morrow, V. (1999). Conceptualizing social capital in relation to the well-being of children and young people: A critical review. *Sociological Review*, *47*(4), 744-765.

Muthén, L.K. and Muthén, B.O. (1998-2007). *Mplus User's Guide (5th Edition)*. Los Angeles, CA: Muthén & Muthén.

National Committee of Family Planning (2010). *Chinese Migrant Population Development Report*. Chinese Population Press.

Parcel, T. L., & Dufur, M. J. (2001). Capital at home and at school: Effects on child social adjustment. *Journal of Marriage and the Family*, *63*(1), 32-47.

Parcel, T. L., & Menaghan, E. G. (1993). Family social capital and children's behavior problems. *Social Psychology Quarterly*, *56*(2), 120-135.

Portes, A. (1998). Social capital: Its origins and applications in modern sociology. *Annual Review of Sociology, 24*, 1-24.

Pettit, G. S., Bates, J. E., Dodge, K. A., & Meece, D. W. (1999). The impact of after-school peer contact on early adolescent externalizing problems is moderated by parental monitoring, perceived neighborhood safety, and prior adjustment. *Child Development, 70*(3), 768-778.

Putnam, R. D. (1993). The prosperous community. Social capital and public life. *The American Prospect,* Spring, 35-42.

Putnam, R. D. (2000). *Bowling alone: The collapse and revival of American community.* New York: Simon & Schuster.

Rankin, B. H., & Quane, J. M. (2002). Social contexts and urban adolescent outcomes: The interrelated effects of neighborhoods, families, and peers on African-American youth. *Social Problems, 49*(1), 79-100.

Ream, R. K. (2005). Toward understanding how social capital mediates the impact of mobility on Mexican American Achievement. *Social Forces, 84*(1), 201-224.

Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.

Sampson, R. J., Raudenbush, S. W., & Earls, F. (1997). Neighborhoods and violent crime: *A multilevel study of collective efficacy. Science, 277*(5328), 918-924.

Simons, L. G., Simons, R. L., Conger, R. D., & Brody, G. H. (2004). Collective socialization and child conduct problems: A multilevel analysis with an African American sample. *Youth and Society, 35*(3), 267-292.

Stevenson, H. C. (1998). Raising safe villages: Cultural-ecological factors that influence the emotional adjustment of adolescents. *Journal of Black Psychology, 24*(1), 44-59.

White, M. J., & Glick, J. E. (2000). Generation status, social capital, and the routes out of high school. *Sociological Forum, 15*(4), 671-691.

Wu, Q., Xie, B., Chou, C. P., Palmer, P. H., Gallaher, P. E., & Johnson, C. A. (2010). Understanding the effect of social capital on the depression of urban Chinese adolescents: An integrative framework. *American Journal of Community Psychology, 45(1),* 1-16.

Xinhua News. (2009). Migrant children to receive compulsory education in Shanghai. http://news.xinhuanet.com/politics/2009-12/17/content_12663425.htm. Retrieved on Jan. 2, 2010.

Yan, S., Robins, C., & Lin, N. (2000). A cross-cultural comparison of depressive symptom manifestation: China and the United States. *Journal of Consulting and Clinical Psychology*, 68(6), 993-999.

Table 1 Descriptive Statistics of Sample Characteristics

	Frequency (N)	Percent (%)
Gender		
Male	400	53.2
Female	352	46.8
Age	Mean=12.87 (SD=1.932) (years)	
Length of Residence in the City	Mean=83.65 (SD=49.56) (months)	
School Type		
Public School	437	58.5
Migrant Children School	310	41.5
Family Structure		
Living with both parents	652	86.2
Living with one or neither parent	104	13.8
Education (Father)		
Didn't attend or finish elementary school	84	11.3
Elementary school	177	23.8
Secondary school	350	47.0
High school (academic/professional/vocational)	117	15.7
Diploma	8	1.1
Bachelor or higher	8	1.1
Education (Mother)		
Didn't attend or finish elementary school	182	24.8
Elementary school	223	30.3
Secondary school	231	31.4
High school (academic/professional/vocational)	82	11.2
Diploma	7	1.0
Bachelor or higher	10	1.4
Employment Status (Father)		
Full-time	391	51.8
Part-time	35	4.6
Unemployed	17	2.3
Self-owned business	312	41.3
Employment Status (Mother)		
Full-time	346	45.8
Part-time	46	6.1
Unemployed	155	20.5
Self-owned business	209	27.6
Monthly Household Income		
999 or less	68	9.1
1000-1999	238	31.9
2000-2999	191	25.6
3000-3999	94	12.6
4000-4999	45	6.0
5000-5999	43	5.8
6000-6999	16	2.1
7000 or above	52	7.0

Table 2 Standardized Factor Loadings of Observed Indicators on the Latent Constructs*

Construct	Indicator	Factor Loading	
		Low CSC Group	High CSC Group
Psychosocial Adjustment (PA)	Self-Esteem	.606	.707
	Depression	.583	.652
	Hostility	.501	.468
	Life Satisfaction	.575	.629
Family Social Capital (FSC)	PCRI-1	.724	.761
	PCRI-2	.785	.796
	PCRI-3	.742	.729
	PCRI-4	.801	.795
	PM-1	.465	.448
	PM-2	.499	.538
School Social Capital (SSC)	School Climate	.710	.656
	Student-Teacher Relationships	.827	.770
Peer Social Capital (PSC)	Companionship	.629	.637
	Conflict	.688	.691
	Help/Aid	.713	.702
	Security	.692	.680
	Closeness	.752	.837
Family Human Capital (FHC)	Father Education	.700	.699
	Mother Education	.782	.825
Family Financial Capital (FFC)	Income	.814	.796
	Equipment	.613	.631
	Poverty Index	.601	.630

* Note: Please refer to the Appendix for the detailed description of each indicator

Table 3 Comparison of the Fit of Alternative Models: Multiple Group Analysis with Community Social Capital as Moderator

Model	Model Description	χ^2	df	$\Delta\chi^2$	Δdf	p
1	Fully constrained, with all factor loadings and structural effects equal across groups	869.753	560			
2	As model 1, release the path from FSC [a] to PA [d], allowing free estimates of the effects of FSC in each group	862.699	559	7.054	1	.008
3	As model 1, release the path from SSC [b] to PA, allowing free estimates of the effects of SSC in each group	863.797	559	5.956	1	.015
4	As model 1, release the path from PSC [c] to PA, allowing free estimates of the effects of PSC in each group	869.732	559	0.021	1	.885
5	Final model, release the paths from FSC & SSC to PA, allowing free estimates of the effects of both FSC and SSC in each group	861.911	558			

a. FSC refers to family social capital
b. SSC refers to school social capital
c. PSC refers to peer social capital
d. PA refers to psychosocial adjustment

Table 4 Standardized Direct, Indirect, and Total Effects of Major Predictor Variables on Children's Psychosocial Adjustment

Major Predictor Variables	Psychosocial Adjustment					
	Low CSC* Group			High CSC* Group		
	Direct	Indirect	Total	Direct	Indirect	Total
Family Social Capital	.212	-	.212	.385	-	.385
School Social Capital	.462	-	.462	.374	-	.374
Peer Social Capital	.179	-	.179	.154	-	.154
Family Human Capital	.051	.033	.084	.043	.047	.090
Family Financial Capital	-.003	.050	.047	-.002	.074	.072
Gender	.021	.112	.133	.018	.122	.140
Age	.029	-.129	-.100	.022	-.114	-.092
School Type	.035	.248	.283	.028	.242	.270

* CSC refers to community social capital

Figure 1 Hypothesized Model of Social Capital Effects on the Psychosocial Adjustment of Chinese Migrant Children

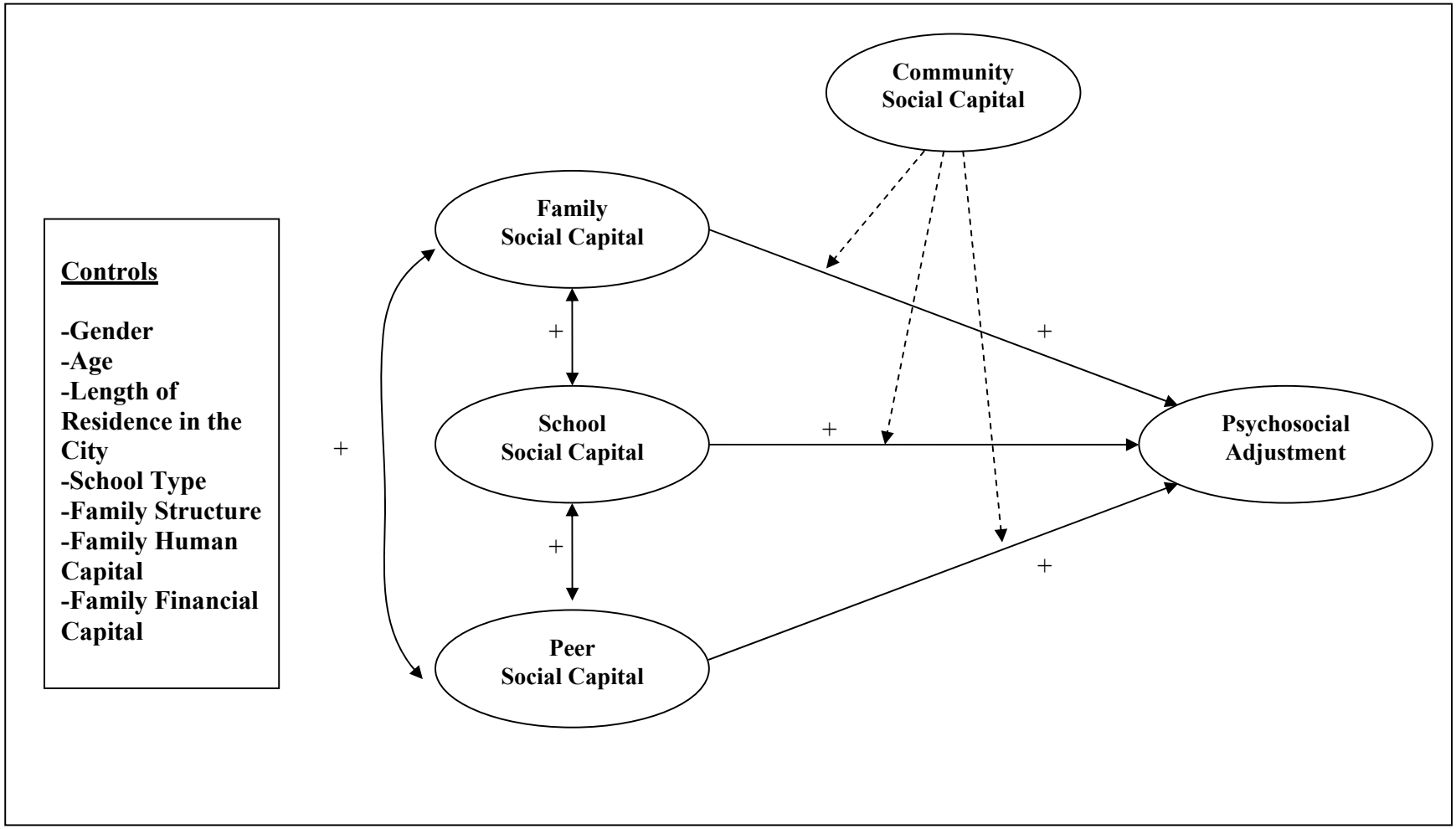
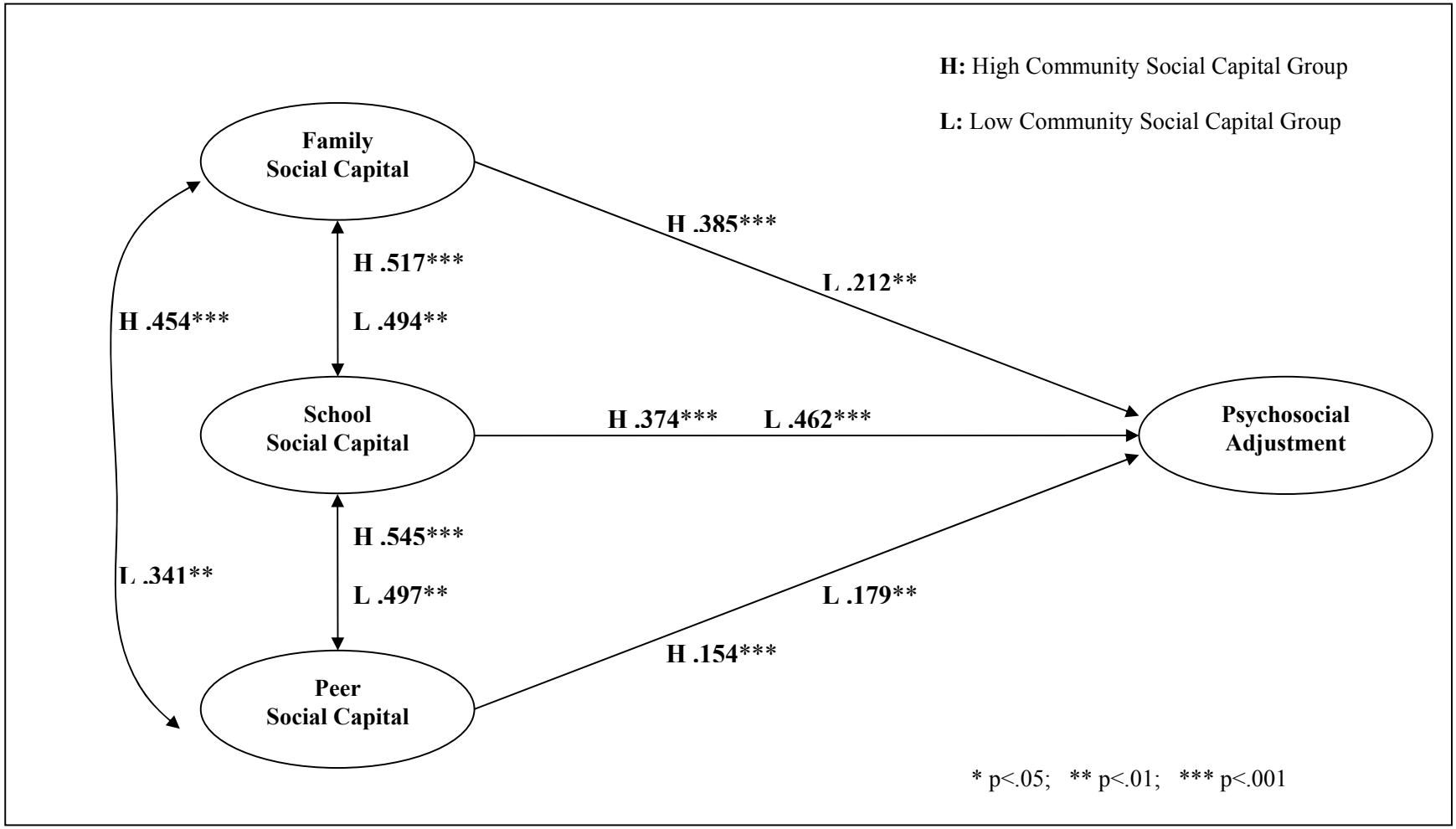


Figure 2 Standardized Solutions for the Multi-Group Structural Model of Social Capital Effects on the Psychosocial Adjustment of Chinese Migrant Children: Community Social Capital as Moderator



Appendix: List of Constructs and Measurements*

Construct	Measure	Variable	Response Scale	α
Psychosocial Adjustment	Self-Esteem	Rosenberg Self-Esteem Scale (10 items) (e.g., "I feel that I have a number of good qualities")	4-point scale ranging from "not true at all" (1) to "very true" (4)	.671
	Depression	Center for Epidemiological Studies Depression Scale for Children (20 items) (e.g., "I felt down and unhappy")	4-point scale ranging from "not at all" (1) to "a lot" (4)	.827
	Hostility	Hostility subscale adapted from the Aggression Questionnaire (8 items) (e.g., "I am suspicious of overly friendly strangers")	5-point Likert scale ranging from "extremely uncharacteristic of me" (1) to "extremely characteristic of me" (5)	.824
	Life Satisfaction	Satisfaction with Life Scale (5 items) (e.g., "I am satisfied with my life")	7-point scale ranging from "strongly disagree" (1) to "strongly agree" (7)	.832
Family Social Capital (FSC)	Parent-Child Relationship Inventory	Experience of things that parents are supposed to do for children (8 items) (e.g., "My parent pays attention to me") (PCRI-1)	5-point Likert scale ranging from "never (1)" to "always (5)"	.749
		Experience of things that children are supposed to do for parents (9 items) (e.g., "I do chores for my parent") (PCRI-2)		.740
		Experience of things that parents and children are supposed to do together (8 items) (e.g., "My parent and I play together") (PCRI-3)		.756
		Experience of feelings that parents and children should have for each other and the way they behave with each other (15 items) (e.g., "My parent and I trust each other") (PCRI-4)		.927
	Parental Monitoring	Parental monitoring of children's school activities and home discipline (8 items) (e.g., "How often do you talk with the teach about your child's school performance") (PM-1)	4-point scale ranging from "never (1)" to "often (4)"	.620
		Parents' knowledge of children's whereabouts (4 items) (e.g., "When your child is not home after school, how often do you know where he/she is?) (PM-2)	5-point Likert scale ranging from "never (1)" to "always (5)"	.800

School Social Capital (SSC)	Inventory of School Climate	Multiple dimensions of school climate including consistency and clarity of rules, teacher support, student commitment and achievement orientation, safety, etc. (10 items) (e.g., "Teachers go out of their way to help students")	5-point Likert scale ranging from "not true at all (1)" to "very true (5)"	.698
	Student-Teacher Relationships	Students' experience of relationships with teachers (7 items) (e.g., "The teachers are interested in me")	5-point Likert scale ranging from "not true at all (1)" to "very true (5)"	.857
Peer Social Capital (PSC)	Friendship Qualities Scale	Companionship (4 items) (e.g., "My friends and I spent all our free time together")	5-point Likert scale ranging from "not true at all (1)" to "very true (5)"	.779
		Conflict (4 items) (e.g., "I can get into fight with my friend")		.747
		Help/aid (5 items) (e.g., "my friend would help me if I needed it")		.753
		Security (5 items) (e.g., "If I have a problem at school or at home, I can talk to my friend about it")		.655
		Closeness (5 items) (e.g., "I feel happy when I am with my friend")		.790
Community Social Capital (CSC)	Social Cohesion & Trust	Bonds and trust among adults in the neighborhood (5 items) (e.g., "People in this neighborhood help each other out") (SC & T-A)	5-point Likert scale ranging from "extremely uncharacteristic (1)" to "extremely characteristic (5)"	.631
		Bonds and trust among children in the neighborhood (7 items) (e.g., "Children in this neighborhood play together a lot") (SC & T-C)		.635
	Informal Social Control	Ability and willingness of neighborhood adults to provide monitoring and social control for children in the neighborhood (5 items) (e.g., "We watch out for each other's children in this neighborhood") (ISC)		.769
	Solidarity	Feeling of togetherness with neighbors (single item)	5-point scale ranging from "very weak (1)" to "very strong (5)"	
		Sense of belonging to the neighborhood (single item)		

*Note: Measures of psychosocial adjustment, family social capital, school social capital, and peer social capital are based on children's report; measures of community social capital are based on parents' report.