Impact of parental migration on the psychosocial wellbeing of left-behind children in two Chinese provinces: individual experiences, family characteristics, and community contexts

Chenyue Zhao

Institute of Global Health, University College London

Supervisor: Prof. Therese Hesketh

A thesis submitted for the degree of Doctor of Philosophy

February 2017
Declaration

I, Chenyue Zhao, declare that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.
Abstract

**Background:** In many countries, large numbers of left-behind children (LBC) grow up experiencing prolonged separation from their migrant worker parents. In China, the wellbeing of 60 million LBC has become a significant challenge for families, communities, and the society. This thesis aimed to investigate the impact mechanisms of parental migration on the psychosocial wellbeing of LBC.

**Methods:** Children were recruited from migrant-sending rural areas in Zhejiang and Guizhou provinces. A qualitative study investigated the experiences of children and perceptions of family members in relation to child psychosocial wellbeing under the impact of parental migration, as well as the interrelated factors in the family and social environments and the mechanisms through which they affect LBC. A quantitative study measured children’s psychosocial strengths and difficulties and the family and social factors, with a self-administered questionnaire, and examined the effects of both current and previous parental migration, and potential causal mechanisms involving different covariates in multiple linear regression models.

**Findings:** Qualitative findings showed that lengthy separation poses considerable difficulties on many children’s psychosocial wellbeing, especially emotional distress, primarily through disrupted attachment relationships. These effects may not be easily restored even if migrant parents permanently returned home. The
psychosocial support (and lack of) from the co-resident family, as well as factors regarding school performance and community cohesion, also modify or intensify the child wellbeing outcomes under the impact of parents’ absence. Quantitative results indicated that both current and previous parental migration was independently associated with adverse outcomes, especially the emotional and social dimensions of child psychosocial wellbeing. Relationship between nuclear family members, care arrangements, and availability of support in family and social environments seem to be important covariates in the causal mechanisms. Parental divorce and lack of support may particularly exacerbate children’s psychosocial difficulties.

**Discussion:** Parental migration has a long-lasting adverse effect on children’s psychosocial wellbeing, especially emotional functioning. Positive parent-child relationship bonds and supportive family and social environments are crucial determinants of the wellbeing of LBC, rather than socioeconomic status. Community based programs may be developed to provide additional care and support.
Acknowledgements

I would first and foremost like to thank my primary supervisor Prof. Therese Hesketh who provided essential guidance and support throughout my PhD project. I am also very grateful to my secondary supervisor Dr Leah Li for the insightful help with the quantitative analysis chapter.

There are many people in China without whom this research would have been impossible. Thanks to the project team at Zhejiang University for enabling me to conduct this study, and to Kaihua Women’s Federation for the local support from many of its staff members. Thanks also to the study participants in Zhejiang and Guizhou for sharing their time and often personal experiences. Special thanks to Kaihua Women’s Federation for the crucial local support from many of its staff members.

Also, very deep thanks to the friends who have motivated and inspired me throughout my PhD, in particular Jin Xu and Henry Li, because of whom I never really felt alone on this bittersweet journey.

Finally, thanks to my parents and my girlfriend, who supported me unconditionally along the way. And thanks to my grandfather, who I was unable to spend more time with during his last years, who taught me so much in becoming a person I am, and would have been so proud of me.
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Chapter 1  Introduction

1.1 Scale of migration and LBC populations globally

Over the past few decades, unprecedented migration flows in many parts of the world have had profound impacts on family structures and the home communities of migrants (Lam et al., 2013). In 2013, 232 million people – 3.2% of the world’s population – lived outside their country of origin (United Nations, 2013). An even higher number - an estimated 763 million people - are living within their own country but outside their region of birth (United Nations, 2013). Despite that families may be able to migrate together, the population movements often lead to separation between household members, with a variety of implications on both sides of families living apart: the migrants away from home (abroad or in another part of the country), and the left-behind family members in their hometown. In particular, such separation is perhaps most concerning when it involves children left by one or both migrant parents, in the care of other caregivers (Asis, 2006).

In most developed countries, the term “left behind-children” is used to describe children who fall behind in wellbeing, mainly relating to material wellbeing, education and health. To clarify, in this thesis, “left behind-children” (LBC) refers to children who experience prolonged separation from their migrant worker parent(s). The number of LBC is high in many low- and middle- income countries,
where an increasing number of parents have joined the global movement of workers responding to labor shortages in wealthier regions (Graham & Jordan, 2011).

For instance, overseas working, including a large number of female migrant workers, is particularly common in some Southeast Asian countries. A review by Bryant (2005) focusing on three Southeast Asian countries estimated that, there were three to six million children in the Philippines left behind by parents working overseas, approximately one million such children in Indonesia, and half a million in Thailand.

Enormous immigration flows from Latin America to the United States also resulted in great challenges of the left-behind families. Nobles (2013) reported that more than 20% of children in Mexico experience a father’s migration by the age of 15. A UNICEF (2007) report suggested that in Ecuador, between 1990 and 2005, the number of LBC has risen from 17,000 to 218,000.

Eastern Europe is another high out-migration area, both from within and outside of the European Union, to the Western high-income countries. In Romania, a study (Botezat & Pfeiffer, 2014) reported an estimated 350,000 children (over 8% of the child population) were living in a migrant family, and nearly 400,000 children had at some point one or both parents working abroad. In Moldova, it was estimated that 22% of all children aged 0-14 had one or both parents abroad (UNICEF, 2011).
Despite a lack of reports from African countries on the number of LBC, the scale of migration to western countries and within the continent or the country has also been significant. The World Bank’s (2016) report indicated that international migrants from Sub-Saharan Africa totaled 23.2 million, of whom 26% were living in OECD countries and 65.6% were living within the region, which inevitably lead to a large number of children left behind at home.

While overseas migration is now a common phenomenon in many parts of the world, it is possible that even more people are migrating within their own countries, primarily from rural to urban areas. More than half of the world’s population now lives in urban areas (United Nations, 2014), not least due to the rapid urbanization in Asia and Africa.

In China, uneven socioeconomic development is encouraging migration flows to the cities for better job opportunities; the massive rural-urban migration has driven the number of children left behind in rural China up to 61 million, accounting for 38% of children in rural areas and 22% of all children in the country (All-China Women’s Federation, 2013). An estimated 29 million LBC live with neither parent, and over 2 million live alone (All-China Women’s Federation, 2013).
1.2 Contexts of migration and parent-child separation

Globalization in the past few decades has resulted in an overwhelming trend toward technological and social integration (Prempeh et al., 2004), which has affected global migration patterns. The generally restrictive stance towards immigration in developed countries now coexists with a strong demand for certain categories of migrant worker, for instance in domestic service and agriculture. Meanwhile, in the developing world, the recent urbanization in the emerging countries like China has attracted tremendous migration flows into the cities (Wu, 2007). Since the reform and opening up policy in the late 1970s, China has witnessed rapid economic growth and massive urban development. The process of industrialization has accelerated rural reforms in China, increased agricultural productivity and freed agricultural labor. As a consequence, large numbers of former rural laborers have headed into more urbanized areas, looking for better employment opportunities and sources of income. Therefore, since mid-1980s, China has witnessed what some scholars described as the largest peacetime population movement in world history (Roberts, 2002).

People migrate across countries, or within a country from rural to urban areas, mostly driven by the potential for improved economic circumstances and better opportunities for human development (UNICEF, 2006). Although such incentives used to be viewed on individual basis, now it is nearly impossible not to consider the fundamental role played by the family. Hence, household migration is typically
considered a livelihood strategy that is taken up due to economic deficiencies of the family (Laudy & Stark, 1988; Stark & Lucas, 1988).

However, due to stringent entry policies, financial constraints, and limited access to public goods in the destination (Valtolina & Colombo, 2012), in many cases family members are unable to migrate together. Consequently, hundreds of millions of children around the world are being left behind by their migrant parents, many of whom are lower-skilled workers from developing countries (Yeoh & Lam, 2006). In particular, migrant workers at the lower end of the socio-economic spectrum often have little or no possibility of family reunification in destination countries, resulting in their long-term separation from left-behind family members.

Labor migrants from Southeast Asia typically take up short-term contracts in the wealthier counties of the region and beyond, be they women working as domestic servants or men employed at sea or in construction. Their limited rights of residence in host countries make it legally or practically impossible to bring a family. Millions of Latin Americans in the US and in Europe are unable to bring their children because the parents are undocumented immigrants; even legally resident migrants often face bureaucratic and financial obstacles to family reunification, which can result in years of unwanted separation (Carling et al., 2012). China’s urban local public resource distribution and management system poses formidable obstacles for rural-to-urban migrants accessing public goods like
primary education and medical care. Also, rural laborers have lower pay, more crowded living conditions, and more physically demanding jobs. This has resulted in the majority of migrant workers having no choice but to leave their children living in rural hometowns. Leaving children behind has become a common phenomenon not only for low-income families but also across the socio-economic spectrum in rural China (He et al., 2012)

1.3 Care environment of left-behind children

Care is defined by Standing (2001) as the act of seeing to a person’s “physical, psychological, emotional and developmental needs”. As children’s wellbeing comprises a variety of elements, the impact from parental absence and effects of different characteristics of the care environment are complex. In general, standards of living should rise in households that receive remittances from family migrant laborers (Sofranko & Idris, 1999). However, evidence has indicated that parental migration affects child wellbeing through a trade-off between increased family income and disrupted parental care (Valtolina & Colombo, 2012). The quality of substitute care arrangements is an important factor determining the degree to which parental absence impacts the care, stimulation and supervision of children (Parreñas, 2008).

For the families where one or both migrant parents live apart from the family, children left-behind are usually left in the hometown to be raised by a caregiver,
who may be the other parent, an extended family member, or in some cases a non-kin related person. While in many countries it was traditionally the father who would leave and become the breadwinner of the family, now it is increasingly frequent that the mother also migrates, separately or together with the father. Regardless of the migration pattern of the family, in fulfilling child care responsibilities, caregivers are faced with numerous challenges, including inadequate support, social stigma, isolation, disrupted leisure and retirement plans, age-related adversities, anger toward the custodial children and financial difficulties (Butler & Zakari, 2005; Daly & Glenwick, 2000; Whitley et al., 2001).

Asian care regimes remain strongly ‘familistic’, that is, families have the principal responsibility for their members’ welfare, be it in terms of sharing incomes or providing care to those in need (Esping-Andersen, 2000). Unlike western countries, organization of care in many parts of Asia does not heavily reply on the state, market or even community. The concept of family care in many Asian cultures, from high-income to low-income settings, involves active roles of extended family members, especially grandparents (Ochiai, 2009). In Southeast Asia, the extended family adults has been found to have major influence over all aspects of migration including participating in the migration decision, funding the trip and taking care of left-behind children, thereby mitigating the social costs of migration (Bryant, 2005). Meanwhile in China where the family care culture is largely similar, research also suggested that intensive grandchildren care, albeit a common
practice, can be beyond the defined obligations of grandparents and considered more a favor than a formal obligation (Cong & Silverstein, 2011).

China’s “One Child Policy” created a unique impact on family structures. The enforcement of One Child Policy, despite the more relaxed variations of it in certain areas of the country, has been found to be a risk factor for a series of emotional and behavioral problems, based on data from economics experiments conducted with groups of individuals born just before and just after the policy’s introduction in 1979 (Cameron et al., 2013). A high proportion of single child families in relatively underdeveloped areas in rural China should be considered an important characteristic of LBC’s care environment. As rapid economic growth created more human development opportunities in China, those who are the only child may bear higher expectations from the family, but receive less support and be more vulnerable to psychosocial challenges once setbacks take place in their lives (Wang & Guo, 2010).

What children receive from their migrant parents can be broadly categorized into two groups: economic resources and socio-cultural orientations (McLanahan & Sandefur, 1994). Additional financial resources from remittances sent by migrant parents can be used to facilitate child development, including investment in education and the living environment. Assets such as good housing condition, adequate food and nutrition, high quality school and neighborhood, and additional opportunities for skill building, are crucial in promoting child development (Wen,
Remittances have been shown to have a positive effect on nutrition and general health (Constant & Zimmermann, 2013). On the other hand, LBC can benefit from new information and ideas in a more developed urban setting, that are transmitted by their parents and which have been termed “social remittances” (Levitt, 1998). Migrant parents may represent an advanced modern lifestyle that the child could live up to, and provide aspirations of pursuing success in life (Pribilsky 2001).

1.4 Policies to safeguard the wellbeing of LBC

Whether labor migration is an effective long-term poverty alleviation strategy, at both household and national levels, is still a debated issue (Adams & Page, 2005). Although migration was driven by economic incentives, the increase in disposable income and material resources are not guaranteed in the left-behind family members. Particularly, children are vulnerable to the economic shocks and instability in the migrant receiving areas (Janson, 2014). For example, in China, partly because of the preference for investing in new housing rather than in private saving schemes, very few migrant families have liquid assets (Janson, 2014). Consequently, the uncertainty in economic benefits from remittances is rather significant.

This lack of economic security requires targeted policy and intervention from local governments as well as nongovernmental organizations. Corporate social
responsibility from the enterprises where the parents are working should also be 
strengthened, in addition to providing basic employee benefits. Decent housing, 
accessible preschools and schools are among the essential conditions to enable 
families to bring their children with them.

While policy makers and academics have become increasingly aware of the 
economic role of migration, less attention has been paid to the psychosocial 
ramifications for left behind family members (da la Garza, 2010). Yet a number of 
studies have indicated the disadvantages in a variety of measures of psychosocial 
wellbeing, including depression, anxiety, loneliness, and quality of life (see the 
literature review chapter).

In China, the increasing evidence about the social and developmental costs of 
migration, led several central government agencies to jointly call on local 
authorities to prioritize improvements in the education and care of LBC 
(Government of China, 2013) in order to mitigate the adverse effects of parental 
absence. Most recently in February 2016, the State Council of China issued a set of 
guidelines calling for the establishment of an enhanced system that engages 
families, governments, schools and social groups in providing better care and 
protection to “left-behind children” (State Council, 2016). A rescue mechanism 
that includes intervention measures such as mandatory reporting, crisis 
management and assistance evaluation will prevent infringements on the rights of 
these children. The guidelines encourage governments to contract charities and
voluntary bodies to provide professional services, including mechanisms of compulsory reporting, intervention, assessment and help. These organizations must report cases that involve injury, abuse or other harm to the appropriate authority and intervene as soon as possible.

The guidelines also lay out measures to gradually decrease the number of left-behind children. The government will provide more assistance such as granting families of migrant workers urban citizenship or subsidies in housing or education. Rural migrant workers are also encouraged to return to their hometowns and start their own businesses. It is expected that, by 2020, China will improve laws and regulations regarding child protection, and create a safer environment for children to grow up especially in rural areas.

In some other countries, the government has also taken measures to safeguard the wellbeing of LBC. For example, Romania issued a Governmental Ordinance in 2006, soliciting parents to inform authorities of their leaving intentions, and register a guardian, in order to monitor the LBC especially those “at risk”, raise awareness and provide pertinent services. However the implementation of the Ordinance soon became ineffective. Then a new regulation was issued in 2009, as a law obliging migrant parents to nominate a guardian meeting several criteria (a relative with at least the minimum income guaranteed and at least 18 years older than the child to be cared for, full physical and psychological capacity, no disabling conditions or previous parenting convictions, no more than three other children in
care). There are substantial fines for parents breaking the law. Monthly monitoring visits by the social workers, with the ultimate responsibility for child replacement in state care, are stipulated (Pantea, 2012).

Even though Romania has a broad scheme of social assistance provisions and services (Cerami, 2006) especially for children, the high pressure from parental migration has found the system unprepared. Some deprived migrant-sending communities in the east have the poorest resources for assistance and interventions. Moreover, local authorities may have the assumption that migrant families develop their own internal arrangements and thus, relieve the state of its role (Luca, 2007).

1.5 Programs to improve the wellbeing of LBC

Despite the tremendous challenges faced by the left-behind families and the migrant sending communities globally, only few specific policies and programs that address the wellbeing of LBC have been reported.

In China, despite the government’s advocacy and constant efforts, very few systematic care and support programs for rural LBC are being implemented in the field, partly because the non-profit sector in China is under many political and administrative constraints. UNICEF China has reported on preliminary achievements of a “Child Welfare Directors” program in a few provinces, which
recruits grassroots social workers to bridge service gaps for vulnerable children, especially LBC (UNICEF, 2014a). Yet this approach does not provide essential, concrete services to children other than connecting them with available resources and institutions. Neither does it have a physical space as a community level platform.

Very few programs targeting LBC were reported in other countries as well. One program (Givaudan & Pick, 2013) was carried out in Mexico, by the Mexican Institute of Family and Population Research (IMIFAP). IMIFAP has established a number of Community Child Development Centers (CCDCs) that focus on mitigating the negative effects of parental migration, in the rural areas of two Mexican states. Based at these Centers, a broad life skills training program (e.g., cognitive-problem solving, expression and management of emotions, social-conflict resolution) is conducted, targeting LBC and volunteer community promoters/caregivers of children under 12 years old.

The program has been successful in training promoters who in turn have become change agents in their localities. Migrant parents, as well as caregivers such as grandmothers, relatives, and neighbors, accepted the program and reported changes in the perception of their roles in the caring and development of the babies. Positive behavioral changes were also found as they attach more importance to health and nutrition issues.
1.6 Research question and study aims

In light of the backgrounds of the LBC issues, with a specific focus on families affected by rural-to-urban migration, an extensive literature review was conducted which identified a few major gaps. First, longer-term impact of parental migration on children was seldom explored, as only very few studies indicated the lasting effects after migrant parents returned. Second, the relationship quality and dynamics remained unclear in LBC’s family, especially between migrant parents and their children. Third, how the left-behind family and their social environments provide care and support to children has not been comprehensively assessed.

This thesis aimed to answer this overarching research question: what are the impact mechanisms of parental migration on children's psychosocial wellbeing? In the current qualitative and quantitative studies, this was to be addressed by exploring how parental migration may affect psychosocial wellbeing of children over a lengthy period of time, and what are the roles of parent-child relationship, family care and social environment, in the mechanisms or potential causal pathways that connect parental migration with child psychosocial wellbeing status.

1.7 Thesis structure
Chapter 2 provides an overview of theoretical perspectives that are relevant to the mechanisms of parental migration and its impact on children. Chapter 3 is a comprehensive review of both quantitative and qualitative studies on the wellbeing of LBC. Chapter 4 introduces the socioeconomic development, and policy and administration contexts of the study areas. Chapter 5 is a qualitative study examining experiences of children, and relationships, care and support in the families living apart, through in-depth interviews carried out in one study county. Chapter 6 is a quantitative cross-sectional survey investigating psychosocial wellbeing outcomes and child and family characteristics, based on a sample of five counties in two Chinese provinces. Chapter 7 is the final discussion and conclusion based on findings across both qualitative and quantitative studies in this thesis.
Chapter 2  Review of Theoretical Perspectives

2.1 Introduction

This chapter reviews theories that are related to child wellbeing in migrant families from multiple disciplines. According to the overall research question of this thesis, migration in the society, family characteristics, and child wellbeing are the three logical levels or dimensions that are involved in the causal pathways and mechanisms when examining the psychosocial wellbeing of LBC. Connections and interactions between these dimensions are also suggested in the interdisciplinary theoretical approaches. The reviewed theories will be summarized at the end of this Chapter, with reference to the aims of this thesis. Links between the theoretical review and the following chapters, including the empirical review as well as the current studies, will also be highlighted.

2.1 Migration theories

2.1.1 The push-pull models

The earliest migration theorists concluded that migration was governed by a "push-pull" process (Dorigo & Tobler, 1983). This simple model conceives of migration as driven by a set of push factors operating from the region or country of origin (poverty, unemployment, landlessness, rapid population growth, political
repression, low social status, poor marriage prospects etc.), and pull factors operating from the place or country of destination (better income and job prospects, better education and welfare systems, land to settle and farm, good environmental and living conditions, political freedom etc.).

Ravenstein's 1889 "Laws of Migration" stated that the primary cause for migration was better external economic opportunities; the volume of migration decreases as distance increases; migration occurs in stages instead of one long move; population movements are bilateral; and migration differentials (e.g., gender, social class, age) influence a person's mobility.

Many theorists developed variations of Ravenstein's conclusions in the later migration theories. Everett Lee (1966) reformulated Ravenstein's theory to give more emphasis to internal (or push) factors. Lee introduced a set of “intervening obstacles” which have to be overcome; examples include physical distance, cost of making the journey, cultural barriers such as language and different ways of life, and political obstacles such as international borders and immigration restrictions. Personal factors also play a role in Lee’s theorization of migration: different people will react differently to various combinations of pushes and pulls, according to their economic status, life-stage and personality. For example, a single, unemployed young adult will respond more directly to job and income factors and be less concerned about the education system of a destination, as compared to someone who is migrating with their children.
2.1.2 Neoclassical economics theory

The push-pull models dominated much migration thinking during the mid-twentieth century, until the 1960s if not later. Many of the migration paradigms are then reflected in the neoclassical economics theory, which is based on principles of utility maximisation, rational choice, factor-price differentials between regions and countries, and labor mobility. Migration can be assumed as a rational choice within the broader social structures of rural-urban and developmental inequalities, that is, abundant capital, labor shortages and high wages in certain countries or urban areas, and the opposite in other countries or rural areas (Massey et al., 1999).

Macroeconomically, neoclassical economics suggests that international migration is related to the global supply and demand for labor (Sjaastad 1962; Todaro 1969). Nations with scarce labor supply and high demand will have high wages that pull immigrants in from nations with a surplus of labor. At the micro level, migration is the result of decisions made by individual “rational actors” who weigh up the pros and cons of moving relative to staying, or the returns against the investment to the human capital of the individual, based on abundant information about the options. Sjaastad (1962) interpreted the results of this cost-benefit calculus as a decision to migrate based on returns to the individual’s investment in his or her human capital.
2.1.3 *Household economics theory*

Yet most of these previous theories had left out the household context of migration. Migration decisions may not be individually made, but are likely to be jointly taken within the ambit of the household, and for different members of the household (King, 2012). Sometimes the scale of the decision-making unit moves further into the extended families and even wider communal groups (Massey et al., 1998); this is particular relevant in a familist and collectivist culture, for example, the traditions in rural China.

Hence, the new household economics theory shifts the decision-making from the individual and argues that the appropriate units of analysis for migration research are families and households (Stark & Bloom, 1985). A key insight of this new approach is that migration decisions are not made by isolated individual actors, but by larger units of related people – typically families or households – in which people act collectively not only to maximize expected income, but also to minimize risks and to loosen constraints associated with a variety of market failures, apart from those in the labor market (Massey, 1998).

It has been argued that especially within the context of developing countries, an individual is motivated to move not only for his/her own goals but also for the survival of the household (Lauby & Stark, 1988). The perspective of the new
household economics becomes especially relevant in these contexts, because poor families in developing countries lack institutional mechanisms of private insurance markets and governmental programs that minimize household risks, which are more common in many developed countries. Thus, there is the incentive to self-insure by sending one or more family members to a city or abroad to remit earnings that guarantees family income and reduces risks incurred through crop failures, crop price fluctuations, and unemployment (Massey et al., 1998). A large proportion of rural-urban migrants in developing countries remit a significant part of their earnings to the left-behind family members at home, thereby reducing the income variance associated with work in agriculture (Lauby & Stark, 1988).

2.1.4 Segmented labor-market and world systems theory

In addition, from a more global perspective, segmented labor-market theory (Piore, 1983) argues that First World economies are structured so as to require a certain level of immigration, primarily driven by pull, not push factors. This theory suggests that developed economies are dualistic: a primary labor market of secure, well-paid jobs for native workers; and a secondary labor market of low-skill, low-wage, insecure and generally unpleasant jobs in factories and the service sector, filled mainly by migrant workers. To the extent that the secondary labor market may be split into employment subsections according to gender, race or nationality, it becomes segmented. On the whole, the creation of these jobs precedes the migrants who fill them (Samers, 2010). Similarly, world-systems
theory (Sassen, 1988) argues that international migration is a by-product of global
capitalism. Contemporary patterns of international migration tend to be from the
periphery (poor nations) to the core (rich nations) because factors associated with
industrial development in the First World generated structural economic problems,
and thus push factors, in the Third World.

2.2 Theories in family studies

2.2.1 Family Stress Management

The global and societal migration patterns are the larger contexts of the processes
in which individual families are involved. Migration not only involves economic
activities, but also affects family structure and functioning. Absence of the father
and/or mother has direct impact on their relationships and interactions with
household members, especially their children. Additional caregiving roles of
resident caregivers, e.g. grandparents, may further affect dynamics within the
nuclear and extended families across geographical distance. Therefore, migrant
parents and the left-behind family members comprise a family system, which may
be conceptualized as a unit that manages loss or absence, throughout a range of
relationships with children, parents, as well as grandparents or other caregivers.

Besides physical separation due to migration, various stressors within the family
network may interfere with the parent-child dyads and their relationship
dynamics that promote child development (Sroufe, et al, 2005; Murray & Murray,
Family stress is a process of family change rather than simply an event or situation that happens in or to a family (Boss, 2002, p.12; Walker, 1985). In this process, family coping was defined as the group's management of the stressful event or situation (McCubbin, 1979). Boss (2002, p.79) contended that a family as a group is not coping functionally if even one member manifests distress symptoms, thus the exploration of both individual and group indicators is essential in assessing family coping. Building on Lazarus's (1966, 1976, 1977) work on individual coping, Boss (2002, p.79) developed the concept of family coping as the cognitive, affective, and behavioral process by which individuals and their family system as a whole manage a stressful event or situation. It is noteworthy that while economic resource is beneficial, it is not a predominant factor in this process, which is more relevant to the overall functioning of the family and its members in the psychosocial dimension.

Coping behaviors are defined by Lazarus (1966, 1976) as (a) direct action behaviors that are used to change a stressed relation with one's physical or social environment and (b) intrapsychic forms of coping, which are defense mechanisms (e.g., detachment or denial) used to reduce emotional arousal. The actions and thoughts cannot change the source of the stress, and thus are referred to as emotion-focused coping. Such coping behaviors can often be identified in migrant families, both among children and adult family members. For example, children may tend to seek emotional support from their peers or playmates in absence of migrant parents; or they may try to rationalize the separation distress through an
understanding of the overall household benefits from migration.

Families can also use problem-focused coping to master or manage a stressor and provide child development support (Lazarus, 1976; Papalia et al., 2001). The initial decision to migrate can actually be regarded as coping with family economic stressors. Then another scenario may be that migrant parents move back home or bring their children to live together in the cities, to resolve the stress due to separation.

Attachment theory contributes to elucidating the cognitive-emotional process in dyads of parents and school-age children (to be further discussed in section 2.3), as attachment styles in young children tend to persist over time (Ainsworth et al., 1978, p320; Main, 1996). Yet attachment behaviors are referred to less frequently during adolescence, when the balance of attachment and exploratory behaviors shifts towards more independence, especially in the physical absence of the parents (Allen, 2008, p419). As a result, theories in coping behaviors, which can be applied both at individual and family levels, may be better suited in explaining the behavioral consequence and family support for older left-behind children.

2.2.2 Family Context

Family context is also critical in understanding the process of stress management. Boss (2002, p15) developed her Contextual Model of Family Stress by
surrounding Hill’s (1949, 1958) ABC-X Family Stress Model (Figure 2.1). In addition to stress event (A), resources (B), perceptions (C), and degree of stress or crisis (X), she proposed three internal and five external contexts that would influence how a family’s stress process plays out over time.

The internal contexts include (a) structural, (b) psychological, and (c) philosophical dimensions of the family system itself (Boss, 2002, p45). The structure of migrant families involves family composition as well as caregiving arrangements. Psychological context may refer to the migrant family’s inherent mechanisms in perception, appraisal, definition, or assessment of separation and loss. Philosophical context indicates values and beliefs at the microlevel family environment that may differ from the social culture, for example, decision-making on returning to the migrant-sending community from a city, in consideration of child education and development.

The five external contexts are components over which the family has no control and yet in which they are firmly embedded: (a) heredity, (b) development, (c) economy, (d) history, and (e) culture (Boss, 2002, p69). Hence, the migratory decisions and family coping strategies are shaped by the specific characteristics of the migrant-sending community as well as the destination cities, since supportive or restraining factors at community level may directly affect family environment. Meanwhile, historical and cultural determinants in the country and globally that are related to migrant families also need to be considered as crucial external
contexts.

Figure 2.1: The ABC-X Contextual Model of family stress (Boss, 2002)

2.2.3 Socio-ecological approach and family systems theory

The socio-ecological model on human development (Bronfenbrenner, 1979) underscores the fact that families are embedded in larger social systems which the child may not seem to directly function in, but may nonetheless be highly influential. Therefore the entire ecological system in which child growth and development occurs needs to be taken into account. The five layers of ecological system (Figure 2.2) include many extra-familial factors, such as community settings, local politics, the workplace, and the sociocultural context.
Later development of the original framework presented multiple dimensions, as a Process–Person–Context–Time model (Bronfenbrenner & Morris, 1998).

According to the revised model, human development takes place through processes of progressively more complex reciprocal interactions in its immediate family environment, on a fairly regular basis over extended periods of time.

Further, the form, power and content and direction of such processes vary systematically, as a joint function of the characteristics of the developing person and both immediate and more remote environment. The perspective of these
processes is adapted in this thesis when investigating the connections between different variables of the context, individual characteristics and outcomes of interest.

Children’s attachments to particular caregivers influence, and are shaped by, the broader family context. Family system theory is concerned with family dynamics, involving structures, roles, communication patterns, boundaries, and power relations. It is relatively more focused on adults and current family functioning (Rothbaum et al., 2002). While family system theory recognizes that coparenting dynamics are distinguishable from dyadic parent-child relationship (Erdman & Caffery, 2013, p43), the surrogate parenting by grandparents, accompanied by distant parenting of migrant parents, creates a more complex interaction pattern involving a variety of factors, within and outside family systems.

2.3 Attachment Theory

2.3.1 The earliest attachment

Current literature in family studies and child psychology draw on attachment theory to understand the links between child psychological health and parental absence or presence, through the lens of children’s relationships with parents and/or resident caregivers. Bowlby (1969) indicated that the earliest bonds formed by children with their caregivers have a profound impact throughout life.
The initial attachment a child forms is generally to its mother or other habitual caregiver, although it may be supplemented over time by attachments to other persons (Ainsworth, 1969; Bowlby, 1982, p40). The actual or threatened disruption of attachments, also known as the “strange situation”, can lead a child to experience depression, anxiety, or anger when proximity cannot be maintained (Ainsworth et al., 1978, p 116).

The caregiver or attachment figure provides a secure base for infants and children, from which they explore the environment, form other secure relationships, seek support when needed, and draw strengths from the support (Ainsworth et al., 1978, p135). Young children tend to form attachment relationships with more than one caregiver (Ainsworth, 1969; Schaffer & Emerson, 1964). However the principal attachment figure plays the most important role in a child's emotional wellbeing (Bowlby, 1980, p308). Children develop expectations, or “internal working models”, of the caregiver’s availability and responsiveness based on their previous interactions (Bowlby, 1980, p81). As Juliet Hopkins (1990, p467) explained:

If a child has experienced reliably responsive caregiving, he/she will construct a working model of the self as competent and loveable, but if he/she has experienced much rebuff he/she will construct a model of the self as unworthy of help and comfort.
2.3.2 Development and disruption of attachment relationship

In very young children, attachments tend to be dependency relationships characterized by a drive to maintain physical proximity to a primary caregiver. With age, children continually revise and expand their internal working model as their cognitive, emotional, and social capacities increase, and as they interact with parents/caregivers, forming other close bonds with adults, siblings, and friends (Berk, 2012, p421). Building upon the internal working models, older children and adults continue to monitor the availability of attachment figures according to their actual behaviors (Bowlby, 1973, p52). This monitoring may occur increasingly through distant forms of communication as a young child grows up (Kobak & Madsen, 2008, p24), which later transforms into a drive to maintain symbolic proximity via less direct communication, such as through phone calls, as an individual matures (Vanore et al., 2015).

When lines of communication are disrupted by the attachment figures’ prolonged absence, emotional disengagement, or signals of rejection, older children can develop negative emotions similar to young children’s reactions to physical separation (Kobak & Madsen, 2008, p24). Interruptions in attachment relationships, or the development of unresponsive or unpredictable attachment relationships, shake the sense of security an individual derives from attachments (Armsden & Greenberg, 1987). Insecurely attached children are more likely to respond to loss or stress with dysfunctional thoughts and emotions (Kobak &
Madsen, 2008, p26; Sroufe et al., 1999). Consequently, migration of a caregiver, and the disruption to physical proximity it may bring, may cause significant psychological distress among recipients of care. Factors that contribute to attachment relationships include duration and quality of care, emotional investment, social cues, and presence of the caregiver (Colin, 1996; Cassidy, 2008, p15).

2.3.3 Migratory separation and attachment

Although attachment theory may apply to different types of parent-child separation, it is important to note the unique features of migratory separation and the limitations of the attachment-based interpretation, as compared to parental absence in other scenarios such as incarceration or ambiguous loss.

Separation due to economic migration is a phenomenon that emerged on an unprecedented scale only during the past few decades, and in most cases the migration is driven by parents’ desire to improve the circumstances and wellbeing for the whole family, particularly children (Rapoport & Docquier, 2006). Consequently, older children with increased cognitive understanding are unlikely to perceive the separation as intentional rejection and abandonment. During migration, open lines of communication and frequent reunion between migrants and their children are feasible with the help of modern technology and transportation, which may contribute to relieving the stress due to the prolonged
physical absence.

Most child and family psychology studies using attachment theory largely focused on the separation of parents from children owing to crisis events such as incarceration, death, or divorce (Mazzucato, 2014). These studies have found strong negative repercussions of parental loss for children’s emotional well-being, particularly in cases in which prolonged uncertainty about the permanence of loss or its cause (ambiguous loss) blocked appropriate coping and stress management, resulting in the deterioration of family life when tasks and roles were not reassigned (Carroll et al., 2007; Boss, 2004).

2.4 Summary

This chapter reviewed theoretical perspectives in relation to migration, family systems, and child-parent attachment, illustrating a preliminary framework structure that entails the systems or environments in which the child lives, from the macro-level society to the micro-level household. Although the conceptual framework needs to be further developed based on our empirical studies, existing theories have provided useful inputs from various perspectives of the mechanisms, between individual wellbeing status and the larger social phenomenon of migration.

The reviewed theories suggest that the core outcome to be investigated in our
studies, child psychosocial wellbeing, is determined by the relationships with parents and care from caregivers, which involves a complicated process shaped by the child’s various interactions with individuals and environments, during infancy to adolescence. As the left-behind child grows up, the wellbeing status and family conditions may also evolve over time, through a series of dynamics in the extended family. In the absence of migrant parents, the specific factors that may influence child wellbeing include family care arrangements and availability of psychosocial support, as well as household socioeconomic status. These aspects at family level are further affected by the corresponding factors in the larger social contexts, which contribute to the configuration of the family childcare strategies and migration processes. The specific community/society level factors include general migration patterns, community solidarity and resources, and overall socioeconomic status in migrant sending and receiving areas.

Factors and mechanisms illustrated in the theoretical review also help better organize the results of the empirical review in the next chapter, and interpret key variables in the quantitative and qualitative studies. The review of empirical literature will continue to develop the evidence base for this thesis, with a more close-up view of children and families affected by migration. By confirming relevant parts of the theories, the context-specific findings from the empirical evidence will also strengthen the interpretation of the results from our current studies.
Chapter 3  Review of Empirical Literature

3.1 Introduction and scope of the review

This chapter provides an extensive review of the empirical literature, including both quantitative and qualitative studies, on the wellbeing of LBC. Both international migration and internal migration (within a country) were considered relevant in this review. This is because the key issues in the research question of this thesis, such as parent-child relationship over distance, and family care and support environments, do not seem to be markedly different between international and internal migration.

The theoretical review in the previous chapter identified various patterns of migration, but the core rationales based on socioeconomic disparities remained highly consistent. As a disruption or stress event in the family, parental absence due to migration, irrespective of their destination, also fits with both the attachment theory and family systems theories. Many of the methodologies employed in the empirical literature are likely to be exchangeable across different settings. Additionally, results from this review may help interpret findings from the current studies by comparing with the literature on different patterns of migration. Comparison of the contexts between our empirical studies and the extant literature, especially studies of international migration, will be presented in Chapter 5 (Section 5.4.2).
For quantitative studies, results are categorized by different aspects of child wellbeing outcomes, and then by dimensions of associated factors. For qualitative studies, the articles are classified into a few broad key themes. A summary of this review is presented at the end of this chapter, followed by the contribution of this review to the current qualitative and quantitative studies to be presented in the next two chapters.

3.1 Methods

A systematic search was conducted to identify empirical studies on the psychosocial wellbeing of left behind children globally, published in both English and Chinese, using the following databases: PubMed/Medline, PsycINFO and Web of Knowledge, and CNKI (China National Knowledge Infrastructure). Both quantitative and qualitative studies were included. We did not limit the publication year in order to retrieve maximum number of relevant articles.

The flow diagram of the search and selection process is outlined in Figure 3.1. The inclusion criteria are as follows: (1) the study subjects are LBC, i.e., children living in their hometown or country of origin, separated from one or both migrant parents; (2) psychosocial wellbeing outcomes of the children were examined (3) for quantitative studies, a comparison/control group was included, and; (4) studies published in peer reviewed journals
More specifically, the following exclusion criteria regarding measures and participants were further applied: 1) studies on migrant children who accompanied their parents, including refugee children; 2) studies that only included outcome measures in parents and/or caregivers, without reporting child outcomes; 3) studies that only examined educational outcomes in children; 4) quantitative studies which did not consider other factors of child psychosocial wellbeing, besides parental migration status; and 5) quantitative studies in which only bivariate descriptive analysis was conducted.

We did not restrict the types of psychosocial wellbeing measures, or qualitative/quantitative methodologies in this review. Key terms in psychosocial wellbeing were selected after a pre-search of the LBC literature. Due to the various expressions in defining the LBC and meeting our review criteria, four groups of key words were used as below.

#1: "left behind" and (children or adolescents or teenagers)

#2: (children or adolescents or teenagers) and (parent* or father* or mother*) and (left or leav* or away or absence or absent or separat* or unaccompanied or alone)

#3: migrat* or migrant* or emigra* or transnational or immigra*

#4: psychological or psychosocial or depression or anxiety or resilience or neglect or emotional or loneliness or mental or behavior* or behaviour* or stress
Then we performed a final search in which group #1 and #2 were combined by the preposition “or” and then combined with group #3 and #4 with “and”. For the Chinese literature, since most studies used the term “留守儿童” which already indicated parental migration, group #3 was removed. Other key words were also adjusted from the literal translation from English, to better match with the academic language use in Chinese. The key word groups are as follows (including Pinyin and English translation):

#1: "留守儿童 [Liu Shou; left-behind]” and (儿童 [Er Tong; children] or 青少年 [Qing Shao Nian; adolescents] 
#2: (儿童 or 青少年) and (父母 [Fu Mu; parents] or 父亲 [Fu Qin; father] or 母亲 [Mu Qin; mother]) and (外出 [Wai Chu; going out from home] or 打工 [Da Gong; working away in the city] or 迁移 [Qian Yi; migration] or 进城 [Jin Cheng; into the city]
#3: 心理 [Xin Li; psychological] or 抑郁 [Yi Yu; depression] or 焦虑 [Jiao Lv; anxiety] 复原力 [Fu Yuan Li; resilience] or 弹性 [Tan Xing; resilience] or 情感 [Qing Gan; emotion] or 孤独 [Gu Du; loneliness] or 行为 [Xing Wei; behavior]

Then the final search combined #1 and #2 by the preposition “or”, and then combined with group #3 and #4 with “and”. The reference lists of the identified English- and Chinese-language articles were also hand-searched for further relevant studies. Data and literature were extracted from each of the included studies using a standard format: author and year, study location, sample, key
measurements.

Records from initial search conducted in 3 databases: n=1,342

Web of Knowledge: 498
PubMed: 243
PsychINFO: 89
CNKI: 512

Abstract screening n=1,075

Papers retrieved for Full text screening n=287

Papers that meet the inclusion criteria n=83

Papers included in the review: n=84

Duplicates excluded: n=267

Papers excluded: n=788
Reviews: 32
Not empirical studies: 453
Not relevant or no comparison groups: 303

Papers excluded: n=204
Reviews: 9
Not empirical studies: 49
Not relevant: 37
No comparison groups: 31
Simple descriptive quantitative study: 78

Reviews:
Not empirical studies:
Not relevant:
No comparison groups:
Simple descriptive quantitative study:

Figure 3.1: Flow chart of article selection procedure
Table 3.1: Summary of reviewed quantitative studies conducted in China and published in English

<table>
<thead>
<tr>
<th>Author, Year</th>
<th>Location</th>
<th>Sample</th>
<th>Definition of LBC</th>
<th>Age</th>
<th>Key measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fan et al., 2010</td>
<td>China Hunan (schools)</td>
<td>Case control 629 LBC (including 102 past-LBC), 645 non-LBC.</td>
<td>Both parents away for over 12 months</td>
<td>12.4 ± 2.2</td>
<td>SDQ</td>
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<td>SES (Socioeconomic status)</td>
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<td>Education</td>
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<td>Teacher engagement</td>
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<td>Migration history</td>
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<td>Relative/non-relative caregiver</td>
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<tr>
<td>Gao et al., 2010</td>
<td>China Guangdong (schools)</td>
<td>541 LBC, 2445 Controls.</td>
<td>One or both parents away for over 6 months</td>
<td>10 to 18</td>
<td>SES</td>
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<td>Youth Risk Behavior, Student Health</td>
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<td>Gao et al., 2013</td>
<td>China Guangdong (schools)</td>
<td>2609 (44% LBC; 30% father-only; 3% mother-only; 11% both)</td>
<td>One or both parents away for over 6 months</td>
<td>11 to 19</td>
<td>Past 30-day smoking, Smoking Self-Efficacy Questionnaire</td>
</tr>
<tr>
<td>He et al., 2012</td>
<td>China Hubei (schools)</td>
<td>590 LBC, 285 controls</td>
<td>One or both parents away for over 6 months</td>
<td>9 to 14</td>
<td>Children’s Depression Inventory, Family Affluence Scale,</td>
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<td>Multidimensional Scale of Perceived Social Support</td>
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<td>Hu et al., 2014</td>
<td>China Wuhan (Schools)</td>
<td>3473 Children (parent-report)</td>
<td>One or both parents away for over 6 months</td>
<td>5 to 17</td>
<td>SDQ</td>
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<td>(Ordinary Least Square (OLS) regression (nested))</td>
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<tr>
<td>Huang et al., 2015</td>
<td>China (six provinces) Household survey (snow ball)</td>
<td>608 LBC, 755 non-LBC</td>
<td>One or both parents away for over 6 months</td>
<td>Mean 10 (2 to 18)</td>
<td>Pediatric Quality of Life Inventory</td>
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<tr>
<td>Study</td>
<td>Country</td>
<td>Region</td>
<td>Sample Size</td>
<td>LBC Definition</td>
<td>Frequency of Communication with Parents</td>
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<tr>
<td>Jia et al., 2010</td>
<td>China</td>
<td>Shandong (household survey)</td>
<td>324 LBC, 282 non-LBC</td>
<td>One or both parents away</td>
<td>11.4 (8 to 14)</td>
</tr>
<tr>
<td>Jia &amp; Tian, 2010</td>
<td>China</td>
<td>Shandong (household survey)</td>
<td>324 LBC, 282 non-LBC</td>
<td>One or both parents away</td>
<td>11.4 (8 to 14)</td>
</tr>
<tr>
<td>Ling et al., 2015</td>
<td>China</td>
<td>Hunan (1 village only)</td>
<td>268 LBC, 228 non-LBC</td>
<td>One or both parents away for over 6 months</td>
<td>11.9 (7 to 16)</td>
</tr>
<tr>
<td>Liu et al., 2009</td>
<td>China</td>
<td>(three provinces)</td>
<td>592 LBC</td>
<td>One or both parents away</td>
<td>10 to 17</td>
</tr>
<tr>
<td>Liu et al., 2010</td>
<td>China</td>
<td>Hubei (random towns - schools)</td>
<td>Case control 230 LBC, 250 controls</td>
<td>based on question - whether grew up with both parents work away</td>
<td>Mean 11 (8 to 15)</td>
</tr>
<tr>
<td>Luo et al., 2011</td>
<td>China</td>
<td>(5 provinces)</td>
<td>1214 LBC (1024 F/O, 190 M/O), 1019 non-LBC, aged 11-23</td>
<td>One or both parents away for over 6 months</td>
<td>11 to 23</td>
</tr>
<tr>
<td>Ren &amp; Treiman, 2016</td>
<td>China</td>
<td>(nationwide)</td>
<td>1107 LBC, 3613 non-LBC, 342 migrant children</td>
<td>One or both parents away for work</td>
<td>Mean 12.2 (10-15)</td>
</tr>
<tr>
<td>Authors</td>
<td>Country</td>
<td>Sample Size</td>
<td>Sample Description</td>
<td>Mean/Frequency</td>
<td>Measures</td>
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<tr>
<td>Su et al., 2012</td>
<td>China</td>
<td>501 LBC</td>
<td>218 one parent out, 283 both parents away, 653 non-LBC.</td>
<td>Mean 14.12</td>
<td>Frequency of speaking with parents; Life and school satisfaction (1 Q each); Children's Loneliness Scale; Oxford Happiness Questionnaire</td>
</tr>
<tr>
<td>Tao et al., 2014</td>
<td>China</td>
<td>650 LBC, 100 controls</td>
<td>One or both parents away for over 6 months</td>
<td>3 to 5</td>
<td>Family Support Scale; Parenting Self-efficacy Scale; Preschool-aged Child Mental Health Scale</td>
</tr>
<tr>
<td>Wang et al., 2015</td>
<td>China</td>
<td>4857 LBC</td>
<td>One or both parents left for job over the past 6 months</td>
<td>7 to 17</td>
<td>Children's Depression Inventory</td>
</tr>
<tr>
<td>Wen et al., 2015</td>
<td>China</td>
<td>397 LBC, 477 non-LBC</td>
<td>Born and raised in the countryside; and one or both of their parents migrated to cities for employment.</td>
<td>10 to 17</td>
<td>Qs on Five C's model of PYD</td>
</tr>
<tr>
<td>Wen &amp; Lin et al., 2012</td>
<td>China</td>
<td>LBC 303 (153 both parent away, 108 father only, 42 mother only) 322 controls,</td>
<td>One or both parents away</td>
<td>8 to 18</td>
<td>Satisfaction with life and study, positive health behavior, school engagement, Family socializing process, Social support, self-efficacy, Internal locus of control</td>
</tr>
<tr>
<td>Author, Year</td>
<td>Province</td>
<td>Sample</td>
<td>Definition of LBC</td>
<td>Age</td>
<td>Key measures</td>
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<tr>
<td>Chen et al., 2011</td>
<td>Sichuan</td>
<td>340 LBC, 208 controls</td>
<td>Unspecified</td>
<td>Mean=13.0 SD=0.9</td>
<td>Vaux Social Support Record; Psychological resilience scale; Chinese Middle School Student</td>
</tr>
<tr>
<td>Wu et al., 2015</td>
<td>China Guizhou (schools)</td>
<td>363 LBC, 103 previously left-behind, 158 non-left-behind</td>
<td>One or both parents away, including past migration, for over 6 months</td>
<td>Mean 12.45 (8 to 17)</td>
<td>Depression (Center for Epidemiological Studies Depression Scale for Children); Family Social Capital (parent-child interaction; parental monitoring); Community social capital</td>
</tr>
<tr>
<td>Zhan et al., 2014</td>
<td>China Shaaxi (schools)</td>
<td>4275 LBC (3111 both parents away), non-LBC 450</td>
<td>Father or mother worked outside of village in the past 8 months</td>
<td>Mean 15, 12 to 19</td>
<td>Rosenberg self-esteem scale</td>
</tr>
<tr>
<td>Zhao et al., 2009</td>
<td>China Anhui (schools)</td>
<td>1390 LBC, 1131 non-LBC</td>
<td>One or both parents away, including past migration, for over 6 months</td>
<td>12.83 ± 1.93</td>
<td>P-H children’s self-concept scale; mental health diagnosis test</td>
</tr>
<tr>
<td>Zhao et al., 2014</td>
<td>China Anhui (schools)</td>
<td>1694 LBC, 1223 non-LBC</td>
<td>Based on question parent(s) out for work?</td>
<td>Mean=12.52; 7 to 17</td>
<td>The Social Anxiety Scales for Children (SASC); Family function (APGAR); Quality of life; Neglect and physical abuse (Parents-Child Conflict Tactics Scale)</td>
</tr>
</tbody>
</table>

Table 3.2: Summary of reviewed quantitative studies conducted in China and published in Chinese
<table>
<thead>
<tr>
<th>Authors</th>
<th>Location</th>
<th>Sample Size</th>
<th>Parental Migration Status</th>
<th>Mean (SD)</th>
<th>Measures Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dong &amp; He, 2014</td>
<td>Yunan</td>
<td>654 LBC, 589 controls</td>
<td>One or both parents migrated</td>
<td>Mean=13.35, SD=0.84</td>
<td>Family Assessment Device; Resiliency Scales for Children &amp; Adolescents; duration of migration</td>
</tr>
<tr>
<td>Dong &amp; Zhang, 2013</td>
<td>Yunnan</td>
<td>713 LBC, 632 controls</td>
<td>One or both parents migrated</td>
<td>Junior middle school students (Year 7-9)</td>
<td>Resiliency Scales for Children &amp; Adolescents; Child Loneliness Scale</td>
</tr>
<tr>
<td>Dong &amp; Zhang, 2013</td>
<td>Yunnan</td>
<td>713 LBC, 632 controls</td>
<td>One or both parents migrated</td>
<td>Junior middle school students (Year 7-9)</td>
<td>Resiliency Scales for Children &amp; Adolescents; Eysenck Personality Questionnaire for Children; SES; duration of migration</td>
</tr>
<tr>
<td>Fan et al., 2013</td>
<td>Hunan</td>
<td>Longitudinal study:151 LBC, 56 controls (parental migration status unchanged between baseline and follow-up)</td>
<td>One or both parents currently away</td>
<td>Mean=10.9, SD=1.6</td>
<td>Family Atmosphere Scale; self-report happiness; Affect Balance Scale (negative and position emotions); Multidimensional Scale of Perceived Social Support; duration of migration</td>
</tr>
</tbody>
</table>
| Gao 2010 | Henan | 116 LBC, 116 controls | Unspecified | Primary school students | Self-report: Piers-Harris Children's Self-Concept Scale; duration of parental migration; frequency of visit; attitude to migration; sense of hope | Caregiver-report: SES; health status; reason for
<table>
<thead>
<tr>
<th>Authors, Year</th>
<th>Location</th>
<th>Sample Size</th>
<th>Sample Characteristics</th>
<th>Mean, SD</th>
<th>Measures and Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Han et al., 2012</td>
<td>Shaanxi</td>
<td>211 LBC, 329 migrant children, 210 controls</td>
<td>One or both parents away for over 6 months</td>
<td>Mean=13.9, SD=1.4</td>
<td>The Healthy Kids Resilience Assessment; Sense of Security Scale; parent-child closeness; wealth status</td>
</tr>
<tr>
<td>He et al., 2011</td>
<td>Anhui</td>
<td>893 LBC, 335 controls</td>
<td>Unspecified</td>
<td>6-14</td>
<td>Center for Epidemiological Studies of Depression Scale for Children; economic status; source of 491 family income; care style.</td>
</tr>
<tr>
<td>Hou et al., 2015</td>
<td>Henan and Shaanxi</td>
<td>1475 LBC, 209 children living in special families (parents deceased, incarcerated, or divorced); 2355 controls.</td>
<td>One or both parents migrated, who visit home every 3 months or more</td>
<td>Mean=12.8, SD=1.9</td>
<td>Self-Esteem Scale; Children's Depression Inventory; Seiffge-Krenke Problem Questionnaire (problem with future) Family type; mother’s education; school class characteristics; neighborhood safety (occurrence of crime)</td>
</tr>
<tr>
<td>Huang &amp; Li, 2007</td>
<td>Jiangxi</td>
<td>570 current LBC, 110 previous LBC, 133 never LBC</td>
<td></td>
<td>Mean=13.4, 9-18</td>
<td>Mental Health Test; type of caregiver (grandparents, one parent, adult relatives from father’s generation; relative from same generation or no caregiver)</td>
</tr>
<tr>
<td>Jiang 2013</td>
<td>Fujian</td>
<td>963 LBC, 1520 controls</td>
<td>One or both parents currently away</td>
<td>Mean=13.9, SD=0.8</td>
<td>SDQ; wealth status; duration of migration; frequency of communication with parents; caregiver;</td>
</tr>
<tr>
<td>Jiang et al., 2013</td>
<td>Anhui</td>
<td>1694 LBC, 1223 controls</td>
<td>One or both parents away for over 6 months</td>
<td>Mean=12.6, SD=2.2, range 7 to 17</td>
<td>Children’s Depression Inventory; Social Anxiety Scale for Children; Trait</td>
</tr>
<tr>
<td>Study</td>
<td>Location</td>
<td>Sample Size</td>
<td>Sample Description</td>
<td>Age Range</td>
<td>Measures</td>
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</tr>
<tr>
<td>Lan et al., 2009</td>
<td>Guangxi</td>
<td>270 LBC, 609 controls</td>
<td>One or both parents currently away</td>
<td>7-16</td>
<td>Coping Style Questionnaire; Parents-Child Conflict Tactics Scales; Children’s Self-Esteem Scale; Adaptation Partnership Growth Affection Resolve; SES</td>
</tr>
<tr>
<td>Li &amp; Tao, 2009</td>
<td>Anhui</td>
<td>334 LBC, 5506 controls</td>
<td>One or both parents migrated</td>
<td>14-16</td>
<td>Eysenck Personality Questionnaire; Center for Epidemiological Studies Depression Scale for Children; Frequency of seeing parents, self-rated personality; satisfaction with family; school performance; SES; family history of mental illnesses</td>
</tr>
<tr>
<td>Li et al., 2012</td>
<td>Anhui</td>
<td>810 LBC, 1329 controls</td>
<td>One or both parents migrated</td>
<td>Junior middle school students (Year 7-9) who were under 14</td>
<td>Suicide tendency questionnaire; Self-Rating Depression Scale; Self-Rating Anxiety Scale; Trait-Oriented Coping Styles Questionnaire; parents’ education; ethnicity</td>
</tr>
<tr>
<td>Liu et al., 2011</td>
<td>Hebei</td>
<td>194 LBC, 352 controls</td>
<td>One or both parents currently away</td>
<td>Mean=12.3, SD=2.6</td>
<td>Smoking; drinking (more than once per week); violence under alcohol influence (more than once per semester); time spent online (over 1 hour/day); Parents’ education status; urban/rural residence; ethnicity</td>
</tr>
</tbody>
</table>

Depression self-rating scale for children; SES; primary caregiver; care style; school performance
<table>
<thead>
<tr>
<th>Study</th>
<th>Location</th>
<th>Study Design</th>
<th>Participants</th>
<th>Mean ± SD</th>
<th>Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liu et al., 2014</td>
<td>Sichuan</td>
<td>Longitudinal study</td>
<td>T1 (Year 7): 322 LBC, 228 controls</td>
<td>Mean=13.0, SD=0.9</td>
<td>The Healthy Kids Resilience Assessment; Social Support Appraisal Scales; Chinese Middle School Student Mental Health Scale</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>T2 (Year 8): 276 LBC, 180 controls</td>
<td></td>
<td>Quality of relationship between father and mother; strictness of disciplining from mother, father, and caregiver</td>
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<tr>
<td></td>
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<td>T3 (Year 9): 217 LBC, 152 controls</td>
<td></td>
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</tr>
<tr>
<td>Lu et al., 2014a</td>
<td>Hubei</td>
<td></td>
<td>1031 LBC, 895 controls</td>
<td>Mean=14.1, SD=2.4</td>
<td>Chinese Middle School Student Mental Health Scale; duration of migration; missing parents; attitude toward migration</td>
</tr>
<tr>
<td>Lu et al., 2014b</td>
<td>Guizhou</td>
<td></td>
<td>250 LBC, 538 controls</td>
<td>Mean=14.3, SD=1.1</td>
<td>Mental Health Test; duration of parental migration; missing parents; attitude towards migration; quality of communication with parents; frequency of contact</td>
</tr>
<tr>
<td>Wang et al., 2011a</td>
<td>Anhui</td>
<td></td>
<td>1730 LBC, 1223 controls</td>
<td>Mean=14.0, 7-18</td>
<td>Children's Depression Inventory; Adaptation Partnership Growth Affection Resolve; attending boarding school; single child; SES; school performance</td>
</tr>
<tr>
<td>Wang et al., 2011b</td>
<td>Henan</td>
<td></td>
<td>250 LBC, 212 controls</td>
<td></td>
<td>Friendship Quality Inventory; Children’s Loneliness Scale; Children’s Depression Inventory; economic status</td>
</tr>
<tr>
<td>Wang W et al., 2014</td>
<td>Liaoning</td>
<td></td>
<td>952 LBC, 952 controls</td>
<td></td>
<td>Symptom Check List-90; Eysenck Personality Questionnaire; Trait Coping Style Questionnaire; Social Support Rating Scale;</td>
</tr>
<tr>
<td>Study</td>
<td>Location</td>
<td>Sample Size</td>
<td>Group</td>
<td>Covariates</td>
<td>Tools</td>
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<tr>
<td>Yang et al., 2013</td>
<td>Hunan</td>
<td>2110 LBC, 2026 controls</td>
<td>One or both parents migrated</td>
<td>School Year 3, 5, 8, and 11 (approximate age 9-18)</td>
<td>Children's Hope Scale; SDQ; duration of parental migration; co-resident household members</td>
</tr>
<tr>
<td>Yang, et al., 2010</td>
<td>Anhui</td>
<td>416 LBC, 525 controls</td>
<td>One or both parents currently away</td>
<td>Mean=12.1, SD=2.2</td>
<td>Children's Depression Inventory; SES; single child or not; parents’ divorce; self-report body type</td>
</tr>
<tr>
<td>Zhang et al., 2007</td>
<td>Anhui</td>
<td>491 LBC, 393 controls</td>
<td>One or both parents currently away</td>
<td>Mean=10.54, SD=1.57</td>
<td>Social Anxiety Scale for Children; education style of parents and teachers (intellectual or not); amount of pocket money; health status; level of learning difficulties</td>
</tr>
<tr>
<td>Zhao 2006</td>
<td>Sichuan</td>
<td>160 LBC, 154 controls</td>
<td>One or both parents currently away</td>
<td>Mean=11.8, SD=0.8</td>
<td>Piers-Harris Children’s Self-Concept Scale; Eysenck Personality Questionnaire for Children; age at separation; duration of separation</td>
</tr>
<tr>
<td>Zhao et al., 2012</td>
<td>Ningxia</td>
<td>926 LBC, 1091 controls, 5-16 months</td>
<td>One or both parents away for over 6 months</td>
<td>Mean=10.05 (5-16)</td>
<td>Self-report: Piers Harris Self-Concept; Child Loneliness Scale; Social Anxiety Scale for Children. Caregiver report: Caregiving behaviors, level of care; closeness with parents; child’s relationships with peers and teachers.</td>
</tr>
<tr>
<td>Zhao et al., 2015</td>
<td>Henan</td>
<td>378 LBC, 351 controls</td>
<td>One or both parents currently away</td>
<td>Mean=13.7, SD=2.3</td>
<td>Mental Health Test; duration of parental migration; parents’ education; relationship with teachers, peers and</td>
</tr>
</tbody>
</table>
Table 3.3: Summary of reviewed quantitative studies that were not conducted in China

<table>
<thead>
<tr>
<th>Author, Year</th>
<th>Location</th>
<th>Sample</th>
<th>Definition of LBC</th>
<th>Age</th>
<th>Key measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zheng et al., 2014</td>
<td>Hubei</td>
<td>156 LBC, 123 controls</td>
<td>One or both parents migrated</td>
<td>12-14</td>
<td>Social Support Rating Scale; Mental Health Test; Resiliency Scales for Children &amp; Adolescents</td>
</tr>
<tr>
<td>Zhou et al., 2011</td>
<td>Sichuan</td>
<td>291 LBC, 430 controls, 670 urban migrant children</td>
<td>Both parents migrated</td>
<td>Mean=12.3, SD=1.53</td>
<td>The Healthy Kids Resilience Assessment; SES</td>
</tr>
<tr>
<td>Zhu 2016</td>
<td>Sichuan, Anhui, Henan, Guangxi</td>
<td>1251 LBC, 704 controls</td>
<td>One or both parents away for over 6 months</td>
<td>Mean=11.1, SD=1.1</td>
<td>The Gansu Survey of Children and Families (Internalizing and externalizing behaviors)composition of family and caregivers; SES; parents’ occupation; house location; migration prevalence in the village</td>
</tr>
<tr>
<td>Zhu et al., 2014</td>
<td>Guizhou</td>
<td>545 LBC, 1024 controls</td>
<td>One or both parents away for over 6 months</td>
<td>Mean=12.71, SD=1.85</td>
<td>Mental Health Test; Coping Style Short Questionnaire; ethnicity; school year</td>
</tr>
<tr>
<td>Study &amp; Year</td>
<td>Country</td>
<td>Group 1</td>
<td>Group 2</td>
<td>Sample Size &amp; Description</td>
<td>Location of primary caregivers</td>
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<tr>
<td>Adumitroatie et al., 2013</td>
<td>Romania</td>
<td>Case control</td>
<td>177 LBC, 107 non-LBC</td>
<td>One or both parents away</td>
<td>Child Parental Acceptance-Rejection Questionnaire; The Adult Personality Assessment Questionnaire</td>
</tr>
<tr>
<td>Aguiler-Guzman et al., 2004</td>
<td>Mexico</td>
<td>106 LBC, 194 controls</td>
<td>Father periodically absent for 6+ years</td>
<td>aged 11-14</td>
<td>Stressors and compensators from relationship with absent father, peers, family, and their communities, and essential facts about the teenagers.</td>
</tr>
<tr>
<td>Crawford et al., 2009</td>
<td>Inner city New York, USA</td>
<td>35 LBC, 731 controls</td>
<td>Children who were separated from mother for at least one month before age 5</td>
<td></td>
<td>Borderline personality disorder (BPD) symptoms, Child and maternal risk factors, Insecure attachment</td>
</tr>
<tr>
<td>Graham &amp; Jordan, 2011</td>
<td>Indonesia, the Philippines, Thailand, and Vietnam</td>
<td>1916 LBC (including farther/mother/both working overseas for 6+ months), 1960 controls, aged 3-5 and 9-11</td>
<td>One or both parents away for over 6 months</td>
<td>3-5 9-11(Caregiver report)</td>
<td>SDQ</td>
</tr>
<tr>
<td>Jordan &amp; Graham, 2012</td>
<td>Indonesia, the Philippines, Thailand, and Vietnam</td>
<td>N=1523, about half LBC half controls</td>
<td>One or both parents away for over 6 months</td>
<td>aged 9-11 (Caregiver and self report)</td>
<td>General Happiness (1Q, incl parent report), school enjoyment (1Q), school performance (1Q, incl parent report)</td>
</tr>
<tr>
<td>Study</td>
<td>Location</td>
<td>Sample Description</td>
<td>Measures</td>
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<tr>
<td>Lahaie, et al., 2009.</td>
<td>Mexico</td>
<td>parents from 755 households of LBC</td>
<td>At least one family member who had migrated to the US in the last 5 years, 754 controls.</td>
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<td>Parents reported: behavioral or academic troubles at school, whether dropped out of school, any emotional problems</td>
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<tr>
<td>Mazzucato et al., 2015</td>
<td>Ghana, Nigeria, Angola (Schools)</td>
<td>1747 in Ghana, 1344 in Angola, 1690 in Nigeria</td>
<td>One or both parents away for 3 months</td>
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<td></td>
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<td></td>
<td>11 to 21</td>
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<td></td>
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<td></td>
<td>SDQ; care arrangements, SES, school performance, health, and psychological well-being.</td>
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</tr>
<tr>
<td>Pottinger, 2005</td>
<td>Jamaica</td>
<td>Case control: 27 LBC; 27 controls aged 9-10</td>
<td>Unspecified</td>
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<tr>
<td></td>
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<td></td>
<td>Academic achievement (diagnostic tests)</td>
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<td></td>
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<td></td>
<td>Self-esteem (Piers-Harris Self-Concept Scale)</td>
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<td>Children’s thoughts and experiences regarding migratory separation</td>
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<td>Child behaviour</td>
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</tr>
<tr>
<td>Senaratna et al., 2011</td>
<td>Colombo, Sri Lanka</td>
<td>Case control: 253 pairs of LBC and controls matched by age, gender, and neighbourhood,</td>
<td>mothers working overseas minimum 12 months</td>
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<tr>
<td></td>
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<td>aged 5-10.</td>
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<tr>
<td></td>
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<td></td>
<td>Behaviour (Child Behaviour Check List)</td>
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<td>Socio- demographic and Risk-factors Information</td>
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<td>Questionnaire</td>
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<td>School performance and attendance</td>
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<td>Study</td>
<td>Country</td>
<td>Sample Size</td>
<td>Details</td>
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<td>Smeekens et al., 2012</td>
<td>Philippines</td>
<td>108 LBC, 97 controls, aged 13-18</td>
<td>One or both parents working abroad</td>
<td>13-18 Physical health (Physical Health Questionnaire) Missing parents or not Perceived stress (The Homesickness Questionnaire) Loneliness Avoidant coping (Coping Scale for Children and Youth)</td>
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<tr>
<td>Tomsa &amp; Jenaro et al., 2015</td>
<td>Romania (Schools)</td>
<td>Case control 163 LBC, 163 non-LBC</td>
<td>One or both parents away for over 6 months</td>
<td>Mean=13.5, 12 to 15 The State-Trait Anxiety Inventory for Children; The Short Mood and Feelings Questionnaire; Anger Expression Scale; Children's Coping Strategies Checklist</td>
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<tr>
<td>Vanore et al., 2015</td>
<td>Moldova (household survey)</td>
<td>471 LBC, 1508 non-LBC</td>
<td>One or both parents living abroad for at least 12 months consecutively at the time of the survey</td>
<td>Mean=10.8 (4-17) Caregiver report SDQ</td>
<td></td>
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<tr>
<td>Wickramage et al., 2015</td>
<td>Sri Lanka</td>
<td>Case control 410 LBC, 410 comparison (some under 5 and no SDQ results)</td>
<td>One or both parents away for over 6 months aged 1-17</td>
<td>SDQ, Nutritional status, parent SES and mental health</td>
<td></td>
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</table>

3.2 Quantitative studies
A total of 68 papers were included in the final review; 36 of them were published in English and 32 published in Chinese. The majority of the English-language studies, i.e. 22 papers were based on research conducted in China (Table 3.1). Others (Table 3.2) were in South/Southeast Asia (six), Latin America (four), Eastern Europe (three), Africa (one, across three countries), and the USA (one). All Chinese-language studies were about LBC in China.

In a few cases, multiple articles were found to be from the same study sample. Three articles (Adhikari et al., 2013; Jordan & Graham 2012; Graham & Jordan, 2011) used data collected in the CHAMPSEA (Child Health and Migrant Parents in Southeast Asia) project. Jia et al. (2010) and Jian & Tian (2012) were based on an identical sample from Shandong, China, while looking at different psychosocial measures. Similarly, a pair of researchers published two studies (Dong & Zhang, 2013a & 2013b) on different Chinese journals based on the same sample in Yunnan province but different measures. Also, Gao et al. (2010) and Gao et al. (2013) used different groups of the same sample in Guangdong, China.

**3.2.1 Characteristics of the study samples**

The concept of LBC, i.e. children living apart from one or both migrant worker parent(s), has been generally consistent in all included studies. However, the specific definition in terms of the duration of migration varied in identifying the LBC in the study populations. Many studies examined the duration of parent-child
separation (until the time of survey), and set a minimum eligibility criterion for LBC, ranging from 6 to 12 months except one study. Others did not specify the duration, but defined the LBC group only by questions regarding the migration status of parents, or who lived or cared for the children. Some Chinese-language studies did not even define the LBC, as the term in Chinese (留守儿童) already indicates children of migrant workers. Yet only three studies (Huang & Li, 2007; Wu et al., 2015; Adhikari et al., 2013) looked at children who were previously left-behind but currently living with both parents, and compared them with never left-behind children.

Most studies only included school-age children, and collected data by self-report instruments. Four studies recruited pre-school age groups (Crawford et al. 2009, Graham & Jordan 2011, Tao et al. 2014, Vanore et al., 2015), and used caregiver-report data; two of these (Graham & Jordan 2011, Vanore et al., 2015) triangulated caregiver-report and self-report results for the older children in the studies.

LBC were also grouped by mother-only, father-only, or both-parent migration. Three studies (Senaratna et al., 2011; Luo et al., 2011; Fan et al., 2012) included in this review only focused on one of these three groups, and one article (Graham & Jordan, 2011) excluded the both-parent away group to compare the other two groups.
In most countries, fathers are more likely than mothers to become the migrant in a family. Parreñas (2008) specifically looked into the practice of “transnational fathering” and the relationship between migrant father and children. Yet the number of female migrants from certain South/Southeast Asian countries is close to male migrants, if not larger. In particular, Senaratna et al.’s (2011) study only investigated the wellbeing of children left behind by mothers, since 65% of labor migrants from Sri Lanka are female. When both parents were away, grandparents usually became caregivers of the LBC, across all countries.

While most studies focused on comparing migration patterns based on which parent, or whether both parents had migrated, very few looked into the effects of different caregivers on child wellbeing. The literature tended to assume that if the mother did not migrate, she should be the primary caregiver; or if both parents were away, one grandparent should be primary caregiver. However, care arrangements may be more complex than these assumptions, and the identification of primary caregiver may differ between different respondents.

Various factors associated with parental migration and child psychosocial wellbeing were examined in the literature, including demographic characteristics, socioeconomic status, family relationships, functioning and support, as well as school, peer, and community variables. These categories and the common indicators are outlined in a summary framework (Figure 3.2).
Figure 3.2: Summary framework of the quantitative literature
3.2.2 **Comparison between English-language and Chinese-language studies**

Although articles published in English covered many countries around the world, the majority of them were about the LBC in China. Studies published in Chinese journals provided further perspectives about how the issues related to LBC were viewed and addressed by the Chinese academia and policy-makers.

In general, studies published in Chinese were of lower quality, with less rigorous sampling and data collection processes and less sophisticated data analysis. Most Chinese-language studies adopted a simple study design. Many of them explored the overall mental health status of LBC, by employing a general mental health scale or multiple interrelated psychosocial outcome variables. Instruments developed by Chinese researchers (for children in China) and international researchers were both used. The reporting was generally focused on various descriptive characteristics of the child population, rather than the mechanisms of the challenges facing the LBC.

The English-language studies tended to be more specific regarding the dimensions of wellbeing that were examined. The authors usually looked deeper into the socioeconomic status and other household-level factors that may affect child wellbeing, and fitted regression models that incorporated a variety of independent variables. Theories from multiple disciplines such as child development and family studies were often referred to in the background and
discussion, whereas the interdisciplinarity was often lacking among Chinese-language studies.

Nevertheless, the only two longitudinal studies retrieved in the review were both published in Chinese. They offered important insights about the impact of parental migration over a couple of years’ time, at a crucial stage of early adolescence. However the two studies had a small sample size and high drop-out rates. The study design was also simple with few measures about family characteristics.

In the following sections of this chapter, when necessary, the language of the article was noted if it was Chinese, in order to better compare with the English-language studies from different perspectives in the LBC literature.

3.2.3 Happiness and quality of life measures

Several studies examined the happiness and life satisfaction among LBC in comparison with non-LBC (Jordan & Graham, 2012; Graham et al., 2012; Wen & Lin, 2012; Su et al., 2012; Gao et al., 2010; Jia et al., 2010; Hu et al., 2015), and it was generally shown that LBC tended to be less happy and less satisfied with life and school. An important longitudinal study published in Chinese (Fan et al., 2013) suggested that the self-report happiness level significantly reduced among LBC over the 2.5-year study period, while the level in non-LBC remained unchanged.
However, the outcome variables in these studies (Jordan & Graham, 2012; Graham et al., 2012; Wen & Lin, 2012; Gao et al., 2010; Jia et al., 2010; Fan et al., 2013) were only based on a single question asking the children about their happiness or life satisfaction, which may have over-simplified real experiences of both LBC and non-LBC.

Moreover, Jia et al. (2010) and Huang et al. (2015) looked into rural Chinese children’s “health related quality of life”, a concept that includes domains related to physical and mental disorders, through household surveys using The Pediatric Quality of Life Inventory (PedsQL) scale. Among children aged 2-18 across six provinces, Huang (2015) found that LBC were worse off in PedsQL overall scores, with lower physical, emotional and social functionings, as compared to other rural children. Jia et al. (2010) showed similar results in a smaller sample of school-age children, except that the physical health subscale scores did not show significant difference, indicating psychological challenges in the LBC.

While the “health related quality of life” may be a useful indicator of child wellbeing in general, it is not closely relevant to the challenges faced by the LBC. Similarly, measures in the PedsQL instrument were also supposed to be related to physical and mental disorders, especially in pediatric care settings. In fact, there has been no clear evidence regarding disadvantages in terms of physical health. The prolonged separation from parents is likely to affect quality of life that is related to psychological and socio-behavioral challenges, rather than diseases or
disorders. Hence the results from studies using health focused survey tools may not be fully warranted.

### 3.2.4 Mental health status

Several Chinese-language studies looked into the mental health status of children in China. A 100-item psychometric scale namely “Mental Health Test” (MHT), designed by Chinese researchers (Zhou, 1991), was often used on middle school children in the Chinese literature. It included eight content scales: learning anxiety, interpersonal relationship anxiety, loneliness tendency, self-accusation tendency, sensitiveness tendency, physical symptoms, horror tendency, and impulsion tendency. Five studies in this review used MHT and all found the LBC group had worse mental health (Zhao et al., 2015; Lu et al., 2014; Huang & Li, 2007; Zheng et al., 2014; Zhu et al., 2014). In particular, LBC showed a higher level of anxiety symptoms than non-LBC in all these studies; three studies indicated that LBC tended to be more scared of stressful situations than their peers (Zhao et al., 2015; Lu et al., 2014; Huang & Li, 2007).

Another commonly used psychometrics tool for Chinese adolescents was “Chinese Middle School Student Mental Health Scale”. Based on this scale, two studies (Chen et al., 2011; Liu et al., 2014) found no significant difference in mental health status between LBC and non-LBC. Importantly, Liu et al.‘s (2014) longitudinal study suggested that during the 2-year period between the follow-up and baseline, the mental health status of LBC and controls showed a similar amount of decline;
no significant difference was identified between the two groups either at baseline or follow-up.

Ling et al. (2015) used the Youth Self-Report scale and identified higher level of mental health problems in aggressive and externalizing and internalizing behaviors, somatic disorders, anxiety/depression, and social problems in LBC than non-LBC. By metrics of Preschool-aged Child Mental Health Scale, Tao et al. (2014) found among preschoolers aged 3-5 that LBC were not worse than controls.

Despite an overall disadvantage among LBC, mixed findings from the above studies also suggested the complexity of LBC’s mental health status, and revealed certain specific dimensions of psychosocial wellbeing that were worth further investigation. The screening tools used in these studies provided an overall assessment of children’s mental health, instead of focusing on certain types of disorders. However, despite the comprehensiveness, the measures were still focused on the symptoms, instead of dimensions of psychosocial wellbeing. The results may thus underestimate the impact of parental migration, since disadvantages of LBC may be demonstrated from specific psychological and behavioral aspects, which are not related to mental health disorders. The two mental health scales commonly used in China were not used in any other country, and thus the scores and study findings cannot be used to make international comparisons.
3.2.5 Resilience and positive youth development

Resilience was pointed out in some articles as a psychological performance that had a positive significance for the mental health of children, despite adverse situations such as prolonged parental absence. A few of these studies attempted to measure resilience as a key outcome variable.

In the Chinese-language literature, the Healthy Kids Resilience Assessment was used by three studies, to explore external and internal resilience constructs associated with child development. With very similar study design, both Zhou et al. (2011) and Han et al. (2012) investigated three groups of children in suburban areas: LBC, urban migrant children, and children living with both parents. Both studies found no significant difference between LBC and non-LBC. In contrast, results from other studies (Dong & Zhang, 2013a; Dong & Zhang, 2013b; Dong & He, 2014; Zheng et al.’s 2014) based on questionnaires designed for Chinese students demonstrated less resilience in LBC. Liu et al.’s (2014) longitudinal study measured the same outcome among a group of middle school students at Year 7, 8 and 9. The results implied a trend of declining resilience among LBC, but only at Year 8 did the LBC have significantly lower resilience than non-LBC. In Southeast Asia, Jordan & Graham (2012) articulated resilience as a combined outcome of multiple measures of general happiness and well-being aspects, and found greater resilience was associated with longer durations of maternal absence.

The investigation around resilience was similar to the perspective of Positive
Youth Development (PYD), implying a beneficial effect of difficult situations. Wen et al. (2015) probed into the PYD aspects of Competence, Confidence, Caring, Character, Connection, through a host of questions that were similar to the ones in SDQ. However little difference in these PYD outcomes was detected by parental migration status. Nevertheless, the positive psychology perspective is an interesting direction to further exploring LBC’s overall psychosocial wellbeing, taking into account the beneficial influence of parental migration, for example via economic and social remittances.

### 3.2.6 Psychosocial strengths and difficulties

The Strengths and Difficulties Questionnaire (SDQ) was used as a primary survey instrument in four of the reviewed papers. It is a widely used child psychosocial wellbeing questionnaire and has been validated in multiple countries (Goodman, 2007). It comprised of 25 items in 5 hypothesized subscales: emotional symptoms, (somatic, unhappy, worries, nervous, fears) conduct problems (tempers, obedient, fights, lies, steals), hyperactivity, peer problems, and pro-social behaviors.

**The CHAMPSEA project**

As part of the CHAMPSEA (Child Health and Migrant Parents in Southeast Asia) study, Graham and Jordan (2011) used the emotional and conduct subscales of SDQ as measurements of psychological wellbeing among 3,876 children (including
1,960 LBC) in Indonesia, Thailand, Vietnam, and the Philippines. The results were inconsistent across countries. Only in Indonesia significantly higher emotional distress was found among LBC by transnational migrants as compared to children living with both parents, after child age and gender were accounted for. However, in the Philippines the relationship was in the opposite direction, that is LBC were less vulnerable to emotional problems. With regard to children’s behavior, only in Thailand did the results show increased odds of LBC experiencing conduct problems as compared to non-LBC, while Filipino LBC were less likely to have conduct problems. The authors attributed the advantages among LBC to the strong civil society support organizations in the Philippines.

In addition, Adhikari et al. (2013) examined the overall SDQ scores among the Thai children in the CHAMPSEA study. No significant disadvantage was shown in LBC, although children currently living with their mothers who had returned home from migration may have experienced more psychological problems.

The CHAMPSEA studies highlighted the context-specificity of LBC’s wellbeing, as no consistent correlation between psychosocial wellbeing and parental migration was found even among the four countries in the same region. Also, some limitations may weaken the conclusions from this study. First, the child measures were all reported by caregivers, who may have under-estimated children’s distress due to parental migration. This was pointed out by the same authors in a later paper (Jordan and Graham, 2012) based on the same sample comparing the
self-report and caregiver-report results. Also, the CHAMPSEA samples were selected from areas of high out-migration, where the overall socioeconomic development benefited significantly from overseas remittances. In these areas better coping strategies and stronger social support networks may have been developed for the LBC, because of the left-behind community’s abilities in mobilizing considerable amount of resources. It was also questionable whether the study samples were representative of the entire LBC population in the respective country.

**Other studies using SDQ**

Four studies in China used SDQ to measure child outcomes; among them only Jiang (2013) did not identify significant difference in psychosocial outcomes between LBC and non-LBC, based on cut-off scores that defined emotional and conduct problems. Fan et al. (2010) demonstrated that LBC had significantly lower levels of psychosocial wellbeing from all five sub-scales of SDQ, while only hyperactivity and pro-social behavior remained significantly different after adjusting for demographic variables. Similarly, Hu et al. (2014) found worse outcomes in LBC from all SDQ sub-scales through bivariate analyses, but none of the differences were significant any more after controlling for family and school characteristics. Yang et al. (2013) suggested among the LBC, those who were left behind by their mother had higher level of difficulties than those left behind by their father or both
parents. The authors also found that sense of hope was an important factor contributing to LBC’s wellbeing.

In Sri Lanka, Wickramage et al. (2015) obtained results from three versions (self, parent and teacher report) of the SDQ for each school-age child. The composite scores in the five domains were calculated according to a validated predictive algorithm of SDQ, generated from a large community sample in Britain. The results showed significantly more LBC children were in the “borderline” or “abnormal” categories (43.3%) than the comparative children (33.6%). The difference was also significant in emotional and hyperactivity subscales.

A study in Moldova (Vanore et al. 2015) only used outcomes from the emotional and conduct subscales in the caregiver-reported SDQ, and the scores were converted from continuous to categorical values. For boys, having a migrant parent corresponded to a higher probability of an abnormal conduct problems score, but not for girls. Emotional outcomes did not show significant difference. Parental migration did not bear a significant influence on the emotional symptoms scale. Mazzucato et al. ’s study (2015) in three African countries found that children with one or both migrant parents had higher levels of psychological distress than children living with their parents. There was no significant difference between international and internal migration, in Ghana and Nigeria; but for Angola, international parental migration has a greater negative impact on children’s psychological health.
The SDQ total difficulties score has proven to be a valid measure of psychosocial wellbeing across various settings, and therefore the instrument has become popular in studies on LBC, a special but generally healthy population without clinically relevant risks for mental health problems. The SDQ is a useful tool for comparing outcomes between groups of children, but has not been widely used for clinical diagnosis of mental health conditions. The initial designers of SDQ did provide a computerized algorithm to predict child psychiatric diagnoses on the basis of SDQ scores (Goodman, et al. 2000). However it requires the questionnaires to be completed by parent, teacher, and the child him/herself for each individual case. Some studies (Jordan & Graham 2011, Wickramage et al., 2015) used an estimated cut-off score of SDQ or its subscales, and dichotomized the outcome in their analyses without comparing mean outcome scores. This approach may undermine the robustness of SDQ and lose certain amount of information.

3.2.7 Emotional symptoms

Loneliness

Seven papers in China used the Children’s Loneliness Scale (CLS) score as the outcome measure (Four in English: Liu et al., 2010; Jia & Tian, 2010; Su et al., 2012; Ling et al., 2015; three in Chinese: Wang et al., 2011b; Zhao et al., 2012; Dong & Zhang, 2013a); the 16-item scale is one of the most reliable measures of its kind
with a Cronbach alpha of 0.80 or above (Liu et al. 2010). All these studies except one (Wang et al., 2011b; which found quality of friendship to be a key factor of wellbeing) concluded that LBC were more vulnerable to loneliness than children living with both parents in rural areas. Similar studies in the Philippines reported association between parental migration and loneliness with other measurements (Asis, 2006; Smeekens et al., 2012).

Although the concrete impact on LBC’s overall wellbeing remains unclear, it appears that loneliness is very common among LBC, which can be explained as a direct consequence of parental absence. One specific weakness of these studies was the lack of consideration of other family and community characteristics. Particularly, family structure and care arrangements, as well as migration prevalence and sociocultural contexts, may be closely associated with both migration patterns and loneliness. As loneliness is a relatively subjective experience instead of a mental health disorder, the interpretation of it should be based on various contextual factors. Associations with other mental health symptoms may reveal certain mediating effects, as loneliness appears to be a direct consequence of parental absence.

**Depression**

Studies also explored indications of mental health conditions among LBC by using various screening tools for specific types of mental disorders. Although the results
did not necessarily suggest clinical diagnosis, strong negative implications of parental absence were demonstrated in most studies.

Children’s Depression Inventory (CDI) was the most commonly used depression scale in among the reviewed studies. An important study (He et al., 2012) showed that 15.6% of left-behind schoolchildren had a depression risk, significantly higher than the controls after adjusting for demographics and socioeconomic status. The study was carried out in a rural county of China’s Hubei Province. The depression symptom scores did not differ between children with a migrant mother, father, or both parents away. Similar studies in English (Wang et al., 2015a) and Chinese (Hou et al., 2015; Wang et al., 2011a; Wang et al., 2011b) that applied CDI also found higher depression prevalence (ranging from 12.1% to 24.8%) among LBC than controls. The samples across these studies included diverse geographic areas across mainland China. Additionally, also based on CDI, Wang et al. (2015a) noted that both-parent migration was associated with higher likelihood of depression than father- or mother-only migration in Chongqing municipality, whereas Wang et al. (2011b) found in Henan that children left behind by one parent were less likely to be depressed, compared to both non-LBC and children left behind by both parents.

Ling et al.’s (2015) study adopted another popular depression screening tool, Depression Self-Rating Scale (DSRS) for Children, in a small sample in Hunan, China. The study found higher depression score in the LBC group than the control
group, but the difference was not significant. Meanwhile the Anxiety/Depression subscale from the Youth Self-Report, applied in the same study, indicated worse outcomes in LBC. Using a cut-off score of DSRS, a Chinese-language study (Liu et al. 2011), found 27.1% of LBC had depression risk, much higher than the proportion among non-LBC (13.9%) in a small sample in Hebei province.

A recent study (Ren & Treiman, 2016) applied the Center for Epidemiological Studies Depression Scale for Children (CES-D), and found no significant difference in depression symptoms between rural LBC and rural children living with both parents. However, it is noteworthy that this study oversampled the more populated villages, where availability of resources related to child wellbeing might confound the results. With the same depression scale, two studies published in Chinese (Lan et al, 2009; He et al., 2011) demonstrated higher levels of depression in LBC than non-LBC, after adjusting for factors including socioeconomic status.

Different depression prevalence from the same survey tool suggests the variation of the scale of challenge for LBC. Studies may not be able to properly identify the impact of parental migration, without using the instrument that best suited for the target child population. Adjusting for covariates at multiple dimensions is also important in illustrating a comprehensive situation.

Wu et al.’s (2015) study provides an excellent example of the investigation of family and community level variables, among both current and previous LBC. After
adjusting for family social capital and community social capital, children who were currently left-behind exhibited significantly higher levels of depression, than native rural children (those who were never left behind or migrated with parents). Children who were currently living with both parents but had been left behind by their migrant parents, showed significantly lower levels of depression than the native rural children. However, the small sample size (N=591) and the five categories of migration status resulted in very small and unequally sized groups of children in the analysis, which was a limitation of the study.

Anxiety

Luo et al. (2011) used the State-Trait Anxiety Inventory to examine the state anxiety (anxiety about an event) and trait-anxiety (anxiety level as a personal characteristic) symptoms among children in a large sample across five Chinese provinces; they found that subjects who experienced separation with fathers have increased state-anxiety but not trait-anxiety. Tomsa & Jenaro (2015) applied the same instrument in a sample in Romania, and found that LBC had higher levels of both state and trait anxiety. Anxiety scores were predicted by coping skills, depression, and anger, controlling for the quality of the relationships with parent, and sociodemographic characteristics.

Zhao et al. (2014) found increased social anxiety in LBC as compared with their peers in rural Anhui Province, China. The higher Social Anxiety Scales for Children
(SASC) scores in LBC were associated with lower quality of life, poorer family function, physical abuse, being female, having more siblings and minorities. Earlier studies published in Chinese (Zhang et al., 2007; Zhao et al., 2012) indicated similar results from the same scale, showing higher levels of social anxiety in LBC than non-LBC. Zhang et al. (2007) further suggested that LBC who were girls, younger, lacked proper care, and were less healthy were more vulnerable.

Although the studies seem to show the association between parental migration and anxiety, the specific mechanisms have not been clearly elicited. In particular, Zhao et al. (2014) examined various aspects of wellbeing and its potential determinants, but these factors are yet to be connected to provide a convincing explanation. One reason may be that anxiety accompanies many mental health conditions, and may not be a good indicator of LBC’s psychosocial challenges due to parental absence.

3.2.8 Behavioral issues

Studies have examined child behaviors that are related to mental health or psychosocial wellbeing. Their results, in China, Sri Lanka, and Mexico, respectively, suggested that LBC had more behavioral problems. Ling et al. (2015) examined behavioral outcomes from the Youth Self-Report questionnaire, and revealed higher risks of externalizing behaviors, internalizing behaviors, somatic disorders, anxiety/depression, social problems, and loneliness, in LBC. In Sri Lanka,
Senaratna et al. (2011) reported that LBC were more likely to have mental health problems, based on the scores from the Child Behavior Check List (CBCL-S). Similar results were also found in Mexico (Lahaie et al., 2009) although the outcome measurement was only asking the caregiver whether the children had behavioral problems.

Overall, these studies showed higher prevalence of behavioral problems in LBC. Yet the connections between parental migration and behavioral challenges are rarely delineated. Ling et al. (2015) set a good example of investing multiple dimensions of behavioral wellbeing, although other factors in the child’s family and community were missed out in the analysis. Interpretation of the unadjusted effects of parental migration on child outcomes should always be cautious as many factors may interfere with correlations.

None of the Chinese-language papers in this review focused on behavioral problems as key outcome indicators. Yet some studies explored behavioral aspects of wellbeing metrics. Zhao et al. (2006) and Gao (2010) reported that LBC had higher levels of behavioral problems than their peers, according to the Piers-Harris Children’s Self-Concept Scale. Yang et al. (2013) noted that among LBC, sense of hope was positively associated with pro-social behaviors, based on the results from the Strengths and Difficulties Questionnaire. These findings suggested that behavioral issues in LBC may entail a variety of aspects, and were closely linked with other dimensions of psychosocial wellbeing.
Additionally, some English-language studies conducted in China have found a higher prevalence of health-related risk behaviors in LBC. Gao et al. (2010) examined the differences in health behavior between LBC and non-LBC in rural China. Based on a questionnaire adapted from Chinese and international survey instruments, their results demonstrated that LBC were at higher risk of skipping breakfast, lower rates of physical activity, having ever smoked tobacco, suicide ideation, and being overweight. Gao et al.’s (2013) study based on a similar sample further indicated that while maternal migration increased the adolescent’s smoking risk, paternal migration seemed protective for smoking; the impact of parental migration on smoking was partially mediated by self-efficacy. Wen & Lin (2012) also found that LBC tend to have more unhealthy behaviors by asking whether the child smoked, used illicit drugs or binged on alcohol in the last month.

These studies indicated that LBC seem to have considerable higher health related risk behaviors, although their physical health was not found to be problematic. Yet the more in-depth question may be about the quality of care in the absence of migrant parents, and the existing studies largely failed to explore the intermediate mechanisms that caused risky behaviors.

3.2.9 Self-concept and self-esteem

Self-concept is broadly defined as a person’s perception of him/herself, and
typically refers to how one feels about one’s worth across the evaluative dimensions such as social, academic, behavioral and physical domains (Marsh & Hattie, 1996). The Piers-Harris Children’s Self-Concept Scale (CSCS) is a self-report questionnaire asking how children may feel about themselves, as a broad range of psychological health assessments by six dimensions: behavior, intellectual and school status, physical appearance and attributes, anxiety, popularity, and happiness and satisfaction.

Five studies published in Chinese used this scale (Liu et al. 2010; Zhao et al., 2009; Zhao et al., 2012; Gao, 2010; Zhao et al., 2006), all of which suggested significantly lower overall self-concept level as compared to non-LBC. The two English-language papers using the same scales further reported that LBC had lower overall self-concept scores in all subscales of Piers-Harris CSCS except physical appearance (Liu et al. 2010) and behavioral/intellectual concept scores (Zhao et al., 2009) in the respective studies. Additionally, some Chinese-language studies indicated the lower self-concept in LBC may be associated with early separation from parents (Zhao et al., 2006) and longer duration of parental migration (Gao, 2010). However in Jamaica, Pottinger (2005) found no difference in self-concept between LBC and non-LBC according to Piers-Harris CSCS measurement, but the sample size was too small (only 54) to draw valid conclusions.

A similar but less general psychological instrument, Rosenberg Self-esteem Scale,
was used by a few other studies. Zhan et al. (2014) indicated that LBC whose parents both migrated had lower self-esteem, and parental migration seemed to have further reduced self-esteem in children with initial low self-esteem. Luo et al. (2011) indicated that children left-behind by father had lower self-esteem than those left behind by mother and the non-LBC. In contrast, Adumitroatie et al. (2013) found in Romania that self-esteem was higher in teenagers with both parents living abroad, as compared to the teenagers whose parents were in the country.

Although self-concept demonstrates an overall wellbeing status of the child, the existing studies have not separately investigated factors in family, school, and community environments that may affect different dimensions self-concept in different ways. Self-esteem, which can be seen as one aspect of the self-concept measures, appears to be context-specific and may be more dependent on how migration is viewed in the local community. The bias due to self-report should also be considered, as most studies did not triangulate study findings with child outcomes reported by other respondents.

3.2.10 Factors associated with wellbeing in left-behind children

Age (at time of survey)
Children in different age groups respond and adjust differently to major life changes such as parental migration. The effect of age may vary depending on the measures of psychosocial outcome when comparing LBC with their counterparts. The transition from childhood to adolescence involves changes in multiple domains including physical, sexual and social development with a considerable range of individual differences in the age at which each of these changes occur.

Fan and colleagues (2011) demonstrated that younger LBC generally had more emotional and behavioral problems than older LBC (mean age of LBC=12.2 ± 2.2 years) as is measured by the SDQ questionnaire, even after accounting for the duration of being left behind. A Chinese-language study (Zhang et al., 2007) also found that younger LBC had higher level of social anxiety, as compared to the older ones. Both Wu et al. (2015) and Lan et al. (2009; published in Chinese) found older children tended to have more depressive symptoms than the younger ones. Liu et al. (2014) further reported that younger children, both LBC and non-LBC, had better overall mental health status.

Yet Huang et al. (2015) demonstrated that older age was associated with improvement in health-related quality of life among LBC. Interestingly, Wang et al. (2015a) revealed a U-shaped age-specific depression prevalence curve: 10–12 years age group has the lowest rate, and the younger (middle childhood: 7–9 years group) or older (adolescent: 13–15 years group, 16–17 years group) age groups have a higher rate.
Age as a variable in the above studies is potentially correlated with a variety of wellbeing factors that emerge at different stages of children’s life. As a result, the effects of age may vary depending on different psychosocial outcomes. While younger LBC might feel parental separation simply as abandonment, some older children experience ambivalent feelings of acceptance/respect and grief/resentment, while at the same time being more aware of the family’s situation and parents’ efforts and sacrifices (Reyes, 2007). However, as the transition into adolescence involves various physical and psychological changes, children may also encounter difficulties in adaptation thus becoming more vulnerable to the effects of parental migration (He et al., 2012).

**Age at and duration of separation**

Child age at which the migrant parents first departed home was found to be another important factor, in relation to multiple aspects of psychosocial wellbeing, especially in the empirical studies conducted in China. This was similar to the theoretical literature summarized in the previous chapter, which argued that separation from migrant parents may cause adverse affects from a psychological development perspective.

Liu et al (2009) suggested that children who were separated from parents at a younger age had more symptoms of anxiety and depression, based on a sample of
LBC across three provinces in China. This effect was especially pronounced for children who were separated from their mothers or from both parents. Luo et al. (2011) found in children with an absent father the separation from the father for children aged 7 to 12 was linked with greater state-anxiety, compared to other age groups, and girls separated from their father before 2 years, and currently in middle/high school showed lower self-esteem. Fan et al. (2010) also demonstrated that children who were left-behind at an earlier age tended to have more emotional problems and less pro-social behavior, according to SDQ scores. An earlier study (Zhao et al., 2006) published in Chinese noted that younger age at separation was associated with introvert personality and lower self-concept about physical appearance and attributes. A longitudinal study conducted in New York even suggested that extended maternal separations (defined as at least one month), before age 5 independently predict long-term risks for offspring borderline personality disorder symptoms (Crawford et al., 2009).

The duration of parental absence also mattered according to the reviewed literature. Fan et al. (2010) found that longer separation from parents was significantly correlated with more psychopathology, especially emotional symptoms. Similarly, Liu et al. (2009) showed that separation from parents before 7 years old was associated with more symptoms of anxiety and depression, especially for children left-behind by mothers or both parents. Ling et al. (2015) indicated that long duration of separation had a negative impact on the child's psychological development, for children above 6 years old at the time of separation.
For LBC under 6 years at the time of separation, the impact of duration influenced only problems with thoughts. Many Chinese-language papers also included duration of parental migration as a variable in their survey; most of them found longer separation was correlated with worse psychosocial outcomes (Dong & Zhang, 2013b; Dong & He, 2014; Lu et al., 2014a; Zhao et al., 2015; Lu et al., 2014b; Gao 2010; Fan et al., 2013). In particular, a longitudinal study (Fan et al., 2013) found that longer duration of parental migration predicted increased negative emotions at the end of a 2.5-year study period.

Yet some papers reported no significant effects from the duration of parental migration (Yang et al., 2013; Jiang 2013; Zhao et al., 2006). Other studies even suggested longer separation might improve child resilience. Huang et al. (2015) also showed children whose parents had migrated for a longer duration, scored higher in quality of life metrics. Jordan & Graham (2012) found greater resilience in child wellbeing was associated with longer durations of maternal absence.

**Gender**

Among studies using SDQ, both Fan et al. (2010) and Hu et al. (2014) found left-behind girls were more likely to have emotional symptoms, whereas boys had higher levels of problems in hyperactivity and pro-social behaviors, according to results from SDQ scores. Hu et al. (2014) and Jiang (2013) compared the SDQ scores between boys and girls, and suggested that boys had higher level of
difficulties in conduct, peer relationship, and prosocial behaviors. Wickramage et al.’s study (2015) in Sri Lanka also revealed higher likelihood of any psychiatric diagnosis in left-behind boys than girls, based on standardized composition SDQ scores reported by parent, teacher and self.

Many studies compared the wellbeing outcomes between boys and girls. Wu et al. (2015) and Zhao et al. (2014) found that girls had higher levels of depressive symptoms and social anxiety, respectively, than boys. Similarly, Liu et al. (2009) indicated that female students had higher levels of trait anxiety and depression than did male students when both parents left for the cities. Similarly, a Chinese-language study (Jiang 2013) found girls were worse off in various mental health measures. Meanwhile, a few other studies published in Chinese suggested that boys were more disadvantaged, in terms of social support (Zheng et al., 2014) and depressive symptoms (Yang et al., 2010).

Some other studies identified wellbeing disadvantages related to parental migration among girls. Luo et al. (2011) found female middle/high school students who were separated with father before 2 years, suffered from lower self-esteem. Zhan et al. (2014) indicated that LBC girls whose father or both parents migrated out to work in other cities are inclined to score lower in the self-esteem test than boys. In contrast, Zhou et al. (2011) and Zhu (2016) found among boys that LBC had worse mental health status than non-LBC. Gao et al. (2010) reported that as compared to non-LBC, left-behind teenage girls in China
were more likely to use substances and have emotional problems and express sadness, whilst left behind teenage boys were more vulnerable to being overweight and addicted to the internet.

Studies conducted in countries other than China implied that the socio-cultural contexts played certain roles in the gender disparities of child wellbeing, especially the communities where traditional gender norms still prevail. Aguilera-Guzman et al. (2004) showed that left-behind boys in Mexico feel the pressure of their role as providers, and female LBCs felt the pressure of having to do more housework, such as cooking or washing clothes. The authors suggested that gender, not father's absence, appears to be the most important risk factor for psychological distress. Tomsa & Jenaro (2015) found boys appear to use more distraction strategies to cope with various situations, whereas girls seem to experience more anger.

Parental migration may affect boys and girls in different ways. Many studies elicited a similar pattern: girls seem to demonstrate more emotional distress or internalizing problems, whereas boys tended to have more behavioral or externalizing problems. Hence gender effects may vary between different wellbeing outcomes, yet most studies were unable to distinguish between them. Additionally, sociocultural contexts play a significant role in gender norms, which should be further explored in different settings.

**Patterns of parental migration**
The impact of migration on LBC’s wellbeing may vary across different types of migrant households, i.e. families with father or mother or both parents migrating, leaving children behind in the care of grandparents, other relatives/friends or even alone.

Many studies compared the effects of one-parent and both-parent migration. For example, Su et al. (2012) found children with two parents migrating reported the lower level of life satisfaction than children with only one migrant parent and the non-LBC group. Gao et al. (2010) demonstrated that compared to those with one migrant parent, children with both parents absent were more likely to engage in risk behaviors, to have emotional and mental problems and to be overweight or stunted. In contrast, Li & Tao (2009) indicated that children left behind by one parent were significantly more likely to have suicide thoughts, compared to children left behind by both parents as well as non-LBC.

Others compared mother-only and father-only migration, and demonstrated mixed results. Some studies suggested that children living with fathers and left behind by mothers seemed more disadvantaged than the other way around. Gao et al. (2010) revealed that children with a migrant mother only were more vulnerable to behavioral risks, compared to those with father’s absence only. Wen & Lin (2012) indicated that children left by migrant mothers (but not fathers) are the most disadvantaged type of parental migration, in terms of health behavior and school
engagement. In Romania, Adumitroaie et al. (2013) found teenagers left-behind only by mothers had a lower level of psychological adjustment compared with both the groups of father-absence and both-parent absence, especially in terms of aggressiveness, self-esteem, self-adequacy and worldview. Asis (2006) described how children left behind by mothers in the Philippines had worse emotional health compared to children of father migrants, although no statistical significance was examined. Wen & Lin (2012) pointed out that this disadvantage seems partly attributable to deficiency in family cohesion and family support in mother-only migrant households, with children particularly reluctant to see their mothers migrate. In many societies the prevailing gender script of mother as children’s nurturer and father as breadwinners could shape LBC’s experience with regard to mothers absence (Graham et al., 2011).

On the other hand, there are also findings indicating the greater impact of father’s absence than mother’s. Luo et al. (2011) reported that a father’s absence had a greater influence on the state-anxiety and self-esteem of left-behind adolescents than that of the mother’s. Vanore et al. (2015) noted that the migration of fathers, but not the mothers, resulted in worse psychosocial outcomes for children. Dreby and Stutz (2012) exemplified that, by understanding the sacrifice of their migrant mother makes in order to support them, LBC may see their mother’s migration more acceptable over time and derive higher educational aspiration in return.

Meanwhile, He et al.’s (2012) study on depression and Zhao et al.’s (2014) study on
social anxiety also indicated no significant difference in their findings among three subgroups of LBC (father, mother, and both parents away). Graham & Jordan’s study (2011) based on SDQ results also concluded that there was no evidence in any of the country samples (Indonesia, Vietnam, Thailand, and the Philippines) between the father-migrant/mother-caregiver group and mother-migrant/father-caregiver group in psychological disorders than children of a migrant father, although only one of these two groups appeared significantly better off or worse off, as compared to the non-LBC group in each of the four countries.

Father, mother, or both-parent migration may also affect different aspects of child wellbeing. Wen et al. (2015) found father-only migration corresponded to higher educational aspirations and high levels of no problem behaviors; mother-only migration was linked to better self-rated health, and; both-parent migration was associated with higher school grades and higher educational aspirations. Li et al. (2012) suggested that mother-only migration was linked with smoking behaviors and violence under alcohol influence, and both-parent migration linked with frequent drinking and more time on the internet.

Studies that investigated children’s previous experience of being left-behind also showed mixed results. Adhikari et al. (2013) found in Thailand that mother’s earlier migration history had a significant, independent association with psychosocial difficulties. Huang & Li (2007) showed both current and previous
LBC had worse mental health status than non-LBC. However, Wu et al., (2015) indicated that children who had previously been left-behind tended to experience fewer depressive symptoms.

Given the complexity of patterns of parental migration and family structure, a major gap in the literature was the lack of investigation on the primary caregiver living with the child. Whether the father, mother or both are away does not determine the primary caregiver at home. Children’s opinions about who cares for them the most may also reflect crucial family characteristics. Meanwhile, a variation across different contexts is observed regarding the differences between types of parental migration, which suggests the importance of considering socio-cultural settings when analyzing the impact of migration type on LBC. Gender roles and norms may potentially shape the parent-child relationship and children’s experiences. Local tradition may also lead to a dominant type of migrant (such as migrant fathers) and consequently a type of community support network comprised of the remaining family members.

**Caregivers and siblings**

In China evidence suggests that having one parent at home is better for the well-being of LBC than living with grandparents (Jia & Tian, 2010; Zhao et al., 2009; Huang & Li, 2007). Children in the care of grandparents in China and Southeast Asia appeared to be more psychologically advantaged than those who were cared
by other relatives or friends (Zhao et al., 2009; Fan et al., 2010; Jiang, 2013; Graham, 2011; Senaratna et al., 2011), and older caregivers seemed more favorable to children's wellbeing than younger caregivers (Adhikari R, et al. 2013; Fan et al. 2010). Mexican LBC who were taking care of themselves were found to be much more disadvantaged than other LBC (Lahaie et al. 2009).

It is also noteworthy that changes of caregivers could have negative effects on LBC. Senaratna et al. (2011) found in Sri Lanka that change of primary caregiver was twice or more times associated with behavioral risks. Mazzucato et al. (2015) found that children living in transnational families who changed caregivers one or more times had worse psychological well-being, as compared to that of children living with both parents and who have never changed caregiver, in Ghana, Nigeria, and Angola.

This pattern of the effect of different caregivers seems to be quite consistent across countries from the reviewed literature. A gradient of psychosocial wellbeing is observed in relation to caregiver arrangements, with children cared by one parent at the top, followed by grandparents, other friends/relatives, and LBC living alone at the bottom.

With regard to other household members, Senaratna et al. (2011) identified that not having an elder sibling was associated with more behavioral health problems in LBC in Southeast Asia. In addition, Adhikari et al. (2013) and Zhan et al. (2014)
examined the effect of siblings as a control variable among all children, and found more siblings was correlated with better mental health. However, in China, some reviewed studies found being a single child to be a protective factor for child wellbeing. Zheng et al. (2014) and Jiang et al. (2013) indicated that being a single child was associated with higher social support and greater resilience. Zhao et al. (2014) found that among LBC, children with fewer siblings tended to have lower levels of social anxiety. Additionally, Yang et al. (2010) and Wang et al. (2011a) suggested that whether the LBC was single child or not did not affect their wellbeing.

Despite the One Child Policy, many LBC still had siblings at home, although there seemed to be mixed effects of having any siblings, especially when availability of resources for child development was considered. While caregivers and siblings comprised LBC’s co-resident household members, more insights regarding the relationships in the extended family, including the migrant parents, were necessary to better understand the disrupted family structure.

**Family relationships**

Separation between LBC and their parents does not necessarily mean there is no communication between them. Modern communications, such as internet and mobile phones, contribute to keeping the absent parents “virtually present”. They
may also visit home to maintain relationships with children and sustain the family function from afar.

In China, the most important days for family reunion are during the Chinese New Year, when most migrants will return home in the one-week public holiday. In a study including 1024 LBC with migrant fathers across five provinces, Luo et al. (2011) noted that over 50% of fathers could come home at every Chinese New Year, while the rest visit their home less frequently; 22% of LBC contacted their fathers every day by phone, and more than 65% contacted them every week. Su et al. (2012) reported nearly 60% of LBC with two parents migrating (n=283) would “always” contact their fathers and 70% of them would do so with their mothers.

However, LBC in transnational families in other countries may not be able to see their immigrant parents as often. For instance, in the Philippines migrant workers may visit their families at home every two years when renewing their contracts or less often for the high-skilled workers (Asis, 2006), and many undocumented Latino immigrants in America do not visit their home country at all, since they are undocumented and hence not allowed to cross back into the US.

Nevertheless, the presence of migrant parents through communication or home visits seems to benefit the psychosocial wellbeing of LBC across different contexts. Jia & Tian (2010) demonstrated that LBC who had bad relationship and low frequency of communication with parents were prone to encounter more
loneliness. Liu et al. (2010) examined whether and how LBC like their migrant parents and caregivers, and the results from both questions were positively associated with children's self-concept, as well as the frequency of home visits and communication (for migrant parents). However, simple measures of communication frequency may not reflect the quality of parent-child relationship, since it the child may unwillingly talk with migrant parents over the phone under pressure of co-resident caregivers.

Wang et al. (2015a) further looked into the characteristics of communication between LBC and their migrant parents. The study showed the protective factors for depression in LBC included high frequency of parent-child communication, communication by telephone, and talking about daily trivia, learning experience, school life, and feelings.

A few Chinese-language studies explored another perspective by asking about how close was the child with migrant parents, or how much the parents cared for the child. Han et al. (2012) showed that, “very close” parent-child relationship was linked with higher sense of security in LBC, although the effect disappeared after adjusting for resilience measures. Zhao et al. (2012) and Zhao et al. (2015) found that, higher extent of care the child reported to receive from the parents was associated with better mental health outcomes.
Relationship between the parents as one or both of them became migrants, was a crucial characteristic of the family environment, but very few studies included parental marital status as a variable. Some authors such as Wu et al., (2015) excluded children of divorced parents in their sample. Yan et al., (2010) noted that children of divorced parents were more likely to have depression symptoms. Liu et al. (2014) examined the relationship between the parents and found it to be an important positive correlate of child mental health. Yet Hu et al. (2014) found divorce was not associated with psychosocial strengths and difficulties.

Despite the long-term physical absence of migrant parents, their relationship with the child appeared to be an important wellbeing factor. However, few studies examined other relationships in the family that may be meaningful in child development, such as the relationship between the parents. The relationships that involved caregivers were also rarely examined. Alternatively, the family environment might also be regarded as a variable, and the overall characteristics of the household were examined by some studies as is elaborated below.

**Family function and social support**

Two studies examined child-report family function using APGAR, a rapid screening tool with questions about adaptation, partnership, growth, affection, and resolve. Zhao et al. (2014) showed poorer family function was linked with higher social anxiety in LBC. Jordan & Graham (2012) further noted that child assessment of
family functioning, an explanatory measure across wellbeing measures, seemed an important factor in variation in child wellbeing beyond the migration effects. The family functioning seems to be an important aspect of family characteristics, yet its definition may need further clarification in terms of the relevance to child care.

In addition to family functioning, social support may provide important resources that benefit child psychosocial wellbeing. Several studies suggested social support was a protective factor of LBC’s wellbeing (Chen et al., 2011; Wang W et al., 2014; Zheng et al., 2014; Fan et al., 2013; Liu et al., 2014; Tao et al., 2014; Wu et al., 2015). For example, Zheng et al. (2014) found that LBC had lower level of social support than the control group, and higher social support was associated with better overall mental health. Tao et al. (2014) showed that less social support for LBC may be an important risk factor for their mental health, although LBC had significantly better family economic status than non-LBC.

More specifically, a longitudinal study (Fan et al., 2013) published in Chinese revealed that, social support particularly mediated the predictive correlation, between family atmosphere at baseline and emotional wellbeing at the follow-up survey after 2.5 years. Wu et al. (2015) also concluded that parental migration influenced children’s mental health through the mediating effects of family and community social capital. These studies illustrate the position of family and social support on the potential causal pathways between parental migration and child
wellbeing, and underscored the importance of adequate support from outside the nuclear family in improving LBC’s situations.

**Socioeconomic status**

The household economic situation and parent/caregiver’s educational levels can positively affect child wellbeing and may mediate or confound the impact of migration on LBC. While migration was usually aimed at higher income, the relative socioeconomic status of migrant households prior to parental migration is unknown. Therefore, the LBC may not always enjoy economic advantages compared to their peers.

Most studies in China that compared economic status between LBC and children living with both parents suggested no significant differences (He et al., 2012; Jia et al., 2010; Liu et al., 2010; Su et al. 2012; Wen & Lin, 2012). Yet Wen et al. (2015) noted that the highest family income level was found in two-parent migration families and the lowest found in non-migrant families. Tao et al. (2014) and Gao et al. (2010) also suggested higher socioeconomic status in migrant families, using indicators of self-report annual income per capita and the possession of multi-storey house, respectively. Zhao et al. (2014) further suggested parental education levels were lower in LBC than non-LBC, although this did not show association with social anxiety in multivariate analysis.
Yet Fan and colleagues (2010) found that the left-behind families had lower economic status than others, and the LBC’s emotional and conduct problems were significantly correlated with lower family economic status and lower education level of parents and caregivers. Wen et al. (2015) showed that father's education was in fact the lowest in both-parent migration families among all migration types.

A few studies published in Chinese indicated better socioeconomic status was a protective factor for wellbeing outcomes among LBC, taking into account of parental migration and other covariates. Jiang (2013) showed that self-report family income status was positively associated with the child’s psychosocial strengths. Dong & Zhang (2013b) and Wang et al. (2014) found LBC whose mother had higher education level were more likely to have better psychological outcomes. In addition, Gao (2010) noted that higher education level of the caregiver was also linked with higher self-concept of the LBC.

While most studies implied links between higher SES better psychosocial wellbeing, the impact of parental migration often seemed to be independent from the differences in SES. Wen et al. (2015) indicated that increased income in migrant families helped explain some of the impact patterns of parental migration on child wellbeing. However, Lahaie et al. (2009) demonstrated no association between monthly remittances and any of the academic, behavioral, or emotional outcomes among LBC in their study in Mexico. Jordan & Graham (2012) further
noted that they found no evidence of a moderating effect of higher socio-economic status on parental migration in Southeast Asia, as socio-economic indicators are consistently associated with variations of wellbeing regardless of parental migration status.

Most of the measurements of socio-economic status were rather crude in the reviewed literature, which makes the results difficult to interpret or compare. For example, some studies only used a single proxy indicator to indicate economic status, such as housing type (Gao et al., 2010), and children in a public or private school (Smeekens et al., 2012). Other indicators such as self-reported household income (Jia & Tian, 2010; Jiang, 2013) and wealth level (Su et al., 2012; Liu et al., 2010; Wen & Lin, 2012) were also over-simplified and subject to reporting bias. The wealth index, calculated from multiple indicators may be a better approach to demonstrate economic status (Graham & Jordan, 2011; Fan et al., 2010).

**School, peers, and community**

Outside the household, the extant literature also looked into LBC’s psychosocial wellbeing in their school and community environments. English-language studies conducted in China indicated that LBC were more likely to drop out of school (Gao et al. 2010) or have lower school engagement (Wen & Lin, 2012) compared to non-LBC. Three Chinese-language studies (Lan et al., 2009; Liu et al., 2011; Wang et al., 2011a) further suggested that in addition to parental absence, lower school performance may increase depression risk in Chinese children. Yet Jordan &
Graham (2012) found in Southeast Asia that LBC showed no difference in school performance and enjoyment, although longer duration of parental migration seemed to have negative influence on school performance.

In contrast with the above studies, a study in Guangxi, China (Wen et al., 2015) found father-only migration corresponded to lower incidence of problem behaviors and higher educational aspirations, compared with not-left-behind children. Both-parent migration was associated with higher school grades and higher educational aspirations.

These contradictory findings imply the complexity in the effects of factors associated with LBC’s wellbeing in the school environment. An interesting study published in Chinese (Hou et al., 2015) investigated the effects of school class composition in terms of the proportions of LBC, children not living with parents for other reasons, and children living with both parents. The results demonstrated that higher proportion of children from “normal” families was associated with lower self-esteem in LBC.

Interaction with peers, whether at school or in the community, may reflect an important aspect of a child’s social life. Some other studies looked into the effects of the overall relationship with peers on child wellbeing. Three Chinese-language papers (Zhao et al., 2012; Wang et al., 2014; Zhao et al., 2015) reported that positive relationship with peers was associated with better overall mental health.
Wang et al. (2011b) more specifically measured quality of friendship with peers, and found better friendship were linked with less loneliness and depression.

Outside the child’s family and school, two studies also included variables regarding community-level characteristics. Hou et al. (2015) found that children living in a low-crime neighborhood, which was used as a proxy indicator of better community development, were less prone to depression. Zhao et al. (2015) reported that better relationship with neighbors was associated with better overall mental health outcome. However, these studies did not include any economic status measures or any other community-level variables, and thus this link may be confounded by many other factors.
## Table 3.4: Summary of reviewed qualitative studies

<table>
<thead>
<tr>
<th>Author, Year</th>
<th>Location</th>
<th>Sample</th>
<th>Age</th>
<th>Main measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arnold 2006</td>
<td>African Caribbean women (who migrated to the UK)</td>
<td>20 women (retrospective study)</td>
<td>35 to 50</td>
<td>In-depth interviews using the Separation–Reunion Interview Schedule</td>
</tr>
<tr>
<td>Asis 2006</td>
<td>LBC in the Philippines</td>
<td>Adolescent children of migrants (n=11), left-behind care-givers (n=8) and community workers involved in organizing families of migrants (n=4)</td>
<td>About 10 to 12</td>
<td>Focus group discussions</td>
</tr>
<tr>
<td>Coe 2011</td>
<td>Ghana (a suburb of the capital city Accra)</td>
<td>24 LBC</td>
<td>8 to 22</td>
<td>Focus group discussions</td>
</tr>
<tr>
<td>Dreby 2007</td>
<td>USA and Mexico</td>
<td>44 migrant parents in the United States and 60 LBC and 37 of their caregivers in a number of sites in Mexico.</td>
<td>Pre-adolescent s, adolescents, and young adults</td>
<td>In-depth interviews</td>
</tr>
<tr>
<td>Dreby &amp; Stutz, 2012</td>
<td>Mexico</td>
<td>51 children of migrants and 30 of their caregivers in Mexico.</td>
<td>16 were aged between five and eight, 12 between nine and twelve, 10 between thirteen and fifteen, and 13 sixteen or older</td>
<td>Structured interview with the younger children and a semi-structured one with the older children; interviews with young adults were open ended</td>
</tr>
<tr>
<td>Study</td>
<td>Country/Region</td>
<td>Sample Size</td>
<td>Sample Composition</td>
<td>Age</td>
</tr>
<tr>
<td>------------------------------</td>
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</tr>
<tr>
<td>Graham et al. 2012</td>
<td>Indonesia and Philippines</td>
<td>32 LBC (16 in each country)</td>
<td>10 to 12</td>
<td>Semi-structured interviews</td>
</tr>
<tr>
<td>Hoang &amp; Yeoh, 2015</td>
<td>Vietnam</td>
<td>15 LBC, 37 caregivers</td>
<td>12 to 15 (children)</td>
<td>In-depth interviews</td>
</tr>
<tr>
<td>Hoang et al., 2015</td>
<td>Indonesia, Philippines, Vietnam, Thailand</td>
<td>50 caregivers and 16 children in each country</td>
<td>9 to 11 (children)</td>
<td>In-depth interviews</td>
</tr>
<tr>
<td>Liu 2009</td>
<td>Jiangxi, China</td>
<td>38 LBC, 32 caregivers, 15 teachers</td>
<td>Under 18 (children)</td>
<td>In-depth interviews</td>
</tr>
<tr>
<td>Murphy 2014</td>
<td>Jiangxi, China</td>
<td>41 caregivers (parents), 59 children (33 were matched pairs), 12 teachers</td>
<td>not reported</td>
<td>In-depth interviews</td>
</tr>
<tr>
<td>Pantea 2012</td>
<td>Romania</td>
<td>24 grandmothers</td>
<td>not reported</td>
<td>In-depth interviews</td>
</tr>
<tr>
<td>Parennas 2008</td>
<td>Philippines</td>
<td>69 young adult children of migrant parents</td>
<td>young adults</td>
<td>Open-ended interviews</td>
</tr>
<tr>
<td>Pribilsky 2001</td>
<td>Ecuador</td>
<td>At least two family members in each of the 15 households (e.g. a father and a child, mother and a child, husband and wife)</td>
<td>not reported</td>
<td>Open-ended interviews</td>
</tr>
<tr>
<td>Ye &amp; Pan, 2011</td>
<td>Anhui, Henan, Hunan, Jiangxi, and Sichuan, China</td>
<td>Mixed methods: qualitative sample not reported</td>
<td>not reported</td>
<td>Structured and semi-structured interviews; group interviews</td>
</tr>
<tr>
<td>Zou 2012*</td>
<td>Guizhou</td>
<td>3 fathers and 6 grandparents from 4 families</td>
<td>Not reported</td>
<td>Semi-structured interviews</td>
</tr>
<tr>
<td>Zhang et al., 2015*</td>
<td>Hunan</td>
<td>28 LBC and their caregiver and teacher</td>
<td>Students at Year 8</td>
<td>Semi-structured interviews</td>
</tr>
</tbody>
</table>
3.3 Qualitative studies

A total of 16 qualitative studies across a variety of geographical regions were included in the review (Table 3.3), only two of them were published in Chinese (Zou, 2012; Zhang et al. 2015), and 14 were published in English. Among the English-language studies, three were conducted in China, three in Latin America, five in Southeast Asia (three were based on the CHAMPSEA project), one in Africa, one in Eastern Europe, one in Western Europe (retrospective study).

3.3.1 Migration decision

According to studies in multiple countries, most children were able to understand their parents’ decision of migration as fulfilling their role of securing better economic status for the family. They were able to recognize that the increased income would not only improve their economic wellbeing, but also cover their school costs.

Hence most children seemed to support the decision, and some indicated that they think the parents were forced to leave them behind. Although children would
rather not let the parents go, they had to acknowledge the reality that the parents are away, and learn to live with it. Murphy (2014) found among many Chinese left-behind girls that they stressed the material benefits of their fathers’ migration, while being emphatic that they wanted their mothers to live at home.

Yet the decisions to migrate or return were made almost exclusively by the parents on behalf of their children and family’s best interests. Children’s voices were largely absent during the decision-making process. Parents also make decisions about whether children should stay at home or migrate with them. Children are often the last in the link to move abroad, in part because of parents’ concerns about the dangers and costs of children’s migration as well as their desire that children be educated in their home country (Hondagneu-Sotelo, 1994; Levitt, 1998; Massey, Alarcon, Durand, & Gonzalez, 1987).

A return migrant father in Vietnam, interviewed by Hoang & Yeoh (2015, p186), smiled as he explained “it is us as their parents who make the decision. They are just kids and they all would say the same thing when they have to be separated from their mom.”

Consequently, as Hoang et al. (2015) also found, some children put up resistance to their parent’s imminent departure, begging them to stay or asking someone else in the family to intervene so that the migrant would change his or her mind. Even after gradually getting used to the absence of parents and accepting the economic
reasons of their decision, the children would not comfortably accept the rationales of the extended separation. As Ye & Lu (2011, p373) found in a Chinese LBC’s narrations during group interviews:

*I’m always wondering why my other classmates can have parental love while I can’t. This question drove me mad and I feel so bored with life. My parents have been working in the city for 11 years and they only came back during Spring Festival. Sometimes I think my dad won’t want me anymore.*

In Mexico, according to self-report, children had little agency on their family decision-making processes, with parents tending to make the most of the decisions (Esteinou, 2004). Transnational families, at times, even sent children back home when they misbehaved in the United States (Grasmuck & Pessar, 1991). Interestingly, Dreby’s (2007) qualitative study suggested that children may manifest agency in shaping families’ migration trajectories, by expressing feelings of powerlessness with displays of emotional withholding, especially among younger LBC; in doing so they pressured parents to return to Mexico. Adolescent children were able to make more direct claims to their parents’ limited resources, even by acting aggressively to family members. For example, in order to fulfill their own migration aspirations, many older children pressure parents to migrate using the family’s social capital.
3.3.2 Gender norms and socio-cultural context

Similar to findings from quantitative studies, qualitative interviews elicited that migrant fathers and mothers play different roles in migrant families. This is largely determined by the gender norm in the local community and society. On one hand, the absence of the roles that parents used to play in the care environment may have various effects on the child, across migrant families with different structures. On the other hand, children’s views on the departure of their parents may also depend on the local socio-cultural setting, which lead to variable experiences.

In most socio-cultural settings, mother’s role is associated with emotional intimacy, domestic housework and most of other childcare tasks. The left-behind mothers with no paid employment often assume both the disciplining of children and productive roles, such as agricultural tasks, previously undertaken by their husbands (Hugo, 2002). Meanwhile, father’s role is associated mostly with economic provisions for the family. Migrant fathers may further represent an advanced modern lifestyle that the child could live up to. They also command respect through providing resources to meet their children’s needs and aspiration of being a successful migrant, rather than directly through strict force (Pribilsky 2001).
The shifts in parental roles due to migration may be interpreted differently by children. Graham (2012) noted that in Southeast Asia, children’s stronger sense of abandonment after their mothers left to work abroad may be due to the prevailing gender scripts for mothers, as “lights of the home” or “nurturers”. Similarly, in Mexico, Dreby (2012) suggested that Fathers’ periodic absences, although distressing, do not disrupt children’s lives as much as when both parents migrate.

In China, Murphy (2014) found that children learned that life working in the cities is “bitter” for the migrant fathers, and so is their mothers’ living at home taking care of the family. Yet, the study showed that children from mother-only migrant households did not show as much appreciation to their co-resident fathers. In the study (Murphy, 2014) a girl whose father was a local village accountant, said her mother sacrificed much for her and her sister while her father enjoyed an easy life.

3.3.3 Emotional and behavioral impact

Even if the child reluctantly accepted the fact of parents’ migration, the separation and loss would still disturb the children very much, as many became emotional when recalling the moment of departure (Hoang & Yeoh, 2015). Qualitative studies elicited various emotional experiences of LBC in response to the departure and extended absence from home. Many children, at all age levels, demonstrated negative feelings of loneliness, vulnerability, abandonment, and even symptoms of depression and anxiety after their parents’ departures (Dreby, 2007).
As the emotional bonds became fragile due to the long distance, children may perceive a strong lack of parental love and manifested deficits of happiness. As a girl in Liu's (2009, p78) study said:

*I feel that I have received little mother love because I have lived apart from my parents from a very young age. In the depths of my heart, I thirst desperately to stay with my parents.*

Graham et al. (2012) found that the absence of their mother may create vulnerabilities related to seeking emotional support. Some children’s narratives indicated their response to feeling sad was not to tell anyone and kept it as a “secret”, or they would feel “embarrassed”, even by talking with grandmother.

Parreñas (2008) noted that children often voiced their feeling of an “emotional gap”, or a sense of discomfort, unease and awkwardness that they feel toward migrant fathers. This may capture the ambivalence that they feel over the unfamiliarity that has developed from the prolonged separation.

Children whose parents had been working abroad for a long time may have been used to their situation. For these children, the cycle of migrant parents’ departure and return can be more painful than the prolonged separation itself. For example, Asis (2006, p61) found in the Philippines that children of seafarers particularly
suffered from emotional turbulence during their parents’ short visits back home.

One child described such experiences:

*I would rather that my father does not leave. When he leaves, I would rather be in school and not see him go so that I don’t have to think that he is leaving.*

*When I get home, they would ask me, ‘Why did you not come with us?’ I would say, ‘I just don’t want to.’ I don’t like going through that. It’s like that every year.*

However, the existing research did not delineate concrete accounts of children’s emotional experiences when missing or thinking about their migrant parents. Some studies mentioned that the interviews had to be paused or suspended, because children started to cry or their emotions became too intense to be expressed (Coe, 2011; Murphy, 2014). Such situations themselves implied the psychological vulnerability of LBC.

The links between parental migration and the child’s behavioral wellbeing may be more complex, and few studies were able to articulate the mechanisms by which parents’ absence affected child behaviors. Zhang et al. (2015, p58) argued that discrimination against the LBC at school, especially by other students, may cause significant psychological burden; the child’s perception of and response to the discrimination would lead to problematic behaviors. According to a child’s narrative:
In my first year of middle school, people knew that my parents haven’t been living at home, so the older students would bully me and say they don’t like me, and slap me in the face...I didn’t dare to fight back because there were a lot of them. But I’m really pissed off, so after school, I broke their bicycles.

3.3.4 Communication

It is important to sustain communication between LBC and migrant parents over time and distance, as a means to compensate for care deficits which left-behind children experience, since their emotional bonds were already fragile after such a long physical separation.

In general such distant communication is maintained on a regular basis, over the phone or via the internet. However, the quality of communication was often reported as inadequate, according to children, parents as well as caregivers. Many times children acted uninterested when their parents called home. As a migrant mother stated in Dreby’s (2007, p1055) study:

The only thing that makes me feel badly about my son is when he doesn’t want to talk to me. Sometimes there is a little bit of distance between us and he doesn’t want to talk.
Many co-resident caregivers also played an active role in prompting the child to talk more with the migrant parents over the phone. An aunt-caregiver mentioned (Dreby, 2007, p1055):

*I didn’t want my sister to think that I was telling him not to talk to her. So sometimes I would trick him to get him to talk to her on the phone . . . My sister would cry when he didn’t want to talk to her.*

However caregiver’s encouragement or even manipulation did not seem to benefit the parent-child relationship or change children’s attitudes toward parental migration. Graham (2012) noted that often times the communication was ineffective, as children were unwilling to share their problems with migrant parents. The barriers included fear of being reprimanded, the geographical distance, and concern about adding burden to their parents.

Children’s passivity in transnational communication was also demonstrated by the fact that they let the parents take the lead in phone conversations. Parents also made frequent efforts to discipline their children from afar (Hoang & Yeoh, 2015). Content of the conversations tended to focus on the life of LBC rather than allow the child to get to know about their parents’ lives away from home. Such repetitive phone conversations without fully engaging the child can exacerbate the emotional distance, leading to a sense of detachment and aloofness. As a Vietnamese girl said of her migrant mother (Hoang & Yeoh, 2015, p189),
She often talks about our family. ... I rarely ask her anything, partly because I am shy. Also, I don’t like asking her questions. My mom always asks too many questions so I never ask her back. She asks too much, one thing after another.

She asks if I do well at school, how my dad and grandmother are and how well our relatives do, etc.’

In addition, the emotional distance was even manifested in children when their migrant parents returned home. Parreñas (2001) elicited a sense of social discomfort and emotional distance’ between Filipino migrant fathers and their left-behind children. Dreby (2007) suggested a level of emotional withholding in LBC in their interactions with migrant parents, both when they were away and back home for a short visit. A Chinese-language study (Zou, 2012, p839) conducted in Guizhou province revealed that certain positive change during the temporary reunion was unable to last long, according to a grandparent (translated by the author of this thesis):

When the parents came back home with all the fancy gifts like bike and toys, the kid became very interested. But after the parents were gone, the good impression about them quickly disappeared...When they called home, the kid wouldn’t even answer, or just say a few words and then “bye-bye”.
3.3.5 *Education*

Remittances from migrant parents may benefit children's education prospects with both increased economic resources and heightened educational aspirations. In Ecuador, Pribilskly (2001) found that migration flows to the US have drastically improved school attendance, which was historically hampered by high matriculation fees and a family's need for children's labor. Education opportunities may not only prepare students for limited opportunities in the local economy, but help achieve dreams of permanently living in the US.

Acknowledging parents’ sacrifice and efforts working away from home, some children were able to draw on the long-distance encouragement migrant parents and keep considerable self-discipline on study. For example, a left-behind girl in Hoang et al.’s (2015, p271) study was constantly the top student in her class. She was well aware of why her father had to be separated from the family, and for her, studying hard at school was the only way she could support him. According to her mother:

*She is glad because her father's migration means earning money. Occasionally she complains that she misses him and wants him to come back ... She wishes her father could stay with her ... She is never absent from school. She goes to school every day, never skipping classes even when she is ill...until the teacher orders her to stop.*
Hearing their caregivers’ speak about their mothers’ sacrifices may motivate these children to study harder and do well at school to justify their mothers’ selflessness. A grandparent caregiver described her approach for her granddaughter (Dreby, 2012, p84):

*Well, last year she failed [was kept back a year] and I said, Cindy, you have to study and make an effort at school because your mom isn’t there suffering and working so that you do nothing here. She is sacrificing herself there so that you have a better life here. You have to take advantage of her sacrifice.*

In contrast with children from lower income settings in Latin America, the higher educational aspiration of Chinese children leads them away from the migration paths of their parents. In fact, for families with considerable economic challenges, children would only continue schooling if they do well, otherwise they would have to join the migration workforce before higher or even secondary education. This created conflicting feelings in some children: even though they accepted the importance of study, they had come to doubt that their own grades would be good enough for them to avoid migration (Murphy 2014). For example, a boy felt that his grades were not good. He said that he was waiting for a year when he would be old enough to migrate. He said that school now held little interest for him and that only the internet cafe’ alleviated his boredom, while regretting that the study route was closed to him.
The emotional repercussions of family separation, and the resentment they feel about their parents being away, can also cause lower academic achievement or educational aspiration. Especially among children who were left behind by both parents, many changes in the children's daily lives after their parents leave can impose emotional burdens, as well as practical burdens including more housework, on their educational achievements.

Dreby's (2012) study in Mexico noted a tenth grader, whose father migrated first, said that after his mother left when he was in the seventh grade, he had a hard time at school. He became really close to his mother since his father's departure. Since both his parents left, he did not want to study because he missed his mother too much. Dreby (2007, p1058) also reported several cases in which the LBC dropped out from school after a series of behavioral changes and acting out after parents’ departure. A left-behind mother in the study said:

*Everything was destroyed [after the father left]. Everyone was sad and didn't eat well anymore. Some of them were insolent and rude to me. I think that they [her children] lacked a paternal figure.*

Coe (2011, p19) reported a 19-year-old boy who attributed his lack of academic success in secondary school to his mother leaving for the United States:
She had all the time for all of us, especially our studies. I was very good. There were things she used to do to help me, waking me up at dawn and sitting by me . . . Since she left, everything turned upside down, especially my studies. I wasn’t getting any help from anyone, so my academic performance in [secondary school] was good though, but not what I expected.

3.3.6 Care environment in the left-behind families

The effects of parental migration on children are usually dependent on the quality of care the child receives from his surrogate caregiver (Hoang & Yeoh, 2015). Most studies reported grandparents as the primary caregivers in the left-behind families, especially if both parents were away. However, children’s experiences and attitudes toward grandparental care varied considerably. In general, children who were left-behind at very early age, even before they had any memories about migrant parents, tended to be closer with their primary caregiver at home.

For example, Arnold (2006) interviewed women who were left-behind in the Caribbean. They were very young when their mothers migrated to the UK, and typically it took more than a decade for mother and child to reunite in the UK as if for the first time. One woman reported retrospectively about her grandmother, (Arnold, 2006, p164):
I was so well looked after and I was happy; my grandmother was my world. I remember her as a fascinating woman who loved me. It was just a warm close relationship.

It is also notable that most of the women in this study who had strong attachment with their primary caregivers (mainly grandmothers) spoke of the pain of the separation from them; yet more painful was the traumatic experience of reunion with their mothers who were strangers to them.

In Ghana, Coe (2011) found this close relationship with grandparents even in difficult economic situations. A 16-year-old girl whose mother and grandfather migrated to South Africa was interviewed. She was being raised by her 60-year-old grandmother who was ill much of the time, partly because to the economic deprivation. The girl explained (Coe, 2011, p12):

[I also love] my grandmother. Even though she doesn't have anything, she helps me. She struggles to get money to give me. If my grandmother doesn't have anything at all, she will go ask people for help so that we can eat.

Grandparents’ may not have the necessary support in child care, due to their reduced mobility, insufficient disposable income from remittances, and the simultaneous migration of several family members. (Hochschild, 2000; Silver, 2006; Piperno, 2006, 2007; McGuire & Martin, 2007; Lutz, 2008; Pham & Hill,
2008). Yet they may need to cope with children’s contestation of their authority, relationship with the co-resident parent especially daughter-in-law, divorce of the parents, or emotional episodes of the child (Pantea, 2012). Consequently, some studies indicated children’s adverse experiences living with grandparents.

Dreby (2012) interviewed a young woman who were left-behind during late adolescence, who preferred living with her mother and explained that (Dreby, 2012, p85):

*It isn’t the same [living with her grandparents]. We have small problems. ... It isn’t the same type of affection. We don’t feel the same as with our mother.*

In Arnold's (2006) study in the Caribbean, a woman was left with her maternal extended family, along with several other children. She sadly recalled (Arnold, 2006, p163): “*My grandmother had too many children to look after; there was not enough love to go around and I felt left out.*”

### 3.4 Summary

#### 3.4.1 Overview and gaps in the literature

In general, most quantitative studies in this review indicated worse psychosocial wellbeing outcomes in LBC, as compared to other rural children; few identified benefits of parental migration. While some studies used overall measures such as
quality of life and behavioral problems, the disadvantage of LBC is also quite consistent across individual dimensions of psychosocial wellbeing and mental health.

A few gaps were identified in the current literature. First, longer-term impact of parental migration was rarely explored, as only a few studies attempted to look into the previous experiences or long-term effects of being left behind, and provided some suggestive findings, yet lack of strong longitudinal evidence makes it difficult to reach valid conclusions. Second, the relationship dynamics between migrant parents and LBC, a key variable following their separation, remained unclear despite of findings on certain descriptive characteristics; the qualitative and quantitative studies did not present solid evidence on the mechanisms leading to wellbeing disadvantages in LBC. Third, how the left-behind family and their social environments provide care and support to children has not been comprehensively assessed. Although all the above-mentioned aspects were subject to methodological and practical challenges, this thesis aimed to provide further insights into these gaps in the literature.

Given the complex mechanisms by which parental migration affects child wellbeing, various types of potential covariates were explored in the literature. However, due to methodological and practical constraints, no concrete, comprehensive frameworks of LBC’s psychosocial wellbeing were proposed in the literature. Nevertheless, the reviewed articles together revealed an outline of
potential determinants. Similar to what was summarized in the previous chapter on theoretical perspectives, crucial factors of child wellbeing have been identified within the child’s family and community, although the direction and size of the effects varied across different contexts. Some of these covariates were also found to potentially mediate or moderate the impact of migration.

### 3.4.2 Contribution of the review to the current qualitative study

The literature reviewed in this chapter contributes to both empirical studies in this thesis. For our qualitative study, the review process formulated questions that acted as a stepping-off point during initial observations and interviews. The micro-level insights from the quantitative literature took a close-up viewpoint on families and individuals, and pinpointed some of the wellbeing concepts and factors to be investigated in the current qualitative study.

During the review of qualitative literature, the author did not attempt to synthesize or apply any deductive reasoning process, and persistently avoided imposition of predetermined understanding and existing frameworks on the current study, by reflexive interpretation and constant comparison. Hence, the frequently occurring themes in the qualitative literature were simply categorized in this chapter. Nevertheless, the crude summary also demonstrated that the existing studies mostly focused on individual experiences and rationales of migration from personal perspectives, rather than considering the family as a unit.
of analysis. There was a lack of insights into wellbeing outcomes related to family relationships and dynamics in the social environment (such as return migration), which are to be focused on the current qualitative study.

The use of relevant theories in migration, family studies, and child development, was also scarce and incomprehensive. The current qualitative study thus aimed to build on the existing knowledge, explore more into the gaps, and contribute to both theoretical and empirical literatures. As data analysis in the current qualitative study proceeded, the reviewed literature contributed to furthering conceptual and theory development. More details about these processes will be clarified in the introduction and methods sections of Chapter 5, the qualitative study.

3.4.3 Contribution of the review to the current quantitative study

The literature review also informed the current quantitative study. Although the quantitative study in this thesis was based on secondary data analysis, the author was highly involved in the initial questionnaire design, by reviewing the survey instruments and screening tools in the extant literature, and selecting the ones that were most pertinent to LBC’s psychosocial wellbeing in our study sites in Zhejiang. High relevance of the studies from the CHAMPSEA project contributed to the decision of selecting SDQ as the core component of our questionnaire. A number of
variables from the literature were referred to by the author in designing other questionnaire items.

Considerable gaps still existed in the quantitative literature, despite a variety of psychosocial wellbeing measures and control variables having been analyzed. Above all, since the previous studies rarely entailed solid theoretical groundwork, investigation in the current qualitative study was guided by theoretical perspectives presented in Chapter 2 regarding migration, family studies, and child psychology. In light of a comprehensive theoretical understanding of topics related to LBC's psychosocial wellbeing, the current qualitative study looks into the areas of the issue which the extant literature was unable to fully address, as was shown above in the literature summary framework (Figure 3.2).

First, the previous experience of being left-behind was investigated by very few studies with various limitations; it thus became a focus throughout this thesis and pervious-LBC was analyzed separately from current-LBC. Second, in order to improve the depth of data analysis in the literature, the current study aimed to distinguish the effects of family characteristics other than parental migration on child psychosocial wellbeing, and the roles of support for LBC potentially from the social environment. Interaction effects between the key covariates and parental migration were further explored, to elucidate any exacerbating and mitigating effects on child wellbeing. Third, as findings from the literature was largely context-specific, the current quantitative study attached significant importance to
exploring contextual factors that were specific to the study sites, and how they may have shaped the social and family systems and the relationship dynamics relevant to LBC’s wellbeing.

3.4.4 Putting empirical studies into contexts

Despite some commonality regarding parental absence and lack of care, findings from the reviewed studies were highly context-specific, as the migration decision and its impact tend to be rooted in larger social environments. Many specific characteristics, such as cultural and socioeconomic factors, make it difficult to extrapolate the findings to another country of even another community of the country, without detailed understanding about local settings. Also, as was discussed in the previous chapter, theories around the family and socio-ecological systems of child development delineate the important roles of broader contexts outside the household. Hence, the next chapter examines the local social background of the study sites, and policy and administration systems that were relevant to migration and child wellbeing, in order to better understand the settings and rationales of the empirical chapters.
Chapter 4  Study contexts

4.1 Introduction

The previous two review chapters presented how parental migration may affect child psychosocial wellbeing through multiple mechanisms, in which various potential confounding or mediating factors were involved. Aside from the characteristics of the family relationships and household environment, the considerable variability of the empirical study results is also attributed to vastly different socioeconomic, cultural and political contexts globally. Therefore, it is necessary to look into our specific study contexts before the next two empirical chapters of this thesis.

This chapter provides a description of the larger contexts of our empirical studies, with a focus on socioeconomic development and migration in the study areas, and policy and administration systems that are relevant to the wellbeing of rural families affected by migration, from national level to local community level. These contexts provide crucial background information of the design and implementation of both qualitative and quantitative studies in this thesis, and may inform the interpretation of the study results.

4.2 Study areas and populations
Data in this thesis was collected from samples of children and family members, across five counties in two Chinese provinces, Zhejiang and Guizhou. The two provinces represent the richest and poorest parts of China, respectively, and therefore may reflect different patterns of impact on LBC due to socioeconomic development status.

Ethical approval was received from both the Ethics Review Committee of University College London and Zhejiang University prior to the field study. Participants were recruited from migrant-sending rural areas in Zhejiang and Guizhou Provinces, China. Three counties in western Zhejiang, including Kaihua, Jiande, and Jiangshan, and two counties in southeast Guizhou Province, Guiding and Longli, were included in the study. Zhejiang is a wealthy eastern coastal province in China, but its western mountainous area is relatively underdeveloped, with a high level of out-migration. Guizhou is one of the poorest Chinese provinces, although the two counties in this study, located near the provincial capital, rank at medium level in GDP across the province. Figure 4.1 presents a map showing the locations of the two provinces.
Figure 4.1: Location of the study provinces

4.2.1 Socioeconomic development and migration in Zhejiang Province

Zhejiang is a wealthy eastern coastal province in China, and it has been taking the lead in the country’s urbanization and economic boom since the 1980s. In 2014 Zhejiang ranked 5th in GDP per capita among all 31 provincial level administrative regions in Mainland China, only after three municipalities (Tianjin, Beijing, and Shanghai) and Jiangsu Province (National Bureau of Statistics, 2014). Yet, much like the entire country, significant development gaps exist between different areas
of the province. The mountainous area in western Zhejiang, where our studies were conducted, is relatively underdeveloped, with a high level of out-migration.

Zhejiang is both a feeder and receiving province for migrant workers; there are an estimated 17.8 million migrant workers in Zhejiang according to a 2005 population census, around 40% of which are intra-provincial migrants (Zhang et al., 2008). According to Duan and colleagues’ (2013) estimate based on the 6th National Census in 2010, approximately 1.2 million children of migrant workers were left-behind in rural Zhejiang in 2010, accounting for 30% of all rural children in the province.

Economic vitality in Zhejiang is largely concentrated in about seven large cities in the eastern part of the province along the coast, which is a major migrant-receiving area. In contrast, western Zhejiang is relatively underdeveloped and has become a migrant-sending area, with massive natural reserves that limit the industrial expansion. Jiande enjoys a huge lake area that provides high-quality water for millions of population, and therefore many local industries are under constraints in order to protect water sources. Similarly, the source of Qiantang River, the mother river of Zhejiang, is in Kaihua, where the government enforces strict policies to limit the size of industry and protect the natural environment.

The three counties included in our studies are all located in western Zhejiang,
far away from the developed coastal cities in the province. Both Kaihua and Jiangshan are under Quzhou prefecture. Jiande is under the administration of Hangzhou prefecture, yet it is next to Quzhou prefecture and over 140 kilometers from Hangzhou City. While Kaihua is the poorest among the three, the overall socio-economic development and migration patterns are similar across these counties, and thus Kaihua is taken as an example. This is also because the qualitative study (Chapter 6) was exclusively conducted in Kaihua.

4.2.3 Introduction to Kaihua, the main project site

Our main project sites were in Kaihua County (population 350,000). Kaihua is under the jurisdiction of Quzhou city and it is located 300 kilometers from Hangzhou, the provincial capital, in the westernmost portion of Zhejiang on the border with both Anhui and Jiangxi Provinces. Its population includes over 99.5% Han ethnicity (National Bureau of Statistics, 2008) whose ethno-cultural background is similar to rural areas across the three provinces.

Kaihua is one of the least developed counties in Zhejiang Province and a typical migrant-sending area in the tri-province region; its GDP in 2010 ranked at the 47th place among the 58 counties in Zhejiang. This is largely due to the fact that Kaihua’s industrial development is restricted, as the source of the Qiantang River is in the county as well as many ecological reserves. About 85% of the county is mountainous areas, and the forest coverage over 80%.
According to a survey by Kaihua Women’s Federation (2013), about 55% of school-age children in the county were left behind. Two-thirds of these were left-behind by both parents and typically live with grandparents who are illiterate. The other one third live with one parent, usually the mother, while the father migrates to work. Most young parents have one or two children, as a second child was allowed if the first was a girl, though this policy has been relaxed recently and now all couples are allowed two children.

In the 1990s, Kaihua used to be a highly industrialized county, a number of forestry, cement, papermaking, and chemical plants are all over the townships and villages. Consequently, the environment, especially the water source for a massive part of the province, became highly polluted. In the year of 2000, Kaihua’s leadership set up the strategy of “a county based on ecological environment”, which became a turning point of Kaihua’s development entering the new century. In 2006, during a visit to Kaihua, Mr. Xi Jinping, the Party Chief of Zhejiang Province at the time, highly praised the ecological environment and encouraged the county to develop the economy by taking advantage of the well-reserved environment.

In recent years, a new type of industry, processing factories of supplied materials, emerged in Kaihua, and became a major drive of the local economy. These processing factories mainly assemble small products, which require very limited
training and cause little pollution. A number of local workers are now employed by this industry, and consequently the out-migration flows are held back to some extent. In the meantime, tourism is also booming in Kaihua thanks to the preservation of the natural environment. The number of tourists increased by 30% from year 2013 to 2014; the county is set to be an ecological functional area, as a “national park” system, with only 10% lands for industrial use (Li, 2015).

4.2.2 Socioeconomic development and migration in Guizhou Province

Guizhou is one of the poorest Chinese provinces. It is a landlocked province located in southwest China. In 2014 Guizhou ranked the last place in GDP per capita among all 31 provinces, municipalities, and autonomous regions in Mainland China. Historically, Guizhou's development has been constrained by the weak infrastructure and the frail ecological environment. The current urbanization and industrialization process is faced with major challenges including huge gaps between urban and rural areas, and inadequate social services.

Guizhou is a major migrant-sending province. Among the 8.6 million out-migration population, over 70% chose to move to another province. There are over three million left-behind children in Zhejiang, accounting for 40% of all rural children in the province. Children's education attainment in Guizhou is of particular concern: about 5% of rural children in Guizhou are not enrolled in
China’s nine-year compulsory education, which is the 8th highest proportion across Mainland China provinces; and LBC are slightly more likely to drop out than non-LBC. Neglect and lack of protection for LBC has caused severe consequences in Guizhou. A few horrible incidents that occurred over the past few years in the province have drawn attention from across the country regarding the wellbeing of LBC. The worst one which happened in June 2015 involved the deaths of four LBC from the same family. The four siblings, one older brother and three younger sisters, committed suicide at home in Bijie, Guizhou where they were living without any adult caregiver, by drinking poisonous pesticide. Government officials were already aware of their situation but failed to take effective actions.

The two counties in this study, Guiding and Longli, rank at medium level in GDP in Guizhou province. They are located next to each other at south-central Guizhou near the provincial capital Guiyang. Both counties belong to the Central Guizhou Economic Zone, a key area with strategic priority in the province’s development. According to a development plan of the Economic Zone, it aims to become a base of emerging industries. However, the current socioeconomic status of the entire area is still lagging behind in Southwest China, and thus a large number of working age population have migrated to other provinces.

4.3 Policy and administration contexts
Migration as a social phenomenon is not only driven by the economic development impetus and gaps across urban and rural China, but also shaped by the rather unique socio-political systems in the Chinese society. In fact, the economic advantage in the eastern coastal areas can be seen as a result of the Reform and Opening-up strategy adopted by the Central Government since 1980s (Cai et al., 2002).

The population control strategies started in the same period, known as the One Child Policy, had far-reaching implications on the structure of Chinese families and the wellbeing of their children. The top-down implementation of such policies requires a strong government administration system at grassroots level, which is organized in different patterns across the country and often unfamiliar to the outside world. In this section, the implementation pattern of the family planning policy and government administration systems in the study areas will be introduced, with a focus on the Women’s Federation, an government body responsible for child welfare and protection.

### 4.3.1 Family planning policy in China

A common misunderstanding of China’s One Child Policy is that all families across the entire country are only allowed to have one child. In practice, before the recent major shifted to Two Child Policy, there were already multiple variations of the One Child Policy across different areas and different population groups in
China. The local policies may even differ within a prefecture or a county.

A common relaxed version of the policy was the “One and Half Child Policy”. It means that if the first-born child is a girl, then the parents are allowed to have a second child; but not a third child. Before the recent policy change, some versions of the Two-Child Policy had already been applied to many rural areas in China, as well as certain population groups, including parents (some areas required one parent, while some require both) from an ethnic minority group, or if both parents are only child. Up to three children were allowed for ethnic minorities in rural areas (Guo et al., 2003).

In most of project sites in Zhejiang and all sites in Guizhou, the One and Half Child Policy applied. There are a higher number of ethnic minority families in Southern Guizhou, who were allowed to have two children.

4.3.2 Rural government administration system

China’s administrative system comprises a nested hierarchy of authorities. Under the central state, in descending order, there are provinces, prefectures (cities), counties, township and village levels (Chung, 2008).

Townships (Xiang Zhen; 乡镇) that have larger economy, area, and population (especially non-agricultural population) are named as Zhen (镇). Others are
named as Xiang (乡). In Kaihua, there are 18 townships including nine Zhens and nine Xiangs. A township governs a number of administrative villages, and occasionally, Communities (urbanized neighbourhoods). There are only nine Communities in Kaihua, five are near county center in Chengguan Zhen, three in Huabu Zhen as another urbanized center.

An “administrative village” is comprised of several “natural villages”. The government body is only at the administrative village level. Over the past decade, the government administrative units at community level in rural areas have been undergoing a merging process in many parts China, largely due to the decrease of rural population. In Kaihua, from the end of 2010 to early 2011, the government went through the process to reduce the number of administrative villages from 449 to 255. Similarly, the number of townships was reduced from 27 to 18 in year 2005 (Zhejiang Online, 2011).

The village government body is often referred as the “Two Committees” (两委): Village Party Branch Committee and Villagers Committee, which effectively work as one entity and is often referred to as Village Committee (村委会). Heads of these two committees respectively are Village (Party) Secretary, the top leader of the village, and Village Director, the second in command. Usually there is at least one female staff among members of the two committees.
4.3.3 Women’s Federation (WF) system

The WF has representation at county, township, and village level in Kaihua. The county level WF has eight staff currently. Each township government has a WF staff (Township WF President), but most of them take other responsibilities outside WF as well, such as family planning, health and sanitation, or general administrative affairs; the work of WF is normally less demanding or considered less important, especially as compared to family planning.

The title of the WF representative at village level is literally “Director of Village Conference of Women Representatives” (村妇女代表大会主任), or “Director of Women Representatives” (妇女主任), one in each village. All WF staff at village level work part-time. The WF representative is normally a female member of the Two Committees, who also takes various responsibilities apart from women’s and children’s affairs. In most villages in Kaihua, the WF representative’s primary appointment is actually Family Planning Commissioner, who report to the local family planning department, a much more powerful agency at all levels of the Chinese government, as compared to WF. In some natural villages there is also a “WF Liaison Officer”, who would previously be the village WF representative before the village merging process. The WF representative is responsible for child wellbeing, thus she usually oversees the affairs related to the Children's Clubs.
4.3.4 Roles of government agencies on child protection and intervention programs

Unlike many other countries, civil society in China is not well developed and thus unable to be actively engaged in child protection. Consequently, government agencies or their affiliated organizations play an essential role in safeguarding children's welfare. In this regard, navigation within such administrative systems becomes highly important. Besides better understanding of LBC’s wellbeing based on information provided by local governments and community leaders, effective support from government agencies is also crucial in planning and delivering intervention programs, in order to improve the situation of these children.

The studies presented in this thesis were carried out with substantial support from local government agencies and village committees, especially Women’s Federation and its staff members. Basic knowledge about the child welfare governance system helped us better understand the roles of stakeholders, in order to effectively obtain relevant information and administrative support.

Moreover, our intervention program aimed at safeguarding LBC’s wellbeing was carried out in close collaboration with Women’s Federations. On one hand, at county level, WF officials were involved in project planning, and our intervention program was given certain political priority at all levels of WFs branches within the county. One the other hand, the grassroots WF representatives comprised
most volunteers in our Children’s Clubs, and became a vigorous workforce in delivering program services to children in the communities.

4.4 Summary

Understanding of the study contexts provides crucial information when examining wellbeing challenges caused by a complex social phenomenon. For the quantitative study, many variables associated with child psychosocial wellbeing status are rooted in the local socioeconomic, cultural and political settings. For the qualitative study, experiences of children and perceptions of family members are also closely related to the larger environments in the migrant-sending as well as the migrant-receiving areas. Specific community and policy characteristics as were introduced in this chapter informed the design and implementation of our empirical studies, and may help build links between our findings with those from similar contexts the existing literature.
Chapter 5  Experiences of children, and relationships, care and support in the families living apart

5.1 Introduction and use of extant literature

This chapter presents a qualitative study based on in-depth interviews of left behind children, their migrant parents, and resident caregivers in the rural areas of Kaihua County, western Zhejiang Province.

In the previous chapters, the review of both theoretical perspectives and empirical studies, as well as the understanding of the local socio-political contexts, provided crucial insights from macro- to micro-levels for the qualitative study on the psychosocial wellbeing of LBC. Yet this chapter is not focused on testing hypotheses, but rather aimed to develop a new theoretical framework grounded in empirical data collected in the field, with limited inputs from the extant knowledge.

Although the review in Chapter 3 only retrieved a few qualitative studies about China, the first issues identified in the literature helped clarify the subject matter of the current study: the experiences of children and perceptions of family members in relation to child psychosocial wellbeing under the impact of parental migration, as well as the interrelated factors in the family and social environments and the mechanisms through which they affect LBC.
Literature was used as an effective analytic tool to stimulate thinking and heighten theoretical sensitivity in the qualitative data analysis. Memos were kept along with literature review process to record the new findings and ideas from the empirical studies, as well as the propositions, values and context linked with a given theory, including the possible shortcomings of the theory. The memos chronicled the manner in which the author’s thinking had changed as a result of accessing extant knowledge, and enhanced the author’s sensitivity to the meanings without forcing explanations on the data (Strauss & Corbin, 1998, p. 47).

For instance, migration theories became important references when examining the rationales behind migration as perceived by family and community members; this perspective has often been ignored by previous research on LBC’s wellbeing. The socio-ecological approach of human development and family systems theories shed light on the complex environments in which the child lives, when looking into the range of dynamics between children, migrant parents, and caregivers. The author was thus inspired to examine the child’s reciprocal interactions with the immediate family environment, as well as the impact of the larger contexts at community and society levels of the human ecological system. The timing and duration of these processes in child development were also considered variables of wellbeing.
In the later stages of data analysis, the extant literature also assisted theoretical sampling, by directing to situations that the author might not have considered otherwise. Attachment theory, for example, was referred to in order to identify multiple relationship patterns between parents and children, over distance and following a reunion.

In the meantime, the author actually became more aware of possible unhelpful preconceptions, by constantly reflecting on the ideas that the author has been exposed to while engaging with the literature. A respectful yet critical stance towards extant theories and empirical findings was adopted, before incorporating any extant concepts into the narrative of this study.

Although the literature review was conducted before the qualitative fieldwork, both chapters 2 and 3 were written up after the qualitative analysis was conducted. In fact, the author’s reflections and insights from the empirical data considerably influenced the structure of the review chapters and discussions about the extant knowledge.

5.2 Methods

In general, the author followed Strauss and Corbin’s (1998) grounded theory approach of data analysis, with certain modifications to better fit with the aims and conditions of this research project. This approach incorporated both inductive and deductive analyses, as opposed to Glaser’s (1992) classic grounded
theory which predominantly focuses on inductive reasoning. Further elaborations of the coding and data analysis processes will be provided in the Section 5.2.5 below.

5.2.1 Study area

The study was carried out in Kaihua county, western Zhejiang province, at an initial phase of a larger project that involved more projects areas. More detailed information about the contexts of the study area was provided in Chapter 4. Although the quantitative study of the larger project included Guizhou Province, we were unable to carry out the qualitative study in Guizhou, due to significant practical and funding constraints. This qualitative study was only supported by a small research grant over one year; only during the implementation of the qualitative project did our team win a larger grant which was to support the LBC research and an intervention program in both Zhejiang and Guizhou provinces, over a five-year period. In addition, our China project team members were all based in Zhejiang.

We collaborated with the local Kaihua county branch of the Women’s Federation (WF), which had representation at township and village levels as well. There was a WF official in each township and a WF staff member in each village. The village WF representative was also a member of the village committee. Kaihua WF was consulted about the design and implementation of the project. However the WF
representatives did not interfere with the research process, so investigators in this study remained independent from any government agency, without any obligation or restriction in data reporting and dissemination. More information regarding the implications of WF’s involvement will be presented at the end of the methods section.

5.2.2 Sampling

In the initial stage, a purposeful sampling approach was adopted to maximize the possibilities of obtaining data and leads for more data on the research question. As purposeful sampling is common in all qualitative studies, it may also be used at the initial stages of the theoretical sampling approach in grounded theory. Specifically, Glaser (1978, p45) noted that researchers may begin by talking to the most knowledgeable people to get a line on relevancies and leads to track down more data, and where and how to locate themselves for a rich supply of data.

In this study, we reached out to village leaders and WF staff members to obtain anonymous information about migrant families in selected villages, in order to include communities, families and individuals from which diverse types of experiences may emerge in relation to rural-to-urban migration. These families and children had various backgrounds in terms of household socio-economic characteristics, family structure, caring arrangements, and child age at the beginning of migration.
As the study progressed, in the later stages of sampling, we continued to choose children, families and communities which would maximize opportunities to elicit data regarding variations along dimensions of categories, and that demonstrated what happened when changes occurred. If new categories were discovered, additional participants were recruited to reflect these particular dimensions. When an overall story line started to be formulated, some further samples were added to verify the story line and relationships between categories, and to fill in poorly developed categories.

When selecting specific communities for the study sites and populations, a two-stage cluster sampling method was employed to achieve certain geographical representativeness and population coverage in Kaihua, by selecting one village from each selected township. It is noteworthy that we aimed at conducting family group interviews including all members in each family, although in most cases this was prevented for practical reasons because not all family members were able to participate during the short field visit period in the village (often 1 day), especially at Chinese New Year when many community activities and household chores limited people's availability. Eventually interviews were conducted with 25 children, 17 parents, and 13 grandparents, from 29 families, across 12 villages. The age of the children ranged from 7 to 14 (mean=10.93, SD=1.77). The family composition and migration patterns of all interviewed families are shown in Table 5.1, with individuals on the same row from the same family.
Table 5.1: Demographics, family composition, and migration pattern of interviewed migrant families

<table>
<thead>
<tr>
<th>Sex</th>
<th>Age</th>
<th>Sibling</th>
<th>Co-resident adult</th>
<th>Migrant parent</th>
<th>Child age when left-behind</th>
</tr>
</thead>
<tbody>
<tr>
<td>Girl</td>
<td>10</td>
<td>1 elder sister</td>
<td>Mother</td>
<td>Father only</td>
<td>2</td>
</tr>
<tr>
<td>Boy</td>
<td>12</td>
<td>1 younger sister</td>
<td>Mother</td>
<td>Father only</td>
<td>10</td>
</tr>
<tr>
<td>Girl</td>
<td>11</td>
<td>None</td>
<td>Other relatives</td>
<td>Both parents</td>
<td>5</td>
</tr>
<tr>
<td>Girl</td>
<td>11</td>
<td>None</td>
<td>Grandparents</td>
<td>Both parents</td>
<td>2</td>
</tr>
<tr>
<td>Girl</td>
<td>9</td>
<td>1 elder sister</td>
<td>Mother &amp; Grandma</td>
<td>Father only</td>
<td>Right after birth</td>
</tr>
<tr>
<td>Girl</td>
<td>10</td>
<td>1 younger brother</td>
<td>Mother &amp; Grandparents</td>
<td>Father only</td>
<td>Unknown</td>
</tr>
<tr>
<td>Boy</td>
<td>10</td>
<td>None</td>
<td>Grandma</td>
<td>Both parents</td>
<td>3</td>
</tr>
<tr>
<td>Girl</td>
<td>14</td>
<td>1 elder sister</td>
<td>Mother</td>
<td>Father only</td>
<td>Right after birth</td>
</tr>
<tr>
<td>Boy</td>
<td>12</td>
<td>None</td>
<td>Grandparents</td>
<td>Both parents</td>
<td>4</td>
</tr>
<tr>
<td>Boy</td>
<td>13</td>
<td>1 younger brother</td>
<td>Grandparents</td>
<td>Both parents</td>
<td>1</td>
</tr>
<tr>
<td>Girl</td>
<td>8</td>
<td>1 younger brother</td>
<td>Grandparents</td>
<td>Both parents</td>
<td>Right after birth</td>
</tr>
<tr>
<td>Boy</td>
<td>14</td>
<td>None</td>
<td>Grandparents</td>
<td>Both parents</td>
<td>1 (with parents from 5 to 7)</td>
</tr>
<tr>
<td>Boy</td>
<td>11</td>
<td>None</td>
<td>Grandparents</td>
<td>Both parents</td>
<td>A few months</td>
</tr>
<tr>
<td>Girl</td>
<td>11</td>
<td>None</td>
<td>Grandparents</td>
<td>Both parents</td>
<td>3</td>
</tr>
<tr>
<td>Boy</td>
<td>11</td>
<td>None</td>
<td>Grandpa</td>
<td>Both parents</td>
<td>4</td>
</tr>
<tr>
<td>Girl</td>
<td>12</td>
<td>1 younger brother</td>
<td>Mother</td>
<td>Father only</td>
<td>6</td>
</tr>
<tr>
<td>Girl</td>
<td>10</td>
<td>1 elder sister</td>
<td>Mother</td>
<td>Father only</td>
<td>5</td>
</tr>
<tr>
<td>Girl</td>
<td>9</td>
<td>None</td>
<td>Grandparents</td>
<td>Mother only</td>
<td>9</td>
</tr>
<tr>
<td>Girl</td>
<td>7</td>
<td>1 elder sister</td>
<td>Grandparents</td>
<td>Both parents</td>
<td>3</td>
</tr>
<tr>
<td>Boy</td>
<td>12</td>
<td>None</td>
<td>Grandma</td>
<td>Both parents</td>
<td>5</td>
</tr>
<tr>
<td>Girl</td>
<td>10</td>
<td>None</td>
<td>Grandparents</td>
<td>Both parents</td>
<td>4</td>
</tr>
<tr>
<td>Boy</td>
<td>12</td>
<td>None</td>
<td>Grandparents</td>
<td>Both parents</td>
<td>5 or 6</td>
</tr>
<tr>
<td>Boy</td>
<td>13</td>
<td>None</td>
<td>Grandma</td>
<td>Father only</td>
<td>11</td>
</tr>
<tr>
<td>Boy</td>
<td>13</td>
<td>None</td>
<td>Grandparents</td>
<td>Both parents</td>
<td>3</td>
</tr>
<tr>
<td>Boy</td>
<td>10</td>
<td>None</td>
<td>Mother &amp; Grandma</td>
<td>Father only</td>
<td>1</td>
</tr>
<tr>
<td>Boy</td>
<td>12</td>
<td>None</td>
<td>Mother</td>
<td>Father only</td>
<td>Unknown</td>
</tr>
<tr>
<td>Girl</td>
<td>12</td>
<td>1 elder sister</td>
<td>Mother &amp; Grandparents</td>
<td>Father only</td>
<td>Right after birth</td>
</tr>
<tr>
<td>Boy</td>
<td>9</td>
<td>None</td>
<td>Grandma</td>
<td>Both parents</td>
<td>4</td>
</tr>
<tr>
<td>Girl</td>
<td>13</td>
<td>None</td>
<td>Grandparents</td>
<td>Both parents</td>
<td>7</td>
</tr>
<tr>
<td>Boy</td>
<td>8</td>
<td>1 elder brother</td>
<td>Grandparents</td>
<td>Both parents</td>
<td>5</td>
</tr>
</tbody>
</table>
5.2.3 Interview preparations

Interviews were conducted during two periods. The first period was 2\textsuperscript{nd} September to 18\textsuperscript{th} November 2013, right after schools started, following the some children's return from visiting their parents in the cities during the summer holiday. One of the most important Chinese holidays for family reunion, Mid-Autumn Festival, fell on 19\textsuperscript{th} September in 2013. The second period was from 20\textsuperscript{th} January to 16\textsuperscript{th} February 2014 around Chinese New Year that fell on 31\textsuperscript{st} January 2014. Most migrant workers would return home during this holiday season, and some may stay until the Lantern's Festival, the 15\textsuperscript{th} day into the Chinese New Year. These two periods were chosen mainly in order to recruit more participants, both children and migrant parents, in the qualitative study.

The author was introduced to the leaders of Kailhua County WF at the start of the fieldwork, by a co-investigator of the larger LBC project who was affiliated with Zhejiang University and was involved in other research projects within the county. In the following week, the author had a few meetings with the WF leaders to introduce the qualitative study within the larger project. The author requested logistic support from the WF and discussed about some specific fieldwork arrangements. One of the Vice Presidents of Kailhua WF was appointed as the focal person for this study, and she continued to provide coordination support for the author after these meetings.
The Vice President offered a list of names and contact information of all township WF officials in Kaihua, and briefly informed them about the overall aims of the study and the fieldwork. One day prior to each field trip, the author would contact the local township WF official by phone, briefly explain the purposes of the trip, and coordinate with specific interview-related logistic arrangements.

As was mentioned in the previous section on sampling, we approached leaders as well as members of the community, at the start of each field trip, one or two days before children and families were recruited in the village. Particularly the author would meet with the WF official and one or two other members of the Village Committee. In these meetings the author would request general information about the village and its families, such as key sectors in the local economy, the scale of out-migration, the overall wellbeing status of the LBC. The author would also briefly go over the sampling methodology, and select the participants to be approached for the interviews independently or with the help of village leaders, based on their information registered at the village committee.

In doing so, the author conducted a preliminary investigation into children’s household and physical environments in the community, and how larger social systems, such as local industry and social safety net, were interacting with the child’s immediate environment. This was partly inspired by the socio-iconological approach of Bronfenbrenner et al.’s (1998), as the authored recognized the importance of exploring the larger ecological system in which child development
occurs, and eliciting the connections between different variables of the context, family and individual characteristics, and child wellbeing outcomes. More details related to the socio-ecological model of human development will be presented in the results and discussion.

5.2.3 Interview procedure

Home visit appointments were made a day prior to the interview. The selected families were visited to recruit children, parents and/or caregivers who were present. Children who were not at home were recruited at the local community center where they usually spent time after school.

The study purpose, the interview process and topics were explained to all participants, and informed consent from all interviewees was obtained before the interview. Additionally, a parent or custodial caregiver of all interviewed children also signed a consent form. For younger children, the consent was obtained first from their parent or caregiver; then the author explained the study to the child in more plain language, in the presence of the parent or caregiver, along with whom the author took the opportunity to explain anything that was not clear to the child. If no parent or caregiver were present at the interview site, a family visit was conducted to deliver the consent form. After caregiver consent was obtained, an adult volunteer at the community, usually a teacher or community leader who knew the child well, would accompany the child and provide support during the
interview process. Participants were guaranteed that withdrawal from the study
would not affect any benefit from the community or government, and the
interview would stop at any time if the child, any parent/caregiver or the
accompanying volunteer felt uncomfortable to continue.

We also had made arrangements to provide a local counseling service for any
children (or parents/caregivers) who felt they wanted to further explore areas of
difficulty. These participants may make appointments with the help of the author,
using the research team's connections at the Psychological Counseling and
Therapy Center at Quzhou Third Hospital. The team would facilitate the
transportation and other logistics in accessing the service.

Interviews were conducted in Mandarin Chinese with some help from the WF
personnel if the interviewees, mostly the elderly, used local dialect. The WF
representatives tended to be a well-trusted community member, thus their
presence mostly facilitated the communication. Interviews were audio-recorded
and transcribed verbatim with specific consent from the participants.
Observational notes were also taken on interviewees' behaviors and facial
expressions, as well as interactions when multiple family members were
interviewed conjointly. Of particular note, a few children became upset and
tearful during the interview. In these cases, we suspended the interview and
attempted to comfort the participant. We continued only if the child and an adult
family member expressed the wish to continue; if the child still appeared silent
and sad after a following question, the interview was then terminated. If the child expressed needs to talk with psychological service providers, the author would offer help in accessing the service, following the procedure described in the previous paragraph.

Each interview flowed differently as the researcher and the participant dynamically co-constructed the interview. Interviews with children were semi-structured and began with questions on general demographics (age, school year, family members, primary caregiver at home), and parents’ migration status. Then questions covered topics including feelings toward separation with parent(s), communication with the migrant parent(s), care from and relationship with the caregiver at home, school performance and after-school activities. Questions were adapted to the child’s age, posing more simple and direct questions to younger children and relatively more in-depth questions with older children. Interviews were conducted with parents and grandparents, using similar but rephrased questions to explore adult family members’ perspectives. Additionally, we asked parents and grandparents about incentives and concerns about migration, its potential impact on their children’s wellbeing, and we explored the rationale of migratory decisions in terms of internal and external family contexts.

5.2.4 Roles of the local collaborator
Kaihua WF was consulted about the design and implementation of the project. However the WF officials did not attempt to interfere with the research design and fieldwork process. The author would request the accompanying WF staff member to step out from the interview room if possible after the greeting and introduction, unless specific requests for facilitation or interpretation were made by the interviewees, in which case the WF representative was often a family friend.

In general, the involvement of WF and its staff members did not add to the biases in participant responses or complicate the ethical implications in the study. First, the co-Investigator who introduced the author used to work with the Kaihua WF on other research projects of Zhejiang University; he and the WF leaders had established a strong relationship. The author was introduced as a member of the Zhejiang University research team, and thus quickly gained trust during the initial meetings. Second, unlike some of the more sensitive social challenges that may directly cause social instability and resistance, the Chinese government had largely taken a stance to identify the issues related to LBC and advocate on the needs of effective solutions, despite the lack of concrete actions. The State Council and multiple ministries had released statements and guidelines on strengthening the care and social protection for LBC (Government of China 2013; State Council, 2016). The Kaihua WF were unlikely to be concerned about Kaihua LBC’s psychosocial difficulties being discovered, which were much less troubling than the horrible incidents involving suicide or murder that were reported from other
more remote parts of the country. Third, the WF staff member did not gain access to any confidential or sensitive information about the interviewed families through the author.

Last but not least, the Kaihua WF had a largely neutral attitude towards the potential impact of our research outcomes on their work. Although WF’s future collaboration with our team especially on the intervention project may add to the merits of the agency and benefit its leaders’ performance, the officials also indicated that they were unwilling to be much actively engaged tackling the LBC issues. This was because of their limited resources on a number of priority issues, and their concern that more parents may become used to relying on the government to support the care of LBC, without taking responsibilities when following the decision of migration.

5.2.5 Analysis

The analysis of the interview data followed the principles of grounded theory approach (Strauss & Corbin, 1998), as it helped to construct a theoretical explanatory understanding of the social phenomenon of migratory separation. Experiences and perceptions of family members were investigated, including relationship dynamics, actions and reactions in managing the situation of parent-child separation and childcare provision in the left-behind family. Perspectives of multiple members of the same family were triangulated to help
overcome the limitations of self-reports and to improve the understanding of the relationship and psychosocial support mechanisms in the extended family.

Data were gathered and analyzed simultaneously, and continually checked and revised throughout the research process, including changes to interview questions, as new theoretical ideas emerged. Memos were taken to generate explanations of the emerging concepts, and further develop the key categories as well as the relationships between them, which helped the author compare findings from the current study with the literature, in order to “become sensitive to meaning without forcing our explanations on data” (Strauss & Corbin, 1998, p. 47)

We followed the procedure of open, axial, and selective coding, according to the methods proposed by Strauss and Corbin’s (1998, p96) grounded theory approach, which relied more on deductive reasoning than another branch of classic Grounded Theory (Glaser, 1992). Data analysis in this study emphasized the use of deduction, verification and validation on emerging questions and patterns, in addition to the key induction processes in the initial and later stages of coding.

In the first phase of the analysis, all of the transcript data, primarily from interviews with children and parents/caregivers, were open coded in order to name and define the preliminary categories and their dimensions, as theoretical
concepts were allowed to emerge inductively. Main categories that emerged from experiences and narratives of family members included rationales of migration in the family contexts, emotional connections in attachment relationship, care and support in the left-behind family, and return migration due to concerns about childcare and disciplining.

The next phase axial coding (a process that is unique to Strauss and Corbin's approach) embodied a combination of inductive and deductive reasoning. Data was put back together after being fractured in open coding, by making logical and meaningful connections among the categories that were most salient in participants’ lives. The emerging concepts were tested against and fitted into a pre-determined paradigm model, as was proposed by Strauss & Corbin (1990, p. 96). The adapted model in this study focused on the context that gave rise to migration, the conditions in which migration and parent-child separation was embedded, the interactional relationships and strategies in response to the separation and family conditions following parental migration, and the consequences of the strategies to deal with these situations. This model was further developed as the conceptual framework of this study, to incorporate qualitative findings that comprised the essential components of the storyline of this thesis.

In the final stage of the coding (known as selective coding), we selected and organized the main categories, and conceptualized how the substantive codes
may relate to each other as hypotheses to be integrated into the theory (Holton, 2007, p. 255). Data analysis and memo-writing became increasingly conceptual, through constant comparison between incidents and categories from the data, and with certain inputs from the related theoretical perspectives in the literature. A core variable, the mechanisms of managing the impact of migration, eventually emerged, as its properties became dense and theoretically integrated, and accounted for most of the variation of the left-behind experience.

5.3 Results

5.3.1 Overview of migrant families

Most families in Kaihua complied with the “one-and-a-half-child policy”, a typical variation of the One Child Policy in rural China: if the first child is a girl, then a second child is allowed, but not a third. So a typical Kaihua family comprised a single child, or an elder daughter plus a younger son, or two daughters. Among all interviewed families, if both parents lived away from home, children were usually cared for by grandparents, especially the grandmother (except one child cared for by her aunt); the co-resident parent in our sample was always the mother. Some co-resident mothers were also providing daily care for children’s grandparents who were too frail to live independently; in two cases, the mother did not migrate because of her own physical disability or chronic conditions.
Grandparents were willing to take the responsibility of caring for grandchildren. When both parents were away, one grandparent would naturally become the primary caregiver. In fact, to provide support for childcare is a virtual expectation of grandparents in Chinese culture (Short et al., 2001). They also have more time for children than working parents even when the parents live at home. However, the education level of grandparents was generally low in Kaihua and all grandmothers we interviewed were illiterate or semi-literate. In rural Kaihua, many female elderly were deprived of education opportunities, and they have led sheltered lives often not venturing far from their villages.

Because Zhejiang is overall a wealthy province, most people from Kaihua preferred migration to coastal rich cities within the province, about 200 to 300 kilometers away. Other migrants also chose work in smaller cities that are closer to Kaihua. Most children seemed to have the chance to reunite with migrant parents, between two and five times a year. Chinese New Year is the time when almost all families would get together; the summer holiday is another chance for the migrants to take time off and spend more time with their children. When possible, some older children would also visit their migrant parents in the city during school holidays.

5.3.2 Household socioeconomic rationales of migration

The decision of migration was made based on various components of the family
context. In general, our interview results suggest that “to earn more money” was the primary incentive for migration, due to better employment opportunities and higher income in large cities, compared to Kaihua where farming is the predominant livelihood activity and the scale of local industry is very limited. Yet the decisions about migration were usually not made individually, but jointly taken by and for the whole household.

Many interviewees mentioned “everybody has gone to the cities to work” and “we have to make a living and support the family, especially after having a child”. Some also said that “we have to leave because there are no jobs here except farming”. The overwhelming majority of Chinese peasants have no pension (Wang, 2006). Parents often mentioned the need to ensure some capital for their old age. For the best chance of survival and possible prosperity among household members, not least the child, parents felt “there’s no other way” but to migrate to the cities. A resident mother illuminated this rationale vividly:

*Frankly speaking, people have to lead a life, and life needs money to be led. If only there was somewhere closer we could earn some money, we wouldn’t leave...It’s like we go out and earn money just for the kids. If they go to high school or college, you have to save up the money for them. And we’re not young now, and we won’t be making much money when we get old.*

If the economic situation had allowed them to stay, the migrants would clearly
prefer to live with the children in their hometown. It seemed that to migrate was essentially a decision by the whole household, one that was not made lightly. Moreover, it was noticeable that even after the initial move, the economic gains from migration were often weighed against other intangible loss in the family relationships, as they kept monitoring situations. A left-behind mother stated:

*Her (the daughter) dad rarely comes back home, just because he wants to make more money. Her grandma is over 80 years old and someone has to take care of her. We have two kids – they also need money to go to school. Of course her dad wants to see them more often; but he always goes out in January and comes back in December (lunar calendar). Two years ago we visited her grandpa in Wenzhou once, other than that we don't want to spend extra money on traveling.*

Older children usually had positive perceptions of the reasons for their parents’ migration, while the author often did not receive clear responses from younger children. A 12-year-old boy said, “I do miss him (father). I wish he could come home more often and play with me and spend more time together, but I do understand that he has to go and earn money.” In another case, the migrant mother reported her how her son coped with the harsh reality and became more considerate of it:
Yet he knows that the family couldn’t survive without the money, so we have to go... He understands this and has become mature. Sometimes he says, “Mom, next year can you move back home?” But after a few words to soothe him, he is fine with it. Especially when we stayed together for a while, he would become more relaxed and easier to communicate with.

Although the net income in urban areas is usually higher than rural Kaihua for individual families, interestingly there was no clear distinction in economic status between migrant and non-migrant families from rural Kaihua, according to the community leaders we interviewed. Firstly, richer migrant parents often had taken their children to live in the city where they work. Secondly, parents in impoverished families tended to be forced to migrate, in order to meet family survival needs; these families were actually poorer than most non-migrant families. Thirdly, local small enterprises in rural Kaihua had provided job opportunities with comparable income with migrant jobs in cities; some local businessmen also had become wealthier than migrant workers.

For young couples, construction and/or purchase of a new house for themselves and their further children, emerged as an essential objective of economic activities in the extended family. The new house, often not far from the village they grew up, appeared to have a critical cultural significance in terms of gaining basic recognition of independence and grown-up status in rural Kaihua. The cost of building a house in Kaihua was estimated at about CNY 250,000 to 750,000 by
the interviewees, a huge expense for almost all families. Although their parents would provide significant financial support, the cost still often led to heavy debts equivalent to several years' income of the extended family. Then after giving birth to a child, the family economic burden was further increased. A grandmother described her family's situation:

*To build the house, we sold our farmland, but still had 190,000 yuan of debts.*

*My son had membranitis when he was little, so couldn’t handle sophisticated work, and he still took a janitor job in a factory and his wife works at the same place. Yet they don’t earn enough money, and grandpa (her husband), at 70 years old, still has to work for the forestry on the mountains.*

These economic concerns in a typical family in Kaihua were driving many young people out of Kaihua into the cities, not only to meet their current economic needs, but to achieve better chance for prosperity among all family members, particularly their children. In this regard, parents also expressed views about securing better education opportunities for their children in the future through migration, as the quality of school education in Kaihua is much lower than urban areas.

Like many parts of rural China, the school system in Kaihua had undergone a process whereby primary schools in many remote areas were merged into larger schools in the populated areas, usually near the township center. Schools in small
villages simply did not have enough students to run classes, because an increasing number of children joined the rural-to-urban migration flows, and the overall population size continued to reduce due to years of One Child Policy. It was also increasingly difficult to retain teachers at these schools. As a result, the commute to school became too long for many children, and some chose to live at the school dormitories on weekdays. A principal of the township school expressed his serious concerns about the education disadvantages that systematically undermined children in Kaihua, or generally similar rural areas across the country:

Our school does have more resources at our disposal than before – but we need to spend more time and energy on children. Now teachers are so busy that they spend little time on each kid; and obviously the left-behind ones need more attention from the teachers. In any case, to be honest, these children can hardly climb up the social ladder by studying at our school. In the national exams, they won’t be able to compete with those educated in the cities. And sadly in this society, the exams would probably be the only way to secure a better future for our kids.

According to other community leaders and parents we interviewed, the effects of these school mergers on child wellbeing were complex. In fact, the child population has been decreasing in rural Kaihua, both due to the strict “one and half child” policy and families that migrated with the children. Most LBC had
never lived in the city with parents; but those who lived in a better-off family may count on their parents in bringing them the city in near future, where both the economic cost and quality of education is usually much higher than in Kaihua.

5.3.3 Child wellbeing in absence of migrant parents

This section presents the experiences and perceptions regarding the separation due to migration and the parent-child relationship over distance, with a focus on the concepts that demonstrate child psychosocial wellbeing status. As a direct consequence of the absence of parents and the disrupted connections, emotional distress such as loneliness and depressive symptoms in children was reported by themselves, and parents, and caregivers. The adult family members often closely monitored the children’s experiences and wellbeing status, with awareness of the positive and negative effects of migration.

Emotional attachment sustained over distance

The majority of children expressed that they missed their parents, and often think of them while they were away. Despite of the lengthy absence of the parents in their life, some children maintained strong emotion attachment with their parents throughout a complex migration process which involved many occasions of separation and reunion. The feelings seemed the most intense when migrant parents were about to leave home again after a brief reunion.
A 13-year-old boy Zhuang was separated from his parents soon after birth. The parents were working in Shanghai and brought him to the city for kindergarten when he turned 4. Zhuang returned home at age 7 due to barriers to accessing public education in Shanghai. Yet the family would reunite in the city during the summer holiday each year. Zhuang reported that he “felt painful” or “would cry” at his parents’ departure, and “wished they could spend more time at home” with him. His mother described the situation as, “When he sees us he’s really happy, and when we have to separate again he becomes sad and upset.”

Another family had a much different migration pattern, and the parents shared detailed accounts about how the effects of migration were perceived. The migrant father, Qiang, had been away for two years, leaving two children behind with their mother, Huan. The family was interviewed together when the father returned for Chinese New Year. The parents specifically explained about the challenges for the parent-child relationships.

_Huan: Kids always yearn for their dad to come home; Xing always says on the phone “dad, when are you coming home? I miss you so much.” Jing (the daughter) is a bit quiet though. I say to them the best thing you can do is to study harder. Your dad is (working for) your future. If you study hard then you don’t have to work faraway from home; our family will be happily gathered around the same table._
Qiang: When I miss the kids I call and chat; when it’s not busy at work I visit home - I come back four or five times a year. The kids miss me after a while. Although we talk on the phone, they’re not that close to you when you don’t come home often – they only report the good news, and I’m also cautious about what I say because my words may hurt. When at home we’re more frank with each other.

Both the son, Xing, and the daughter, Jing, briefly expressed moderate emotional distress due to parental migration in the following interviews, which may also be attributed to the short duration of separation. The migrant father and the co-resident mother also did well in communicating with their children, about daily life at school as well as the rationales of father’s migration.

Whereas some boys openly expressed their feelings and even negotiated with parents on migratory decisions, left-behind girls tended to experience sadness and internalized distress when coping with the separation. Rui, an 11-year-old girl, lives with her aunt, and both her parents work in the provincial capital. She was interviewed soon after a temporary reunion during the summer holiday when she went to see her parents in the city:
My parents went to Xiaoshan (A Hangzhou suburb) when they were 18, and had me when they were 24. I was born and raised in Xiaoshan until I finished kindergarten - then I came back to Kaihua.

I miss my parents very much. Especially at this time when the school just started; it feels like everything I see reminds me of the time when I was with them. Now when I think of them I sometimes cry a bit. And then if I really want to cry, I’d read a book or something to help me stop thinking about them.

Despite the strong emotional attachment, Rui showed certain resilience in coping with the absence of both parents. She did not show much sadness even when she was talking about her difficult feelings. Unlike most LBC, Rui grew up with parents in the city before elementary school, which may have strengthened her relationship with parents as an LBC and helped her cope with the challenges of separation.

However, it was notable that four children actually cried during the interview. They seemed to be affected by either difficult household economic situation or parents’ divorce, or even both. Nine-year-old, Hong, was interviewed with her mother, Lian. The family was very poor; Lian worked as a doorkeeper for a local factory and had to take care of her paralyzed mother-in-law. The father migrated to a province in Northeast China thousands of kilometers away, and recently had
an accident at work. Hong started weeping as soon as her father was mentioned and she wasn't willing to talk, despite encouragement from her mother. Lian was unable to cope with her family's financial situation and attempted to seek assistance from the local community. While comforting her daughter, Lian said:

She’s just missing her father too much; but she is an obedient girl. She said she wants to visit her dad. I told her it was too far and would take a few days to get there. I wouldn’t be able to find him either as I’m almost illiterate; plus her grandma needs me at home. Then she didn’t say much – and sometimes she’d just cry.

Meanwhile, some children did not demonstrate strong emotions when talking about the absence of their migrant parents, and according to the co-resident caregivers, no significant problems in parent-child relationship was observed. For example, Wenhui, an eight-year-old girl was interviewed whose both parents left when she was three. According to her teacher and grandmother, Wenhui is a well-behaved, thoughtful and introvert girl. She responded to our questions only in brief words:

*Interviewer: Do you miss your parents?*

*Wenhui: Yes.*

*Interviewer: Do you often think of them?*

*Wenhui: Not really.*
Interviewer: Are you often in contact with them?

Wenhui: Not much...just a few phone calls a week.

Interviewer: Would you seek help from them when you have some troubles or difficulties?

Wenhui: No.

Based on Wenhui’s responses, it remains unclear how the parent-child relationships were affected by migration. After all, it would be challenging to elicit the probably complex emotions and relationships from some brief description about one’s feelings, especially for a quiet, young child. More in-depth exploration of the care environment in the family would be necessary, and Wenhui’s case is to be delineated further in the following sections.

Emotional withholding and detachment over time

In contrast to those who felt strongly the absence of their parents, some children’s feelings about their migrant parents seemed to be ambivalent, even showing indifference during the interactions with the parents. Most of these children were left behind early in life, even during infancy; the emotional connections and attachment relationship were likely to be considerably weakened by the extended separation. Also, children with limited family care resources, such as those who were living in extreme poverty, appeared to be particularly vulnerable to the disruption of parent-child relationship.
Children who did not demonstrate a close relationship with migrant parents tended to be unwilling to answer phone calls from them. Often times the co-resident family members would make efforts on encouraging the child to be cooperative and communicate with the parents when they called. A migrant father, Shengli, described the patterns of communication with his 12-year-old son, and the changes after he visited home. Shengli left home shortly after his son’s birth; then 4 years later, his wife joined him in the city, leaving the child behind with grandparents.

*When we are away my son doesn’t really communicate with me although I call him quite often. Sometimes grandma has to make him pick up. Over the phone we [he and his wife] just urged him to study hard, it certainly annoys him that we talk like that all the time. So now I get this situation more as I’ve been reflecting on my ways of disciplining him, and even thought about my own experience when I was a kid – It’d probably better not to push him too hard.*

*I usually come back 3 or 4 times a year - when I’m home he gets really clingy and tells me more about everything – especially things that worry him. My wife actually comes home and stays with him during the summer holiday. Or sometimes in holidays my son would go to Hangzhou [where Shengli works] for several days and come back together with my wife and me.*
Given his very early departure from his son’s life, Shengli seemed to have made strong efforts in maintaining the relationship through phone calls remotely. The efforts encountered considerable challenges, and were often not well received on the other end of the phone. However, importantly, he was aware of this situation, and it appeared that he gradually became able to make more emotional connections and even provide psychological support to his son, which might have contributed to the closeness with the child during the short reunions and the upsurge in attachment behaviors. This showed the ambivalent or contradictory attitudes and feelings towards separation from parents. Shengli later added that as “economic status is getting better”, he and his wife were planning to move to a small city next to Kaihua and probably accept a lower paid job, to be able to spend more time with the child.

Some other children seemed more detached from migrant parents, and even reunions were not necessarily desirable. Shortly after Zhimin’s birth, his parents migrated to Ningbo, a rich city in eastern Zhejiang Province, leaving him with his two grandparents. The parents owned a successful grocery store in Ningbo, and they actually had arranged for Zhimin to go and live with them in the city. The 10-year-old was interviewed together with his grandmother.

_Interviewer: How often do you talk with your parents over the phone?_

_Zhimin: About every two weeks or so._

_Interviewer: Do you like chatting with them?_
Zhimin: No. Because they just make a fuss.

Interviewer: What would you guys talk about?

Zhimin: Just study.

Interviewer: Do you miss your mom and dad?

Zhimin: Sometime I do, sometimes I don’t.

Grandma: Actually his parents took him to Ningbo when he was ready for kindergarten - the tuition was even paid already. But he just cried and cried and his mother had to bring him back to us. It’s just that I was the one who brought him up since he was born. And he was also really attached to his grandfather and wouldn’t let him out of his sight. Even now he doesn’t really miss his parents, and doesn’t seem close to them even when they are home once or twice a year.

By taking him to Ningbo, Zhimin’s parents appeared to have forced upon him closer parent-child relationships that he did not want, after gaining a better-off economic status. Later on, the parents’ communication style was generally didactic, without much sensitivity about their son’s psychosocial wellbeing or anything except his performance at home and school. Not surprisingly the boy would turn to his grandparents for help and daily care.

Although Zhimin’s case illustrated that richer families in Kaihua did not necessarily cope well with the early separation, it seemed poor families with complex problems would encounter serious difficulties in managing the
relationship stress due to migration. An example was Xia, aged 13, whose mother, Fang, re-married after her first husband died and had Xia in her late 30s (very late in rural China). Xia’s father had been a migrant worker since he was a teenager, so she was cared for by Fang from birth. According to Fang, Xia had frequent episodes of psychosomatic abdominal pain and dizziness, and had been off school for months as a result.

*Interviewer: Do you miss your dad as he’s always away?*

*Xia: [Shakes head]*

*Interviewer: Why not?*

*Xia: I’m not sure. It’s just I used to get along very well with my dad when I was little; it was like two persons in one. But as I got older we grew apart. We just don’t communicate any more.*

*Fang: They do talk over the phone. But they just can’t have a proper conversation. I asked her Dad to call up every week and have a chat with her. But they have nothing to talk about. She has nothing to say to her Dad. Even when he’s back at home it doesn’t get much better.*

*Xia: I’ve just got nothing to discuss with him. I usually hang up within one minute.*

*Fang: It’s also her dad – he doesn’t like talking very much, so she doesn’t feeling liking talk with him either.*

*Interviewer (to Xia): Do you feel stressed or lonely because your dad is not home?*
Xia: It’s just...I usually don’t talk much to people, or hang out with people...I’d just stay in the house.

Interviewer: Why not?

Xia: Because I can’t find anyone [smiles sadly].

Interviewer: Really? Is it just your dad’s not here or you don’t have many playmates or friends around?

Xia: It’s just...

Fang: She’s very introverted.

Xia: Also...they don’t seem to understand what I’ve been through.

Adverse effects from father’s migration and complex disruptions in family relationships probably contributed to the significant mental health symptoms, including peer relationship problems that Xia was suffering from. Importantly, the negative impact due to the lengthy separation may have been augmented over time; despite of the closeness with her father during her childhood, at present the distant relationship seemed largely dysfunctional with little emotional connections of effective communication between with her father. Poor economic status certainly added to the burden of the family, possibly to the psychological burden of Xia as well. Yet besides the material resources, psychosocial support from the extended family or even the community would have helped to relieve the challenging situations in this family.
5.3.4 Care arrangements and psychosocial support in the left-behind family

This section examines the effects of family care and psychosocial support on safeguarding child wellbeing. Aside from economic remittances, the non-material resources may take various forms and come from different sources. Most importantly, extended family care comprised essential support and guidance for overall child development. Since the psychosocial resources took various forms and came from different sources, many factors other than parental migration in the socio-ecological system may influence the care and support the child received.

A significant result of parental migration was that fact that many children became much closer to caregiver grandparents than to the migrant parents. A WF staff member quoted the Chinese proverb “closeness between every other generation” to describe this situation. For example in Zhimin’s case from the previous section, the grandparents were clearly the most important caregivers in the attachment hierarchy, whereas the parents only played a subsidiary caregiving role throughout his childhood.

Although the grandparent-child closeness was likely not the full equivalent of parent-child bonds in many other families, some children did appear to be happy with grandparents’ care which replaced the usual responsibilities of parents. A boy said in the interview: “I feel OK (about my parents’ absence) because my grandparents take care of me very well, basically the same as my parents - although
I like my parents the most, because I they understand better about what I usually think about and what I usually do."

After all, when both parents migrated, the co-resident grandparents were clearly the most essential source of care and support for almost all children left behind in Kaihua. The fact that absence of parental care did not affect these children according to their narratives, implied that some grandparents were capable of active engagement in children's home life and provision of effective support, despite the challenges in maintaining emotional connections and healthy interactions in child disciplining. More findings about the challenges in grandparents fulfilling their caregiving roles will be presented in the next section.

In addition, siblings, and sometimes cousins, were also in close interactions and may provide psychosocial benefits to each other in the shared care environment. Although many children reported that they would not feel lonely because of their brother or sister at home, from the interviews it was unclear whether the child's wellbeing benefited from having a sibling, partly because the families with more children tended to be poorer than the single child families.

But it was particularly noteworthy that in the field visits, the author found several households where cousins were living together and cared for by their common grandparents, due to the small number of children in each nuclear family. Although the caregivers had to look after more than one LBC, this care approach
was sustained by resources from multiple nuclear families. A 12-year-old boy named Jie, was living in this type of household, and appeared to be happy with it:

*I enjoy living with my cousin in my grandparents’ house, and I often hang out with a lot of friends as well. My grandparents are great but I do miss my parents. So in the school holidays I usually go to Hangzhou to be with them, except that they may come back home in the summer and during Chinese New Year.*

Apparently Jie’s parents were able to afford the time and money spent on the family's frequent travels between Hangzhou and Kaihua. The author later learned that his grandparents also had stable income from light work at home for the local processing industry, and were physically very capable of taking care of the children. Moreover, as Jie and his cousin were both only children, the concentrated resources from their parents ensured a reasonable living standard for these children. The overall family atmosphere was filled with frequent interactions among the children and between the children and grandparents, and no signs of loneliness were observed in the interviews. It seemed that both children benefited from each other’s presence in the family.

In some other families, the care arrangements and family support structure were more complex, as members of extended left-behind family were living apart, and grandparent caregivers were separately caring for different children. The
previously mentioned quiet girl, Wenhui, who was mainly looked after by her grandpa, talked more about her regular days. She was in Year 2 in an elementary boarding school located at the township center. She had an older sister, who goes to another school and lives with their grandma in the county center.

**Interviewer:** Would you be left at home alone sometimes?

**Wenhui:** Not really, because my grandma and sister and cousin come home on weekends too. Grandma lives with my sister in Kaihua (county center); my cousin is in high school and comes home every other weekend.

**Interviewer:** Is your home faraway from school?

**Wenhui:** Yes. Grandpa would come pick me up on Fridays. Or sometimes on Wednesday if it gets too hot (to take a shower at home).

**Interviewer:** So what do you do on weekends?

**Wenhui:** Do my homework. And play with my sister and cousin.

**Interviewer:** Would you hang out with other friends as well?

**Wenhui:** Not really. I mostly want to hang out with my family.

**Interviewer:** Would you hang out with other friends a lot when you are at school?

**Wenhui:** Yeah, kind of.

Although Wenhui’s cousin was unable to be approached for the interview, the author learned she was also left behind, with her mother at home who was her primary caregiver. Within an extended family structure, these care arrangements
seemed to be able to overcome the challenge that the two sisters had to go to different schools faraway from each other, and provide adequate care and necessary support to each of them. Living at school with other children may also have placed Wenhui into a pro-social environment, although its effects were unclear from the interview.

Yet when parts of the nuclear family system became dysfunctional, grandparental care was more of the child’s last resort instead of an intentional arrangement. Particularly, the divorce of migrant parents may cause significant disturbance to the family dynamics, and diminish the chance for the child to receive proper care and other resources. The parents of a 13-year-old boy named Dongyang got divorced when he was eight. His father was a construction worker who would often travel to nearby rural areas, while his mother had migrated to a city next to Kaihua. Dongyang started to cry at the beginning of the interview, so the author stopped the interview and later talked to a neighbor of him, who knew his family well and occasionally cared for him. The neighbor reported:

*It’s his 80-year-old grandma who mainly cares for him (grandpa passed away), after his dad won the custody. He sometimes visits his maternal grandparents as well. But his (paternal) grandma is a bit too frail as a caregiver, and the money sent from his dad is barely enough. Rumor has it that the dad often goes gambling, which ruined the marriage.*
Now even the kid’s bed is broken and hasn’t been fixed. He sometimes can’t get hold of a phone to call his dad. He often has to go buy and eat instant noodles – you can see he’s quite short for his age. Sometimes I invite him to eat at our house, as he often plays with my grandson. His mom heard about the problems and now often gets him to stay at her place on weekends. But then he doesn’t have any friends to play with there.

The local WF was aware of Dongyang’s situation and was about to offer certain financial and social assistance. Dongyang’s experiences suggested that when the parents were away, the child’s caregivers might not even have the capability to provide basic resources to meet essential development needs, even though they were willing to. Divorce was a significant factor which not only resulted in psychosocial distress in the child, but may have weakened important relationship ties in the family in coordinating childcare and household goals to prioritize the needs of the child. Under this circumstance and with very limited material resources available in the family, the child would have to resort to extra support from the socio-ecological system, including all relatives, neighbors, and community officials, who may or may not be able to help overcome the difficulties.

In some families, adult relatives other than grandparents may also be the primary caregiver of the child. Rui, the above-mentioned 11-year-old who would read a book to divert thoughts of her parents, had been living with her aunt (her
mother’s sister) and uncle, as well as their son (her cousin) who just graduated from college. Rui told us more about her experiences:

*My auntie takes care of me pretty well actually. She cooks even better than my dad and mom. I would just eat dinner after finishing my homework, and then take a shower, read a book or something on my bed before sleep. But I could talk in Mandarin with my parents about things, with them (aunt’s family), they talk in their local dialect and sometimes I don’t really understand, and yet I don’t want to interrupt them...I think I would get along better with my parents.*

Rui seemed to be organizing her daily life quite well in a different type of extended family, despite the absence of both her parents and her emotional thoughts of them. Rui’s experience of living in the city before elementary school formulated a stronger attachment relationship with her migrant parents than many other LBC, which would benefit her psychosocial wellbeing after the separation. It seemed that she was able to peacefully accept changes in her source of care, and developed the abilities in adapting into another supportive yet less homelike environment.

5.3.5 *Care and disciplining concerns and the return of migrant mother*

This section focuses on how the challenges in maintaining parent-child
relationships and supportive care environment were manifested, in the experiences of the child and perceptions of the parents and caregivers. The disciplining issues and other concerns about child wellbeing related to childcare provision, demonstrated in these cases, lead to certain changes of priorities considered in the migrated-related decision-making rationales. The most explicit change was the actual or intended return migration among the migrant mothers. It should be clarified that “return migration” here is referred to as the permanent decision to come back home after quitting job in the city, rather than a temporary return for a reunion that usually occurred during holidays.

Naturally as the primary caregiver of the child, a left-behind mother would play critical roles in safeguarding the wellbeing of LBC at home, while taking charge of the vast majority of childcare activities. Many children whose father migrated showed strong attachment with their co-resident mother. As a girl said, when talking about feelings about her father’s departure after a reunion, “It’s alright because my mother is home.” However, remittances from only one migrant may not make enough family income, so many young mothers still had to work in their village, township, or county, which often involved long commute. In such situation, without strong support from the grandparents, adequate childcare for the LBC may become challenging.

For instance, Yilin, mother of an 11-year-old boy, lives in a small migrant-sending community. Her husband migrated just after their son was born. Yilin herself left
home when her son was six years old, but recently quit her job in the city and moved back to work in a local factory. The author asked her, “Does he (her son) miss his dad? Do you think he feels lonely?” Her answers depicted some vivid scenarios with her son at home.

When I’m home it’s better...He would have a chat with dad on the phone sometimes, but after all they’ve barely lived together...His dad went to the city when he was a few months old and rarely stays at home. Just because...the two elders (parents of Yilin’s husband) only have one son, so he has to go. I used to be away too but came back this year – have to take care of my son now as he’s growing up.

But still he is certainly lonely, being on his own. He would often say, “I’m so bored being alone, Mom”. I would ask, “Why don’t you go find someone to play with?” He says they all have their own playmates; he really only plays with the grandson of that man [pointing to a neighbor]. Sometime when he goes out after finishing homework, the other kids are already gone and he can’t find anyone...then he has to come home, saying “so bored” again. Actually sometimes I invite some kids to come over and hang out with him. They play here so that I can head out to work; otherwise I’d have to here chat with him, or else he’d get bored.

The grandfather was said to be too frail to take part in childcare. The grandma
later added in the same interview that she just could not handle her grandson, who would not listen to her, and would often make an excuse to go outside. Despite the responsibilities Yilin decided to take by returning home to look after her child, she seemed unable to spend enough time on him and provide adequate accompaniment. Although the child explicitly expressed his frustration due to loneliness, the family members seemed to be equally frustrated because they couldn’t find a viable solution to the situation, largely because of the limited capability of grandparents in fulfilling supportive roles.

In general, grandparents seemed to show a more relaxed attitude towards disciplining children, in particular less likely to use physical discipline. One of the community leaders we interviewed attributed this to the concern that beating the child by grandparents would make the parents unhappy, although other interviewees felt that parents would want standards of discipline (including physical disciplining in the Chinese context) to be maintained in their absence.

In addition, as we found, some grandparents were quite frail and in poor health, simply lacking the necessary physical capability to provide adequate care. Their burdens became much heavier if there were multiple grandchildren to be cared for. For example, in the company of a WF staff member, we interviewed the family of Mrs Liu, 62, who took care of three grandchildren in her home.
Interviewer: How would you compare your care with the parents’ care for the kids?

WF staffer: Grandparents usually tend to spoil them a bit.

Mrs Liu: They are the youngest generation – we grandparents wouldn’t beat them for sure.

Interviewer: Are there any difficulties for you to take care of them all?

Mrs Liu: As to difficulties, my body still works, and we are used to harsh lives in the rural village [laughs]. But it is really tough work taking care of the three together. Kids are just naughty – as you see the house is a mess all day long.

Tingting, a vivacious 11-year-old girl, was one of Mrs Liu’s grandchildren who was at home during our interview. However it was difficult to initiate a conversation with her because she was happily running around or playing with her 3-year-old cousin and did not sit still long enough to respond to us. Her mother, a migrant worker who also happened to be at home for a holiday, told us more:

Tingting is really too lively...Her grandparents don’t discipline her much; they’re not strict with her at all. The older generation – they think very differently about lots of things. I worry that Tingting will start puberty soon, and her grandparents will still use the old values and standards when caring for her. Actually my husband and I already decided not to go back to the city
after this mid-autumn day [the holiday] to look after her, as she’s becoming a big girl.

The mother later mentioned that Tingting’s grandpa used to be a schoolteacher, so she was not worried about the lack of help with her studies. Concerns about inadequate disciplining on Tingting seemed to be the central factor of the mother’s return. It appeared that none of the family members were indeed responsible for the problem. Rather, some interviewees attributed the huge discrepancies between the value systems of grandparents and children to the so-called “generation gaps”, as a result of drastic social change in China over the past decades. According to a community leader, “The grandparents are two generations older – there are a lot of new things that the kids are interested but they don’t have a clue about. So oftentimes they can’t really communicate with their grandchildren or tell them what to do.”

Some other grandparents appeared to adopt stricter measures in a crude way in supervising the child. For example, a few teenage children reported that their grandparents would not allow them to go out unsupervised for fear of accidents, so they were permitted minimal time outside even for school activities. Whether grandparental disciplining strategies appeared to be relaxed or strict, they did not seem effective in many cases. Some children cared for by grandparents, especially boys left-behind from an early age, may have developed externalizing behavioral problems. This was suggested by community leaders who reported some
left-behind boys committed vandalism or suffered injuries in minor accidents from risky play and activities. Due to concerns about her child’s behavioral change, a migrant mother named Xiaojin said, while her husband would continue working in the city, she would quit the city job and come back home next year to take care of the 11-year-old son:

*It’s just his temper that I’m really worried about. He’s become very rebellious in the last few months. He wouldn’t listen to his grandparents at all; always answers back. When I’m home it’s better. This does have something to do with us being away, because grandparents can’t control him, and we can’t control him from a distance.*

In addition to concerns about child wellbeing at home, other important events that affected the entire family dynamics may also contribute to the decision of return migration. For example, the arrival of a newborn often forced the mother to return home for the postnatal period, and sometimes much longer due to the needs for childcare. Jieping was a mother who migrated soon after her daughter’s birth. She decided to return home permanently following the birth of her second child, a boy, when her daughter was 8 years old. Specifically, Jieping emphasized the interesting change in her daughter:

*How to say...it’s like I didn’t spend much time with my daughter when she was little, and we weren’t at all close. I knew she was lonely at home just with her*
grandmother. But now that I’m staying longer at home with her, she’s doing much better. She used to go out all the time to try to find playmates. Now that her little brother makes the family lively, and she actually likes staying at home. Because both of us [the parents] were away when she was young, she became quite introverted, to be honest. But now she seems to be coming out of herself. Everything is getting better – except we’ll need to figure about money as the little guy grows up.

The author was unable to approach Jieping’s daughter and thus further information about the child’s wellbeing was unavailable. As Jieping pointed out, resource constraints may pose certain adverse effects on the long-term wellbeing of the children, due to the reduced family income after her return to Kaihua, and the additional expenses on the newborn.

The actual effects, especially the longer term impact, of the mother’s return remained unclear among the cases presented in this chapter, despite the initial intention of returning to provide better care and disciplining. Return migration was more of a reflection of the problems that the migrant parents and co-resident caregivers were able to detect, and these problems became too significant for the migrant parents not to take any actions.

5.3.6 Challenges in education attainment and community environment
Many parents considered satisfactory school record a very important objective of raising their children. While academic achievement itself is an important indicator of child development, it may also directly affect the psychosocial wellbeing of the child. As was frequently mentioned during the interviews, children who did not perform well at school exams were often under significant pressure from the family to study harder, in a way to reciprocate the hard work of their migrant parents. Most interviewees believed that in rural areas like Kaihua, there exist few pathways for children to emerge and succeed other than doing well at school and pursuing quality higher education.

However no migrant parents reported concerns about school performance as the primary reason of return migration. This may be related to the belief that migration might potentially bring better education opportunities for the LBC in the future, with the help of increased family income and prospects of moving permanently to the city, as was noted in an earlier section. In the meantime, because of the physical distance after their departure, migrant parents became unable to closely monitor the LBC's school performance. In Kaihua, young parents were usually educated at primary school level at least, yet most people in the grandparents' generation were illiterate. Consequently, after parents migrated, many children would receive much less academic support and supervision, even if only one parent was away. For example, according to Xing's mother Huan, the boy's school performance had become much worse after his father left. The parents explained their worries about their both children:
Qiang: Although we don’t know much about his homework, he would behave better if I could be with him. When you say (over the phone), “Xing, do your homework!” He replies “OK!” and doesn’t argue, but he still doesn’t do it properly. However if I were sitting here he’d have to do it – no escape.

Huan: I used to watch the kids while my husband was cooking dinner. Now that I have to cook, I can’t watch them – I also caught Jing copying someone else’s homework several times. I told her, this is not OK at all - if you don’t know the answer, you have to figure it out by yourself. She’s a good girl and would feel bad if she doesn’t do well. But cheating is not the way.

Having realized the problem and attributed it to migration, the parents had no intention to return home permanently yet. After all their presence could not replace the child’s efforts at school, and they were only hoping for the best while sparing no efforts on pushing and monitoring him, at home or remotely. A few children in this study went through certain preschool education in the city where both migrant parents were working. After experiencing early education in the city under parents’ care, they had to return home to attend primary school due to restrictions of school admission in urban areas. For example, Zhuang had experience of 3 years in a kindergarten in Shanghai, and her mother described the challenges of child education for her:
He (Zhuang) went to kindergarten in Shanghai, so he’s seen more of the world; he’s got a good personality and talks sweetly with people. But before elementary school we had to send him back, as it was difficult to get into schools in Shanghai. Then from Grade 1 we sent him to a boarding school in Kaihua; his grandma was getting too old to take care of him everyday. So he only comes home at weekends. He has become quite independent in taking care of himself. But now his school record is just fair, I don’t know, maybe medium. Because nobody’s able to help him; it’s all on his own.

Since both of Zhuang’s parents were working in the city, they were able to jointly provide a reasonable living standard, and preschool education for the child that was of higher quality than what was available in Kaihua. This period of co-residence with the parent in Zhuang’s early childhood also helped him build more secure attachment relationships with them. However it was unclear how this change of school settings might affect the child, and like many other LBC, they still had to face the challenges regarding lack of academic guidance and support at home. Grandparents were apparently not as helpful in academic support and supervision as parents, which raised a considerable concern in the family.

For children living in remote areas, long distance and lack of transportation from home to school may cause further disadvantage in their education. Some of them had to live at the nearest boarding school in the township, and come home only
on weekends and holidays, starting from the first year of primary school. Other families, more specifically at least one grandparent and the child (such as Weihui’s grandma and her sister), chose to move closer to the school and live in a rented accommodation on school days, to avoid difficulties of commuting. Yet not all families were able to afford this strategy. Another grandma-caregiver, Mrs Zhao, elaborated the situation with her and her grandson:

*The school in our township is a bit far from the bus stop - I have to pick up the kid if it rains, which sometimes is not easy for me. The school in the neighboring township is farther from home, but it’s right next to the bus stop so I don’t have to pick him up. So he gets up at 5:30 in the morning and comes home at 5pm.*

*As the population is decreasing here, many schools merged together – people often go a long way to school or rent a place nearby to look after the grandkids. We used to send them to a boarding school about 20 kilometers away for first and second grade years, but he could hardly take care of themselves. And he couldn’t take shower until Friday night at home, and would smell terrible after running around all the time.*

In general specific challenges regarding LBC’s education were largely a reflection of the missing roles of parents. The co-resident grandparents had limited physical strengths and academic abilities that were necessary to help children with their
homework or achieve their intellectual potentials. Especially under difficult socio-economic circumstances or community constraints, children might become more vulnerable in tackling the adverse conditions due to the deficiency of help and support.

5.3.7 Psychosocial support from the community environment

Besides the school, the larger community was a crucial component in the child’s physical and social environments. Community environment in a way determined the available and accessible material resources to meet the needs of families and children, as well as the intangible resources such as social capital that may benefit child development. Joint efforts of community members, especially under organized initiatives, may help relieve some of the difficulties facing the left-behind families that the migrant parents were unable to tackle effectively over distance.

In some high out-migration communities that were densely populated with left-behind family members, a sense of normalization of being left-beind appeared to compensate the feeling of loss among the incomplete families. Children would easily find playmates who shared the similar experiences in the neighborhood, and tended to feel less lonely at home. The community cohesion in these relatively isolated socio-ecological systems in Kaishua may offer some psychological relief to left-behind families, even without providing any concrete
benefits. The previously mentioned migrant father Shengli described such situation of the community where his left-behind family lives:

*Our township as a whole is a remote, underdeveloped area – almost every young adult is away and their children are all left here, so my son feels fine.*

*But if he were among just a few left behind, he would probably feel terrible.*

In contrast, many parents or caregivers reported that, it was not easy for the child to make friends in their village because “there are only about four kids of his age in our village, as the wealthier families usually take their children to the city”. During the field visits, it was not uncommon to come across a house standing alone with only a few adjacent houses in sight. Such families were often poorer than others who live at a better location, and were unlikely to have any working age young adult at home.

Interviewees further reported certain community-level efforts that were made to provide care and support for the LBC, as all community members their leaders reach the consensus that out-migration left behind a generation of children that needed extra support. The Children’s Clubs program, for example, was operating in some villages in Kaihua. The Clubs provided a physical space and some necessary resources for out-of-school activities, run by local community volunteers, as well as university students (during school holiday events only). Children’s Clubs were often using publicly owned space and facilities, including
the community center or elderly's center, where children and adults would gather for various activities, in addition to specific child-focused programming. This program seemed to be functioning well in the communities and was welcomed by many families. A community leader said:

_The children would often spend time in the classrooms in the community center, with WF representative watching them. We have some larger events like dancing as well, on the square outside the community center, which children also join in. We even invited a dance teacher; some families from the neighboring villages also come by. We have a basketball court, some physical exercise equipment, and a library – the kids can play there as well._

In some better-developed villages, other community-based programs and initiatives were also organized to support the left-behind families. Examples included partnerships with local business and/or government agencies in financial support and some specific campaigns such as post-card charity sale, and a “surrogate mom” project that recruited volunteers to forge one-on-one relationship with the LBC. Yet these were only achieved in a small number of villages, where various types resources were made available, according to a township WF leader:

_Financial support is a key aspect, for example a Village Committee was able to offer 30 thousand yuan to open its Children's Club; they also apply for more_
funds from the upper-level governments. Another aspect is support from village leaders by their concrete actions. Some often play with the kids and attend all major events about children – this makes a big difference. With the support from the Villages Committee, we can implement a lot of favorable policies for children’s benefits through different programs. Of course you also need good people to take care of the kids at the Clubs – mostly the educated retirees or WF representatives.

Many villages did not have these prerequisites and were unable to provide extra support for the left-behind families, especially those in the more remote, poorer areas of Kaihua. Some additional challenges related to geographical isolation made community support more unlikely in these villages, as another township WF leader reported:

Our population and villages are very scattered – for example a nearby “administrative village” has nine “natural villages”, located a couple of kilometers from each other, and many don’t even have cellphone reception. Under such circumstance it’s quite difficult to organize any programs or activities...unless they are extremely attractive to the families, which we can’t really afford though.

Community entails critical components of the socio-ecological system and key variables that determined rural-to-urban labor migration. Although the
community-level resources may or may not be able to turn into effective psychosocial support, the interviewees reported certain positive prospects for population-based interventions to continue to benefit children.

5.4 Discussion

5.4.1 Summary of key findings

This qualitative study provides a comprehensive analysis of the impact of migration on children, by eliciting community contexts and causes of migration, consequences of the separation, family coping strategies, and socio-ecological conditions with regard to this impact. Overall, the lengthy separation poses considerable difficulties on many children’s psychosocial wellbeing, especially emotional distress, primarily through disrupted attachment relationships. These effects may not be easily restored even if migrant parents permanently returned home. The psychosocial support (and lack of) from the co-resident family, as well as factors regarding school performance and community cohesion, also modify or intensify the child wellbeing outcomes under the impact of parents’ absence.

The substantive concepts that emerged from our data, and the connections between them, formulated a conceptual framework (Figure 5.1) with reference to the predetermined ground theory paradigm that was noted in the Methods section of this chapter. The contexts and conditions of psychosocial wellbeing in
this framework coincided with the socio-ecological model of human development’s emphasis on connections between different levels of family and social systems. The ABC-X family stress model was also referred to, in relation to the delineation of emotional coping processes and strategies that was initially triggered by a stress event.

Figure 5.1: Conceptual framework of key factors in the impact mechanisms of parental migration on child psychosocial wellbeing (Adapted from Boss, 2002)

Similar to many migrant-sending areas, for the Kaihua families, the decision to migrate was initially made to improve socio-economic status. Despite the
remittances and potential socio-economic benefits, prolonged separation from parents markedly altered the family dynamics, and caused considerable challenges in psychosocial wellbeing among many children, primarily through disrupted parent-child relationship. As a direct consequence of parent-child separation, the disruption of the conventional attachment relationships thus became a main focus of this study.

The emotional distress appeared to be the most pronounced psychosocial difficulty, often manifested as persistent thoughts of their migrant parents and certain depressive feelings when missing them. Children with dysfunctional attachment relationships tended to withhold the expression of emotions in their communication and interaction with migrant parents. Behavioral and social functioning problems were less prevalent yet significantly affect some children.

Family care arrangements and psychosocial support seemed to comprise a crucial factor in safeguarding the wellbeing of LBC in absence of migrant parents, in addition to the available maternal resources. Sources of support included caregivers as well as peers and community members. Concerns about the child accumulated over critical child development periods through various interactions and feedbacks, during which the grandparents’ physical strengths continued to decline. Corresponding strategies were adopted sometimes by migrants adjusting the family objectives and returning home permanently, yet the effects of the return remained questionable. Children’s school access and performance,
correlated to both parental absence and child psychosocial wellbeing, appeared to confound the effects of migration. Community characteristics entailed important contextual factors, which to some extent determine the amount of support available outside of the family for their children.

5.4.2 Comparison of study contexts with extant international literature

The rural-to-urban migration in China investigated in this study occurred within the country's border, in contrast to the vast majority of existing studies conducted in other countries. While findings from the international migration literature in relation to this study should be referred to with caution, the similarities between internal and international migration seemed to prevail over the differences, in examining the psychosocial wellbeing of the LBC.

The incentives of migration for better income prospects and human development opportunities were very similar, whether or not a national border was crossed. Yet the initial move in international migration often involves higher costs than internal migration, which may have blocked some poorer household from making the decision. Entry policies of the migration destination and are usually stricter for foreigners, and more restrictions would be applied for them to obtain social security and welfare, especially for their children (Valtolina & Colombo, 2012). But it is noticeable that due to the household registration system in China and the urban-rural divide in education and social protection systems, migrants in the
cities would also encounter various constraints that prevented them from bringing their children.

The timing and duration of migration was comparable; many children in Kaihua were left behind soon after birth, as were many LBC in other countries. Depending on the border entry policies, some transnational migrants may not be able to visit home as frequently as the Chinese migrants, particularly the undocumented immigrants in the US due to the possibility of being deported. But in Southeast Asia or within European Union, for example, the trips back home may also be unchallenging.

Meanwhile, taking a more in-depth point of view, prospects for a child to move to another more developed country might have different effects than the expectation of a urban destination. In rural China, excellence in school performance would enable rural children to thrive in the cities, without the hardship endured by their migrant parents (Murphy, 2014), and therefore the motivation to study hard and even behave well may became much stronger than the international LBC. On the other hand, for a child looking to join their parents in a developed country, the immigration process does not seem to require them to be well-performed students and thus the school performance factor is less relevant.

A notable finding about the socio-economic context of this study was that, rural-to-urban migration did not necessarily result in economic advantage over
other rural families. This may be a distinct feature compared to communities in lower income migrant-sending countries. The sheer proportion of remittances as part of the national economy was huge in countries like the Philippines (10% of GDP) and Moldova (23% of GDP) (World Bank, 2015).

In some of the CHAMPSEA study countries, especially the Philippines, the overseas income advantage and strong connections between migrants and their home communities, contributed to the development of social support networks for LBC (Graham & Jordan, 2011). In contrast, most rural-to-urban migrants were still struggling to make a living, and moving out of the home community with their children would certainly be their priority when possible, rather than contributing to the next generation living in their hometown, where little future can be seen. Since very few civil society organizations exist in China, efforts on safeguarding LBC’s wellbeing were largely made by the government and village committee leadership, with their limited local resources.

5.4.3 Attachment relationship and emotional distress

While the impact from parental migration involves complex mechanisms, the phenomenon that immediately follows the move is the physical absence of one end of the parent-child relationship. Hence how family relationships function after this change, especially between migrant parents and the child, may represent the direct implication of migration on the child. The relationship
dynamics involve how migrant parents fulfill the absence, by keeping virtually present and playing a caregiver role remotely, and how the psychosocial experiences of the child respond to the disruption of parent-child relationship bonds.

It is worth noting that because the relationship variable is largely an independent consequence of migration, it is likely to represent the effect size of migration after adjusting for other factors related to the left-behind family and community environments, such as the availability of support and socioeconomic status. The specific casual mechanisms, including how migration may interact with other variables associated with child wellbeing, will be explored in our qualitative study in the next chapter of this thesis.

While some existing qualitative studies elicited the negative feelings such as loneliness and vulnerability, or symptoms of depression and anxiety in LBC (Dreby 2007; Graham et al., 2012), the accounts often illustrated more about the psychological status, rather than strongly pointing to the experience of parental absence per se or feelings about the migrant parents. Some qualitative studies (Dreby 2007; Graham et al., 2012; Parreñas, 2001; Hoang & Yeoh, 2015; Zou, 2012) found certain communication styles between migrant parents and children may undermine child psychosocial wellbeing. Our results further indicate the lack of supportive emotional connections over the distance, even with relatively secure attachment bond.
The relationship-emotion processes

In this study, the exploration into the relationships around the child provided further insights about the implicit emotional processes in LBC, based on children’s accounts about how and whether they miss or think of their migrant parents, as well as the child’s communication and bonding patterns with migrant parents and co-resident caregivers. According to the attachment theorists, with attachment figures’ long-term absence, children regardless of their age group may develop emotional distress similar to young children’s reactions to physical separation (Kobak & Madsen, 2008, p24), due to the shaken secure base that was supposed to derive from attachments.

Our findings illustrate that many children manifest vulnerable emotions in their persistent thoughts of their migrant parents, including depressive feelings especially whey they experience vulnerability. Yet, this appears to be part of the routine mechanisms in their family dynamics, which have mixed implications on the child. Despite the heavy experiences expressed by most children, some cases suggest strengthened resilience as children overcome the difficulties during the lengthy separation. In particular, those who used to live with migrant parents in the city have forged stronger attachment bonds, and demonstrate certain resilience to negative emotional impact after they were separated again from parents.
In the absence of affections, other children respond to the absence of parents in a way that shows a more dysfunctional relationship. Specifically, some of those who were left-behind very early during infancy, such as Zhimin and Xia, tend to withhold the expression of any emotions in their interactions and communication with migrant parents. These cases suggest that early separation can be more damaging to the attachment bonds, since the migrant parents were absent when the attachment relationship and internal working model of the child were initially formed, as was suggested by attachment theory.

Communication over distance

On the parents’ end, the communication over the phone is the most important way to be virtually present in the child’s daily life and manage their relationship bonds. Our results showed that while parents, with the help of caregivers, usually make sure of frequent contacts with the child on regular basis, some children are not willing to take the phone calls at all. Hoang & Yeoh (2015) identified similar issue in rural Vietnam that reflected the child's intentionally distancing themselves from the parents. The psychological mechanisms in withholding the connections appear to be complex, involving ambivalent attitudes towards the parents’ absence, and their ambiguous roles as a remote caregiver. The pressure from co-resident caregivers that pushes the child to speak to migrant parents also seems unlikely to improve their relationship bonds.
Negative emotions can serve as signals that promote open communication in
secure attachment relationships (Ainsworth et al., 1978, p152). Although older
children appear to recognize and acknowledge parental migration as an effort to
improve family wellbeing, rather than an intentional separation, it seems deeper
thoughts from daily life or about parent-child relationships were rarely
communicated, and content of the phone calls was mostly didacticism from the
parents. Through the ineffective communication, adult family members may not
be able to perceive meaningful emotions and thoughts from the child. When the
painful emotions could not be relieved by responsive and accessible care, children
after prolonged separation may attempt to downplay attachment feelings, and
diminish their expectations of the migrant parents (Bowlby, 1973, p56). This
could make it even more difficult to initiate functional coping strategies. Hence,
migrant parents should focus more on the emotional expression of children and
improve distant communication, and make efforts on providing more concrete
responses to the daily thoughts and events their child goes through.

As fundamental elements of secure attachment bonds seem to remain in the
knowledge that the parent can reunite with the child if necessary (Kobak &
Madson, 2008, p33), the occasional reunions became a crucial opportunity to
remedy attachment relationship. Meanwhile, the closeness during the reunions
may also be a sign of the defensive suppression of attachment feelings while being
apart (Kobak & Madson, 2008, p30), so the psychological mechanisms behind the
positive response to the brief reunion may be complex. What is manifested during the reunions is insufficient to infer that psychosocial wellbeing status will be favorable following the permanent return of migrant parents.

5.4.4 Availability of support from family and socio-ecological environments

The rationales of migration involve the objectives on securing more economic resources, for the migrants themselves and their left-behind family (King, 2012). Besides household income status, the intangible resources to make the family thrive and benefit childhood development are also indispensible. Effective care arrangements and adequate support in the in the left-behind family and the larger socio-ecological systems help mitigate the loss of physical proximity with children and disruption of attachment bonds. Meanwhile, lack of supportive factors may exacerbate the disadvantages and even lead to crises in child development.

Our findings indicate that psychosocial support from caregivers becomes a crucial type of non-material resources for child development in the left-behind families. Grandparents, who usually become the primary caregivers, make great efforts to ensure children’s optimal future and compensate the loss due to of parental absence in the family. Quantitative studies have shown the grandparents are better caregivers than other alternative caregivers in fulfilling the gaps left by migrant parents in daily care (Zhao et al., 2009; Fan et al., 2010; Jiang, 2013; Graham, 2011; Senaratna et al., 2011). Similar to some findings in the qualitative
literature (Arnold, 2006), several children in our study are able to forge strong attachment relationship with grandparents and seem to be living in a healthy, supportive environment, demonstrating little difference than normal nuclear families.

However, given the fact that the grandparents’ physical conditions and abilities related to childcare varied, lessons can be drawn from different types and amount of support that were available to by the child, as well as the situations and arrangements that were able to enhance the child’s resilience to parental absence.

Composition of the left-behind family besides grandparents indicates certain significance in this study. Despite little evidence from the existing qualitative literature, theoretical perspectives of family studies and socio-ecological systems elucidated the peer effects in the co-resident household (Berk, 2012; Bronfenbrenner & Morris, 1998). Our results suggest that peer accompaniment relieves the loneliness from being left behind and may improve the overall child development environment. In this regard, one specific type of care arrangement in the context of China’s One Child Policy (and its variants), i.e. capable grandparents looking after multiple cousins, seems to be a pattern that is able to offer adequate psychosocial resources for children, with more concentrated economic resources than multi-sibling families in which only one nuclear family is providing remittances. It is possible that the interactions between cousins involved a peer relationship that differs from relationship between nuclear family
members, which may strengthen the social functioning of the child.

Another type of family in which the child only lives with the left-behind mother, appears to be a less favorable environment; the mother as single caregiver, such as Feng, has limited time and efforts on childcare especially when she also has to work, with a family income that is likely to be lower than two-migrant families. Further effects of caregiver arrangement will be examined in the quantitative study.

The grandparents’ caregiver role becomes particularly important for children living in extremely disadvantaged situations, as Coe (2011) suggested in the study in Ghana. In Kaihua, some of these children are facing enormous difficulties, especially when proper psychosocial support is unavailable from grandparents or alternative sources. To meet the household’s basic survival needs, many poorest parents tend to have no choice but to migrate, because of the lack of employ opportunities in their hometown that may significantly relieve their economic distress. Also, some families are broken down because of the parents’ divorce; the situation leaves the child with only unstable care and livelihood provision arrangements. When parents’ divorce leads to the child’s move of residence, disadvantages in peer and social support and even school attendance may follow in an unfamiliar environment.

The vulnerable children in these families are in dire need of extra help; and the
community may become their last resort. Dongyang’s case suggests that neighbors may also play caregiver roles in extreme cases. The results also show connections between LBC and community environment, such as the benefits from peer accompaniment in a favorable community environment, and even certain types of community care through premature models that have been established in Kaihua. These appear to be beneficial complement of the family-wide resources for child development, whereas isolated, remote community environment may add to the difficulties in child wellbeing.

5.4.5 The processes and effects of return migration

Migration theories reviewed in Chapter 2 underscored the functionality of migrants and their households as rational actors that are driven by returns on economic resource and human capital, against the cost of migration (Sjaastad, 1962). In Kaihua, our findings suggest that the primary consideration when parents made the decision to migrate was to cope with the first-order stress in family economic status. However, similar as what Boss (2002, p48) noted in the family stress model, although migration is a coping mechanism leads to income gains, it also brings new, attending stressors to the family members, especially the child.

Most of these stressors were related to the insufficient quality of childcare grandparents were able to provide. First, frailty because of old age limited some
grandparents’ physical strengths, mobility and energy, which becomes considerable constraints especially in the daily care of younger children, or older children who need extra attention. Also, “generation gaps” makes it difficult for the elderly to sustain effective communication and interactions with children. These challenges may even progressively undermine their capability in soothing children’s emotional distress for disciplining their behavioral problems. As a result, the psychosocial difficulties in children may continue to exacerbate, when the necessary extra support and supervision from caregivers remains unavailable.

Hence, it is important to recognize the possible augmentation over time of the negative impact from parental absence. Existing longitudinal studies in China already suggest the continuous decline of psychological wellbeing during early adolescence, which also appears to be associated with longer duration of parental absence (Dong & Zhang, 2013b; Dong & He, 2014; Lu et al., 2014a; Zhao et al., 2015; Lu et al., 2014b; Gao 2010; Fan et al., 2013). Some interviews in the current study indicated similar worsening situation over time, for example, Xia used to be much closer with her migrant father in her early childhood but they “grew apart”. Often times the family did not take corresponding actions in time before the problems worsen, since migrant parents, and even co-resident caregivers did not detect the early worrying signs of child wellbeing and become aware of the situation. In these cases, the parent-child interactions via distant communication appear to be unproductive in achieving open, in-depth conversations or effective disciplining of behavioral problems.
It may also be extremely challenging to reverse the negative psychosocial impact caused by parental migration, even with full efforts from parents and grandparents. When the migrant mother eventually decides to return home permanently, it is still unclear from our results whether this move will be followed by significant positive changes in the child. In fact, a quantitative study (Adhikari et al., 2013) of the CHAMPEA project found in Thailand that mother’s earlier migration history had a significant, independent association with psychosocial difficulties.

First, as was noted in the results section, in our study the decision to return itself indicates that the challenges in childcare and disciplining have been so significant, that economics of labor migration theory no longer applies in these families. Migrant parents have to adjust the family goals and priorities, by shifting the focus from economic prospects back on to child development. Second, economic status is still a key factor in ensuring adequate resources for the child. Because of the reduced income after quitting the job in the city, the return migrants are likely to seek other income sources at home, and therefore they may not have enough time and energy to focus on childcare, as they were intending to. Empirical evidence also indicates that mothers who are wage workers spend significantly less time in child care, based on data from eight Chinese provinces (Short et al., 2012).
Last but not least, the return migration may indeed bring new challenges for the family and children. Although most infants become attached to more than one familiar person, there is a strong tendency for them to prefer a principal attachment figure for comfort and security (Bowlby, 1969, p308). Following the mother’s return, the primary caregiver role of one of the grandparents is bound to be challenged. Because of the disturbance in the continuity of care from the initial attachment figure, attachment theorists suggest the child is prone to distress due to the insecurity demonstrated in the unstable relationship bonds (Bowlby, 1973, p35). Previous empirical research has also shown that frequent change of caregivers leads to negative effects on LBC’s wellbeing (Senaratna et al., 2011; Pottinger, 2005).

5.4.6 Limitations: study sample, age, and gender

The small sample in this study was recruited from a rich province in China and hence cannot be nationally representative, considering the massive underdeveloped rural areas across the country. Also most parents in this study migrated within the province and thus were more likely to visit home, compared to those who migrated to another province, comprising approximately one third of total migrants in China (Qiao & Huang, 2013). Despite our efforts in recruiting families with diverse contexts in terms of family structure, income, and migration timing, the small sample did not allow us to comprehensively investigate all variables in family contexts and distinguish their individual effects on child
wellbeing. We were also unable to compare migrant fathers and migrant mothers in attachment relationships, partly due to the fact that both migrant parents would usually join the phone communication with the child and visit home together.

Relatedly, although certain the results showed certain signs that girls were more likely to internalizing problems and boys more prone to externalizing behaviors, the data has not been strong enough to make valid conclusion regarding gender disparities of child wellbeing. Similarly, the age variations in this study was insufficient to infer differentiated psychosocial wellbeing attributes between age groups. With a much larger sample, the quantitative study presented in the next chapter will investigate the child demographic characteristics in more detail.

5.4.7 Study implications and connections with the quantitative study

Very few qualitative studies published in English or Chinese have addressed the wellbeing of left-behind children in China. This study provides insights from a comprehensive perspective that incorporates both migrants and left-behind family members, through the exploration of a range of relationships, functions and mechanisms in relation to family care and psychosocial support, within the family and community systems. With certain caveats, our findings may even inform the research on families living apart due to reasons other than migration, such as incarceration and military service. Intervention programs should be
developed to improve parent-child communication in the family coping process; community care and support programs may also benefit child and family wellbeing. Further research implications will be discussed in the last section of the final chapter.

Due to practical constraints, the qualitative data analysis did not finish when the quantitative data collection started. Nevertheless, the initial qualitative findings informed the overall framework and objectives of quantitative study. Building on the original general research question on how parental migration may affect child wellbeing, qualitative results shed lights on the potential causal pathways between migration and child outcomes, by identifying the relevant household characteristics and other environmental factors.

Above all, various aspects of child psychosocial wellbeing identified in the qualitative results contribute to the selection of outcome measures and questionnaire instruments in the quantitative study, to investigate critical wellbeing dimensions, particularly emotional symptoms, peer and socio-behavioral problems.

Although previously left-behind children were not included in the qualitative study sample, the findings on mother’s return suggest that return migration may not be able to resolve the challenges facing their children and may even create new stressors. Some results implied the adverse impact of parental migration
may accumulate and progressively undermine child wellbeing. Early migration after childbirth and parental absence during critical development periods also appeared to be alarming. As a result, the psychosocial wellbeing of previous LBC whose parents returned home permanently, or the long-term impact of parental migration, becomes a key point of interest in the quantitative study, and will be examined throughout the next chapter.

According to the qualitative findings, the most direct impact following migration is embodied in the parent-child relationship, and helps interpret the effects of parental migration that are independent of other covariates in the quantitative study. In other words, even after adjusting for characteristics of family and social environments that were explored in the qualitative study, the remaining correlation between migration and child psychosocial difficulties, especially emotional distress, is still meaningful.

The qualitative results also contribute to the inclusion of covariates in the quantitative study, which are more indirectly related to both migration and child experiences. Care arrangements and family composition emerged as important concepts to be further explored using quantitative data. Who are the co-resident family members, and who plays the role of primary caregiver, seems to be important variables that may reflect the consequences of migration and the wellbeing status of children. Parents’ divorce, shown as a strong undermining factor of LBC’s wellbeing in Dongyang’s case, is also to be further examined in the
quantitative study.

This study shows how psychosocial support from multiple sources, including family and community members, provides essential resources for the child in absence of parents. The availability of support thus becomes a major factor to be examined in the quantitative study. Importantly, when looking into the most disadvantaged families, qualitative results indicate children with less support from family and social environments tend to be disproportionately affected by parental migration, even in a progressive manner over time. This prompts the investigation on interaction effects between availability of support and parental migration in the quantitative study.

Due to the lack of valid measures of wealth status in the qualitative study, the quantitative chapter will further investigate the household economic mechanisms in relation to migration and child wellbeing, as in family care resources and the larger socioeconomic contexts of labor migration. The quantitative study is based on a much larger sample across two provinces, so child demographics including age and gender will be taken into accounts in the analysis models in the next chapter.
Chapter 6  Impact of parental migration on children’s psychosocial wellbeing measures: a quantitative survey

6.1 Introduction

This chapter presents the quantitative study of this thesis. Using a cross-sectional self-report questionnaire, this study further investigates the central research question of this thesis: how parental migration affects child psychosocial wellbeing and what are the roles of other factors in the LBC’s family and social environments.

Data was collected in this study as part of a larger project. A local project team based in Zhejiang affiliated with Zhejiang University collected data from all study sites, and thus results in this chapter are from the secondary data analysis that the author conducted. However, the author participated in the design of survey instrument, based on the review of both empirical and theoretical literatures. Connections between the review and questionnaire instrument applied in this study will be elaborated in the Methods section.

The quantitative analysis aimed to investigate the current and long-term impact of parental migration, on the emotional, behavioral and social functioning aspects of child wellbeing that may reflect consequences of parental absence. In particular, the study focused on family care arrangements and sources of psychosocial
support, in addition to material resources for the children. These factors were explored in order to indicate the potential impact mechanisms or causal pathways, from parental migration to child psychosocial wellbeing outcomes.

More specifically, we examined: 1) the impact on child psychosocial wellbeing due to lengthy separation (for more than 6 months) from migrant parents, including both current and previous experiences of being left behind; 2) characteristics of available resources for overall child development in absence of migrant parents, including family care provision, psychosocial support, and wealth status that may confound the direct effects of parental migration; 3) how child wellbeing factors (as were mentioned in the previous two points) were associated with specific dimensions of psychosocial wellbeing, as compared to the overall wellbeing metric; 4) whether the effects of childcare risk factors, such as parental divorce, and lack of social support, are greater in left-behind children than never left-behind children.

6.2 Methods

6.2.1 Study populations

Data in this study was collected from the three counties in Zhejiang and two counties in Guizhou. The three counties in Zhejiang were selected in the poorest region of Zhejiang, and the two counties in Guizhou were among the richer rural
areas in the province near the provincial capital.

Officials at the relevant departments of county or township governments were interviewed to identify communities with high proportions of LBC, and to understand the economic status of these communities. Twenty migrant-sending townships in western Zhejiang, and ten such townships in southeastern Guizhou, were included in this study. In Zhejiang, to make the sample more comparable to Guizhou, two villages with higher out-migration and lower economic status in each township were further selected as sampling units. In each selected township, two schools where most LBC go to were included in the study, with the permission of the school principal and local Department of Education. To be eligible for this study, students should be in Year 4 to Year 9 from the selected schools; and in Zhejiang, students should also come from the selected villages.

6.2.2 Data collection

As was stated in the introduction section, quantitative data used in this chapter from both Zhejiang and Guizhou provinces was collected by a project team in the field, as part of a larger project. The project team comprised of researchers and graduate students at Zhejiang University and Zhejiang Normal University, and the author conducted secondary data analysis.

All eligible students were provided with a detailed description of the study design
and an informed consent form. Those who agreed to participate were asked to complete a self-administered questionnaire in their classroom, without the presence of any teachers or school administrators. Participants were assured that they could withdraw from the study at any time. They were also told that there were no right or wrong answers, and their answers would remain confidential; no one except the researchers would have access to information they provided in the questionnaire.

Trained research assistants helped younger students fill in the questionnaire by explaining the questions if requested. Each participant was briefly interviewed after the questionnaire was completed, to confirm the questions relating to parental migration history. Corrections were made according to the interview for inconsistent answers. All completed questionnaires were collected and put into a box that was then sealed to demonstrate that confidentiality was guaranteed.

6.2.3 Measures

Questionnaire design

The survey instrument was development based on reviews of both empirical and theoretical literatures conducted by the author, with further inputs and modifications from the larger project team. The theoretical perspectives elucidated in Chapter 2 suggest areas of focus when designing survey questions. Arguments according to attachment theory highlighted the focus areas of
emotional and behavioral issues when examining child wellbeing. The family studies theories pointed out the crucial effects of household characteristics, as well as larger contextual factors in the left-behind family's socio-ecological system. Migration theories illustrated complex mechanisms that drive the actions related to migration, which involved important factors in the left-behind family and communities to justify the rationales of migration (or return migration). Particularly, household economics perspective informed the investigation and discussion on family wealth status in this study.

As was shown in Chapter 3, instruments and questionnaire items in the empirical studies were critically reviewed, to design the survey instrument that addresses the central research question by measuring overall and specific dimensions of wellbeing, as well as important covariates. Mental health scales were excluded because this study does not focus on psychopathology, but rather the comprehensive psychosocial mechanisms which involve both positive and negative aspects. Emotional and behavioral wellbeing became the focus of child outcome measures, which may be better linked with parental absence according to the theoretical review. The applicability in the non-clinical settings in rural China was also considered, and certain language in the questionnaire was modified accordingly to avoid misinterpretation.

**Psychosocial wellbeing**
The self-report version of Strengths and Difficulties Questionnaire (SDQ) was applied to measure psychosocial wellbeing of children. The SDQ (Goodman, 2007) comprises 25 items of psychosocial wellbeing, in five dimensions including emotional symptoms, (somatic symptoms, unhappy, worries, nervous in new situations, and many fears) conduct problems (tempers, obedient, fights or bullies, lies, steals), hyperactivity (restless, fidgety, easily distracted, thinks before acting, good attention), peer problems (solitary, has good friend, generally liked, bullied, better with adults than with children), and pro-social behaviors (considerate, helpful if someone hurt, shares readily, kind to younger children, often volunteers). Each item was scored from 0 to 2 (not true, somewhat true, and certainly true). Each dimension was measured by the summed score of the five items as a subscale, with values ranging from 0 to 10. All but the pro-social subscale were then grouped together to generate a total difficulties score, ranging from 0 to 40, with higher scores indicating more severe difficulties. All dependent variables from SDQ were coded as continuous in our analysis.

Table 6.1: Frequency distribution of responses in each SDQ item

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Questionnaire item</th>
<th>Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotion</td>
<td>I get a lot of headaches, stomach-aches or sickness</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Not true</td>
<td>53.4</td>
</tr>
<tr>
<td></td>
<td>Somewhat true</td>
<td>36.0</td>
</tr>
<tr>
<td></td>
<td>Certainly true</td>
<td>10.6</td>
</tr>
<tr>
<td></td>
<td>I worry a lot</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Not true</td>
<td>16.5</td>
</tr>
<tr>
<td></td>
<td>Somewhat true</td>
<td>58.7</td>
</tr>
<tr>
<td></td>
<td>Certainly true</td>
<td>24.8</td>
</tr>
</tbody>
</table>
I am often unhappy, down-hearted or tearful
   Not true       52.6
   Somewhat true  34.8
   Certainly true 12.6

I am nervous in new situations. I easily lose confidence
   Not true       32.2
   Somewhat true  45.0
   Certainly true 22.8

I have many fears. I am easily scared
   Not true       50.8
   Somewhat true  34.2
   Certainly true 15.0

**Conduct**

I get very angry and often lose my temper
   Not true       36.5
   Somewhat true  49.0
   Certainly true 14.5

I usually do as I am told
   Not true       4.5
   Somewhat true  58.4
   Certainly true 37.1

I fight a lot. I can make other people do what I want
   Not true       70.3
   Somewhat true  25.9
   Certainly true  3.8

I am often accused of lying or cheating
   Not true       78.7
   Somewhat true  17.4
   Certainly true  3.9

I take things that are not mine from home, school or elsewhere
   Not true       85.7
   Somewhat true  6.1
   Certainly true  8.3

**Peer relationship**

I am usually on my own. I generally play alone or keep to myself
<table>
<thead>
<tr>
<th>Statement</th>
<th>Not true</th>
<th>Somewhat true</th>
<th>Certainly true</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have one good friend or more</td>
<td>63.3</td>
<td>26.5</td>
<td>10.1</td>
</tr>
<tr>
<td>Other people my age generally like me</td>
<td>12.7</td>
<td>46.8</td>
<td>40.5</td>
</tr>
<tr>
<td>Other children or young people pick on me or bully me</td>
<td>62.7</td>
<td>28.5</td>
<td>8.8</td>
</tr>
<tr>
<td>I get on better with adults than with people my own age</td>
<td>31.6</td>
<td>43.7</td>
<td>24.7</td>
</tr>
<tr>
<td>Hyperactivity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am restless, I cannot stay still for long</td>
<td>31.5</td>
<td>53.6</td>
<td>14.9</td>
</tr>
<tr>
<td>I am constantly fidgeting or squirming</td>
<td>46.4</td>
<td>41.4</td>
<td>12.2</td>
</tr>
<tr>
<td>I am easily distracted, I find it difficult to concentrate</td>
<td>31.9</td>
<td>50.4</td>
<td>17.7</td>
</tr>
<tr>
<td>I think before I do things</td>
<td>8.8</td>
<td>53.2</td>
<td>38.0</td>
</tr>
<tr>
<td>I finish the work I'm doing. My attention is good</td>
<td>14.7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Somewhat true 63.0
Certainly true 22.3

Prosocial

I try to be nice to other people. I care about their feelings
Not true 3.0
Somewhat true 58.4
Certainly true 38.7

I usually share with others (food, games, pens etc.)
Not true 6.2
Somewhat true 45.0
Certainly true 48.8

I am helpful if someone is hurt, upset or feeling ill
Not true 4.2
Somewhat true 43.0
Certainly true 52.8

I am kind to younger children
Not true 4.4
Somewhat true 32.3
Certainly true 63.3

I often volunteer to help others (parents, teachers, children)
Not true 5.3
Somewhat true 57.5
Certainly true 37.3
Figure 6.1: Frequency distribution of SDQ total difficulties score
The SDQ has proven its reliability and validity across different cultures and settings, and has been validated in Chinese population (Kou et al., 2007). Some previous studies on LBC have used SDQ or its subscales as primary outcomes of child wellbeing (Mazzucato et al, 2015; Vanore et al., 2015; Wickramage et al., 2015; Fan et al., 2010), which can provide scores to be compared with our results.

**Parental migration status**

Parental migration status was determined according to the two questions “has your father (and mother) taken a job away from your hometown and been absent for over six months?” The options were “yes, currently absent”, “yes, previously absent”, and “no, never”. If one or both parents were currently absent, the child was defined as a “current-LBC”; if not, and if one or both parents were previously absent, the child was defined as “previous-LBC”; and if neither parent was ever away, the child was “never-LBC”.

**Household characteristics**

Household characteristics included economic status, primary caregiver (grandparents, father, mother, or others), parents’ marriage status (married or divorce), and any siblings (yes or no). Economic status was measured by the
number of household appliances, among air conditioner, refrigerator, washing machine, television, and computer. The variable was then coded as poor (zero to one item), fair (two to three items), and wealthy (four to five items). The primary caregiver of children was identified based on two consecutive questions, “Who are you currently living with?” and, “Among them (who live with you), who takes care of you the most?” Caregivers were grouped into four categories: grandparents, father, mother, and others (including relatives, friends, siblings, and no caregiver). The answers were then cross-checked with parental migration status. If the child identified a migrant parent at the time as primary caregiver, this parent, when coding the variable, was replaced by an adult living with the child, using an order of precedence: mother, father, grandparents and then others.

Child social support and school performance

Social support was measure by a scale of six items adapted from the Multidimensional Scale of Perceived Social Support. We excluded the wordings that specified family or friends in order to explore if support the child can get from anyone. We also only focused on the aspects that better apply to rural children in China. The questions asked were: whether or not there is someone would help or talk with the child, when the child 1) has trouble in study, 2) worries about problems, 3) is teased or bullied, and whether there is anyone the child can 4) share happiness with, 5) share sorrow with, and 6) seek help or guidance from when things go wrong. The answer “yes” was coded 1 and “no” as 0.
Children who scored 6, i.e. “yes” in all six items were categorized as high social support. Children who scored 3 to 5 were categorized as medium, and 0 to 2 as low social support. School performance was measured by the question, “In general, what is your academic performance level in your class?” The options were “top, upper-middle, middle, lower-middle, low”, coded from 1 (low) to 5 (top).

### Table 6.2: Overall sample characteristics

<table>
<thead>
<tr>
<th></th>
<th>N / Mean</th>
<th>% / SD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Parental migration status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NLB</td>
<td>701</td>
<td>19.8</td>
</tr>
<tr>
<td>PLB</td>
<td>907</td>
<td>25.6</td>
</tr>
<tr>
<td>CLB</td>
<td>1930</td>
<td>54.6</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>1674</td>
<td>47.45</td>
</tr>
<tr>
<td>Female</td>
<td>1854</td>
<td>52.55</td>
</tr>
<tr>
<td><strong>Province</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zhejiang</td>
<td>1352</td>
<td>38.21</td>
</tr>
<tr>
<td>Guizhou</td>
<td>2186</td>
<td>61.79</td>
</tr>
<tr>
<td><strong>Primary caregiver</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grandparent</td>
<td>1630</td>
<td>46.24</td>
</tr>
<tr>
<td>Father</td>
<td>435</td>
<td>12.34</td>
</tr>
<tr>
<td>Mother</td>
<td>1307</td>
<td>37.08</td>
</tr>
<tr>
<td>Other</td>
<td>153</td>
<td>4.34</td>
</tr>
<tr>
<td><strong>Parents divorced</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>3114</td>
<td>88.72</td>
</tr>
<tr>
<td>Yes</td>
<td>396</td>
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</tr>
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<td><strong>Any Sibling</strong></td>
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<td></td>
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<td>No</td>
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<td>Yes</td>
<td>2774</td>
<td>78.47</td>
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<td><strong>School performance</strong></td>
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<tr>
<td>Very poor</td>
<td>290</td>
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</tr>
<tr>
<td>Poor</td>
<td>659</td>
<td>18.68</td>
</tr>
<tr>
<td>Fair</td>
<td>1516</td>
<td>42.97</td>
</tr>
<tr>
<td>Good</td>
<td>752</td>
<td>21.32</td>
</tr>
<tr>
<td>Very good</td>
<td>311</td>
<td>8.82</td>
</tr>
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<td>-----------</td>
<td>-----</td>
<td>------</td>
</tr>
<tr>
<td><strong>Family/social support score</strong></td>
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<td></td>
</tr>
<tr>
<td>0</td>
<td>14</td>
<td>0.40</td>
</tr>
<tr>
<td>1</td>
<td>60</td>
<td>1.71</td>
</tr>
<tr>
<td>2</td>
<td>124</td>
<td>3.54</td>
</tr>
<tr>
<td>3</td>
<td>235</td>
<td>6.71</td>
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<td>4</td>
<td>451</td>
<td>12.89</td>
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<td>5</td>
<td>678</td>
<td>19.37</td>
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<td>6</td>
<td>1938</td>
<td>55.37</td>
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<tr>
<td><strong>Household items:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Air conditioner</strong></td>
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<td></td>
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<td>No</td>
<td>2676</td>
<td>75.70</td>
</tr>
<tr>
<td>Yes</td>
<td>859</td>
<td>24.30</td>
</tr>
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<td><strong>Washing machine</strong></td>
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<td></td>
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<td>No</td>
<td>598</td>
<td>16.92</td>
</tr>
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<td>Yes</td>
<td>2937</td>
<td>83.08</td>
</tr>
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<td><strong>Television</strong></td>
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<td></td>
</tr>
<tr>
<td>No</td>
<td>120</td>
<td>3.39</td>
</tr>
<tr>
<td>Yes</td>
<td>3415</td>
<td>96.61</td>
</tr>
<tr>
<td><strong>Refrigerator</strong></td>
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<td></td>
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<td>No</td>
<td>721</td>
<td>20.40</td>
</tr>
<tr>
<td>Yes</td>
<td>2814</td>
<td>79.60</td>
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<tr>
<td><strong>Computer</strong></td>
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<td></td>
</tr>
<tr>
<td>No</td>
<td>2447</td>
<td>69.22</td>
</tr>
<tr>
<td>Yes</td>
<td>1088</td>
<td>30.78</td>
</tr>
<tr>
<td><strong>Motorcycle</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>1700</td>
<td>48.09</td>
</tr>
<tr>
<td>Yes</td>
<td>1835</td>
<td>51.91</td>
</tr>
<tr>
<td><strong>Cellphone</strong></td>
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<td></td>
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<tr>
<td>No</td>
<td>162</td>
<td>4.58</td>
</tr>
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<td>Yes</td>
<td>3373</td>
<td>95.42</td>
</tr>
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<td><strong>Car</strong></td>
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<td></td>
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<tr>
<td>No</td>
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<td>81.02</td>
</tr>
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<td>Yes</td>
<td>671</td>
<td>18.98</td>
</tr>
<tr>
<td><strong>Wealth score</strong></td>
<td>6.2</td>
<td>2.76</td>
</tr>
<tr>
<td><strong>Age at separation</strong></td>
<td>4.52</td>
<td>3.34</td>
</tr>
<tr>
<td><strong>Migrant parent(s)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Both</td>
<td>1602</td>
<td>56.45</td>
</tr>
<tr>
<td>Father</td>
<td>860</td>
<td>30.30</td>
</tr>
<tr>
<td>Mother</td>
<td>376</td>
<td>13.25</td>
</tr>
</tbody>
</table>
6.2.4 Data analysis

Chi-square test and analyses of variance were conducted to compare child and household characteristics, across three groups of children with different parental migration status. Then analyses of variance and covariance compared dependent variables across these groups. Tukey-Kramer (TK) test was applied in post hoc analyses that compared psychosocial outcomes across three parental migration groups. The TK method conducts the set of all pairwise comparisons simultaneously, and is relatively conservative when detecting significant differences between groups with unequal sample sizes (Jaccard & Guilamo-Ramos, 2002), as is the case in this study between parental migration status groups.

Multiple linear regression models were fitted to examine the associations between the psychosocial outcomes and characteristics of children and families. The baseline model included parental migration status, the main variable of interest, and child demographics: age, gender and province. The second model added household characteristics, including economic status, caregiver and sibling, and parents’ marriage status. In the third and fourth (full) model, two covariates, social support and school performance were added subsequently, to explore their potential mediating effect. For household covariates that remained significant (i.e. p≤0.05), their interaction terms with migration status were tested within the full model to establish whether the effect of parental migration differed across levels of
each covariate. The adjusted means were estimated for each subgroup of the interaction term and compared pairwise.

6.3 Results

6.3.1 Sample descriptive statistics

Of the 3,632 students who were eligible, 3596 children agreed to participate in the study. Nine children who failed to complete the SDQ section, and eight children with one or both parents deceased were excluded. The final study sample included 3579 participants, including 1930 current-LBC, 907 previous-LBC, 701 never-LBC, and 41 (1.1%) missing data on parental migration status.
Table 6.3: Sample characteristics by parental migration status

<table>
<thead>
<tr>
<th></th>
<th>CLB Mean (SD)/N(%)</th>
<th>PLB Mean (SD)/N(%)</th>
<th>NLB Mean (SD)/N(%)</th>
<th>Statistics</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td>12.3 (2.1)</td>
<td>12.5 (2.1)</td>
<td>12.3 (2.1)</td>
<td>4.25</td>
<td>0.014</td>
</tr>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
<td></td>
<td>1.492</td>
<td>0.474</td>
</tr>
<tr>
<td>Male</td>
<td>899 (46.7)</td>
<td>443 (49.1)</td>
<td>332 (47.5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>1028 (53.4)</td>
<td>459 (50.9)</td>
<td>367 (52.5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Province</strong></td>
<td></td>
<td></td>
<td></td>
<td>96.46</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Zhejiang</td>
<td>693 (35.9)</td>
<td>282 (31.1)</td>
<td>377 (53.9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guizhou</td>
<td>1238 (64.1)</td>
<td>625 (68.9)</td>
<td>323 (46.1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Primary caregiver</strong></td>
<td></td>
<td></td>
<td></td>
<td>625.9</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Grandparent</td>
<td>1254 (65.2)</td>
<td>252 (27.9)</td>
<td>124 (17.8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father</td>
<td>150 (7.8)</td>
<td>147 (16.2)</td>
<td>138 (19.8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother</td>
<td>390 (20.3)</td>
<td>486 (53.7)</td>
<td>431 (61.8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>128 (6.7)</td>
<td>20 (2.2)</td>
<td>5 (0.7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Parents divorced</strong></td>
<td></td>
<td></td>
<td></td>
<td>54.75</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>No</td>
<td>1637 (85.5)</td>
<td>812 (90.3)</td>
<td>665 (95.6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>278 (14.5)</td>
<td>87 (9.7)</td>
<td>31 (4.5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Any Sibling</strong></td>
<td></td>
<td></td>
<td></td>
<td>5.51</td>
<td>0.064</td>
</tr>
<tr>
<td>No</td>
<td>434 (22.5)</td>
<td>170 (18.8)</td>
<td>157 (22.4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>1494 (77.5)</td>
<td>736 (81.2)</td>
<td>544 (77.6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Household wealth</strong></td>
<td></td>
<td></td>
<td></td>
<td>18.68</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Poor</td>
<td>185 (9.6)</td>
<td>62 (6.8)</td>
<td>53 (7.6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fair</td>
<td>1181 (61.3)</td>
<td>564 (62.3)</td>
<td>291 (41.5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wealthy</td>
<td>562 (29.2)</td>
<td>280 (30.9)</td>
<td>357 (50.9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Social support</strong></td>
<td></td>
<td></td>
<td></td>
<td>18.63</td>
<td>0.003</td>
</tr>
<tr>
<td>Low</td>
<td>122 (6.4)</td>
<td>38 (4.3)</td>
<td>38 (5.5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fair</td>
<td>780 (40.8)</td>
<td>346 (38.8)</td>
<td>238 (34.2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>1010 (52.8)</td>
<td>507 (56.9)</td>
<td>420 (60.3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>School performance</strong></td>
<td></td>
<td></td>
<td></td>
<td>18.68</td>
<td>0.017</td>
</tr>
<tr>
<td>Very poor</td>
<td>155 (8.1)</td>
<td>77 (8.5)</td>
<td>58 (8.3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor</td>
<td>375 (19.5)</td>
<td>167 (18.5)</td>
<td>117 (16.7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fair</td>
<td>849 (44.2)</td>
<td>390 (43.1)</td>
<td>277 (39.6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good</td>
<td>400 (20.8)</td>
<td>188 (20.8)</td>
<td>164 (23.4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very good</td>
<td>144 (7.5)</td>
<td>83 (9.2)</td>
<td>84 (12.0)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 6.1 presents the frequency of answers from each of the 25 items of the SDQ. Figure 6.1 and Figure 6.2 demonstrate the distributions of total difficulties score and scores from the five sub-scales of SDQ. Table 6.2 shows the overall sample characteristics across all children in the study sample.

Table 6.3 presents the socio-demographic characteristics of children by their parental migration status. Overall there were more girls than boys in the study sample and the gender distribution did not differ across the three groups. Previous-LBC were slightly older (mean age 12.54, SD 2.1) than the other two groups. The proportions of children in the two left-behind groups were higher in Guizhou than in Zhejiang (68.9% versus 31.1%). With regard to family characteristics, nearly two thirds of current-LBC were primarily cared for by grandparents, whereas respective proportions for previous-LBC and never-LBC were 28% and 18%. Parents usually took the primary caring role in previous-LBC and never-LBC, although the proportion was slightly lower in previous-LBC than in never-LBC.

Parents who had migrated were more likely to be divorced. Current-LBC’s parents were about 3 times, and previous-LBC’s parents two times more likely than never-LBC’s parents to be divorced. Approximately one fifth of the children were single child, across the three groups.

Fifty percent of never-LBC reported that they were from wealthier households,
compared with 30% from the two left-behind groups. In fact currently-LBC were significantly poorer than never-LBC in both Zhejiang and Guizhou provinces (p<0.01). Besides household items, we examined the child-report relative economic status in our questionnaire. The sensitivity analysis with household item measure replaced by the relative wealth variable showed consistent results, further confirming the disadvantaged economic status among the two left-behind groups.

In general, current-LBC also had lower social support (p<0.001) and school performance (p<0.001) than never-LBC; and previous-LBC were between the levels of the other two groups in these two measures. Most children were left-behind by both parents, and fathers were more likely to migrate than mothers. About 20% of all LBC were separated from migrant parents by the age of one; more than half were left-behind by school age.

6.3.2 **Parental migration status and psychosocial difficulties**

Table 6.4 shows the differences between the three groups of children, in terms of the key psychosocial outcomes from the SDQ, including total difficulties, and the five subscales. Both current-LBC and previous-LBC had higher total difficulties mean scores than never-LBC. Previous-LBC appeared slightly worse off than current-LBC in all mean subscale scores except emotional symptoms. After controlling for age, sex, and province, post hoc analysis confirmed that both previous-LBC and current-LBC had significantly higher total difficulties, as well as
worse emotional symptoms, peer relationship problems, and hyperactivity than never-LBC. No differences were identified between the previous-LBC and current-LBC after adjusting for age, sex and province.

Adjusted between-group differences were also found in each province. In Zhejiang, post hoc analysis showed significantly higher level of difficulties in current-LBC than never-LBC, and in Guizhou both left behind groups had higher difficulty scores than never-LBC.
Table 6.4: Psychosocial outcomes by parental migration status

<table>
<thead>
<tr>
<th>Parental migration</th>
<th>Never (1)</th>
<th>Previous (2)</th>
<th>Current (3)</th>
<th>Unadjusted</th>
<th>Adjusted</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
<td>F</td>
<td>P</td>
</tr>
<tr>
<td>Total difficulties</td>
<td>12.21 (4.71)</td>
<td>13.16 (5.06)</td>
<td>12.94 (5.05)</td>
<td>7.31</td>
<td>0.001</td>
</tr>
<tr>
<td>Emotion</td>
<td>3.51 (2.05)</td>
<td>3.83 (2.22)</td>
<td>3.83 (2.18)</td>
<td>5.73</td>
<td>0.003</td>
</tr>
<tr>
<td>Conduct</td>
<td>2.20 (1.51)</td>
<td>2.35 (1.61)</td>
<td>2.22 (1.51)</td>
<td>2.32</td>
<td>0.098</td>
</tr>
<tr>
<td>Hyperactivity</td>
<td>2.70 (1.65)</td>
<td>2.98 (1.68)</td>
<td>2.89 (1.66)</td>
<td>2.95</td>
<td>0.053</td>
</tr>
<tr>
<td>Peer</td>
<td>3.80 (1.88)</td>
<td>4.00 (1.93)</td>
<td>4.00 (1.99)</td>
<td>5.24</td>
<td>0.005</td>
</tr>
<tr>
<td>Pro-social</td>
<td>7.17 (1.90)</td>
<td>7.21 (1.84)</td>
<td>7.19 (1.90)</td>
<td>0.09</td>
<td>0.913</td>
</tr>
</tbody>
</table>

Note: Adjusted with age, sex, and province.
6.3.3 Effects of household characteristics

Table 6.5 presents the multiple regression results of child total difficulties score. Parental migration status, both previous and current, was associated with significant increases in psychosocial difficulties in all models. The strong impact of previous parental migration was almost unchanged from the reduced model (B=0.81, p=0.001) to the full model (B=0.75, p=0.003). Increases of psychosocial difficulties in current-LBC (B=0.75, p=0.001) appeared to have slightly reduced but remained significant (B=0.57, p=0.017), after adjusting for household characteristics, social support and school performance in the full model. The mean increase (regression coefficient) in the current-LBC group dropped from 0.85 to 0.67 when household characteristics were adjusted (Model 2), and further down to 0.58 when social support variable was added (Model 3).
Table 6.5: Regression coefficient (SE) for total difficulties score on parental migration status with and without adjustment for household characteristics, social support, and school performance

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
<td>P</td>
<td>B</td>
</tr>
<tr>
<td><strong>Parental migration</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(ref: never)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Previous</td>
<td>0.81</td>
<td>0.25</td>
<td>0.001</td>
<td>0.78</td>
</tr>
<tr>
<td>Current</td>
<td>0.75</td>
<td>0.22</td>
<td>0.001</td>
<td>0.67</td>
</tr>
<tr>
<td><strong>Sex (ref: male)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>-0.33</td>
<td>0.17</td>
<td>0.051</td>
<td>-0.34</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td>0.02</td>
<td>0.04</td>
<td>0.564</td>
<td>0.03</td>
</tr>
<tr>
<td><strong>Province</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(ref: Zhejiang)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guizhou</td>
<td>0.87</td>
<td>0.18</td>
<td>0.000</td>
<td>0.78</td>
</tr>
<tr>
<td><strong>Household wealth</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(ref: fair)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor</td>
<td>0.64</td>
<td>0.31</td>
<td>0.042</td>
<td>0.60</td>
</tr>
<tr>
<td>Wealthy</td>
<td>-0.09</td>
<td>0.22</td>
<td>0.662</td>
<td>0.11</td>
</tr>
<tr>
<td><strong>Primary caregiver</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(ref: Grandparent)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father</td>
<td>0.19</td>
<td>0.29</td>
<td>0.496</td>
<td>0.22</td>
</tr>
<tr>
<td>Mother</td>
<td>0.23</td>
<td>0.21</td>
<td>0.284</td>
<td>0.25</td>
</tr>
<tr>
<td>Other</td>
<td>0.56</td>
<td>0.43</td>
<td>0.193</td>
<td>0.31</td>
</tr>
<tr>
<td><strong>Divorced parents</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.29</td>
<td>0.28</td>
<td>0.000</td>
<td>1.14</td>
</tr>
<tr>
<td><strong>Any Sibling</strong></td>
<td>0.09</td>
<td>0.22</td>
<td>0.684</td>
<td>0.17</td>
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<tr>
<td><strong>Social support</strong></td>
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<td></td>
</tr>
<tr>
<td>(ref: high)</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Low</td>
<td>3.46</td>
<td>0.37</td>
<td>0.000</td>
<td>3.03</td>
</tr>
<tr>
<td>Medium</td>
<td>1.53</td>
<td>0.18</td>
<td>0.000</td>
<td>1.32</td>
</tr>
<tr>
<td><strong>School Performance</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(ref: fair)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very poor</td>
<td>2.66</td>
<td>0.32</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Poor</td>
<td>0.88</td>
<td>0.23</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Good</td>
<td>-0.90</td>
<td>0.22</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Very good</td>
<td>-1.39</td>
<td>0.30</td>
<td>0.000</td>
<td></td>
</tr>
</tbody>
</table>
Children from Guizhou were more likely to have higher psychosocial difficulties. Boys appeared to be marginally more vulnerable in the reduced model with demographics and household characteristics ($B=0.67$, $p=0.051$), but the association disappeared when social support is adjusted. Age did not show any effect until social support was added in Model 3, where older children seemed to have more difficulties; but the significance was lost after school performance is controlled for. Children in Guizhou had markedly higher psychosocial difficulties than those in Zhejiang ($B=0.92$, $p<0.001$).

As is shown in Model 2, compared with middle-income families, children from poorer families had higher difficulties score; but children from wealthier households demonstrated no differences from those in the medium level income families. Nevertheless, the effect of household wealth disappeared in the full model.

Parents’ divorce showed a strong association ($B=1.00$, $P<0.001$) with higher total difficulties after adjusting all covariates. With regard to household members, who was the primary caregiver and whether the child had any sibling did not appear to affect psychosocial outcome. Additionally, we found that the co-resident parent of current LBC was not necessarily the primary caregiver. Based on the primary caregiver that was determined according to our methods, unadjusted analysis
showed lowest total difficulties scores in children cared for by mothers (12.81),
and highest in those cared for by other relatives (13.61).

### 6.3.4 Effects of social support and school performance

Social support was an important covariate which had a strong positive effect on
childhood psychosocial wellbeing. The effect of current separation from migrant
parents stayed almost unchanged, whereas the coefficient for previous parental
migration reduced by about 13%. School performances also showed highly
negative associations with total difficulties score; strong effects were indicated at
each of their ordinal levels.

### 6.3.5 Different dimensions of psychosocial wellbeing

Table 6.6 presents the regression results of SDQ subscale scores that showed
significant between-group differences in Table 6.2. After adjusting for all
covariates, both current and previous absence of parents were still linked to
emotional symptoms. In particular, previous-LBC seemed to be more
disadvantaged in terms of peer relationship, compared to never-LBC.
Table 6.6: Regression coefficients for emotional symptoms, peer relationships, and hyperactivities subscales on parental migration status, household characteristics, social support, and school performance

<table>
<thead>
<tr>
<th></th>
<th>Emotional symptoms</th>
<th>Peer problems</th>
<th>Hyperactivities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>P</td>
<td>B</td>
</tr>
<tr>
<td><strong>Parental migration status</strong> (ref: never)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Previous</td>
<td>0.29</td>
<td>0.010</td>
<td>0.19</td>
</tr>
<tr>
<td>Current</td>
<td>0.31</td>
<td>0.004</td>
<td>0.09</td>
</tr>
<tr>
<td><strong>Sex</strong> (ref: male)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>0.84</td>
<td>&lt;0.001</td>
<td>-0.12</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td>0.01</td>
<td>0.513</td>
<td>-0.11</td>
</tr>
<tr>
<td><strong>Province</strong> (ref: Zhejiang)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guizhou</td>
<td>0.4</td>
<td>&lt;0.001</td>
<td>0.19</td>
</tr>
<tr>
<td><strong>Household wealth</strong> (ref: fair)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor</td>
<td>0.2</td>
<td>0.133</td>
<td>0.35</td>
</tr>
<tr>
<td>Wealthy</td>
<td>0.12</td>
<td>0.205</td>
<td>-0.17</td>
</tr>
<tr>
<td><strong>Primary caregiver</strong> (ref: Grandparent)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father</td>
<td>-0.14</td>
<td>0.124</td>
<td>0.00</td>
</tr>
<tr>
<td>Mother</td>
<td>-0.09</td>
<td>0.472</td>
<td>0.04</td>
</tr>
<tr>
<td>Other</td>
<td>0.11</td>
<td>0.577</td>
<td>-0.21</td>
</tr>
<tr>
<td><strong>Divorced parents</strong></td>
<td>0.34</td>
<td>0.004</td>
<td>0.17</td>
</tr>
<tr>
<td><strong>Any Sibling</strong></td>
<td>0.02</td>
<td>0.846</td>
<td>0.00</td>
</tr>
<tr>
<td><strong>Social support</strong> (ref: high)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>0.88</td>
<td>&lt;0.001</td>
<td>1.14</td>
</tr>
<tr>
<td>Medium</td>
<td>0.39</td>
<td>&lt;0.001</td>
<td>0.41</td>
</tr>
<tr>
<td><strong>School Performance</strong> (ref: fair)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very poor</td>
<td>0.55</td>
<td>&lt;0.001</td>
<td>0.57</td>
</tr>
<tr>
<td>Poor</td>
<td>0.08</td>
<td>0.423</td>
<td>0.29</td>
</tr>
<tr>
<td>Good</td>
<td>-0.18</td>
<td>0.064</td>
<td>-0.19</td>
</tr>
<tr>
<td>Very good</td>
<td>-0.21</td>
<td>0.120</td>
<td>-0.14</td>
</tr>
</tbody>
</table>
Age, sex, and economic status showed significant associations with different subscale outcomes, in both positive and negative ways. Female children were more likely to have emotional difficulties, whereas boys were more susceptible to peer relationship problems. Older children tended to have less peer relationship problems but were more hyperactive. Mean scores for emotional symptoms and peer problem subscales were higher in children from Guizhou than those from Zhejiang province, while there was no difference in hyperactivity score. Although household wealth was negatively associated with peer relationship difficulties, children in richer families may be more likely have hyperactivity problems.

**6.3.6 Results in currently left-behind children**

The subsequent analysis in Table 6.7 only included the current-LBC group to explore factors related to current left-behind experiences. In contrary to common conception, children who identified mother as primary caregiver had higher psychosocial difficulties (mean score 13.40) than those cared for by grandparents (mean score 12.91) in the full regression model. Meanwhile, further subgroup analysis (not shown in regression) showed if a grandparent was primary caregiver and the mother was also living at home, the current-LBC had a very low level of total difficulties (mean score 11.45). Left-behind girls had worse psychosocial outcomes than boys, in contrast to what the reduced model that included all children appeared to indicate. A newly added variable in this analysis, child age
when first separated from a migrate parent, was negatively associated with total difficulties score.

Table 6.7. Regression coefficients (SE) for total difficulties score on parental migration status, household characteristics, social support, and school performance for currently left-behind children only

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SE</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex</strong> (ref: male)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>0.57</td>
<td>0.25</td>
<td>0.020</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.07</td>
<td>0.06</td>
<td>0.219</td>
</tr>
<tr>
<td><strong>Age at separation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-0.11</td>
<td>0.04</td>
<td>0.001</td>
</tr>
<tr>
<td><strong>Province</strong> (ref: Zhejiang)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guizhou</td>
<td>0.93</td>
<td>0.31</td>
<td>0.003</td>
</tr>
<tr>
<td><strong>Household wealth</strong> (ref: fair)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor</td>
<td>0.68</td>
<td>0.41</td>
<td>0.097</td>
</tr>
<tr>
<td>Wealthy</td>
<td>0.25</td>
<td>0.32</td>
<td>0.435</td>
</tr>
<tr>
<td><strong>Primary caregiver</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(ref: Grandparent)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father</td>
<td>0.45</td>
<td>0.44</td>
<td>0.308</td>
</tr>
<tr>
<td>Mother</td>
<td>1.07</td>
<td>0.30</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Other</td>
<td>0.64</td>
<td>0.47</td>
<td>0.17</td>
</tr>
<tr>
<td><strong>Divorced parents</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.1</td>
<td>0.34</td>
<td>0.001</td>
</tr>
<tr>
<td><strong>Any Sibling</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-0.16</td>
<td>0.3</td>
<td>0.599</td>
</tr>
<tr>
<td><strong>Social support</strong> (ref: high)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>3.11</td>
<td>0.5</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Medium</td>
<td>1.68</td>
<td>0.25</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td><strong>School Performance</strong>  (ref: fair)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very poor</td>
<td>2.58</td>
<td>0.46</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Poor</td>
<td>0.8</td>
<td>0.32</td>
<td>0.013</td>
</tr>
<tr>
<td>Good</td>
<td>-0.7</td>
<td>0.31</td>
<td>0.022</td>
</tr>
<tr>
<td>Very good</td>
<td>-1.47</td>
<td>0.46</td>
<td>0.001</td>
</tr>
</tbody>
</table>
6.2.7 Interaction effects

No significant interaction effects of parental migration and key covariates on psychosocial difficulties were found. The magnitudes of the impact from parental migration on psychosocial difficulties were highly consistent between Zhejiang and Guizhou (Figure 6.3), despite the considerable child wellbeing gaps between the two provinces. However, the impacts of parents’ divorce and lower social support appeared to be higher in the two left-behind groups than the never left-behind group, when comparing adjusted total difficulties scores between the divorced and undivorced, and between low and high support groups, within each type of parental migration status. (Figures 6.3; Table 6.8).

Figure 6.3: Adjusted total difficulties score by parental migration status and covariates
Table 6.8: Between-subgroup comparisons of adjusted mean total difficulties score by key covariates and parental migration status

<table>
<thead>
<tr>
<th></th>
<th>Never-LBC</th>
<th>Previous-LBC</th>
<th>Current-LBC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Adjusted Mean</td>
<td>F</td>
<td>P</td>
</tr>
<tr>
<td>Province</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zhejiang</td>
<td>13.4</td>
<td>14.2</td>
<td>0.018</td>
</tr>
<tr>
<td>Guizhou</td>
<td>14.3</td>
<td>15</td>
<td>0.002</td>
</tr>
<tr>
<td>Divorce</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Divorced</td>
<td>13.5</td>
<td>15.4</td>
<td>0.002</td>
</tr>
<tr>
<td>Married</td>
<td>13.4</td>
<td>14.1</td>
<td>0.005</td>
</tr>
<tr>
<td>Social support</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low support</td>
<td>13.7</td>
<td>14.5</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>High Support</td>
<td>12.6</td>
<td>13.2</td>
<td>0.002</td>
</tr>
</tbody>
</table>

Note: Subgroup means were adjusted for all covariates in the full model (model 4) in Table 6.5.

6.4 Discussion

6.4.1 Summary of key findings and contributions to the literature

Our findings indicate that parental migration is associated with independent, long-lasting adverse outcomes, especially the emotional and social dimensions of child psychosocial wellbeing. Relationship between nuclear family members, care
arrangements, and availability of support in family and social environments seem to be important covariates in the causal mechanisms that connect child wellbeing outcomes with parental migration status. School performance also accounts for some of the variations in children’s psychosocial wellbeing. Yet socioeconomic status does not have an overall effect on psychosocial wellbeing, and better-off wealth condition is not necessarily associated with migration status.

The psychosocial difficulties in LBC have been identified in a number of previous studies, as was shown in Chapter 3. However, most of them focused on limited perspectives. First, the outcome variables in many studies failed to present a comprehensive picture of various aspects of psychosocial wellbeing. As was discussion in the empirical review chapter, some authors applied mental health diagnostic tools to screen for symptoms, without much consideration on the traits mentally healthy children that may also distinguish the disadvantages in LBC, especially in social interactions and relationships. A single type of symptom such as depression and anxiety was often the central research aim, which does not provide enough insights regarding the community and social implications and potential interventions.

Also, the extant literature lacks a full account of the household and social environments of LBC, when examining child wellbeing outcomes. The family relationship dynamics, in addition to the physical absence of parents, particularly need in-depth exploration in order to reveal the mechanisms in child development.
The interaction effects of between these covariates and parental migration status are rarely examined. A key finding of our study is that having divorced parents was a greater psychosocial risk factor for current and previous LBC than for never LBC, and similarly, social support was more protective in current LBC and previous LBC than in never LBC. This pattern suggests family relationship crises may cause extraordinary vulnerability in LBC, and suggests the importance of psychosocial support in safeguarding the more disadvantaged LBC.

Nevertheless, in consistence with our results, the vast majority of existing studies conducted in China and globally have shown evidence across many provinces on the disadvantages of psychosocial wellbeing in LBC compared to children living with both parents. The similar conclusion across different provinces in China also corroborates our finding that migration affects children in similar ways across Zhejiang and Guizhou provinces. Meanwhile, as was discussed in the previous qualitative chapter, international labor migration may involve different mechanisms and conditions, so the local contexts regarding the economic resources, care provision and social support should be considered when interpreting their findings.

For instance, among the four CHAMPSEA Project countries, children of migrant fathers in Indonesia and Vietnam were found to have poorer emotional well-being, compared to children in non-migrant households, whereas in Thailand mixed results were indicated (Adhikari et al., 2013; Graham & Jordan 2011). In the
Philippines, a country where transnational labor migration has been long established, LBC actually demonstrated advantages in psychosocial wellbeing. This may be attributed to the government’s active roles in protecting the rights of its migrants, and strong civil society support to those left behind (Graham & Jordan 2011), as opposed to the Chinese contexts. The normalization of transnational families may also be protective, especially in these high out-migration areas, from which the sample was drawn. Yet in the Chinese setting, lack of social capital in the migrant-sending community may partially explain the disadvantages facing LBC (Wen & Lin, 2012). Additionally, while in the Philippines the costs of migration, especially to countries in another continent, may prevent poorer households from considering transnational migration, in Vietnam, some communes offer loans to facilitate migration of poorer parents, which makes the socio-economic variability in Vietnamese study sample more similar to rural China.

6.4.2 Independent effects of parental migration on psychosocial difficulties

In the quantitative literature, a variety of psychosocial wellbeing metrics were applied, but few were able to reflect the independent effect of the disrupted relationships. In the current study, the strong effect of migration on total psychosocial difficulties after adjusting for all covariates implies that the impact of parental migration is independent of key characteristics in the family and social environments of LBC. As was discussed in the previous chapter of qualitative study, this direct impact is likely to be embodied in the problematic relationships with
migrant parents following the migration, and the lengthy process of maintaining the connections remotely and the possible detachment from the relationships bonds. This is in fact supported by Hu et al.’s (2014) study, also based on SDQ outcome measures, which found a binary variable “harmonious family relationship (or not)” accounted for a large amount of the adverse effect due to parental migration.

*Emotional symptoms and socio-behavioral problems*

Particularly, parental migration was found to have the largest impact on emotional wellbeing, among all dimensions of the SDQ measures. This corresponds with the major qualitative finding that many LBC experience emotional distress due to the absence of parental roles in the attachment relationship. Results from this quantitative study suggest the scope of this emotional impact is far beyond parent-child relationship; rather, the emotional symptoms may be present in various aspects of the child’s daily life.

Conduct problems did not show difference between LBC and non-LBC, which suggests parental migration may not necessarily cause misbehaviors. This is also consistent with the qualitative results that little evidence directly points to any significant behavioral challenges in LBC, even in the return migration cases; yet the concerns expressed by some parents about child disciplining do indicate the hyperactive traits in their children. Peer relationship issues seem to reflect the
inadequate social functioning in the LBC, which may be subject to the influence of family relationship dynamics as well. Families comprised of multiple cousins, as described in the qualitative chapter, may in a way strengthen the social functioning with the child’s peers.

**Impact from previous parental migration**

Our results suggest that, previous experience of prolonged separation from migrant parents had similar negative impact on child wellbeing, to the current absence of parents, after accounting for other factors. Previous studies that investigated children’s previous experience of being left-behind showed mixed results. Adhikari et al. (2013) found in Thailand that mother’s earlier migration history had a significant, independent association with psychosocial difficulties. Huang & Li (2007) showed both current and previous LBC had worse mental health status than non-LBC. However, Wu et al., (2015) indicated that children who had previously been left-behind tended to experience fewer depressive symptoms.

Since the vast majority of migration flows are within the country, it is not uncommon that migrant parents return home after living apart from their child for an extended period. In fact the qualitative study discussed the cases of a few former migrant mothers in detail, and discussed the considerably challenging scenarios that may follow the mother’s return. Although the return of the mothers
in the qualitative study does not change the current-LBC status because the father is still away, most of these challenges still apply when interpreting the results of the impact of previous migration from this quantitative study, particularly the possible high severity of psychosocial symptoms accumulated over time that led to the parent’s return, and the consequences following the change of primary caregiver. The possible decrease of family income is not reflected in the quantitative finding since the return mothers are still counted as in a current-LBC family.

As a cross-sectional study, we were unable to compare child wellbeing before and after parental migration. Yet it is probable that the migration caused the wellbeing problems, instead of the other way around. From the migration theories, it can be inferred that the parents would have not leave home and pursue higher wellbeing status, if there were concerns about the child’s psychological or development risks that may be aggravated by their departure. Relatedly, emotional or behavioral problems in previous-LBC that emerged during parents’ absence, may have contributed to the decision of returning home. This may be a rationale to explain the disadvantages in previous-LBC. The disruption of parent-child communication and attachment relationship in early childhood may have long-term negative psychological impacts (Kobak & Madsen, 2008, p26), and the return of migrant parents is unlikely to resolve the complex consequences of their prolonged absence in the child’s life.
As a few previous studies suggested, their return might even create new challenges in the child’s life due to the change of primary caregiver (Senaratna et al., 2011; Pottinger, 2005). While the ongoing separation and past separation seem to affect emotional wellbeing to a similar extent, this study identified peer relationship problems were more serve in previous-LBC, but not current-LBC. This may imply the new challenges regarding social functioning after migrant parents’ return, while further investigations are needed to elaborate the risks that are specifically faced by previous-LBC.

6.4.3 Family care and social support

Care arrangements and roles of primary caregiver

As our qualitative study emphasized, the role of primary caregiver is essential in the care arrangements for LBC. In addition to which parent has migrated, only a few previous quantitative studies (Vanore et al., 2015; Su et al., 2012) examined who is the primary caregiver as an indicator of family structure and caregiving pattern. Their results suggest that grandparents provide better care than other non-parent caregivers for LBC. However, more in-depth analysis of care arrangements is needed to disclose further information about the family environment and patterns of care and support.

In this study, we identified the primary caregiver according to children’s self-report, as the one who looks after them the most, instead of asking adult
household members to identify the primary caregiver. This is because children’s views, albeit subjective, should be more meaningful in reflecting their relationships with co-resident adults, since it is their experiences that matter for their wellbeing. In China, the concept of “primary caregiver” is not as established as it is in the Western context; although the phrase’s Chinese translation (Zhao Gu Zhe; 照顾者) is easy to understand, it is not commonly used. As a result, the children may rely more on their subjective feelings when nominating the Zhao Gu Zhe.

Interestingly, we found that some children identified a migrant parent not living with them as their primary caregiver. This indicates the child’s relatively close relationship and more importantly, emotional attachment to the parents. Yet the realities of migration and the subsequent lengthy physical separation, have created an inevitable disruption to this initially strong attachment; the closeness between parents and the child may lead to extra emotional cost, which was shown as depressive feelings when missing parents in our qualitative findings. Also, the fact that these children did not name a co-residential adult as primary caregiver indicated the lack of emotional connections with them and possibly inadequate quality of care, which also have negative effects on child wellbeing.

Adult caregivers of LBC, mostly grandparents and parents, have different roles in supporting child development and in safeguarding the psychosocial wellbeing of LBC. Perhaps the most striking finding in this study is that the co-resident mother
does not seem to provide better care than grandparents. Current-LBC primarily cared for by their mother appear to be significantly more vulnerable than those cared for mainly by grandparents. In particular, a left-behind working mother in the rural area is likely to have relatively limited income and time on childcare, which may be a significant constraint of child psychosocial wellbeing. A study using data from the a nationally representative survey in China (Chang & Dong, 2010) found labor migration has significantly increased the left-behind married women’s work burdens and their time spent on both farming and domestic work including care provision. Meanwhile, other empirical evidence suggested co-residence of grandparents decreases mothers’ childcare involvement (Chen et al., 2000), and in many cases grandparent care for the child enables parents to participate in wage work (Gray et al., 2005). Hence, multiple caregivers including grandparents may help relieve the burdens of the mother in the left-behind family care.

It is also possible that some of the mothers returned from previous migration, and subsequently taking the primary caregiver role from the grandparents. Then this scenario corresponds with the discussions in the qualitative chapter about the considerable difficulties following the return of migrant mother. Compared to other families in which grandparents provide good care for the child, grandparents’ inadequate abilities in childcare may also influenced the mother decision of not migrating and keeping the primary caregiver role.
On the other hand, the results suggest that some grandparents may be capable primary caregivers, especially when the mother also lives in the left-behind family and is supporting childcare, a scenario found in a small group of cases. It is possible that the primary caregiver never changed due to migration, although the mother may be a return migrant. One advantage of these families may be the stable care structure that leads to well-maintained relationship-emotion dynamics in the extended family. Yet further research is needed for more in-depth inquiries about this care arrangement.

**Psychosocial support in the care environment**

Besides providing material resources to meet the child’s physical development needs, a critical function of LBC’s care environment is the compensation of the psychological loss due to parental absence in the child’s daily life. In order to safeguard the wellbeing of LBC, caregivers must be able to make deep connections with the child and provide support, guidance and supervision when most needed. In this study, family/social support was measured specifically as whether anyone would be usually available to offer essential support to the child in various scenarios. This variable is not only related to the care quality and arrangements in the left-behind family, but reflects the resources for better psychosocial wellbeing from the larger social environments that may involve friends at school or other community members.
Relatedly, concepts such as family functioning and social support have been widely examined in the literature as crucial properties of the family and socio-ecological systems (Zhao et al., 2014; Jordan & Graham, 2012; Chen et al., 2011; Wang W et al., 2014; Zheng et al., 2014; Fan et al., 2013; Liu et al., 2014). These quantitative studies, including a longitudinal study conducted in China (Fan et al., 2013), identified family or social support as an important mediator of the impact from parental migration on child wellbeing. Results from the longitudinal study confirmed that lack of available support is a strong correlate of both parental migration and higher psychosocial difficulties, which moderates the effect of migration on children. In other words, the support appears to be effective in relieving the distress in children due to parental migration, especially for the LBC who are currently separated from migrant parents. Previous-LBC seem to suffer less from lack of support than current-LBC, and the effect size of migration on previous-LBC remained almost unchanged after social support was accounted for. This may imply the longer-term repercussions of parental absence on emotional and behavioral wellbeing that is not reflected by the current support level (Cassidy, 2008, p6).

The interaction effect analysis takes further step and indicates that availability of support is protective against psychosocial difficulties especially among LBC. The results highlight the importance of non-maternal resources in LBC’s care environment; the childcare arrangements and strategies must be able to relieve the vulnerability of LBC and remedy the loss of caring relationships due to the
migrant parents. Also, policies and interventions for improving social support networks should be put in place in the larger socio-ecological environment of the children, including their school and neighborhood. Additional psychosocial resources from these settings, as was suggested in a few cases in our qualitative study, may also benefit the LBC and especially help prevent the deterioration of their wellbeing in an unfavorable family environment.

**Parent’s divorce**

Parent’s divorce appears to be a specific and important undermining factor in the care environment. A shortcoming of the extant quantitative literature is that most studies excluded children of divorced parents from their study sample; our findings show that it is important to take into account this factor. The negative impact on psychosocial wellbeing is significant, which exacerbates the effect of being currently left-behind, according to our study. In fact our results imply that migration may even be associated with higher divorce rate. Although the divorce may have taken place before migration, it is more likely that migration escalated relationship problems between these couples.

Parents’ divorce often causes damage to the family functioning and relationship dynamics, and leads to adverse effects on children’s psychological development (Kobak & Madson, 2008, p34). The two parents’ collaboration on childcare tends to be much less close, leading to reduced abilities for them to provide timely and adequate support when the child is in need. The separation between the parents
may also affect the care provision structure, following the likely disconnection with each other’s parents-in-law who may be the children’s co-resident caregivers.

Then coordination between parents and caregivers over distance becomes more difficult, which exacerbates the exiting challenges in child disciplining and providing responsive care due to migration. The allocation of remittances may also become less effective, due to the less cooperative co-resident caregivers and lack of communication about the child’s needs.

_Siblings in left-behind families_

The empirical literature review in this thesis showed mixed findings about the effect of having any siblings on the wellbeing of LBC, suggesting multiple factors may be at play in relation to sibling presence. While Zhao et al. (2014) indicated that being an only child was protective for mental health, other studies showed opposite findings in China (Zhan et al., 2014) and Southeast Asia (Senaratna et al. 2011; Adhikari et al., 2013). Additionally, Yang et al. (2010) and Wang et al. (2011a) suggested having siblings or not did not affect child wellbeing.

In rural China, although the odds appeared to be against the LBC who were also single child without sibling companionship, our study did not show significant associations between number of siblings and psychosocial outcomes. One possible reason is that resources for childcare become more concentrated in single child families, as compared to multiple-sibling families in which economic benefits from
migrant parents would be distributed among all children. Also, the co-resident caregiver would be spending their limited time and energy on a smaller number of children.

Additionally, as our qualitative findings showed, some left-behind families comprise children who are cousins and cared for by their common grandparents. Due to practical constraints and the timing of the survey design, the quantitative questionnaire for this study did not include an item asking about the presence of cousins. However as was discussed in the previous chapter, this living arrangement potentially intensified the resources for childcare from multiple migrant families, and may be a preferable option if the grandparents are capable of caring for multiple children.

6.4.4 Family wealth status and child wellbeing

A better household economic situation were found to positively affect child wellbeing and may mediate the impact of migration on children in some previous research (Graham & Jordan, 2011; Fan et al., 2010). However in these studies little was done to measure the overall psychosocial support from the family in addition to economic resources. Our study shows that the effect of household wealth on children's overall psychosocial outcome seems only significant before the availability of support was accounted for. This indeed corroborates the causal pathway framework proposed in the qualitative chapter, whereby income and
family and social support comprise the resources for child wellbeing, aside from the relationship impact due to parental absence. Although the economic status prior to migration remains unknown, additional maternal resources from remittances may contribute little to the relief of adverse psychological experiences in children.

Nevertheless, analyses in this study indicate differentiated wealth effects across dimensions of psychosocial wellbeing have complicated the overall effect of family wealth status, which very few studies have investigated in. First of all, emotional wellbeing seems largely unrelated to wealth status. Although previous studies in China such as He et al. (2012) indicate emotional symptoms are worse in poorer families, the effect may reflect the lower overall psychosocial support from the poorer families. Again our finding supports the possibility of independent impact from parental migration through a relationship–emotion mechanism in the family, as was discussed in the qualitative study. This also implies that the financial assistance schemes in some communities, albeit necessary for the extremely poor households, does not compensate for the child’s loss of an attachment figure.

Yet in higher-income families, children tended to encounter fewer peer relationship problems. It is possible that better-off families can afford more social activities for children, including some afterschool tutoring classes, as well as music and art classes, either available at school or in the county center. Also, as was suggested in some qualitative interviews, children in wealthier families are more
likely to travel to the cities the parents work at and socialize with more people, which may benefit their social functioning. Additionally, according to the qualitative findings, better-off families tend to live in more populated, newly developed neighborhoods, where children can meet and play with each other. Some families are too poor to build a new house and move, even if their neighborhood has become largely empty.

While parental migration does not seem to increase behavioral problems, better economic status may contribute to children’s hyperactivities. As parents frequently noted in the qualitative interview, in poor areas in rural China, to study hard and behave well at school is usually the most practical way for a child to get out of poverty. Wealthier children may have less pressure from livelihood concerns, and their caregivers may be more lenient and offer them more free choices in life. Hence some children appear to act out under the more flexible environment and possibly lack of care, to an extent without dramatic delinquencies though.

It should be clarified that the household items included in our measure of household wealth do not necessarily indicate the income of migrant parents. This was partly because of the challenges in creating a reliable measure, from either migrants or caregivers, due to practical constraints. Yet such items may better reflect whether the care environment of LBC secured more material resources from migrant parents, as the increased income due to migration does not
necessarily lead to the improved economic wellbeing or human capital back home.

In fact, a recent study examined the composition shares of family expenditure, and found that remittance-receiving families, as compared to other rural families, spend only 2% higher on non-durable goods (mainly food and clothing), but 20% lower on child education; other major expenditures in left-behind families are on family business and durable goods. Such spending patterns seem unlikely to provide substantial benefits for child development (Déúmero & Wang, 2015). It is also possible that even if the household wealth status did improve, the child might not be able to feel the difference, as is suggested by our analyses using child-report relative wealth status.

6.4.5 Household economics of labor migration

In our study sample, economic status was the highest in non-migrant families and lowest among the current migrant families, in both Zhejiang and Guizhou, according to both household item scores and relative economic status. In general, families of LBC seem to be still in a lower economic class, and even poorer than other rural families. Although this is in contrary to many studies, Fan et al. (2010) also found that the left-behind families had lower economic status than others in Hunan Province, China. Due to the limitation of cross-sectional data, the family income level prior to migration was unavailable.
As labor migration is primarily driven by increased income in theory, LBC who are facing many disadvantages in rural China may reflect a particular phase of the larger social phenomenon. Low cost of rural-to-urban migration enables almost everyone to work in the city, but only the better-off migrants are able to bring their children over. In addition to the much higher living expenses in the city, children are also faced with considerable barrier to accessing quality education. Because of the rural residence, children of migrant families usually need to pay a considerable amount of extra fees to be admitted to the public schools in the city.

Yet there has been a marked increase of migrant children living in the cities, whereas the number of left-behind children remained largely stable in rural areas (UNICEF, 2014b). The out-migration flows may have contributed to reducing the income gaps in rural areas, as a result of richer families’ departure, and the remittances from poorer migrants to their left-behind families. As a new round of urbanization has expanded to smaller city-towns closer to the rural communities, the initial “primary labor market” of secure, well-paid jobs have also reached into more rural township centers (Zhan et al, 2015). Meanwhile, in parts of the urban areas, a secondary labor market of low-skill, low-wage, insecure jobs still exists in the manufacturing and service sectors, filled by many rural migrants. Hence, rural-to-urban migration is not equivalent to socioeconomic advantages. The income gains may contribute little to relieving psychosocial difficulties of children, especially those suffering from multiple aspects of deprivation besides economic status.
Unlike most other studies conducted in China, a major strength of this study is the comparison between two Chinese provinces with distinct socioeconomic development levels, considering the huge variability across the country. While children in Guizhou fared much worse than those in Zhejiang, our results demonstrated highly consistent impacts from parental migration on children between the two provinces, suggesting that local socio-economic development level does not complicate the challenges faced by LBC.

6.4.6 School performance

Education outcome of LBC is a common topic of the LBC literature, yet the links between school performance and psychosocial wellbeing are not well established. Although it is not a central issue in this thesis as a factor outside of the family environment, academic functioning in the school setting reflects certain disadvantages of LBC in the family system. Our qualitative study indicated the negative effects of migration on children’s school performance as was perceived by the parents, which possibly was one reason for some of them to return home permanently. Quantitative results from this study demonstrate that poor school performance is strongly associated with both parental migration and psychosocial difficulties. Lack of parental guidance and supervision may cause the lower school performance, which may further lead to increased distress in children. In China as in many societies, education is the key vehicle for social mobility and prosperity.
(Lu, 2007; Morooka & Liang, 2009), particularly for rural children who are generally disadvantaged in educational and career opportunities. Murphy’s (2014) qualitative study in China further suggested that higher education was considered by the LBC as the only way to avoid migration; under such pressure some children with lower grades started to give in and misbehave.

The inclusion of school performance in this quantitative study is an attempt to incorporate other factors outside of the family system, when delineating the potential causal pathways between migration and child psychosocial wellbeing. However future studies with more rigorous and ideally longitudinal design are needed, in order to identify the specific effects and complex interactions related to factors from the school setting.

6.4.7 Age and gender disparities

Overall, age did not show a significant impact on child wellbeing after accounting for all other factors. However, older adolescents seem to have more hyperactive problems. A “Year 8 Phenomenon” has been found in Chinese students. It refers to a range of psychological and behavioral challenges related to puberty that emerge during children’s second year of middle school (Year 8, one year before entering high school, ages 13-15). This age group indeed corresponds with some adolescents in the qualitative study, whose migrant parents expressed concerns about their disciplining issues and school performance. When these older children
are left behind by parents, the psychosocial problems as well as difficulties in study and school life while preparing for the highschool entry exam, become extra challenging (Wang & Zhang, 2004).

Older children also seem to have better peer relationships, and benefit more from social support than younger children. Our qualitative results also showed that friends became an important part of LBC’s coping mechanisms. It appears that psychological challenges that only emerged in adolescence were partially relieved by peer support, rather than parental or grandparental care. According to a survey across six provinces, only in the 8th-year group of left-behind middle school students considered their peers as providing the most social support, even more than parents (Wang & Zhang, 2004). As was suggested in the qualitative chapter, grandparent caregivers may have trouble understanding and communicating about children’s real feelings, partly due to the massive changes in Chinese society and people’s lives over the past decades. The adolescents may therefore become more willing to share thoughts and talk about concerns with their peers, in the absence of parents.

The quantitative results considerably expanded the qualitative findings on gender disparities at population level. Sex ratio in the Chinese population has been markedly high, due to son preference and sex-selective abortion practices under the strict family planning policies, over the past few decades. In contrast, our study found that more girls than boys are left behind in both Zhejiang and Guizhou,
which implied a large number of boys, rather than girls, had migrated with the parents to the cities. It seems that when parents make the decision of migrating with their children, boys are still more likely to be preferred than girls.

However our findings are contradictory with the report from All-China Women Federation (2013) based on census data in 2010, which showed more left-behind boys than girls nationally. This might be due to the lower economic status in the study counties. One possible reason is that for better off families, it would be easier to bypass the restrictions from the local variation of One Child Policy, through simply paying the penalty charge or other informal approaches.

Gender also has different effects across wellbeing dimensions. In China, studies (Fan et al., 2010; Hu et al., 2014) indicated left-behind girls were more likely to have emotional symptoms, whereas boys had higher levels of behavioral problems. Although no differences were shown in terms of behavioral issues, our results indicate that girls are much more vulnerable to emotional distress, which was also demonstrated in the qualitative study of this thesis. Girls also seem to have better peer relationships. In rural China, similar to many other cultures, girls were more likely than boys to be responsible for younger siblings and household chores after their parents left (Parreñas, 2005; Aguilera-Guzman et al., 2004). During the absence of migrant parents, girls may thus become a more thoughtful and caring family member, which potentially helps them get along with peers outside of the family as well.
6.5 Strengths and limitations

The quantitative study has the following limitations. First, due to practical constraints in recruiting migrants and lack of literacy in some grandparents, we were unable to collect data from parents and caregivers, thus all the data is from child self-report, without triangulation of responses from other family members. Second, as a cross-sectional study, casual pathways cannot be fully delineated, between the migration status and child wellbeing, and thus the findings should be considered exploratory. Third, educational levels of parents and caregivers, and specific indicators of quality of care and relationships, such as the frequency and quality of communication, were not assessed in this study.

Despite the limitations, our study strongly suggests that left-behind children have markedly higher psychosocial difficulties, based on a sample selected from one of the richest and one of the poorest Chinese provinces. The questionnaire survey achieved a high response rate, and collected detailed information about current and previous experiences of left behind, as well as various child wellbeing correlates that allowed us to explore the characteristics of the child's family and social environment. In particular, our study points out the potential negative impact of previous left-behind experiences, which are often neglected in academic studies, policies and interventions. We have also identified major factors that are associated with psychosocial wellbeing in these rural children, especially parental
divorce and availability of support. Our findings provide crucial insights regarding
the impact of parent-child separation, as well as different types of care
arrangements and resources for psychosocial wellbeing in the absence of migrant
parents, and lead the direction of further research on quality of family care and
relationships.
Chapter 7 Discussion and conclusion

7.1 Overall summary of study results

Although the study samples in this thesis are not nationally representative, our results from a very wealthy province and the poorest province in China provided crucial evidence about the impact mechanisms of parental migration from multiple perspectives of child wellbeing. Drawing on the conceptual framework elaborated in Chapter 5, this final chapter delineates how our studies elicited the potential causal pathways between parental migration and psychosocial symptoms, across multiple layers of the socio-ecological system of child development.

Overall, parental migration tends to result in long-term adverse effects on children's psychosocial wellbeing. The primary mechanism leading to psychosocial difficulties is through disrupted parent-child relationship, particularly causing emotional distress. The secondary mechanism affects child wellbeing through care arrangements and psychosocial support in the left-behind family environment and context, including disciplining from caregiver as well as social interactions with peers and community members. Additional factors include household economic status which provides resources for child development and justifies the migration incentive, as well as school performance and certain community characteristics. Importantly, our findings also illuminate a time dimension across these mechanisms, indicating a persistent accumulation
process of socio-emotional difficulties, especially through a child’s critical
developmental periods.

Specifically, this chapter summarizes the relationship-emotion mechanisms
showing the impact of migration, other non-emotional aspects of child wellbeing
in relation to parental migration, as well as the time dimension of the impact from
migration. Major factors on the potential pathways, including care arrangements
and psychosocial support, household economic resources, and socioeconomic and
community contexts, are also elaborated in terms of their respective functions
and the connections between them. In each subsection, key findings are outlined,
followed by more in-depth discussion on the finding theme. Finally, the
conclusion section elaborates the implications of the current studies, as well as
potential strategies and solutions to address the challenges faced with LBC.

7.2 Key findings and contributions

7.2.1 The relationship-emotion mechanisms showing the impact of migration

Findings outline

In general, quantitative and qualitative studies in this thesis demonstrated similar
patterns of psychosocial difficulties experienced by LBC. Emotional distress was
the most pronounced child wellbeing challenge that stuck out from both field
interviews and the self-report questionnaires. This is consistent with many of the
extant empirical studies and theoretical perspectives in family systems and attachment theory. However, results from the current studies highlighted parent-child relationship as a crucial link between parental migration and psychosocial symptoms, which embodies independent, direct consequences of parental migration and crucial attributes of child psychosocial wellbeing.

Multiple patterns of emotional distress were illustrated in the qualitative study, from the narratives that in a way portrayed the relationship dynamics. “Missing my mother/father too much” was a common theme in the qualitative data, as these children showed strong emotional attachment with migrant parent(s) over distance. The psychological vulnerability was notable as some children’s daily life was affected by thoughts of the parents, accompanied by feelings of loss and sadness. Yet certain other children appeared much more indifferent to parental absence. For example, they “don’t feel like talking with” the migrant parents either over the phone or at home, and did not demonstrate positive emotional connections with them. Ambivalent attitudes to the parent-child relationship such as “sometimes I miss them, sometimes not” in a way suggested more complex intrapsychic conflicts in these children, which may cause additional emotional distress.

Characteristics of the parent-child relationship were also reflected in their communication patterns. In many families the parent and child “do talk over the phone, but without “a proper conversation”, as was reflected by a mother. Most
Chinese parents in our study were not good at initiating emotionally sensitive or in-depth conversations about the child’s real feelings, and often “make a fuss”, according to a boy, about the behavioral or school performance. It was common that the grandparents have to urge the child to pick up these phone calls against their will. While some occasional reunions witnessed the child’s clinginess with the parent, extra sadness in the child was also reported in some cases when the migrant parent had to leave again.

In the quantitative study, emotional symptoms (including unhappy feelings, worries, nervousness, fears, and somatic symptoms) was the only SDQ subscale that showed significant increase in both current- and previous-LBC groups, compared to never-LBC; and the effect size on both left-behind groups, measured as the correlation coefficient, was also the largest among five subscales. The association between parental migration and emotional symptoms was independent of all individual, family and environmental characteristics, which indirectly implied that the unmeasured factor, parent-child relationship, was a critical factor.

**Overall discussion**

As an intuitive response to parental migration and their lengthy absence, emotional distress in children stuck out from both field interviews and the self-report questionnaires. Our findings are consistent with theoretical
perspectives such as the family stress conceptual framework (Boss, 2002, p40) and the underpinnings of attachment theory (Bowlby, 1969). The key challenge of parental migration is the prolonged separation from their children, of which the immediate repercussion would be disrupted parent-child relationship. Attachment theory emphasizes the roles of secure attachment from the beginning of a child’s life to adolescence. According to our qualitative findings, the emotional distress in children was mainly derived from the insecure attachment with migrant parents, which is also characterized by dysfunctional communication over the distance.

Care and support from migrant parents was maintained mainly through distant communication over the phone or internet, since frequent physical reunions were impractical. Yet our findings suggest that the phone conversations or internet chats often turn out to be didactic disciplining from the parents, rather than heart-to-heart communication about real feelings and thoughts from the child. As a result, it is unlikely for the child to seek emotional and social support through distant communication, especially considering some children never experienced a close relationship with migrant parents even prior to their departure.

The extra psychosocial risks due to early separation from parents, as is elicited from existing literature (Liu et al., 2009; Fan et al., 2010) and our qualitative and quantitative findings, need particular attention. Even though rationales based on attachment theory may not perfectly explain LBC’s experiences of separation,
they are particularly relevant for the “early left-behind children”. Lack of a secure base even during infancy may partly explain the extra disadvantage in these children. The insecurity is related to the inadequate care and support in the left-behind family, and perhaps the transfer of primary caring roles to grandparents that disrupted the original parent-child relationship.

7.2.2 Non-emotional aspects of child wellbeing

Findings outline

In comparison to emotional symptoms, behavioral problems or externalizing disorders appear to be less of an issue in LBC. According to the quantitative survey results, only current-LBC appear to be worse off in hyperactive behavioral issues (restless, fidgety, easily distracted, don’t think before acting, lack of attention), but neither current- or previous-LBC had showed any difference than non-LBC in the more serious conduct problems or delinquencies (tempers, obedient, fights or bullies, lies, steals). Qualitative interviews also elicited similar scenarios, where some LBC seemed to be mischievous, such as disobedience of caregiver or spending too much time playing outside, but did not misbehave in a way that caused serious troubles.

Social functioning disadvantages in LBC were also suggested, especially in the quantitative results. The adjusted analysis showed increased peer-relationship problems, particularly in previous-LBC compared to never-LBC, while the
increase in current-LBC became non-significant after adding control variables.

The qualitative study presented some indirect evidence related to social functioning, including children's loneliness and unwillingness to socialize with peers. Emotional distress such as depressive feelings also seemed to suppress daily social behaviors in some children. The isolated social environment in a small, remote community also negatively affected social interactions according to several interviewees.

**Overall discussion**

Unlike emotional symptoms, behavioral problems are less likely to be the direct consequence of parental migration. Particularly for younger children, the parents would probably have made solid care arrangements, in order to make sure that their children are supervised and disciplined by adult caregivers, mostly grandparents. Hence, the externalizing behavioral problems are unlikely to emerge drastically soon after their parents left. At schools in rural China, children's behaviors are also usually closely monitored and disciplined by the teachers, especially when behavioral issues were linked with a decline of the student's school performance.

In many parts of rural China, traditional Chinese values of obedience, piety, and education for success still prevail. Such value systems and socio-cultural contexts may help keep children and adolescents in school and follow the guidance and
supervision of authoritative figures, and prevent them from acting out. Yet a trend of giving up school and joining the migrant force has been observed in rural LBC (Murphy, 2014; Démurger & Wang, 2015), and rising juvenile crime rates among these migrant children have become an emerging concern (Robson et al., 2008). Further improvement in family and community care should take into account the function of social contexts, in order to address the challenges faced with LBC.

7.2.3 A time dimension of the impact from migration

Findings outline

Another focus of this thesis is the delineation of long-term impact of parental migration, through multiple perspectives including: progressive decline of child psychosocial wellbeing over time; effects of parental absence at critical development periods; challenges for children after parents' permanent return; overall and specific impacts of parental migration on previous-LBC.

Certain qualitative findings indicated the child and migrant parent dyad “grew apart” after years of separation. In some cases the behavioral problems showed a sudden increase “in the past few months” during early adolescence. This is related to the findings that parental absence during critical development periods, particularly infancy and puberty, seemed to be detrimental to some children's wellbeing. Emerging and accumulating concerns about the care of some extra
vulnerable children prompted some migrant mothers to return home permanently. However, these return parents faced challenges in joining the care environment again while earning sufficient income for the family.

In our quantitative study sample, up to a quarter of all rural children had past experiences of being left behind. Multiple regression results indicated highly significant impact of parental migration on the psychosocial wellbeing of previous-LBC. Besides emotional distress, previous-LBC also had higher levels of peer relationship problems, which appeared to be slightly worse than current-LBC. While LBC’s wellbeing seemed to be significantly undermined by lack of support, the negative effects were larger on the previous-LBC group than current-LBC.

**Overall discussion**

A phenomenon that is closely relevant to our studies is return migration from the cities back to rural hometowns. Findings with regard to the impact of return migration on children are among the most crucial contributions of this thesis, since the long-term impact of previous parent-child separation due to migration has not been very well studied globally, and children of returned parent(s) have been largely ignored by the vast majority of studies on LBC, except a few ones (Wang et al., 2015a; Wu et al., 2015; Adhikari et al., 2013). In addition to changes in family goals and structures, return migration should also be viewed within
larger social and community contexts.

Return migration reflects changes in family goals, the rationales behind the migration decision, or on the perceived effects of parent-child separation on child wellbeing. Given the profound impact on family structure and function, the migration decision is usually made within the ambit of a household (King, 2012). The decision to migrate or return was made in consideration of socioeconomic environments and family and individual wellbeing. However this household decision-making process, especially regarding return migration, has rarely been examined.

Our qualitative study explored how families evaluated the costs and benefits of migration, focusing on the return migration cases which provided crucial insights into the decision-making process. As the findings illustrated, to simply interpret migration as income-driven would be misleading when investigating its impact on children. Especially in China’s familist culture, migration is often considered as a move for the benefit of the entire family, including children (Esping-Andersen, 2000). Parents may have recognized the consequences of prolonged separation from their children, yet the initial migration decision was based on the contemplation that the gains from working in the cities would outweigh the loss for their children’s wellbeing, especially in longer term. However, once the situation has changed, especially as the child grows up, this justification may no long hold valid, which leads to the decision of returning home.
Meanwhile, our questionnaire survey results suggest that previous parental migration has similar psychosocial impact as current migration on child wellbeing. Relatedly, consistent with Liu et al. (2008) has found, our results showed that children who were separated from parents at a younger age were more prone to psychosocial difficulties. Future studies may include other in-depth measures regarding the cyclic pattern of migration, such as duration of separation and reunion, frequency of home visits. These may turn out to become important factors that influence the family structure and function, and relationship dynamics between migration parents and their children.

7.2.4 Care arrangements and psychosocial support

Findings outline

Findings regarding family care structure, such as the challenges of the mother as single caregiver and potential benefits of multi-cousin families, marked some key contributions of this thesis. These arrangements of family care, as well as the community environment, provide psychosocial support for LBC, a crucial factor on the mechanisms that safeguard the wellbeing of LBC from adverse effects of parental migration.

One particularly surprising finding in this thesis was that, LBC who were primarily cared for by the mother tended to have worse psychosocial wellbeing,
compared to children cared for by grandparents, according to the quantitative subgroup analysis. Qualitative findings suggested difficulties for a working mother in looking after her child, who sometimes had to “invite some kids to come over and hang out with him (the son)”. Others needed to “figure out about money” because of the reduced income. The often serious child disciplining problems, which prompted return migration, further exacerbated the challenges for the mother to tackle, for example one of them was worried that her son had “became very rebellious”.

Children of capable grandparents reported they “take care of me very well, basically the same as my parents”, yet some grandparents expressed doubts about their physical strengths for childcare. Parents are concerned the grandparents “think differently about lots of things”. With this “generation gap”, grandparents tended to be either “not strict at all” or too strict, while some children were often not cooperative. Children in a particular type of household structure, where capable grandparents cared for children who are cousins, seemed to enjoy it especially the peer accompaniment.

In our quantitative study, the novel analysis of interaction effects identified parent’s divorce and lack of support as key negative correlates of all aspects of child psychosocial wellbeing, and both correlates showed exacerbating effects particularly among the LBC groups as opposed to non-LBC. One case in the qualitative study illustrated a child of divorced parents living with a frail
grandmother suffering from hunger and neglect. While the quantitative measure did not identify the source of social support, the qualitative results showed neighbors and community activities offered crucial contributions to the LBC in need.

**Overall discussion**

Care arrangements and psychosocial support involve various family characteristics as well as the larger social environment of the child. The primary caregiver, usually either a co-resident mother or grandmother, apparently plays a significant role. Some studies showed that children primary cared for by a parent fare better than those cared for by grandparents or other relatives (Gao et al., 2010; Su et al., 2012). Our qualitative findings indicated various levels of capabilities among grandparents in providing adequate care and supervision. The results from our quantitative survey showed no overall differences between caregivers, although among LBC, mother as primary caregiver seemed to have more negative influence compared with grandparents.

The co-resident mother, even if not identified as primary caregiver, may provide essential support to the grandparent who takes care of the child the most. On the other hand, when the mother takes the primary caring role, it is questionable that whether the grandparents are able to provide adequate care for the child. Unlike some stay-at-home parents in the rural areas, the return migrants, who were able to find a job in a city, are likely to be still working full time in or nearby their rural
hometown after their return; these left-behind mothers’ non-childcare burdens in
the household may still be high, whereas the quality of care and amount of time
they spend with children become limited (Chang & Dong, 2010). It is likely that
none of grandparents were supportive enough, who would otherwise have been
identified by the child as the primary caregiver. If the mother used to be a migrant,
her return may result in the change of primary caregiver, which was found to
have adverse impact on the child psychosocial wellbeing (Senaratna et al., 2011;
Mazzucato et al., 2015). Despite her presence at home, new disturbance in family
relationships and unclear caring roles may lead to children’s ambivalent feelings
and lasting emotional difficulties with parents, without fully resolving the loss
from separation.

Children also have multiple sources of family and social support. Siblings and
cousins play crucial roles in child development (Brody, 2004). Although
quantitative study did not show significant effects from having any siblings, the
qualitative interviews elicited that children benefited from living with siblings or
cousins, as well as social activities with friends in the neighborhood or at school.
In fact it was not uncommon for a child to live with cousins, under the care of
grandparents; and children often develop close relationships with neighbors at
their similar age in the community. In these cases, peer support may be able to
compensate the loss due to parental absence, and become an important source of
social support, according to our quantitative results. Sources of support from
community, school, and peers provide a favorable social environment outside of
the family, which is also crucial in safeguarding child wellbeing especially for LBC. Our questionnaire survey was not restricted to support from within the family and included various scenarios in which children are in need. A particular notable finding was the exacerbating effect of social support on LBC’s psychological risks, which highlights the needs of supportive family function and social network for the children.

The care environment also entails relationships between the caregivers, including migrant parents, co-resident parents and grandparents of the child. Both quantitative and qualitative findings showed that parents’ divorce considerably exacerbated the stress in the care environment, and diminished children’s abilities in seeking help and emotional support from the family. As China’s crude divorce rate has doubled during the past decade (Davis, 2014), with migration as a possible contributor, the consequences of parental divorce in LBC are particularly concerning. Migration and divorce altogether make interactions and coordination extremely difficult in the nuclear family, and result in largely dysfunctional dynamics for effective childcare.

7.2.5 Household economic resources

Findings outline

Our findings provided deep insights into the economic factors in migrant families
and offered more specific results than most existing research. Unlike family care and support, household economic resources did not seem to be significantly associated with emotional and overall psychosocial wellbeing in children. However, our quantitative study showed that wealth status may affect specific aspects of psychosocial difficulties. In addition, the qualitative study indicated certain signs of correlation between that social functioning and economic status.

The effect of household wealth on children’s overall psychosocial outcome became non-significant after the availability of support was accounted for. Although emotional wellbeing seemed largely unrelated to wealth status, lower economic status led to more peer problems, but less hyperactive symptoms. In the qualitative study, a child from a better-off family who has “a good personality and talks sweetly with people” was said to have benefited from his earlier experience living in Shanghai with parents. According to another child, suffering from poverty was partly the reason why her peers “don’t seem to understand what I’ve been through”.

**Overall discussion**

Despite of the relatively low family income in the study areas as compared to the rest of China, economic status may not be a key factor of children’s socioemotional distress in this study sample, regardless of their parental migration status. Yet among the LBC, lower family income seems to be related to
certain internalizing problems in their social interactions, which may incidentally
be protective against hyperactivities.

Our findings imply that economic disadvantages are often accompanied with the
lack of other non-material resources for child development, but it is the
non-economic factors that determined children’ psychosocial wellbeing. However,
the current literature failed to elicit the multiple burdens faced with the LBC in
impoverished migrant families, who are often highly vulnerable both
economically and psychologically. The poverty vicious cycle often involves
multiple dimensions of deprivation; parental absence under such circumstances
would significantly hinder child development. As both our qualitative and
quantitative results indicated, these poorest LBC are in pressing needs of both
economic and psychosocial support. Hence in addition to the existing financial aid
programs for children in poverty, in high out-migration areas more initiatives to
address the psychological aspects of wellbeing should be developed.

7.2.6 Socioeconomic and community contexts

Findings outline

Qualitative findings in this thesis elicited the household socioeconomic rationales
behind the migration decision. Our quantitative results from these
migrant-sending areas indicated disadvantaged economic status in LBC's families
in their community. Given the availability of certain resources, the community organizations and members in solidarity with these families may help relieve some of the difficulties facing the LBC. When the sacrifice from the parent-child separation seemed to outweigh the socioeconomic gains, rationales of the initial migration decision were overturned and some mothers decided to permanently return home.

To “earn more money” in the city while they were still at a relatively competitive age in the labor market, was a universal incentive for migration among the young parents. The other side of the issue was in the rural village, “there are no jobs except farming” for those who had few skills or connections. Indeed non-migrant families had more wealth than previous migrant families, and current migrant families were the poorest, in both Zhejiang and Guizhou provinces. Meanwhile apparently the migration in a way was “just for the kids” to have live a better life. The prospect for the children to go to school in the city and “secure a better future” was also an incentive of the migrant family.

However children’s current situation lies in their home community. When “everybody has gone to the cities” yet the community stays well-connected, those children left behind may actually “feel fine” because of the normalization of migration, as opposed to the context of a lightly populated remote village.

Community activities such as the Children’s Club program also helped LBC receive extra care and support. These community-level efforts were dependent on the
sufficient financial support and strong village committee leadership.

**Overall discussion**

Like in many other developing countries, migration in China has been predominantly driven by economic prospects and human development opportunities in better-developed areas. Under China’s rapid economic expansion and drastic social change, the initial motivation for migration is also reflected in the community contexts. While a large literature pinpointed the economic benefits for the left-behind family members (McKenzie & Sasin, 2007), the cost-benefit assessment in the decision-making process may be highly context-specific and fairly sophisticated. Our studies highlighted the importance of cautious investigation into the economic contexts related to migration.

As higher development level in urban areas is an essential pull factor of migration, deprivation in rural areas is certainly a push factor (Zhang & Song, 2003). The lower costs of migration within China, as compared to international migration from other developing countries, have enabled the massive flows of underprivileged populations. On one hand, many families had to spend much of their income on building a house in their hometown, which left limited liquid assets that can directly benefit children. On the other hand, once families become rich enough, they tend to leave the countryside and move to the city together with their children. Hence, it would be important not to assume economic advantages
in left-behind families, and children in these families may be still in lack of material resources.

The magnitude of the challenges caused by parental migration is also manifested by the number and proportion of LBC in rural China. In the typical migrant-sending areas in the two provinces, our quantitative study found over half of the children had one or both parents away at the time of survey, much higher than the proportion calculated based on national census data (37.7%) (Duan et al., 2013). Considering the tremendous variability of socio-economic development status across the country, both within and across provinces (Li et al., 2013), it is likely that rural out-migration is a much more common phenomenon in some places than others in China.

Yet the existing literature rarely takes into account the scale of migration as a specific community characteristic. According to our field investigation, even within one county, migration rates may differ significantly between different townships or villages. Community social capital has been found to be strongly associated with better child mental health outcomes (Wu et al, 2015). Although quantitative survey was not able to examine community-level variables, our qualitative findings suggest migration rate may be an important context of child wellbeing. High out-migration communities tend to develop targeted support mechanisms and programs for children and families. Also, living in a community with a large group of similar families and children may help some LBC deal with
the challenges of parental absence. To the contrary, stigmatization of being LBC appeared to be more likely in communities with less out-migration. Higher population density may also relieve the loneliness of LBC, as some interviewees noted, which has not been properly examined by the literature either. Further research should aim to provide a community scoping of the issue, and elicit the effects of the proportion and density of left-behind families in the community on child wellbeing.

Soon after the 2008 financial crisis hit China, massive flows of migrants returned to their rural hometowns due to the rising urban unemployment rates. This phenomenon did not last for long before the economy started to recover around 2010. The recent slowdown of Chinese economy, however, may also potentially result in a decline of labor demands in the cities. The scale of local job market in most parts of rural China is largely determined by medium and small businesses, which rely on a variety of factors to thrive. As we found in the qualitative study, the local manufacturing industries in Kaihua have retained a fairly large labor force, especially women. The ongoing new phase of urbanization focusing on similar small towns China may further create more jobs in the formerly rural areas and attract more migrants to return and work near home (Wang et al., 2015b). Meanwhile, as the number of rural working mothers increases, quality of care for children of migrant father may face new challenges.

Child welfare and child protection systems in the migrant-sending communities
are another crucial aspect of social context. Particularly, policies and programs that provide targeted support for LBC may play an important role in safeguarding the wellbeing children and their families. Wu et al. (2015) has found in Guizhou province that community social capital plays a significant role in mitigating the depression risks among LBC. In less developed countries and communities, the local systems are often unable to identify children in need of psychological support and to provide adequate services for these children (Patel et al., 2008). Hence, targeted support programs for the LBC in migrant-sending societies and communities become an important factor of child wellbeing.

The Children’s Club intervention program has set a model of community support for resource-limited settings. Similar mechanisms in other countries have not been well established, except one program in Mexico built up on community networks. Effective implementation and favorable outcomes of community support may be linked with other context-specific institutional arrangements and socioeconomic situations. Community solidarity on tackling issues caused by out-migration may also raise awareness within the families, on the challenges faced by children, and strengthen the support from both co-resident and migrant family members. It is noteworthy that despite of the significant contribution to child psychosocial wellbeing, community support will not and should not replace the responsibilities of family caregivers. Family environment still provides the most important care and resources for child development in absence of migrant parents.
7.3 Conclusion

7.3.1 Systems safeguarding the wellbeing of LBC

Findings from our studies based on the overarching framework provide crucial evidence to improve the current child welfare and child protection systems safeguarding the wellbeing of LBC. Institutions and agencies should aim to identify areas that are highly affected by out-migration, and specifically target the vulnerable children and families. Strategic mapping of the issue requires persistent monitoring of local family networks and population movements, with coordination across multiple government and community agencies.

The massive migration in China is related to the fundamental social transformation that came along with the country’s rapid economic growth, and therefore government agencies and the public service sector are probably the most accountable and capable, in tacking the difficulties imposed on families living apart, especially the LBC. Ideally, supportive institutions in urban and rural areas should be able to collaborate, and coordinate their efforts in serving specific migrant populations and their families at home.

However, the universal basic social services provided by the government’s social policy systems are still rather weak in China. Recent laws and policies designed to protect children (not just left-behind ones) have been practically unenforced.
(Shang & Katz, 2014). As the institutional welfare provision is not functioning, family networks often fill the state void in providing protection to the LBC (Valtolina & Colombo, 2012). Consequently, families in disadvantaged situations are inevitably subject to inadequate provision of care and resources for the children left behind.

### 7.3.2 Stable and protective family environment

A stable family environment, including both migrant parents and co-resident caregivers, is essential for the wellbeing of individual LBC in the migrant-sending communities. As to migrant parents, child welfare and protection agencies should make sure that they take basic responsibilities in childcare even after their departure; especially the arrangements for the child to receive essential care and support at home must be made. Community representatives and social workers should help maintain and reinforce the connections between the child and parents. For instance, some donors have funded reunion trips for the families living apart. Parenting programs may also be organized to help migrant parents better communicate with children, and provide guidance and support over distance.

On the rural left-behind family side, various types of support may also be enhanced by further efforts from the government and community organizations. It is important to recognize that migrants are not guaranteed with better
economic status. In fact, they are rather vulnerable to economic shocks, since most of them prefer to invest in new housing rather than save for liquid assets (Janson, 2014). Financial aid should be reinforced for children in need, and the LBC in economically deprived families should be specially identified and targeted. In general, government or community agencies should constantly monitor the welfare of LBC, to offer timely support or any essential resources that are in demand. Local public institutions such as schools and hospitals must also do more to notify the authorities of cases of abuse or neglect. Programs like the “Children’s Club” may integrate resources at the community to provide care and supervision, as well as social interaction platforms that would benefit child development.

7.3.3 Implications for policy and interventions

Our results may inform future strategies and intervention programs in addressing the psychological and developmental risks faced by the LBC. First of all, the target population of policies and interventions should not be restricted to the currently left-behind. Children and families who previously experienced the prolonged separation should draw more attention from the policymakers and social service providers. Meanwhile, children in the most disadvantaged left-behind families are in pressing needs of better care, with regard to both financial aids and socioemotional support from the community. In combination with existing social protection systems and programs, LBC who have divorced parents, incapable caregiver and/or live in a remote area, should be identified and specifically
targeted. Registration and records of these children should be established, in order to provide constant monitoring and support for child development.

Well-developed interventions and programs should also distinguish the different dimensions of child wellbeing, and provide specific content and activities according to individual characteristics of the child and family. For instance, emotional support and developmental-behavioral interventions may be carried out via different activities and at different places, including at home, school, and community center, depending on the specific aims of the program. Further experimental research needs to explore the pertinent approaches that address overall and individual dimensions of the wellbeing of LBC.

To strengthen the supportive relationships in childcare environment is another priority in improving the wellbeing of both currently and previously left-behind children. This involves parent-child communication over distance, grandparent-child interactions at home, as well as the connections between the father and mother and their joint efforts on childcare. Parenting programs may be designed for migrant parents and co-resident caregivers, respectively. If the couples do not migrate together, certain relationship or marriage counseling services may be piloted, to strengthen the solidarity of the nuclear family especially on care and support for the children.
The local community also plays an important role in providing care and social support to the LBC. Community care program may be organized by local officials and community members for the children, not only to share the responsibilities of caregivers, but to create a platform for children to spend time together in a variety of activities. Such programs may also include academic tutoring to help with children’s school performance. In doing so the community would be able to offer critical sources of peer and social support to the local LBC.

7.3.4 Solutions to keep families together

Certainly the ultimate solution to the LBC issues is to keep families together. In the migrant-receiving cities, governments and large employers should strive to incorporate the migrants into the urban society, by reducing the barriers to urban citizenship, and improving their working conditions, benefits and welfare. Enhanced efforts from non-governmental organizations and corporate social responsibilities are also expected, for better services to the children of migrant workers. On the rural side, more local residents should be able to achieve better living standards by working near their hometown. In the latest urbanization process, this relies on increased investments and targeted policies in smaller towns within rural areas, particularly on start-up businesses or mid- and small-scale industries, in order to attract a larger local workforce. The government and civil society should continue the efforts on ensuring the essential welfare for child development and quality education attainment for all children,
and build up favorable, supportive environments in rural communities where children can thrive and achieve their full potential, without prolonged separation from their parents.
References


King, R. (2012). *Theories and typologies of migration: an overview and a primer.* Willy Brandt series of working papers in international migration and ethnic relations, 3, 12.


Luca, A. M. (2007) 'Long-distance families’, Romania News Watch: Transitions Online, Available at:


Annex: Quantitative survey questionnaire

In order to better understand the mental health and development of children in Zhejiang, as researchers from Zhejiang University, we are conducting this survey and would like your cooperation. This questionnaire will be anonymous and self-administered; it is only for our research and no information will be disclosed. So please answer the questions according to what you consider to be true, as there is not a right or wrong answer. Thank you for your help.

Zhejiang Child Development Questionnaire
(For students at or above 5th year of primary school)

First of all, please tell us something about yourself and your family.

1. Please tell us whether you are a girl or a boy. Girl ☐ Boy ☐

2. Your birthday? ______ (mm/yyyy)

3. What is the name of the school you attend? _______

4. Which school year are you in?

5. What's the level of your family's economic condition as compared to others in your town?
   ① Very good  ② Good  ③ Fair  ④ Poor  ⑤ Very poor

6. Do you have the following items at home?
① air conditioner  ② washing machine  ③ television  ④ refrigerator
⑤ computer/laptop   ⑥ motorcycle

7. How many siblings do you have? _____
   How many of them are your elder sister, younger sister, elder brother, and younger brother, respectively? ________________

8. Is your father living away from home for work (or business) now? ① yes, currently ② yes, previously ③ no, never (if no, go to question 11)
   If yes, how old were you when your father left home for work (or business) for the first time? _____
   How long has he been away after you were born? _____
   Which is the most recent place he has been to? _____
   How many times did he come back home during the last year? _____
   Each time he came back, how many days on average did he stay for?_____

9. Is your mother living away from home for work (or business) now? ① yes, currently ② yes, previously ③ no, never (if no, go to question 11)
   If yes, how old were you when your mother left home for work (or business) for the first time? _____
   How long has she been away after you were born? _____
   Which is the most recent place she has been to? _____
   How many times did she come back home during the last year? _____
   Each time she came back, how many days on average did she stay for?_____

10. (If both your parents live with you, skip this question) How many times have you talked with your mother or father in the past one month by phone or on QQ? _____
11. How much pocket money do you get each month?_____

12. Who are you living with now? (multiple choices)
   ① your father’s father ② your father’s mother ③ your mother’s father ④ your mother’s mother ⑤ your father ⑥ your mother ⑦ other relatives ⑧ neighbour ⑨ nobody ⑩ other people

   Among them, who takes care of you most? _____

   Is that person male or female? _____

   How old is he/she? _____

   His/her education level? _____
   ① primary school/never went to school ② junior middle school ③ high school ④ vocational college ⑤ university or higher

We also want to know how things are going for you at school. Please complete the items according to your actual situation and feelings.

13. I don’t want to go to school
   □ Not true □ Somewhat true □ Certainly true

14. I find school interesting/ I enjoy school activities
   □ Not true □ Somewhat true □ Certainly true

15. I worry about my future
   □ Not true □ Somewhat true □ Certainly true
16. I worry about getting bad marks or grades
   □ Not true □ Somewhat true □ Certainly true

17. It is hard to pay attention in class
   □ Not true □ Somewhat true □ Certainly true

18. I easily forget things
   □ Not true □ Somewhat true □ Certainly true

19. I often answer questions in class.
   □ Not true □ Somewhat true □ Certainly true

20. I finish my homework on time
   □ Not true □ Somewhat true □ Certainly true

21. I finish my homework on my own
   □ Not true □ Somewhat true □ Certainly true

22. Generally how are you doing with your study among all students in your class?
   □ Top □ Middle □ Bottom
We would also like to know whether you do things below to further understand you and other children. Your parents and teachers will definitely never know your answer.

23. Smoking:
   - Never
   - Sometimes
   - Less than 1 cigarette per week
   - More than 1 cigarette per week

24. Drinking alcohol
   - Never
   - Sometimes
   - Less than once a month
   - More than once a month

25. Skip classes
   - Never
   - Sometimes
   - Many times

26. Cheat in exams
   - Never
   - Sometimes
   - Many times

27. Go to internet bars
   - Never
   - Sometimes
   - Many times

28. Help with housework
   - Never
   - Sometimes
   - Many times

29. Help with farm work or family business
   - Never
   - Sometimes
   - Many times

30. Steal things
   - Never
   - Sometimes
   - Many times

31. Lying
Please complete the following items according to your experiences during the past six months. There is not any right or wrong answer, just tell us what you consider to be true.

32. Vandalism

☐ Never ☐ Sometimes ☐ Many times

33. Bully classmates or other children

☐ Never ☐ Sometimes ☐ Many times

34. Bullied by classmates or other children

☐ Never ☐ Sometimes ☐ Many times

35. Physically fight with people

☐ Never ☐ Sometimes ☐ Many times

36. I try to be nice to other people. I care about their feelings

☐ Not true ☐ Somewhat true ☐ Certainly true

37. I am restless, I cannot stay still for long

☐ Not true ☐ Somewhat true ☐ Certainly true

38. I get a lot of headaches, stomach-aches or sickness

☐ Not true ☐ Somewhat true ☐ Certainly true
39. I usually share with others (food, games, pens etc.)

☐ Not true ☐ Somewhat true ☐ Certainly true

40. I get very angry and often lose my temper

☐ Not true ☐ Somewhat true ☐ Certainly true

41. I am usually on my own. I generally play alone or keep to myself

☐ Not true ☐ Somewhat true ☐ Certainly true

42. I usually do as I am told

☐ Not true ☐ Somewhat true ☐ Certainly true

43. I worry a lot

☐ Not true ☐ Somewhat true ☐ Certainly true

44. I am helpful if someone is hurt, upset or feeling ill

☐ Not true ☐ Somewhat true ☐ Certainly true

45. I am constantly fidgeting or squirming

☐ Not true ☐ Somewhat true ☐ Certainly true

46. I have one good friend or more

330
47. I fight a lot. I can make other people do what I want

48. I am often unhappy, down-hearted or tearful

49. Other people my age generally like me

50. I am easily distracted, I find it difficult to concentrate

51. I am nervous in new situations. I easily lose confidence

52. I am kind to younger children

53. I am often accused of lying or cheating
54. Other children or young people pick on me or bully me
   □ Not true □ Somewhat true   □ Certainly true

55. I often volunteer to help others (parents, teachers, children)
   □ Not true □ Somewhat true   □ Certainly true

56. I think before I do things
   □ Not true □ Somewhat true   □ Certainly true

57. I take things that are not mine from home, school or elsewhere
   □ Not true □ Somewhat true   □ Certainly true

58. I get on better with adults than with people my own age
   □ Not true □ Somewhat true   □ Certainly true

59. I have many fears. I am easily scared
   □ Not true □ Somewhat true   □ Certainly true

60. I finish the work I’m doing. My attention is good
   □ Not true □ Somewhat true   □ Certainly true

Please complete the following 4 items if your both your parents do not live with you
61. I miss my parent(s) a lot

☐ Not true   ☐ Somewhat true   ☐ Certainly true

62. I feel sad each time my parents leave home for work

☐ Not true   ☐ Somewhat true   ☐ Certainly true

63. I feel lonely at home

☐ Not true   ☐ Somewhat true   ☐ Certainly true

64. I wish my parents were at home

☐ Not true   ☐ Somewhat true   ☐ Certainly true

Who would help you or talk with you in the following situations?

65. When you were having a problem with your studies

☐ Parent   ☐ Caregivers (if not living with parents)   ☐ Teachers   ☐

Friends/Classmates

☐ Others   ☐ Nobody

66. When you were worried or depressed about something

☐ Parent   ☐ Caregivers (if not living with parents)   ☐ Teachers   ☐

Friends/Classmates
<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>67. When you were being teased or bullied by another child</td>
<td>□ Parent □ Caregivers (if not living with parents) □ Teachers □ Friends/Classmates □ Others □ Nobody</td>
</tr>
<tr>
<td>68. Who would you share your happiness (e.g. did great in exam) with?</td>
<td>□ Parent □ Caregivers (if not living with parents) □ Teachers □ Friends/Classmates □ Others □ Nobody</td>
</tr>
<tr>
<td>69. Who would you talk to when you are unhappy?</td>
<td>□ Parent □ Caregivers (if not living with parents) □ Teachers □ Friends/Classmates □ Others □ Nobody</td>
</tr>
<tr>
<td>70. Who would discipline you or tell you off when you did something wrong?</td>
<td>□ Parent □ Caregivers (if not living with parents) □ Teachers □ Friends/Classmates □ Others □ Nobody</td>
</tr>
<tr>
<td>71. Who cares for you most?</td>
<td>________</td>
</tr>
</tbody>
</table>
72. Who do you like most? __________

73. What do you wish to do when you grow up? ____________

Please choose from options in the items below according to your thoughts and feelings during the past two weeks.

74. ① I rarely feel unhappy. ② I sometimes feel unhappy ③ I often feel unhappy

75. ① I often want to cry ② I sometimes want to cry ③ I rarely want to cry

76. ① I would like to be with people ② I often don't like to be with people ③ I don't like to be with people at all

77. ① I rarely feel lonely ② I sometimes feel lonely ③ I often feel lonely

78. ① None of the adults really love me ② I'm not sure if any adult love me ③ I'm sure some adult love me

79. ① I want to commit suicide ② I think about suicide, but won't do it. ③ I never thought about suicide.

Please tell us about your friends.

80. During the past year, did any of your friends

1 ) drink frequently? ① Yes ② No

2 ) smoke? ① Yes ② No

3 ) physically fight with people? ① Yes ② No

4 ) go to internet bar frequently? ① Yes ② No
5) steal?  
① Yes  ② No

6) oftenskip classes?  ① Yes  ② No

7) often cheat in exams  ① Yes  ② No

8) spendmoneylavishly?  ① Yes  ② No

9) oftendisobey teachers and parents?  ① Yes  ② No

10) hang out with bad guys?  ① Yes  ② No

11) verbally bully other children? (e.g. curse or mock others) ① Yes  ② No

12) physically bully other children? (e.g. hit others) ① Yes  ② No

We would like to know if you suffer from violence from your parents. During the past year, did your parents:

81. Screamed at you very loud and aggressively, said mean things or cursed you?

☐ Many times  ☐ Sometimes  ☐ Never  ☐ Not in the past year but this has happened

82. Threatened to leave you or abandon you?

☐ Many times  ☐ Sometimes  ☐ Never  ☐ Not in the past year but this has happened

83. Hit or slapped on your face?

☐ Many times  ☐ Sometimes  ☐ Never  ☐ Not in the past year

84. Beaten or physically hurt you by hand?

☐ Many times  ☐ Sometimes  ☐ Never  ☐ Not in the past year
85. Beaten or physically hurt you with implements like sticks and whips?

☐ Many times ☐ Sometimes ☐ Never ☐ Not in the past year

86. Locked you out of the home, made you stand or do exercise for a long time as punishment?

☐ Many times ☐ Sometimes ☐ Never ☐ Not in the past year but this has happened

87. Or other kinds of punishment to you?______________________________

We would like to know if you suffer from violence from your caregivers. During the past year, did your caregivers:

88. Screamed at you very loud and aggressively, said mean things or cursed you?

☐ Many times ☐ Sometimes ☐ Never ☐ Not in the past year but this has happened

89. Threatened to leave you or abandon you?

☐ Many times ☐ Sometimes ☐ Never ☐ Not in the past year but this has happened
90. Hit or slapped on your face?

☐ Many times  ☐ Sometimes  ☐ Never  ☐ Not in the past year

91. Beaten or physically hurt you by hand?

☐ Many times  ☐ Sometimes  ☐ Never  ☐ Not in the past year

92. Beaten or physically hurt you with implements like sticks and whips?

☐ Many times  ☐ Sometimes  ☐ Never  ☐ Not in the past year

93. Locked you out of the home, made you stand or do exercise for a long time as punishment?

☐ Many times  ☐ Sometimes  ☐ Never  ☐ Not in the past year but this has happened

94. Or other kinds of punishment to you?______________________________

Your safety is the top concern of your parents and teachers - please let us know if you have been hurt in the following ways during the past 12 months.

95. Mechanical injury (such as bone fracture, sprain):  ①Yes, ___ times;  ②No

96. Animal bites:  ①Yes, ___ times;  ②No

97. Burn:  ①Yes, ___ times;  ②No

98. Drowning:  ①Yes, ___ times;  ②No

99. Traffic accident:  ①Yes, ___ times;  ②No

100. Others

101. Have you tried to hurt yourself during the past year? (e.g. by cutting, scratching, jumping from high places, overdosing, swallowing indigestible things):
Thanks so much for your help!

Was this a hard questionnaire to answer?
☐ Yes  ☐ No

Is there anything that you didn't understand?
☐ Yes  ☐ No

Is there anything else you would like to say about what happened to you or about filling in the questionnaire?