



**Children's Lived Experiences of Being
Reared by Grandparents and Its
Interrelationship with Emotion
Regulation Development:
A Study Based on "Left-behind Young
Children" in Rural China**

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This is to certify that to the best of my knowledge, the content of this thesis is my own work. This thesis has not been submitted for any degree or other purposes.

I certify that the intellectual content of this thesis is the product of my own work and that all the assistance received in preparing this thesis and sources have been acknowledged.

Abstract

Grandparents raising grandchildren is a global child rearing pattern that has emerged as a result to a range of circumstances and cultural influences. In China, it is a culturally accepted practice when parents need support for childrearing and has been commonly employed when parents work in cities away from home, leaving their children to be taken care of by grandparents. These children are referred to as ‘left-behind children’. As both positive and negative outcomes have been found in research on this child-rearing practice, further study of the contextual factors, including from children’s perspectives, is needed to provide a more comprehensive understanding of the phenomenon of ‘left-behind children’. Also, as most research were on school aged children and teenagers, the young ‘left-behind children’ who are equally significant in population and developmental stage need studies to show their lived experiences comprehensively. Furthermore, emotion regulation – an influential factor in children’s development and a significant developmental outcome – is studied as part of children’s lived experience, employing an ecological theory perspective, which underpins the current study.

Taking a phenomenological approach, the current study explored ‘left-behind young children’s (aged from 18 to 53 months) lived experiences using children’s perspectives, underpinned by bioecological theory, through a mixed methods design of four child cases in rural China. Children expressed their perspectives of their lived experiences through activities of the Mosaic Approach, which were interpreted using information provided by their parents and grandparents through interviews, observations, and a questionnaire exploring children’s lives and their emotion regulation development. Reflective thematic analysis was conducted both within and across cases to generate themes inductively, which were then reflected on

and organised deductively, underpinned by the bioecological model, showing a vivid picture of the lived experiences of ‘left-behind young children’ raised by grandparents in rural China.

Across case themes generated from the children’s stories and data were the importance of playing, the different perspectives of grandparents and children towards children’s live, the dynamics of family relationships, the role of learning and education, and the culture of the community. Together with the within case themes that showed the unique aspects of children’s lives, such as having breakfast with a grandfather, having a shy grandmother, being a sister, entering preschool, and living in a ‘modern house’, the lived experiences of children in the current study, shown through systematic data gathering on aspects of children’s daily lives, indicated that children raised by grandparents enjoyed their lives and developed skills and behaviour patterns for adapting to their living environment. Despite not living with their parents, the children were still attached to them both emotionally and materially. In summary, ‘left-behind young children’ reared by grandparents in the current study regarded playing as their main daily activity, had close relationship with family members, and their development and socialisation, such as their development of emotion regulation, were well supported by their family members and the community.

The understandings and interpretations of this comprehensive picture of these children’s lived experiences will provide organisations and researchers working with ‘left-behind young children’ with systematic information from multiple perspectives, especially the children’s perspectives on their lives, proposing the significance and feasibility of involving young children’s voices in designing service programs and conducting research related to them.

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Grandparents Raising Grandchildren among LBYC

Grandparents raising grandchildren is a global child rearing pattern with various causes and cultural backgrounds. In China, it is a culturally accepted practice when parents need support to fulfill their responsibility of rearing the children. In recent years, the phenomenon of grandparents raising grandchildren is common among ‘left-behind children’ (LBC), whose parents work in cities away from home and leave the children to be taken care of by the grandparents living in their hometown. Researchers around the globe have suggested that this rearing pattern is associated with both positive and negative outcomes in children’s development and the wellbeing of children and grandparents. The various outcomes were understood through studies of ecological perspectives, including cultural and contextual factors and children’s perspectives in the explorations. Chinese researchers working with LBC also suggested it is significant to pay attention to contextual factors and children’s perspectives when describing the phenomenon and interpreting research results, especially for research on ‘left-behind young children’ (LBYC), who have been less studied in the literature than older ‘left-behind children’ but are significant in the population.

To provide further understanding and a thorough picture of the life of LBC raised by grandparents, the current study explored the lived experiences of LBYC raised by grandparents from multiple perspectives underpinned by the Person-Progress-Context-Time model (PPCT model, Bronfenbrenner, 1994) of the bioecological theory and a phenomenological position through a mixed methods design on four child-family cases.

Children’s perspectives, as the main data resource of the current study, were collected through the Mosaic approach (Clark, 2011). Children’s developmental factor in the PPCT model, which was the emotion regulation development in the study, was explored with

a questionnaire responded to by grandparents and naturalistic observations coded and analysed by the researcher. Information from interviews with parents and grandparents and the field notes of the researcher during her visits to the children and their families, as well as her observations during all the research activities, provided information that helped with understanding the stories told and showed by the children. Through thematic analysis within case and across cases, the information collected from the children and their families was interpreted and reflected on, to generate a comprehensive picture of the children's lived experience of living with and being raised by their grandparents.

This first chapter serves as an introduction of the current study and presents the structure of the thesis. The second chapter, *Background and Literature Review*, introduces the background of the phenomenon of grandparents rearing grandchildren globally and in China. It then discusses the existing research literature on the phenomenon and identifies research gaps which the current study aimed to contribute to addressing. The literature review concludes with presentation of the research questions.

The next two chapters, *Theoretical Framework* and *Methodology* Chapters, present the study's theoretical framework – the Person-Progress-Context-Time model (PPCT model, Bronfenbrenner, 1994) of LBC reared by grandparents in rural China – and the methodology, which is a mixed methods design of four child-family cases, respectively. Data were analysed within and across cases, through multiple data analysis tools and methods. The main approach to data analysis was thematic analysis (Braun & Clarke, 2006, 2021, 2022).

The fifth Chapter, *Four Child Cases: Within-case Analysis*, presents within case analyses on children's emotion regulation, including descriptive statistics and State-Space-Grid analysis (Cerezo et al., 2017). It also presents themes unique to each case, which were

the within-case themes, generated from children's expressions and information collected during the fieldworks. Then across case thematic analysis is present in the next Chapter, Themes from the Across-case Analysis.

Within case themes show the involvement in the children's lives of various family members, which differed from case to case, and the unique contextual information for each child. Across case themes, which were generated and interpreted inductively from the contextual information and data and organised and reflected deductively with the PPCT model, include children's: 1) playing, as the main activity of children's lives that reflects their development and interpersonal relationships; 2) perspectives different from their grandparents, indicating the significance of inquiry both children and caregivers' perspectives in research; 3) family relationship, as another significant component of children's lived experiences; 4) learning and education, which is highly valued by grandparents and parents; 5) culture of the community, as the context that influenced the children's lived experiences.

Through the within case themes and five across case theme, the current study showed children's lived experience, providing a systematic picture with details and multiple perspectives that help understand various results and findings in previous research. The cases in the current study serve as example and a rich source of information for organisations working with LBC and people who would explore and understand grandparent raising grandchildren with multiple perspectives. The study also implicates that the importance of children's perspectives in research on children and contextual and the need to consider social cultural factors in interpreting human behaviours and lives. The mixed methods research design showed how young children's perspectives could be collected and interpreted. Further study could be conducted into children's lived experiences in preschool, as the current study

did not get teachers' perspectives or record the preschool experiences of every child who attended preschools as planned, due to restrictions on entering preschools during the COVID pandemic.

The seventh Chapter, *Findings and Discussion*, discusses themes and findings from data analysis in the previous two chapters, thus concluding the picture of LBYC's lived experiences from their own perspectives in the current study. The final chapter, *Conclusions*, reflects on the research findings, methodology and research process. It discusses limitations of the current study, implications for policies and other initiatives to support LBYC, and contributions of the current study. Suggestions are offered regarding possibilities for future research into this phenomenon.

Background and Literature Review

Grandparents raising grandchildren is a global phenomenon with diverse social contexts and outcomes in different countries and communities. People's perspectives, countries' policies, the cause of parental absence and the wellbeing of grandparents and grandchildren living in grandparents raising grandchildren households are different, not only among these countries and communities but also within them (Dolbin-MacNab & Yancura, 2018). Researchers suggest that ecological and systematic perspectives be applied when studying this phenomenon in detail (Dolbin-MacNab & Yancura, 2018). In China, a typical case of grandparents raising grandchildren is rural 'left-behind children' (LBC) raised by grandparents. LBC raised by grandparents in rural China share similar cultural and social contexts in definition, but research results on their development and wellbeing are different. This study explores grandparents raising grandchildren through studying 'left-behind young children' (LBYC) who are raised by their grandparents in rural China in detail. It explores the children's perspectives on social interactions, their social relationships, their emotion regulation skills and the grandparents' parenting behaviours, through ecological theory.

This chapter reviews literature on this phenomenon in many countries, which provides background information on LBC who are raised by their grandparents in rural China. Through reviewing this literature, the current study's research questions and aims were generated. These are presented and discussed at the end of the chapter.

The first part of this chapter illustrates the common definitions of grandparents raising grandchildren across the globe. It presents the grandparents' and grandchildren's wellbeing associated with culture, social policy and the social causes of the phenomenon in

many countries and communities. As researchers suggest that ecological and systematic perspectives be applied when studying this phenomenon in detail (Dolbin-MacNab & Yancura, 2018), how ecological perspective is applied is summarised to conclude the first part of this chapter, which provides a rationale for part of the theoretical framework of the current study. The second part of this chapter illustrates background information on LBC in rural China, including definitions and demographic information. It also explores literature on children's cognitive development, social development, socialisation and internal and external behaviours when they are or have been raised by their grandparents. By analysing the information and research results in the literature, some aims and research questions were developed. The third part of this chapter introduces children's emotion regulation skills as a developmental factor and a part of the ecological model, as emotion regulation is a significant causal and outcome factor in children's development. The theory of emotion regulation applied in the current study, and emotion regulation development in Chinese young children are discussed. The last part of this chapter summarises the research gaps parts identified in this chapter. It also introduces the research questions and aims generated from the research gaps.

Grandparents Raising Grandchildren

The phenomenon of grandparents raising grandchildren, is perceived in different ways across countries, communities and cultures, according to its causes, the ways it is practised and its influences on the wellbeing of both grandparents and grandchildren. In the literature on this phenomenon around the globe, some researchers indicate that this practice has neutral or positive effects on grandparents and grandchildren when compared to grandparents do not take care of their grandchildren, who are only reared by their parents. However, some researchers suggest that this global practice is negative to grandparents and

grandchildren. The influence of grandparents who raise their grandchildren varies among different cultural groups. Contextual factors of social culture and family socioeconomic statuses are associated with these diverse outcomes.

The social culture of the grandparents raising grandchildren varies in different cultural groups and communities. In some cultures, for example in collective cultures (Tan, 2018), some aboriginal communities (Dolbin-MacNab & Yancura, 2018; J. Lewis et al., 2018) and familism value system (Sabogal et al., 1987) it is culturally acceptable and encouraged for grandparents to take care of their grandchildren and even take the role of primary caregivers. However, in communities that value individual needs, grandparents raising grandchildren is not as common (Dolbin-MacNab & Yancura, 2018; Lever & Wilson, 2005).

When reviewing the literature on different cultural groups and communities and the positive, neutral and negative results, it is suggested that researchers apply an ecological perspective in order to summarise and systematically analyse the cultural factors to understand this phenomenon (Dolbin-MacNab & Yancura, 2018; Whitley & Fuller-Thomson, 2018).

The Definitions of Grandparents Raising Grandchildren

Parents are significant caregivers: they are attachment figures and teachers to their children, especially when children are in their early years. However, for many different reasons, some children are raised by their grandparents. This phenomenon is named “grandparents raising grandchildren” by researchers, referring to grandparents being the primary caregivers for their grandchildren when the children’s parents are absent (Dolbin-MacNab & Yancura, 2018; Yancura, 2013).

The grandparent's role is enacted through different behaviours and family arrangements (Dolbin-MacNab, 2019). Categorisation is one way of summarising this. Cherlin and Furstenberg (1986) suggest that 'companionate grandparents' play with their grandchildren and take care of them; 'involved grandparents' not only play with their grandchildren but also share caregiving responsibilities, including teaching and disciplining; and 'remote grandparents' seldom stay with their grandchildren. Depending on the grandparents' behaviours, Mueller et al. (2002) introduce five types of grandparents. 'Influential grandparents' have close relationships with their grandchildren and share responsibilities with the children's parents. 'Supportive grandparents' have close relationships with their grandchildren, and they are involved in their activities as supporters. 'Passive grandparents' and 'authority-oriented grandparents' are both moderately engaged with their grandchildren (p. 377), but the former have closer relationships and more direct interaction with them (Mueller et al., 2002). 'Detached grandparents' seldom help in taking care of their grandchildren and do not have close relationships with them.

Another way of summarising grandparents' behaviours and family arrangements is by applying a continuum. Griggs et al. (2010) suggest that grandparents' involvement in their grandchildren's lives ranges between being full-time caregivers for their grandchildren and having no interaction with them. To further describe how grandparents are involved in taking care of their grandchildren, grandparents' behaviours range from 'symbolic' to 'interactive and instrumental' (p. 88): 'sentimental and emotional based roles' and 'instrumental roles' are closer to the caregiving end, while 'social and symbolic roles' and 'spiritual roles' as elements closer to the symbolic end (Kornhaber, 1996). Among these categories along a continuum, 'grandparents raising grandchildren' represents those who have the closest relationships with their grandchildren and share the most parental responsibilities. This is not

the most common image of the grandparent role, but in recent years, this phenomenon has been increasing in many countries and communities (F. Chen et al., 2011; Glaser et al., 2018; Ingersoll-Dayton et al., 2018).

Grandparents' and Grandchildren's Wellbeing

For Grandparents. Researchers who conducted interviews and surveys in Myanmar, Thailand and Vietnam suggested that when grandparents play a larger part in rearing grandchildren, the grandparents become healthier and happier (Knodel & Nguyen, 2014). However, other researchers in this field share negative opinions on the phenomenon (Dolbin-MacNab & Yancura, 2018; Tao et al., 2014), suggesting that grandparents have adverse physical and mental health situations and carry a heavier financial burden when they take the role of primary caregivers, based on research on Caucasian, Latino and African grandparents living in the United States (Ge & Adesman, 2017; Leder et al., 2007; Lever & Wilson, 2005; Whitley & Fuller-Thomson, 2018). The above diverse outcomes were from research conducted in different social and cultural contexts. Reviewing the diverse outcomes, researchers suggest that outcomes tended to be more positive when grandparents had better social support. When grandparents took the role of caregivers because of adverse causes, such as imprisonment, child abuse or parents' drug use, they tended to have negative health and wellbeing outcomes (Ge & Adesman, 2017).

For Grandchildren. Some researchers suggest that grandchildren have fewer emotional problems (Attar-Schwartz et al., 2009), better social adjustment (Barnett et al., 2010; Tan, 2018), better behavioural patterns (Attar-Schwartz et al., 2009) and better peer relations and acceptance (Ling et al., 2017) when they are reared by their grandparents. Other researchers, however, suggest that they have more behavioural problems (Edwards, 2016; Ge

& Adesman, 2017), psychiatric syndromes (Tarroja & Fernando, 2013; Xu et al., 2018), maltreatments (Lever & Wilson, 2005) and delays in cognitive development (Yue et al., 2017) and worse academic achievements (Ge & Adesman, 2017), peer relationships (Edwards, 2016) and physical health (Gao et al., 2010) than children who are reared by their parents. Ge and Adesman (2017) reviewed research that indicated negative outcomes for children who were raised by their grandparents and suggested that the disadvantaged family contexts that existed before grandparents became the primary caregivers and the former primary caregivers' associations with the children may be responsible for these negative outcomes. The parents' cause of absence, grandparents' rationale for becoming the primary caregivers and social support for the grandparents and grandchildren, which vary among the contexts of the research, are associated with the above diverse outcomes on the wellbeing and development of the grandchildren.

For example, being close to grandparents buffers the associations between negative life events and internal and external behaviours (Attar-Schwartz et al., 2009; Flouri et al., 2010). Grandchildren perceived emotional support and help from the closest grandparent as valuable resources in dealing with difficulties in their social life, schoolwork and the transition between childhood and adolescence (Attar-Schwartz et al., 2009; Griggs et al., 2010). Research on the relationships between grandparents and grandchildren in the case of British teenagers who live with their parents, suggested that grandparents play significant roles in their grandchildren's lives (Attar-Schwartz et al., 2009). The quality of the grandchildren-grandparents relationships and their benefits to the children's development are associated with the closeness between the two (Monserud, 2008).

Grandparents Raising Grandchildren in Different Cultures

Researchers indicate varied outcomes for grandchildren raised by grandparents and grandparents who raise their grandchildren. Social culture, the grandparents' demographic factors, parenting and grandparenting behaviours, social support, grandparents-grandchildren relationships, parents-child relationships and the grandchildren's developmental factors are associated with these outcomes (Dolbin-MacNab, 2019). The diversity of these factors could be categorised and partially explained based on the cultural norms and traditional values of the cultural groups and communities.

Cultural norms and traditional values influence grandparents' and families' expectations and attitudes towards grandparents raising grandchildren (M. R. Goodman & Rao, 2007). Confucianism and Familismo are two cultural ideologies that appreciate the wisdom and knowledge of the older generation and attach respect from family members and the responsibility of taking care of the grandchildren to them (C. Goodman & Silverstein, 2002; Tan, 2018). Some aboriginal communities also have the tradition of grandparents, especially grandmothers, taking care of their grandchildren. The grandparents are perceived as members of the family and the household and as significant culture bearers (J. Lewis et al., 2018). Furthermore, grandparents, especially grandmothers, in many African communities become the primary caregivers for their grandchildren in response to family hardships, such as migration work, HIV/AIDS, death, imprisonment, or poverty of the parents, because of the grandmothers' traditional caregiving role and the communities' preference for family interdependence (Mtshali, 2015; Zimmer, 2009). In individualistic countries, taking care of grandchildren and enjoying life after retirement are both parts of grandparenthood (Dolbin-MacNab, 2019). However, the phenomenon of grandparents raising grandchildren has

increased mainly because some children's primary caregivers are replaced due to child abuse and negligence or the imprisonment or death of the parents, which is a child protection policy in some countries, such as the United States (Dolbin-MacNab & Yancura, 2018; Mackenzie et al., 2017).

Confucian and Filial Piety. In Myanmar, Thailand and Vietnam, grandparents raising grandchildren is accepted in their culture and valued by both grandparents and their adult children. Grandparents perceive taking care of their grandchildren as intergenerational resources exchange and feel happier and less lonely than their peers who live without this cross-generational caregiving responsibility (Knodel & Nguyen, 2014). In Korea, grandparents are respected elders and their culturally accepted duty of taking care of and teaching their grandchildren, helping with household chores and being value transmitters are associated with this filial piety (Maehara & Takemura, 2007). In China, co-residence with grandparents, and even great-grandparents if possible, used to be acknowledged as a family honour and happiness and as a goal (Z. Wang, 2014). Grandparents own the respect and support of younger family members and take the responsibility of rearing younger family members and uniting the family at the same time (Jing et al., 2021; Song, 2016). Although the traditional practice of multi-generation households is not as common as it used to be, in China, grandparents taking on the role of primary caregivers is still a commonly accepted practice, especially when parents are not available to fulfil this role by themselves (Song, 2016).

Not all countries that adopt Confucianism accept the phenomenon of grandparents raising grandchildren as a normal practice. Singapore and Japan are two examples. Grandparents play the roles of cultural transmitters and companions for their grandchildren

(Thang et al., 2011), but compared with their own grandparents and their Confucian neighbours, such as Korea and China, grandparents in these two countries are less likely to take over the duties of primary caregivers for their grandchildren. They emphasise interpersonal boundaries and personal freedom and prefer not to be surrogate parents for their grandchildren or teachers who discipline them (Maehara & Takemura, 2007; Thang et al., 2011). They are still important family members who provide help when their adult children face difficulties, and they help with household chores, but they are also individuals who pay attention to their own enjoyment and happiness (Thang et al., 2011).

Familismo and Familism. In Hispanic cultures, grandparents play active roles in taking care of their grandchildren as part of the familism value system shared by the whole cultural group (Sabogal et al., 1987). Similar to other family members, grandparents share family honour, support and provide resources to the family and take care of other family members, including their grandchildren (Losada et al., 2008; Sabogal et al., 1987). In Goodman and Rao's (2007) qualitative research on grandparents who raise their grandchildren, Mexican-American, Mexican and Hispanic grandparents revealed that they feel gratitude and a sense of reward and meaning when taking care of their grandchildren. Their relationships with their grandchildren and other family members improved after they began to take a custodial role, although they also had health problems, financial burdens and difficulties in household arrangements and in helping their grandchildren with their schoolwork.

Aboriginal Communities. In Yup'ik communities in Alaska, grandparents provide support and resources to their families, including taking care of their grandchildren 'as their own' (J. Lewis et al., 2018). Lewis et al. (2018) summarised Yup'ik grandparents' self-

perception when they raise their grandchildren as ‘family providers’, ‘teachers of appropriate behaviours’, ‘role models’ and ‘wisdom bearers’. Yup’ik grandparents and grandchildren often have close relationships with each other.

African Communities. In African communities, mothers take care of the family members, and their roles as caregivers continue when they become grandmothers (Mtshali, 2015). African grandparents traditionally live with other family members in multi-generation households. However, with the spread of HIV/AIDS, some grandparents, mainly grandmothers, became the ‘newest mothers’ (Mtshali, 2015, p. 77) who take care of their grandchildren and head the household. In some countries, such as Kenya, they also take care of children who lost their families because of this disease. Other African grandmothers, such as those in rural villages in South Africa, become primary caregivers for their grandchildren because the parents work in cities. Research suggests that grandmothers who take care of their grandchildren, who may be orphans, are challenged by financial burdens, physical illnesses, traumatic experiences and negative emotions because of the loss of their own children, overcrowded living spaces and the lack of childrearing knowledge (Mtshali, 2016).

Individualism. American scholars conducted research on grandparents raising grandchildren, and the results and findings suggest positive and negative developmental outcomes for grandchildren and grandparents. The causes of grandparents’ involvement in their grandchildren’s care are mostly divorce, death, drug use, diseases, imprisonment and migration for job opportunities by the parents (Barnett et al., 2010; Dolbin-MacNab, 2019). When children’s parents were still their caregivers, the increased caregiving involvement of maternal grandmother buffered negative effects of financial disadvantages and harsh parenting practices of mothers, decreasing children’s external and internal behavioural

problems (Barnett et al., 2010). However, research suggested that grandchildren of middle school age living with their grandparents only were more likely to commit violence by bullying others (Edwards, 2016). Grandparents who were the primary caregivers for their grandchildren, who were aged between four and 17, also reported that their grandchildren had higher levels of problematic behaviours and emotional problems than other children who lived with their parents (G. C. Smith & Palmieri, 2007). Research on minority groups, such as Filipino and Korean migrants in the United States suggests that grandparents serve as culture transmitters and hold positive attitudes towards taking care of their grandchildren full time, but negative effects, such as health burdens on the grandparents, are still present (Ihara et al., 2012; Kataoka-Yahiro et al., 2004).

Ecological Perspectives on Grandparents Raising Grandchildren

As indicated by the above literature on grandparents raising grandchildren, grandparents' and grandchildren's perspectives, wellbeing, characteristics, socioeconomic statuses and sociocultural contexts were associated with the outcomes of this phenomenon. While researchers value personal factors when studying the development of children and the wellbeing of families, contextual factors are gaining attention in contemporary research on the relationships between caregiving and the development of children. The bioecological model (Bronfenbrenner & Morris, 2006) suggests that the development of children is the product of the interactive processes and relationships among immediate interactive factors that influence the children directly, indirectly related contextual factors that influence individuals or objects connected directly with the children, and their combined effects (Bronfenbrenner & Morris, 2006). Children's development and their family relationships are parts of a systematic network that explains their lives from this ecological developmental

point of view. The investigation of children's development benefits from the perspective of the systematic networks they live in and the associated factors within these networks. The investigation of rearing patterns also benefits from the consideration of children's characteristics and development and the interactive process between the persons and the contexts. Thus, the current study suggests employing an ecological perspective systemically to explore grandparents raising grandchildren.

'Left-behind Young Children' Raised by Grandparents in China

Grandparents taking on the roles of primary caregivers are a commonly accepted practice in China when parents are not available to fulfil these roles by themselves. Chinese children under this rearing pattern are often included in the research on 'left-behind children (留守儿童, Liushou Ertong)¹ (LBC) problems that are produced by urbanisation (e.g. H. J. Chang et al., 2017; H. Hu et al., 2014; J. Yang et al., 2018) without providing details of who is taking care of the children and how these caregivers do their work (e.g. Luo et al., 2009; Wen & Lin, 2012; Xu et al., 2018; Zhang, 2015; Zhou et al., 2015). The current study reviews the literature on LBC to provide background information and findings about this phenomenon, revealing the research gaps that have generated research questions and aims of the study.

Researchers have suggested that differences among rearing patterns needs more investigation, as exploring differences among rearing patterns in detail is a key solution to inconsistencies in the literature (e.g. Mo et al., 2016; Tao et al., 2014). Furthermore, it has

¹ 'Left-behind children' in the current study is defined according to the definition of the Chinese government. Scare quote is used to distinguish 'left-behind children' in China from children being left behind in other places of the world. For example, children left behind refers to children who are disadvantaged in academic achievements because educational disparities (J. M. Smith & Kovacs, 2011).

been suggested that more attention should be paid to pre-schoolers and toddlers who are ‘left-behind’, because little research has investigated them, although half of the non-urban children under seven belong to this group (Lei et al., 2018). The claims, practices and conclusions of previous research on LBC generated two considerations for the current study. One is that children under seven are not listened to, which is a deficiency in previous research of LBC because of the significance of children’s voices in issues related to them (UNICEF, 1989). The other one is that element(s) of children’s development should be investigated with consideration to their lived experience and the exploration of lived experience of children includes their development.

LBC in China

Researchers have proposed that the involvement of grandparents in rearing grandchildren can be set on a scale of ‘no contact’ to ‘full-time care’ (Griggs et al., 2010). It is culturally accepted that Chinese grandparents are often in the ‘care’ side, from being partly involved to taking the roles of primary caregivers (Mu et al., 2016). In China, the government, researchers and social workers have been paying more and more attention to this phenomenon (L. Wang et al., 2016; J. Yang et al., 2018). Urbanisation and working opportunities in cities have been constantly producing migrant workers and absent parents. Grandparents in these families in rural areas are required to take full-time care of their grandchildren. Children in these situations are categorised as LBC who are raised by their grandparents (Tao et al., 2014).

The Chinese government started to propose rural LBC as an issue in 2004 (L. Wang et al., 2016). Research on rural LBC started flourishing between 2005 and 2012, with 6750 studies published during that period, compared with 40 studies between 1993 and 2004 (G.

Yang & Chu, 2013). By 2016, approximately 60 million studies and reports were published on the topic of LBC (The social affairs department of The Ministry of Civil Affairs of the PRC, 2016). The definition of LBC varied between age groups and rearing patterns because researchers conducted their research with various types of participants who had their own characteristics in China (Luo et al., 2009). A recent national official definition of the group came out in 2016 when the government released its guidance on better protection and support for LBC and a plan for a national LBC census (The social affairs department of The Ministry of Civil Affairs of the PRC, 2016; Yao, 2016). According to the 2016 government document, LBC refers to children and juveniles under 16 years old of whom both parents are migrant workers working away from home, or one of the parents is a migrant worker working away from home while the other parent is not capable of performing his/her guardianship duty (The State Council, 2016). The social affairs department of The Ministry of Civil Affairs of the People's Republic of China quotes this official definition and suggests that the number of studies and reports that meet this standard official definition of LBC is less than 60 million (The social affairs department of The Ministry of Civil Affairs of the PRC, 2016).

Regardless of the efforts researchers have put into understanding LBC and their local peers or migrant peers with or without a standard official definition of the group, knowledge of this group of children has not been enough to draw a full picture of the causes and effects of the lived experience of all LBC age groups (Wei, 2017). Researchers attribute this inadequacy to two common tendencies: a supposition that this group is problematic and a preference for studying school-aged children (Fan, 2010; Wei, 2017; H. Yang & Zhu, 2011).

First of all, it is important to note that being 'left behind' is not necessarily indicative of latency in cognitive or social development or mental health problems (Luo et al., 2009).

Even though research on LBC often portrays these children as being in adverse situations, potentially problematic and in need of interventions (Guo et al., 2015; Ling et al., 2015; Wen & Lin, 2012), not all researchers have proved these hypotheses. Those who have shown that LBC are problematic suggest that being 'left behind' is associated with more behavioural problems (H. Hu et al., 2014; Lan et al., 2018), worse physical health situations (Wen & Lin, 2012), higher rates of depression and anxiety (Cheng & Sun, 2015), more loneliness (Ling et al., 2017) and lower academic achievements (S. Lu et al., 2016). In contrast, other research findings suggest that being 'left behind' is not necessarily related to negative outcomes (Guo et al., 2015; Wen & Lin, 2012). For example, a proportion of LBC have good social adaptation (Z. Li et al., 2014). It is not infrequent for them to have good academic achievements (Ye & Wang, 2005), and they do not necessarily feel less satisfied with their lives than their peers (Wen & Lin, 2012). There are even fewer cases of depression in LBC than in migrant children who move to cities to live with their parents (Guo et al., 2015). As to whether being 'left behind' is a cause of problems in children's development, some researchers have become aware that environmental, interpersonal and intrapersonal factors other than being 'left behind' explain the differences in developmental outcomes between LBC and children living with both of their parents (S. Lu et al., 2016; Luo et al., 2009; Zhou et al., 2015). Following this finding, some researchers have looked at factors such as family structures, parental supervision and individual differences (Fan, 2010; Z. Li et al., 2014). But in many cases, they are still trapped in assumptions of 'problematic behaviours'. More research should be done that regards leaving children behind as a functional choice in reaction to urbanisation, recognising work-family conflict, in order to build a deeper understanding of certain rearing patterns and situations (Jiang, 2010; Wei, 2017).

Secondly, it is important to acknowledge that the focus on school-aged children in research about LBC does not mean that the proportion of LBC among non-urban children younger than seven years old is lower than among those older than seven years old. On the contrary, the proportion of LBC is higher in the younger group (Lei et al., 2018). For example, among 5413 children in the Rural Household Survey (RHS) and Migrant Household Survey (MHS) of the 2008 Rural–Urban Migration in China (RUMiC) survey, 40–50 per cent of children aged between zero to seven years were ‘left behind’, while no more than 40 per cent of the seven to 16 years old children were ‘left behind’ (Lei et al., 2018). It could be suggested that the slight decrease in percentage was a result of returning parents who believe that the primary-school period is so important to their children that they would sacrifice their jobs in cities to come home if they cannot bring their children to live with them and go to school (Lei et al., 2018; H. Yang & Zhu, 2011). Researchers share this belief when they justify the importance of the school period from the perspectives of socialisation and adjustment (Z. Li et al., 2014; H. Yang & Zhu, 2011). However, developmental scientists have proposed the significance of research in the early years of LBC for their fundamental influence on children’s social development, including emotion regulation and school success (Britto, 2012; Kim-Cohen et al., 2006; Thompson, 2014). Despite the comparatively high proportion of LBC in rural areas in China and the significance of young children’s development, researchers suggested that there is no (Mo et al., 2016) or only little (Wei, 2017; Yue et al., 2017) research on left-behind young children (LBYC). This is not sufficient to understand their lives and development, thus more research on LBYC is needed (Tao et al., 2014).

LBYC Raised by their Grandparents

Grandparents raising grandchildren is the preferred childrearing pattern for LBC. According to research that includes young children based on certain geographic areas, the proportion of LBC being reared by grandparents varies between about 68 per cent and slightly above 99 per cent (Y. Huang et al., 2018; Tao et al., 2014; Xu et al., 2018). In China, grandparents taking the role of primary caregivers when parents are working away from home is not only accepted culturally (as discussed in the part *Grandparents Raising Grandchildren in Different Cultures* in this Chapter) but also accepted and agreed by the family members of migrant workers (Dolbin-MacNab & Yancura, 2018; P. Li, 2017).

However, some researchers associate grandparenting with negative developmental outcomes and suggest that LBYC who are raised by their grandparents (LBYC-GP) are disadvantaged and in need of help (e.g. Mo et al., 2016; Tao et al., 2014; Yue et al., 2017). Also, some research suggests that age of parent-child separation and becoming left-behind matters to children's well-being when they are then raised by grandparents. Cheng and Sun (2014) reviewed research on LBC and suggested that the younger the children were left-behind, the more mental health problems they would have when they attended schools. For example, teenagers who became LBC from two years or younger are more likely to commit suicide because of loneliness and depression than their other LBC peers and peers living with parents. Teenagers who became LBC from two to seven did not have higher suicide attempts than their peers who had separated from parents at school age (Chang et al. 2017). Despite these negative findings, some other researchers suggested that LBYC are as healthy as their rural peers living with parents and have fewer mental health problems and better health conditions than their migrant peers (Huang et al., 2018; Tao et al., 2014). Some research indicates that the negative effects of leaving home with parents to live in cities exist not only

while the children are young but also when they grow up (Huang et al., 2018). Research with negative or positive findings both explained these with attachment theory, living conditions and available education resources for the children (Chang et al., 2017; Mu & Hu, 2016). They argue that separating from parents or from a familiar community at a young age disrupts children's secure attachment to their parents or their grandparents and neighbourhood, resulting in higher risk of mental health problems when they grow up (Chang et al, 2017; Cheng & Sun, 2015).

Regardless of whether these suppositions are correct or not, these researchers and others suggest paying more attention to the details of each rearing pattern, such as caregiving behaviours and activities, caregiver-child relationships, personal characteristics and other contextual factors, such as age of being left-behind and socioeconomic status, because they are the key factors that explain their findings (Mo et al., 2016; Tao et al., 2014). Following the suggestions from these researchers, when studying LBYC-GP and reflecting on the various findings from the literature, it is important to see this practice as a functional choice in reaction to parents' need for work and children's need of being looked after.

Another suggested important element in studying LBYC-GP that has not been undertaken is any investigation of the perspectives of the children (Mu et al., 2016; Wei, 2017). Young children have their own ideas and understandings of themselves and the world around them. They are capable of conveying their thoughts and feelings to others when appropriate communication methods are applied (Reder et al., 2003; UNICEF, 1989). Children should be respected for who they are, having equal rights to express themselves and to be listened to (Reder et al., 2003; UNICEF, 1989). But unlike studies of LBC at school age and 'left-behind juveniles', where researchers have collected perspectives directly from

children through questionnaires, interviews or other tools, studies of LBYC preferred to use teachers' and caregivers' perspectives on the children (e.g. H. Hu et al., 2014; Y. Hu et al., 2014; Tao et al., 2014). One of these researchers claimed that they did not use children as a direct data source because it was too challenging for them to use research tools to understand young children's ideas (Y. Hu et al., 2014). Child development researchers also use teachers' and caregivers' perspectives as well as biological measurements to understand young children's development and thoughts, but some use a variety of tools and methods to get young children's opinions and perspectives directly through their communication and behaviours (e.g. Carter & Nutbrown, 2016; Rubin, 1989). It is important and manageable to understand young children's perspectives on their own experiences and development processes.

The current study proposes to contribute to addressing the gaps identified above in previous research on the phenomenon of grandparents raising grandchildren. To describe and understand the lived experience of LBYC-GP in rural areas from the children's perspectives, phenomenological methods with a bioecological model (Bronfenbrenner & Morris, 2006) will be applied in the study. The bioecological model includes caregiver-child relationships, personal characteristics, development processes and sociocultural factors in an interactive dynamic system (Bronfenbrenner & Morris, 2006). The study investigates children's lived experience as an organic system composed of these elements, especially of interactions and relationships with grandparents and other significant persons of interest to the child.

The Development of LBC Raised by Grandparents: Emotion Regulation

Many researchers pay attention to caregiving behaviours and caregiver-child relationships because they are associated with children's development in many domains (e.g.

Chao, 1994; Mo et al., 2016). Researchers hold positive or negative attitudes toward rearing patterns according to their association with positive or negative developmental outcomes (e.g. Eisenberg et al., 2005; McWayne et al., 2017). They also conclude positive or negative effects of certain behaviours of caregivers according to these associations. Emotion regulation development, which relates to other factors as an outcome and a cause, is one of the domains that researchers pay attention to when studying the relationship between children's development and other contextual or parental/child-rearing factors. Thus, the current study considers emotion regulation as the developmental factor of children to investigate in the ecological exploration of grandparents raising grandchildren, defining emotion regulation theoretically and practically accordingly. Because of the dual role of emotion regulation in its relationship with parental and contextual factors, the study argues that children's emotion regulation is significant to include in this research on grandparents raising grandchildren.

Emotion regulation is studied in many disciplines as the outcome of physiological development, cognitive development and social contextual factors and as a significant social competency that relates to individuals' well-being and success (Gross, 2015; Nyklíček et al., 2011). Parenting and parent-child relationships are influential factors in children's development, especially before the school years. Emotion regulation is influenced by family rearing environments, including parent-child interactions and relationships (Thompson, 2014). In addition to its role as an outcome of caregiver-child relationships and physiological development, emotion regulation is also suggested to be a predictor of individuals' well-being and a mediator in causal relationships from contextual factors, such as caregiving behaviours and family relationship, to children's well-being (Gross, 2015; Nyklíček et al., 2011).

The following paragraphs introduce the literature on emotion regulation's role as an influential factor and outcome in young children's development in various kinds of cultures and social economic status (SES) backgrounds. Firstly, emotion regulation is an outcome of parental factors such as caregiver-child interactions and relationships through attachment. Secondly, emotion regulation is a predictor and mediator when indicating LBYC's well-being. Thirdly, emotion regulation is a required competency for school readiness. Overall, although emotion regulation is suggested as a significant outcome or influential factor in research on the relationship between emotion regulation and children's development, little research has studied emotion regulation in these relationships at the same time from an ecological perspective.

Emotion Regulation as Outcomes. Some scholars have observed parenting and parent-children relationships as influential factors in children's emotion regulation development. Fox and Calkins (2003) reviewed research on emotion regulation and concluded that the development of the ability to manage one's emotions is affected by intrinsic factors: children's physical and cognitive development and extrinsic factors such as parental guidance, support from other people and cultural traditions. Family rearing environments and parental factors, including caregiver-child interactions and relationships, affect emotion regulation through the attachment relationship between caregivers and children (Cooke et al., 2018; Thompson, 2014). Psychopathologists suggest that improving parents' parent-child interaction skills benefits the children's emotion regulation development (Rothenberg et al., 2019). Furthermore, attachment theory suggests that caregivers' way of behaving toward their children has a determining role in the development of the caregiver-child attachment relationship (Bowlby, 1969, p. 344), thus influencing children's development of emotion regulation (Wilson & Wilson, 2015). Timely and effective

responses, sensitivity to children's needs and regulated environments may help children build secure attachment relationships with their caregivers (Bowlby, 1969, p. 345). Secure attachment relationships act as an encouraging base for children to explore their environment and learn from their interactions with people (Wilson & Wilson, 2015, pp. 115–117).

Children with secure attachment relationships may develop better socioemotional skills, including emotion regulation, than their peers who have insecure attachment patterns, such as ambivalent attachment, avoidant attachment and disorganised-disoriented attachment patterns (Cooke et al., 2018; Wilson & Wilson, 2015). Overall, children's emotion regulation development is positively affected by parental and family factors, such as effective caregiver-child relationships and interactions, which are related to secure attachment relationships. Attachment relationships, caregiver-child interactions and caregiving behaviours are important parts of the ecological system of children's emotion regulation.

Emotion Regulation as an Indicator. Other scholars have observed that children's emotion regulation abilities play a role in young children's well-being, with both direct and indirect effects. Children's ability to manage their emotions, accompanied by their cognitive functions, is associated with their pretend play capabilities, as this is both a common enjoyment and a developmental milestone for young children (Slot et al., 2017). Furthermore, difficulties in emotion regulation are associated with children's mental problems and one of the causes of problematic behaviours (Crespo et al., 2017; Rothenberg et al., 2019).

Moreover, children's emotion regulation mediates the relationship between the caregiver-child relationships and children's well-being (Gross, 2015; Nyklíček et al., 2011). For example, in European and American families, interactions between depressed mothers and their children may result in lowering the children's emotion regulation skills, which negatively affects their popularity among their peers (Kam et al., 2011). The above evidence

indicates emotion regulation's direct and indirect effects on children's well-being in certain caregiving patterns, suggesting that it plays a part in the ecological exploration of caregiver-child relationships and children's well-being. It is also appropriate to acknowledge that findings on these effects may differ in different cultural groups. The current study will provide some evidence on emotion regulation's direct and indirect effects on children's lived experiences in the sociocultural context of participants, young Chinese children in rural areas.

Emotion Regulation as a Developmental Milestone. Emotion regulation is also one of the important abilities required in school readiness and a milestone for young children to achieve before attending primary school, which relates to their school success, as suggested by UNICEF and the Chinese government (Britto, 2012; Britto & Limlingan, 2012; MOE, 2012). In the UNICEF documents, emotion regulation is included as a part of socioemotional development preparation for school as well as a factor associated with other domains of school readiness (Britto, 2012; Britto & Limlingan, 2012). In the guidebook to education and the development of young children edited by The Ministry of Education of the People's Republic of China, emotion regulation is suggested through specific goals such as recognising others' feelings in conversations, self-control when facing problems in social interaction, self-comfort and comforting others (MOE, 2012). Being acknowledged as a competency in school readiness both by UNICEF and the Chinese government, emotion regulation has been studied by many researchers in western countries, some of which are reviewed in this part, but it has not received as much attention among Chinese researchers.

Overall, studies on young children's emotion regulation show its significance on children's development and lived experience as an influenced factor, an influential factor and a social developmental competency. However, to systematically understand these three roles,

an ecological-perspective exploration is needed, especially for LBYC in China. As an influenced factor, researchers suggest that emotion regulation is affected by children's psychological development, caregiver-child interactions and attachment patterns (Cooke et al., 2018). As an influential factor, researchers suggest that emotion regulation affects children's overall well-being, including their social relationships (Gross, 2013; Nyklíček et al., 2011) and their success at school age (Britto, 2012; Britto & Limlingan, 2012). This literature shows that emotion regulation is part of the research when studying the influences of attachment relationships, caregiver-child interactions and the factors that affect caregiver-child relationships and children's well-being. However, for children in non-western cultures, such as LBC in China, there is a need for further investigation on these relationships in their cultural and social backgrounds in both situations. The research states that emotion regulation is significant to young children as both an influential and an influenced factor in multiple relationships. Achieving a complete understanding of children's emotion regulation may require an understanding of its two roles and these relationships. Moreover, most of the existing research in western society is quantitative, focusing only on one role of emotion regulation and lacking detailed descriptions of the factors, behaviours and multi-cultural perspectives and investigations in non-western cultures. This suggests a need for further investigation of emotion regulation in diverse cultures. Because of its significance in multiple relationships, and the need to increase understanding of cultural contexts, the current study adopted an ecological perspective, and emotion regulation was chosen as the developmental factor to be included.

Research Questions and Aims

Through this introduction of the background and existing literature on grandparents raising grandchildren and LBYC in rural China and discussions on their well-being and

development, three research gaps were identified. The first gap was due to previous research on LBC in China is not sufficient to understand children's lives and development. This is because of a widespread 'problematic' supposition among researchers in this area and because little research has been done on LBYC. The second gap is the lack of inclusion of children's perspectives in research on LBYC, effectively denying children's rights to self-representation despite their capability to express themselves. The third gap is lack of in-depth exploration of emotion regulation of LBYC, although it is a significant developmental characteristic of pre-schoolers, and can serve as a valuable developmental factor and personal characteristic to investigate as part of an ecological exploration of LBYC's lived experience. Adding a developmental factor in the exploration enables the perspectives of child development to be a part of the picture explored, which helps researchers and readers understand LBYC and their lived experience from several perspectives. Two research questions were generated from these three gaps with the aim of contributing to addressing them through the current study.

Research Questions

To explore what it is like for young children to be taken care of by their grandparents during their early years, the following two questions informed the current study. The first question relates to the identified need to further explore LBYC-GP's lived experience in rural China. The second relates to the potential value of studying the development of emotion regulation as a part and an associated element of the lived experience of children. Each of the research questions set out below are followed by two detailed sub-questions that outline investigation aspects.

The first question is:

What are the young children's perspectives on their lived experience as LBYC-GP in rural China?

1. What are the children's perspectives on their a) role in their family, b) grandparent-caregivers, and c) absent parents?
2. What are LBYC-GP's daily interactions with their a) grandparent-caregivers, b) absent parents, and c) home environments?

Building on the findings in relation to the first set of questions, the study also looked at the emotion regulation of these children as a developmental element in the dynamic interrelationship with the lived experience of being reared by grandparents. This led to the second question, which is:

What is the dynamic relationship between emotion regulation and the lived experience of LBYC-GP?

1. How are their lived experiences influenced by emotion regulation?
2. How does emotion regulation develop under the influence of being reared by grandparents?

Research Aims

By exploring the above questions, the current study aims to provide some insight into what it is like to be taken care of by grandparents during the early years from the children's perspectives, also considering the children's development of emotion regulation. As this chapter has shown, the phenomenon of grandparents raising grandchildren is especially common for children with migrant worker parents. Research on LBYC-GP is therefore the subject of interest in the study, and the findings have potential to provide

detailed descriptions and understanding of this phenomenon in the context of LBYC in the rural areas of China being raised by grandparents.

Theoretical Framework

To explore the two sets of research questions, the current study introduces the Progress-Person-Context-Time model (PPCT model, Bronfenbrenner & Morris, 2006), which is the latest version of Bronfenbrenner's bioecological theory. The chapter starts with an introduction to the bioecological theory (Bronfenbrenner, 1994; Bronfenbrenner & Morris, 2006). The history of the theory is briefly illustrated. Then the PPCT model is discussed in detail with reviews on LBC research that covers topics and elements that belong to each part of the model – the person, the proximal progress, the context, and the time.. Furthermore, the bioecological theory's definition of human development is introduced, suggesting considering cultural elements when defining and theorising the developmental factors in the PPCT model.

The second part of the chapter discusses theories of emotion regulation and introduces the theory of constructed emotion to define emotion and emotion regulation, which includes cultural and contextual factors as parts of the conceptualisation. Then, the commonly used operational definitions of emotion regulation in Chinese research are introduced and discussed under the framework of the theory of constructed emotion to generate an operational definition for the methodology of the current study.

This chapter concludes with a bioecological model of the past experiences of LBC in rural China, which is the theoretical framework of the study. It guides the deductive research process. While following the phenomenological position and approach, the inductive process is also important and is illustrated in the following chapter (see Methodology Chapter).

PPCT Model

In a contemporary developmental understanding of human development, factors within the developing individual as well as contextual factors around them are parts of the system that relates to their development (Lerner, 2007). Furthermore, contemporary development scientists suggest investigating components of ‘attributes’, ‘individuals’, ‘contextual/ecological conditions’, ‘time’ and ‘positive human development’ in a systematic and ‘nonreductive’ style (Lerner, 2007, p. 12). In the current study, it means organising individual characteristics and psychological development of the children and caregivers, sociocultural and environmental contexts, the influence of time and their interrelationships into systematic connections. The PPCT model provides a framework that systematically connects these components into a network. In this model, biopsychological factors within individuals (Person), contextual factors (Context), and continuity, repetition or disruption of events related to the individual (Time) have influences on and are influenced by the producer of human development, which is the proximal process (Process). The proximal process refers to direct interactions between the individual and other people or contextual factors (Bronfenbrenner & Morris, 2006).

The PPCT model is the most recent version of Bronfenbrenner’s theory of human development. Researchers suggested that Bronfenbrenner’s theory of human development had three developing phases, among which the ecological model of human development, suggesting ecological perspectives and taking context into consideration (Bronfenbrenner, 1975) was the first phase (Rosa & Tudge, 2013). In this early stage of the theory, Bronfenbrenner suggested that contextual factors influence human development, and studies with strict controls undertaken in the laboratory overlooked this contextual importance (Bronfenbrenner, 1975; Rosa & Tudge, 2013). Bronfenbrenner thus put the individual

(person) at the centre of four levels of contextual systems: the microsystem, mesosystem, exosystem and macrosystem (Bronfenbrenner, 1981). The microsystem, which was the focus of his model, referred to people and materials interacting with the individual in proximity, such as families, home environments, close friends or workplace colleagues. The mesosystem referred to the association between the individual's microsystems and other related microsystems, such as schools and the neighbourhood. The exosystem referred to indirect influences of broader social settings on the individual, such as policies and industrial revolutions, which influenced some characteristics of other systems associated with the individual's microsystem, thus indirectly affecting their development. The macrosystem referred to the cultural background and the contextual influences of society. Although the individual and their characteristics were at the centre of this model, the contextual factors in the micro-, meso-, exo- and macrosystems were emphasised. Bronfenbrenner defined the context in this model as the one perceived by people in these systems, suggesting that research on the context in the ecological model required a phenomenological approach (Rosa & Tudge, 2013).

In the second development phase, Bronfenbrenner added the individual's characteristics to the microsystem, additional components of social cultures to the macrosystem and the chronosystem to the model to create an ecological paradigm named the ecological model of human development (Bronfenbrenner, 1994; Rosa & Tudge, 2013). This model was further developed in the third phase, becoming the PPCT model. In this latest version of the theory, Bronfenbrenner et al. (1994) added the prefix 'bio' to the previously named ecological model to create the bioecological theory. This addition emphasised shifting the centre of the theory from the context to the process when explaining human development and its associated elements (Bronfenbrenner & Morris, 2006; Rosa & Tudge, 2013).

PPCT Model and Research on LBC who are Raised by Grandparents

This study employs the PPCT model to organise the factors of LBC's development. The following paragraphs illustrate the four parts of this model with examples of LBC from previous research to introduce the PPCT model and understand the development of LBC with this model at the same time.

Proximal process refers to the direct interactions between the individual and other individuals, concepts or physical objects. Previous research has discussed the interactions between LBC and their grandparents in skip-generation households (e.g. Dolbin-MacNab & Yancura, 2018; Yue et al., 2017), between these children and parents (e.g. Baker & Silverstein, 2012; Cheng & Sun, 2015), between these children and teachers (e.g. Guo et al., 2015), between these children and peers (e.g. Ling et al., 2017; Wen & Lin, 2012), and between these children and belief of themselves or society (e.g. Lan et al., 2018). These proximal processes are the core of the model, functioning as dynamic interactions where development takes place (Bronfenbrenner & Morris, 2006). In these proximal processes, children and other factors affect each other. Children's lived experience and their development are the main concerns of the current study.

In the interactions between children and other people, according to the ways characteristics of the ***person*** influence proximal processes, factors of a person are categorised into three types: *disposition, resource and demand*, according to their functions in the proximal process (Bronfenbrenner & Morris, 2006). *Disposition* referred to characteristics or attitudes that encourage, namely *developmental generative dispositions*, or discourage, namely *developmental disruptive dispositions*, the individual (person) to continue a proximal process (Bronfenbrenner & Morris, 2006). For example, LBC who do not believe in social justice may find it difficult to constantly follow the rules of school and society and would

develop more problematic behaviours, while those who believe in social justice may develop fewer behavioural problems as they feel safe with regulations and rules (Lan et al., 2018). *Resource* referred to the ‘biopsychological liability and assets’ by Bronfenbrenner and Morris (2006, p. 812) that made a proximal process function effectively or disruptively. For example, left-behind young boys reared by grandparents, who had low self-efficacy and life satisfaction, lacked social and financial support as caregivers’ *dysfunctional resources* – relatively poor mental health and low social status disrupted positive caregiver-child interactions and led to negative effects on left-behind young boys’ mental health (Tao et al., 2014). Unlike disposition and resource, there is little research that analyses personal characteristics in regard to the functions of the two categories of *demand*, *inviting demand* and *discouraging demand*, which are characteristic of the persons that trigger/inhibit beneficial treatments to their psychological development from others or the environments (Bronfenbrenner & Morris, 2006). Similarly, LBYC’s initial efforts and influences on their development and lived experience were seldom studied because of the researchers’ preference for adults’ perspectives. Previous Chinese literature does not provide much information on the inviting/discouraging demands in the PPCT model of LBYC.

Repetition and duration, the elements of *time*, are significant for the interactions between elements and functions (Bronfenbrenner & Morris, 2006). They vary from *micro-time* within moments or activities to *meso-time* lasting for days or years to *exo-time* of generational and historical influences (Bronfenbrenner & Morris, 2006; Rosa & Tudge, 2013). The micro-time factors, ‘continuity versus discontinuity in ongoing episodes of proximal process’ (Bronfenbrenner & Morris, 2006, p. 796), which are the most basic constitutes of time that make up the effects of the meso-time frame, is not studied as much as the other two levels of time. In daily caregiving behaviours, within the *meso-time* frame, low frequency of being read to and played with inhibits the cognitive development of LBYC (Yue

et al., 2017). The separation between parents and children, a contextual factor in the microsystem within *the macro-time* frame, affects the proximal process of child development because it is associated with children's anxiety and depression in primary school and middle school ages when it lasts long enough or happens in early years (Arber & Timonen, 2012; Cheng & Sun, 2015; Gao et al., 2010). Being separated from parents also led to the instability of the family structure, which increased emotional problems in adolescents (Gao et al., 2010). Grandparents' way of interacting with their grandchildren is different according to the cultural norms and practices of different countries and historical periods (Arber & Timonen, 2012), which is also a macro-time factor that affects the development of children.

Contexts surround the proximal process layer by layer – micro-, meso- and exosystem – interacting with the process as well as with each other through different connections according to whether the context is an immediate environment the developing person lives in or an ecological environment only related others live in (Bronfenbrenner & Morris, 2006). 'Left-behind young boys' living in poor families, which is the immediate living context included in the *microsystem*, are more likely to have mental problems than their comparatively wealthier peers (Tao et al., 2014). Having financial support that migrant parents given to grandparent caregivers improves their physical health and living conditions; furthermore, grandparents' support in child caring helps parents have time to make money and pursue career goals in cities (Baker & Silverstein, 2012). The relationships 'between two or more settings' that influence the proximal process indirectly are parts of the *mesosystem*, which 'is a system of two or more microsystems' (Bronfenbrenner & Morris, 2006, p. 817). Financial support also comes indirectly from the government to these children and their families through national school fee reductions and school-related expenses subsidies during primary school and middle school periods, which serves as a positive influence on the *exosystem* (Dolbin-MacNab & Yancura, 2018).

Human Development in the PPCT Model

Rosa and Tudge (2013, p. 254) quote from the bioecological theory to define development as ‘the phenomenon of continuity and change in the biopsychological characteristics of human beings, both as individuals and as groups ... over the life course, across successive generations and through historical time, both past and future’. It means that the development of individuals is under the combined influences of biogenetic factors and environmental factors, including people, physical contexts, cultures and time (Bronfenbrenner & Morris, 2006; Lerner, 2007; Vygotskiĭ et al., 1978). Furthermore, human development is part of the system because the developing individual is within the system and the individual’s characteristics are influential (Bronfenbrenner, 1994; Bronfenbrenner & Morris, 2006). The development of the individual as part of the system affects both the interpersonal factors within the system and the development of the individual (Bronfenbrenner & Morris, 2006).

Using the definition of development and the PPCT model, the current study explores children’s emotion regulation, which is a significant developmental factor for young children before school age (see Part *The Development of LBC Raised by Grandparents: Emotion Regulation in Background and Literature Review* Chapter), as part of the bioecological system.

Emotion Regulation of Children

When doing research on emotion and emotion regulation, it is important to define them because there are different opinions on their existence and definitions according to the theory being used (Gross, 2015; Gross & Feldman Barrett, 2011). The current study suggests dynamic and systematic relationships between bioecological and contextual factors and the development of children. Therefore, when studying emotion regulation as a developmental

factor for children, the current study states that emotion and emotion regulation are defined according to a theory that concerns the significance of social and cultural factors and their relationship with the physical and psychological development of the child. For this purpose, emotion and emotion regulation are defined according to the theory of constructed emotion (see Barrett, 2018) after comparing definitions of emotion and emotion regulation of various theories, such as the basic emotion model, the appraisal model, the psychological constructed model, and the social constructed model (Gross & Feldman Barrett, 2011). The operational definition of emotion regulation, which combines the opinions of Chinese researchers and the theory of constructed emotion, is discussed. The following paragraphs discuss the definition of emotion and emotion regulation and the operational definition of emotion regulation of the current study. After explaining the definitions in this part, a further discussion on the proximal process containing emotion regulation and the ecological factors associated with the proximal process is needed to explain the PPCT model of LBC for the exploration of children's lived experience in current study. Further discussions are part of the conclusion of the PPCT model of children's lived experience in the part that follows.

Conceptions and Theories on Emotion and Emotion Regulation

Scientists define emotion regulation differently according to their theoretical backgrounds, referring to a collective property consisting of mental, physical and behavioural processes (Barrett, 2018; Nyklíček et al., 2011). Researchers suggest four schools of emotion models: the basic emotion model, the appraisal model, the psychologically constructed model, and the socially constructed model (Gross & Feldman Barrett, 2011). The basic emotion model suggests that humans have a few basic emotions that function mentally or physically through behaviours and daily activities (Gu et al., 2019). The number of basic emotions is different among researchers supporting the basic emotion model. For example,

Gu et al. (2019) suggested that happiness, sadness, fear and anger, which are associated differently with three core affects, namely happiness, sadness and stress, are four basic emotions shared by all human beings and even animals. The socially constructed model emphasises that cultural and social contexts influence the construction of emotion, for example, suggesting different definitions and generations of emotion in different countries. It also agrees with the basic psychological processes about the value of studying emotion with a multi-discipline perspective (Karandashev, 2021). These two models emphasise two aspects of the definition of emotion: the basic emotion model emphasises its naturally existing and universal side and the social constructed model emphasises its sociocultural side, both of which miss an in-depth discussion on the other side required by an ecological perspective. The third emotion model is the appraisal model, which emphasises that emotion not only has neurobiological basis and external/internal stimuli but also is determined by the personal evaluation system, which relates to personal experiences and cognitive processes (Meuleman & Scherer, 2013; Xenakis et al., 2012). Although this model emphasises both subjective, objective and neurobiological factors in the emotional process, it does not bring out the dynamic connection among all of them (Gross & Feldman Barrett, 2011), which shows that it is inadequate for a systematic analysis of each element of emotion. The fourth model, the psychological constructed model, has been suggested by some scientists in keeping with the psychological construction approach and the ‘enlightenment’ of findings of neuroscience based on a constructed, systematic and dynamic perspective, suggesting that emotion is artificial, produced from the interactions among personal experiences, universal expressions, culture influences and emotional processes and based on neuro processes (Barrett, 2013, 2018; M. D. Lewis & Stieben, 2004). This model has a broad understanding of emotion, which fits the ecological and systematic perspectives.

For example, in the dynamic system theory, emotion is a process of event appraisal and goal-achieving according to contextual and biological information (Gross, 2013, pp. 3–6). Emotion regulation regulates emotions and their related process with a goal (Gross, 2013, pp. 6–7). Gross (2015) conceptualises emotion and emotion regulation with the process model of emotion regulation and discusses details of their processes, suggesting that emotion is an affective state and emotion regulation is an affect regulation. He concludes that emotion include changes in experiences, behaviours, physical signals and context-fitting goals that decide whether the emotion is beneficial in the context, and emotion regulation is the effort and strategies to change the duration, types, expressions or experiences of emotions according to one’s goals (Gross, 2015). Lewis and Stieben (2004, p. 372) defined ‘emotion regulation as embedded in emotion’ based on the dynamic system theory. In the dynamic system theory, emotion and its regulation are within the microsystem where the basic changes leading to more persistent changes in mood and then in personality (M. D. Lewis, 2000). Not only is the definition of emotion regulation different according to scientists’ tradition of theoretical frameworks but the categorisation model of emotion regulation is also different according to scientists’ understanding. According to the process model of emotion regulation, Gross (2015) suggests four types of emotion regulation based on negative/positive emotions and the increase/decrease of emotion intensity or duration. Based on whether emotion regulation is an automatic process or a cognitive effort that controls or regulates emotions, Woltering and Lewis (2009) suggest a reactive-deliberate two-type model of emotion regulation. Also, according to the direction of biological processes, Thompson (2014) suggests that emotion regulation follows top-down and bottom-up processes. In the same article, Thompson (2014) also suggests categorising emotion regulation into extrinsic and intrinsic processes according to a ‘broader understanding of emotional development’ (p. 174) on whether others’ influence is included in the regulation process.

In another theory of the psychological constructed model, the theory of constructed emotion, Barrett defines emotion as ‘constructions of the world’ (2017, p. 16), which is formed through categorisation based on interoception, prediction and social reality constructed by sociohistorical/cultural conceptualisations (2018). This definition distinguishes itself by adopting the perspective that emotions are artificial, refuting the assumption that basic emotion categories with certain body expressions are universal (Barrett, 2006). She listed the efforts and strategies individuals take to master their emotions and the processes and elements of emotion, such as using the body budget, acquiring knowledge of emotion concepts and changing the formation of emotion (Barrett, 2018). Body budget referred to motivation and physical energy, which was limited to a certain amount of time, that the individual needed to start and continue the emotion mastery process. She also suggested that the individual performs activities, strategies and efforts to achieve emotion mastery at the moment, for a few days or over a longer period of time (Barrett, 2018). The longer time frame would include the influence of social cultures and the public in the community and society. The individual’s activities, strategies and efforts also function at the moment, in/for a few days or in/for a longer period of time.

In the current study, contextual components and individual varieties are parts of the systematic investigation of the development of the emotion regulation of LBYC in China. Regarding the PPCT model, children's emotion regulation development and emotional states are parts of their characteristics, which interact with interpersonal and person-object interactions in proximal processes. As elements of children’s characteristics, they also interact with cultural factors and people’s understanding of emotion and emotion regulation in this context. The cultural influence of the local understanding of emotion and emotion regulation and children’s development of emotion and emotion regulation are essential parts of the PPCT model to investigate children’s lived experience. Considering the significance of

the cultural influence, which is of a rural area in China during the country's urbanisation process, and children's perspectives on their emotional experiences in this cultural environment, a theory concerns cultural factors and views emotion and emotion regulation as a systematic process is applicable. The theory of constructed emotion suggested that the definition and understanding of emotion and emotion regulation include cultural factors in the categorisation process of emotion, providing a framework with less loss of information due to a supposition in theory or problematic bias (Barrett, 2018). It avoids cross-culturally inconsistent findings in emotion regulation caused by emotion categories based on western cultures, revealing the emotion and emotion regulation processes in the Chinese culture. Furthermore, the theory of constructed emotion systematically includes the influence of various emotion elements and processes functioning in real-time interactions and the long run in its theory and investigation tool (see Part *Developmental Factors in Lived Experience: Measuring Emotion Regulation Strategies and Daily Routines*), which supports the exploration of emotion regulation in different levels and systems of the PPCT model. It agrees with the ecological and systematic perspectives, which consider the sociocultural backgrounds when studying psychological and developmental factors in children's lived experience of being taken care of by their grandparents, and it provides tools that support the study's exploration.

Therefore, instead of defining emotion and emotion regulation as unique mechanisms or totally based on sociocultural events, the study defines them as psychological processes modified by sociocultural events according to the theory of constructed emotion. To further explore the sociocultural contexts of emotion regulation in Chinese and of LBYC in rural China, the following part discusses the operational definition of emotion regulation, which combines the understanding of emotion and emotion regulation of the theory of constructed emotion and Chinese researchers' studies in China.

Operational Definition of Emotion Regulation

In theories of constructive and systematic perspectives, when individuals are in an emotional process, they could use strategies, knowledges, habits, or personality attributes gained from activities to manipulate emotion process and thus its products (Barrett, 2018). Feldman (2015), agreeing with the dynamic perspectives, cited other research and concluded that children in early childhood and preschool generate their emotion regulation skills and strategies by learning from caregivers and using their cognitive abilities. Thus, researchers often measure certain behaviours and strategies children use to control and express their emotion in different situations; for example, they use behaviour observation tasks, such as picking up toys, delayed gratification activities, and other tasks to initiate emotion processes (e.g. Feldman, 2015; Morris et al., 2011). They also use questionnaires that measure children's emotion-regulating behaviours and outcomes, such as the Behaviour Rating Inventory of Executive Function Emotional Control subscales and the Emotion Regulation Checklist (e.g. Crespo et al., 2017; Rothenberg et al., 2019). Chinese researchers also focus on emotion regulation skills and strategies when they study children's emotion regulation. They often refer to emotion regulation strategies when they conduct research on behaviours or mental processes of individuals' emotion regulation (e.g. Liu & Zhao, 2013) and when they explain the acquisition and influence of children's emotion regulation (e.g. L. Chang et al., 2003; X. Chen et al., 2018; Rao & Gibson, 2018). The most often used measurements are observation tasks and questionnaires designed with Chinese culture in mind as context.

A popular local developed category of 'emotion regulation' suggests that children have six kinds of emotion regulation strategies, namely cognitive reconstruction, problem solving, alternative activity, self-consolation, venting, and passive behaviour (X. Chen et al., 2018; Liu & Zhao, 2013). However, according to the theory of constructed emotion, Barrett

(2018) distinguishes her idea of mastering emotion from emotion regulation. Gross (2015) also suggests that strategy could refer to a broader definition to cover more than behaviours and concepts described in the term ‘emotion regulation strategy’. This term is used to name the behaviour and mental process of controlling emotion by many Chinese researchers (e.g. X. Chen et al., 2018; F. Lu & Chen, 2007; Rao & Gibson, 2018) and is inconsistent with Barrett’s and Gross’s ideas.

The term ‘strategy’ is applied, but it is defined in accordance with the theory of constructed emotion to distinguish Barrett’s (2018) idea of mastering emotion from emotion regulation. Barrett’s (2018) tips for mastering emotion could be divided into two groups, namely strategy and activity. Strategy includes only the mental process and individuals’ behavioural choices in the moment. This is often measured in previous research (e.g. Lu & Chen, 2007; Morris et al., 2011), as it reveals the development of emotion regulation in early childhood. Activity refers to sports and lifestyles that are good for emotion mastery over time. The behaviours of ‘emotion regulation strategy’ that Chinese researchers measured and described match ‘strategy’ in Barrett’s definition. Also, following the dynamic system theory, emotion regulation is investigated as a process within the microsystems of time and context (see Lewis, 2000) of development.

Thus, the operational definition of emotion regulation here is for the at-the-moment measurement of emotion regulation development in young children. Factors that function in the broader time frame, such as ‘activity’ in Barrett’s definition, are perceived as the context in the ecological system, which is excluded from the proposed research. Emotion regulation strategy in the current study refers to the at-the-moment effort of managing one’s physical wellness, environmental context, or mental processes that relate to the master of emotion so that one stays healthy and fulfilled.

Conclusion: A Bioecological Model of Children Lived Experiences

Overall, the current study, underpinned by the PPCT model, explores left-behind preschool children's lived experiences in being reared by grandparents. Emotion regulation defined according to the theory of constructed emotion and Chinese researchers' opinions is explored as a characteristic and developmental factor of the focal individual, the child, that related to other factors and processes in the PPCT model.

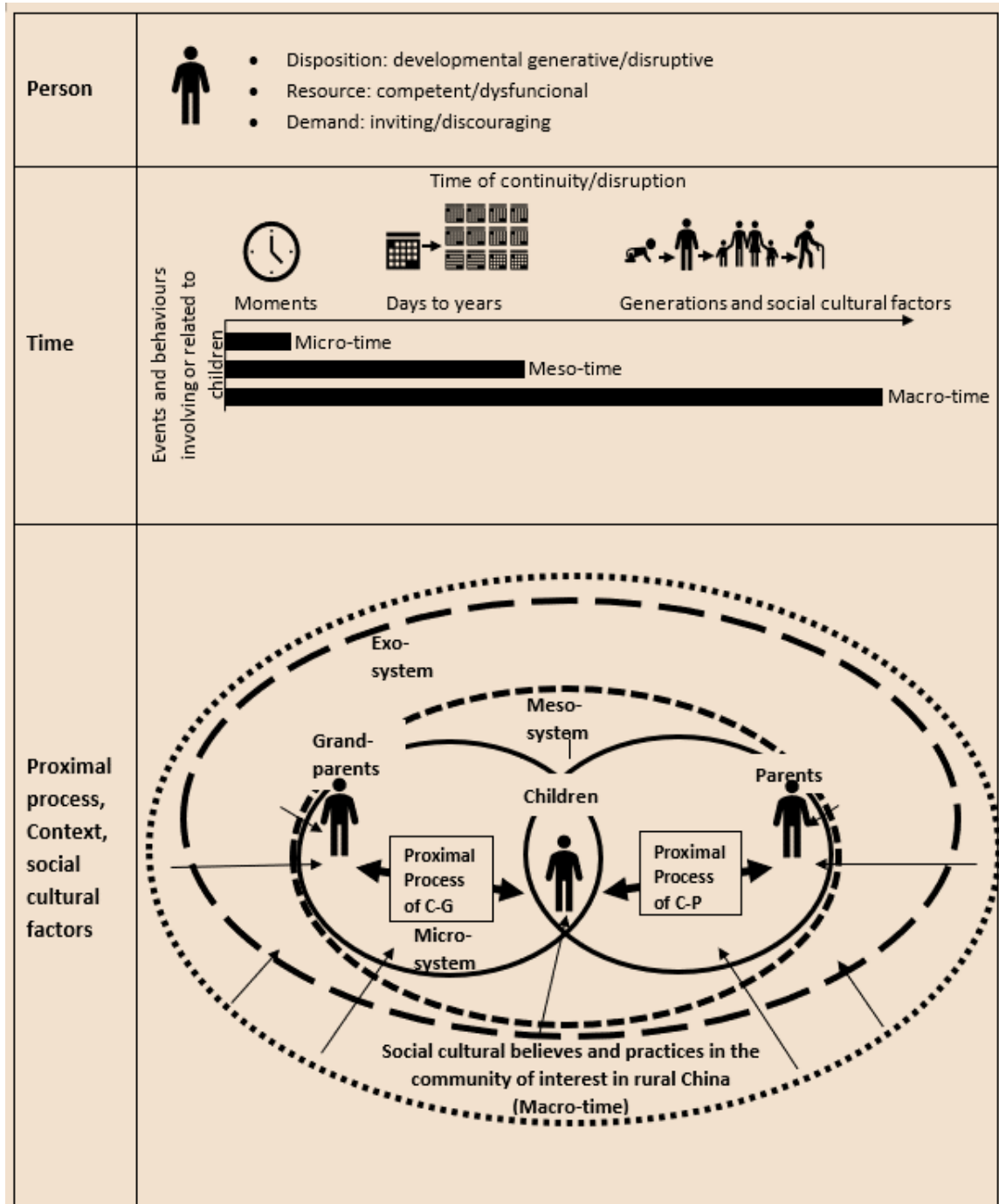
The current study concentrates on the lived experience of the children of interest. Elements, relationships, and connections in the lived experience of children reared by grandparents briefly summarised from previous research are organised in the framework of the PPCT model. The present model puts the child of interest and his/her interaction with grandparents in the centre and mainly illustrates elements related to the proximal processes that the centred child involves. These elements include interactions between left-behind preschool children and their grandparents, parents, and other important persons, their characteristics, the social context they live in, and the sociocultural influence of the community. The proximal processes that do not involve the centred child directly will be added to the model when the child or other family members mention them initially, so as to keep the spotlight on children and their perspectives, while information that family members value is included as supplements.

Figure 1 shows the model of lived experience of being reared by grandparents, generated from the above elements and the PPCT model. The figure consists of three parts: personal characteristics (person), the ruler of micro- to macro-time factors (time), and the circles of process, context, and sociocultural factors in the macro-time frame (proximal process, context, sociocultural factors). They illustrate the elements, relationships, and interactions within and among: a) the categories of three personal characteristics that affect

the proximal process in different ways; b) the time span of the continuity and disruption of events or behaviours of children or related to children; c) the child–grandparent and child–parent proximal processes; d) the micro-, meso-, and macro-system that children, grandparents, and parents are in; e) the sociocultural factors of a community in rural China.

Figure 1

The PPCT Model Adapted to LBYC's Lived Experience of Being Raised by Grandparents



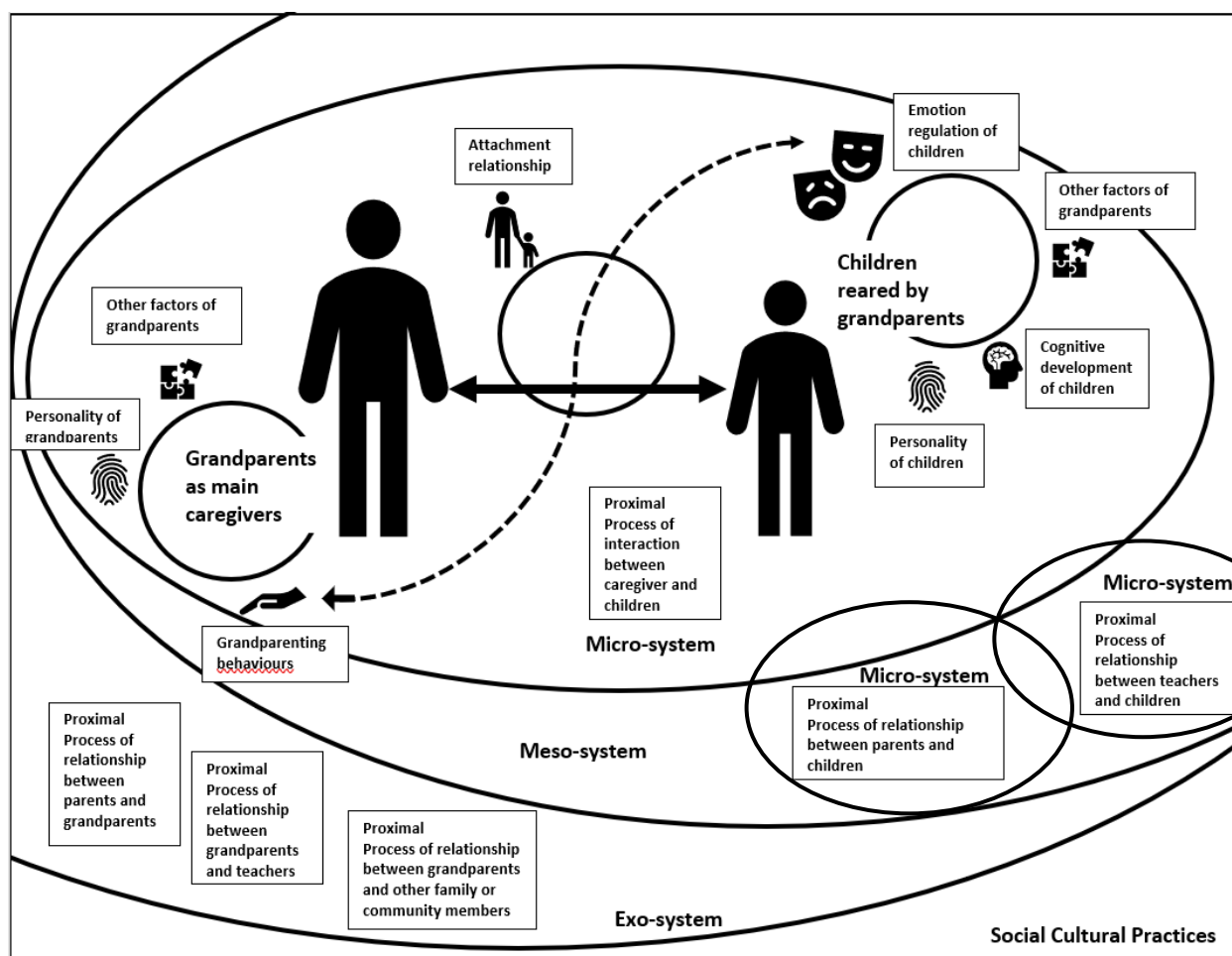
Reviewing both the PPCT model and the research about emotion regulation, emotion regulation can be seen as a personal characteristic in the proximal process. Figure 2 illustrates the relationship between emotion regulation and the lived experience of ‘left-behind young children’ raised by grandparents (LBYC-GP), according to the bioecological model, showing how they interrelate to each other, while emotion regulation development is a part of the system of LBYC-GP’s lived experience. The PPCT model also explains children’s emotion regulation development in connection with the associated factors of context, time, and other personal characteristics. Emotion regulation is regarded as an element in the micro-time frame and microsystem of context. In the microsystem and micro-time frame, emotion regulation affects caregiver-child interactions, relationships, and other developmental outcomes of the child. The intrinsic and extrinsic factors associated with its development are within the meso-time frame and microsystems, as well as their interactions, the mesosystem. Although both biological development, included in the intrinsic factors, and ecological factors are essential to the development of emotion regulation (Fox & Calkins, 2003), the current study mainly considers how the latter one in their lived experience interacts with the development of emotion regulation. In conclusion, factors to be investigated about emotion regulation as a personal characteristic in the proximal process and a constructed developmental property being affected in proximal processes include:

- Emotion regulation strategies performed by children in the home and preschool contexts.
- The dispositions, resources, and demands of grandparents and parents, which is associated with the children in the proximal processes within the microsystem.

- The interactions between grandparents and parents' personal characteristics, which might affect children from the mesosystem.
- Caregiving behaviours of grandparents and parents that prolong children's lived experiences in meso-time frame.
- Other contextual, sociocultural, and personal characteristic factors of significant others and environments.

Figure 2

Relationship Between Emotion Regulation and LBYC-GP's Lived Experiences



These factors also interact with each other and construct the lived experience of children. Figure 2 shows how personal factors and interpersonal factors position in the proximal process of child–grandparent relationships and how the proximal process positions in the PPCT model of LBYC-GP. When other proximal processes that involves the child are mentioned initially by participants, Figure 2 serves as an example model for the exploration of the relationship and the lived experience of the child.

Methodology

To explore the two sets of research questions presented in the Part *Research Questions and Aims* in *Background and Literature Review* Chapter, the current study firstly proposed using the Progress-Person-Context-Time model of left-behind children in China (see *Theoretical Framework* Chapter), then employed a mixed methods design, combining the Mosaic approach, interviews, psychological questionnaires, and naturalistic observations to study cases of left-behind young children (LBYC) and their families. Using these methods, the researcher collected and analysed information and data from children, their families, and field observations.

This chapter begins by outlining the researcher's position as an outsider and then introduces the epistemological position that was applied using a phenomenological approach. The subsequent parts of this chapter introduce the participants and the ethical process of the study. This is followed by a discussion of the significance of children's perspectives in research on children and in the study. The sixth and seventh parts introduce the study's mixed methods design and outline the research methods in detail. The chapter then discusses the across-case and within-case analyses of the data and information collected in fieldwork and the use of thematic analysis to explore children's lived experiences. The chapter concludes with a summary of the methodology and a brief discussion of its value for the current study.

The Researcher's Position

The researcher, who grew up in one of the biggest cities in southern China and has never lived in any rural villages for more than a month, was an outsider to rural life. Her knowledge of and interest in children's lived experience in rural areas in China came from her previous research and work experience, literature, and reports on social media. Her experience of getting along with people in rural areas was from working with people on

research projects and talking with experienced researchers and local partners. The researcher has been interested in children's lives and development since she began her master's degree in psychology. After working with children and families in rural areas in China for some years, the researcher learned more about rural life. However, her knowledge of children's lives and their families in rural China is just a tiny portion of their stories, and she was curious to gain a deeper understanding.

On the one hand, people's wisdom and the variety of culture and daily routines in different areas amazed her. In other researchers' studies of 'left-behind children' in Chinese rural areas, data on people's feelings, opinions, and experiences – especially children's – are not as evident as a focus on statistics, scientific jargon, and theories. Taking a different approach, the researcher was curious about children's stories because of research that had conveyed complex images of their lives and that showed mixed developmental outcomes for them. As discussed in the literature review of this thesis, some Chinese researchers and media commentators have reported negative developmental outcomes for these children and have presented a negative image of their lives, suggesting that they live in disadvantaged families and in areas that need help. In contrast however, positive developmental outcomes and positive attitudes towards their family and community were found in other research and reports on people's real-life stories. outcomes for these children and have presented a negative image of their lives, suggesting that they live in disadvantaged families and in areas that need help. In contrast, positive developmental outcomes and positive attitudes towards their family and community were found in other research and people's real-life stories.

The researcher's curiosity about left-behind children and their lives and the gaps and differing findings in existing research literature generated the research questions for the current study. As the literature review has shown, further understandings and interpretations

are needed of the phenomenon – ‘left-behind children’s’ lived experiences of being raised by grandparents in rural China – as there are contrasting conclusions and findings in the existing research. The researcher’s knowledge of developmental psychology also led her to adopt the theoretical framework – the bioecological model – that underpinned the research design process to explore the research questions. Further, previous research showing mixed findings on left-behind children’s psychological development and wellbeing led the researcher to include a psychological focus in the research. However, the quantitative methodologies often used in psychology lack detail and interpretation of participants’ stories, from which the meanings were generated (Van Manen, 2014). Van Manen (2014) suggested that when inquiring about such understandings and interpretations of a pre-reflective phenomenon, it was necessary to go beyond exploring the phenomenon with only quantitative measurements, qualitative discourses, or human languages and cognition. Thus the researcher chose to employ both quantitative measurements – to evaluate children’s development of emotional skills as part of their lived experience – and qualitative approaches and tools to explore their lived experience and understand its meaning in the study.

With her research and work experience, the researcher was conscious of the dominant scientific model of standardised psychological development and popular education pedagogies in China, being aware that they were not adequate to inquire into the complexity of ‘left-behind children’s’ real lives, including children’s interpretations, their lives with their grandparents, and the social culture of the rural community. The researcher believed that lived experiences and its evaluation are determined by people who experience them (Van Manen, 1997). Thus, there is not only one correct description or interpretation or only one accurate evaluation of left-behind children’s lived experience and development. Children and families should have the opportunity to describe their lives and share their perspectives. Researchers should explore the reality from various perspectives – not excluding

interpretations of children and families for their ‘subjectiveness’ but also inquiring about meanings and insights from them through multiple approaches (Van Manen, 2014). In order to consider the lives of LBYC from various perspectives, the research design, and the researcher skills and attitudes in data collection of the current study were flexible and open so that the research would be conducted respectfully and would be responsive to the children and their families’ lives (Vagle, 2016, pp. 73–102).

Phenomenological Approach

In order to explore the lived experience of ‘left-behind young children’ reared by grandparents in rural China and reflect on the researcher’s position, beliefs, and research aims in the explorations, a phenomenological approach was used in the current study. Phenomenology seeks to understand the meaning and nature of objects, events, lived experiences, and knowledge as constructed by an individual or a group of individuals (Van Manen, 2014). In the current study, children’s lived experience was interpreted, and reflected on by individuals, including the children themselves as the key individuals and grandparents as their significant caregivers. Given that children’s development is a part of their lived experience and is shaped by their daily experiences, relationships, and sociocultural environments, the current study also explored the emotion regulation of the children. Emotion regulation, as discussed in *Theoretical Framework* Chapter, refers to the alteration in duration, strength, direction, or process of emotion, which is constructed through the categorisation and interpretation of sensations, context, and cultural norms (Barrett, 2018). In keeping with phenomenology, instead of making conclusions on ‘left-behind children’s’ lived experience and giving them guidelines to live their lives, the current study valued ‘the quest for meaning, the mystery of meaning, how meaning originates and occurs – as well as the

meaning of our responsibility for others and for the organic, material and technological world we inhabit' (Van Manen, 2014, p. 13).

The picture of 'left-behind young children's' (LBYC) lived experience and its interpretations were generated not only from children and their family's expressions, opinions, and perspectives on their lives, but also from the process of exploring this knowledge in fieldwork. By employing an ethnographic approach to fieldwork when with participants, the natural processes of exploration and the meaningful materials that emerged during these processes were recorded and preserved. This approach also helped build reciprocity in research relationships, which was significant in obtaining rich information from participants while being respectful of local life and showing gratitude to the participants (von Vacano, 2019).

Participants

Four children aged 18 to 52 months participated in the current study with their grandparents, parents, peers, and teachers. The children were from the same town but different villages in a city next to the provincial capital city in the north-west part of China. Each child was studied as a case with their grandparents, parents, teachers, and peers. Three of the four children were girls, who each participated in both rounds of data collection, and one was a boy, whose mother decided the family would not participate in the second round but agreed that their information and data collected in the first round could be used in the study. Introductory information about the four children is shown in Table 1. More detailed information is reported in the introductions of the child cases in the next Chapter.

As well as the four children in the table, two other preschool girls, who were classmates of the oldest girl among our participants, participated in the first round and left the current study before the second round. Their information was not included in Table 1 because

their parents requested that their information and data collected in the first round not be used in the study. According to the ethics of the study, withdrawn participants' information and data would only be used with their permission. One girl and her family withdrew because her parent did not want their family to continue in the project. She was surprised that the study involved a second visit to their family, although she had been informed about this on the phone before the first round of data collection, when she agreed to participate. Another girl withdrew because her father and mother had different opinions about participating in the project. Her mother agreed and gave consent, but her father was against it after finding out about it. According to the child's grandfather, they were divorced not long before my first visit. The child lived with paternal grandparents, and her mother worked in the capital city, who visited her daughter or took her daughter to live with her for one or two days seasonally. Her father was the only parent who worked further away and did not come home monthly or seasonally.

Table 1*Basic Information Regarding Child Participants*

Name (gender, age in months)	Guardianship		Family member in the household		Preschool or early education	
	1 st round	2 nd round	1 st round	2 nd round	1 st round	2 nd round
Location: In H, Yi, City, Province						
Quinn (Girl, 52)	Paternal grandmother	Mother and paternal grandmother	Quinn and her grandmother	Quinn, her mother, and her grandmother	Went to the preschool in the town (primary class).	Went to the preschool in the town (primary class) and started to learn writing.
Location: In S, Yi, City, Province						
Cora (Girl, 38)	Maternal grandparents		Cora and her grandparents	Cora, her younger brother, and her grandparents	did not attend	went to preschool in the town for about one month (junior class).
Henk (Boy, 31)	Paternal grandmother	Mother and paternal grandmother (according to the grandmother)	Henk and his grandmother	Henk, his mother, and his grandmother (according to the grandmother)	did not attend	went to preschool in the town for about one month (junior class).
Grace (Girl, 18)	Paternal grandparents		Grace and her grandparents		did not attend	took local early childhood classes (Project Z) for 5 months.

Note. The name of children, and the village, town, city, province are all pseudonyms, as required by the ethics of the current study (see Part *Ethical Process*).

Ethical Process

The current study was approved by the University of Sydney Human Research Ethics Committee (HREC) [2019/815] (see Appendix A). The participant information statements, participant consent/assent forms², and the research tools³ were reviewed and approved by the HREC. To include children in deciding about their participation in the current study, LBYC who were too young to read the statements were informed by the researcher about the activities they would be participating in and their rights in the current study using a Participant Assent Forms, which included pictures to help them understand (see Appendix B).

To begin the process of recruitment for the current study, the researcher contacted a non-profit organisation (not named for ethical reasons) that works with rural families, introduced the current study to its staff, and asked for their support in introducing potential participants, gatekeepers, or communities. They agreed and asked the researcher to join in on a training program called Project Z (pseudonyms applied for ethical reasons), a rural support project to provide early education to families by training local early education teachers. The researcher was permitted to distribute the project flyers, which had been approved by the

² The current study provided a Participant Information Statement for parents of 'left-behind young children', a Participant Information Statement for grandparents, a Participant Information Statement for teachers, and a Participant Information Statement for parents of the 'left-behind young children's' peers in the free play observation. The current study also provided Participant Consent Forms for parents, grandparents, and teachers of 'left-behind young children' for their participation. There were Participant Consent Forms for parents of 'left-behind young children' and parents of the 'left-behind young children's' peers in the free play observation; finally, there was a Participants Assent Form for 'left-behind young children' (see Appendix B and Appendix C).

³ Research tools of the current study included the questionnaire of emotion regulation strategies, the interview questions for parents and grandparents, the observation tool sheet and the conversation with children in tasks for children (see Appendix D, E, F and G).

HREC, about the current study to attendees of the training program. The head of a local preschool and a Child Affairs officer of a village agreed to be the gatekeepers. They then linked the researcher to potential participants and looked after the participants' rights throughout the current study. After they introduced the children and their families to her, the researcher made appointments with the children's families to visit them at home to present them the Participant Information Statement (PIS) and introduce the study. The researcher met the parents who were at home visiting their children and introduced the study to them face-to-face. For parents who were in the cities they worked in, the researcher asked the grandparents for their numbers or WeChat and sent messages and called them to introduce the study to them. When the children, grandparents, and parents all agreed to participate and signed the consent form, the children were included as a case with their grandparents and parents. Their teachers were then invited to participate with the children officially. They were given the PIS and consent form. With the signed consent form, the child's teacher was included in the child's case. Every participant was well informed of their rights in the study, including about withdrawal. If participants and their family wished to withdraw from the study, their permission to use their information and data collected in the study would be requested. Participants and information that could be used to identify them were anonymised in the current study. Children were recorded and discussed with pseudonyms in the data and data analyses. The other participants were referred to using titles that showed their relationships with the children. The location of the communities of the participants was anonymised. People's faces in photos exhibited openly were blurred to ensure anonymity.

Children's Perspectives

Children's perspectives were a significant element in the current study. Young children have their own ideas and understandings of themselves and the world around them.

They are capable of conveying their thoughts and feelings to others when appropriate communication methods are applied (Reder et al., 2003). Children should have equal rights to be respected for who they are, to express themselves, and to be listened to (Reder et al., 2003; UNICEF, 1989). Child development researchers generally gather teachers' and caregivers' perspectives as well as biological measurements, and may use observational instruments to understand young children's development and thinking (e.g. Rubin, 1989). Some have also developed measurement tools and research approaches to collect children's perspectives (e.g. Bettmann & Lundahl, 2007; Carter & Nutbrown, 2016; Clark, 2004), but only a few of these tools and approaches allow children to express their perspectives with their own words and have their voices included in the research. Because of the widespread call for children's equality and capability in self-representation, more and more researchers have attached importance to tools and methods for gathering young children's opinions and perspectives directly from their communications in their research on children (e.g. Clark, 2004, 2011). Following this global trend, some Chinese researchers have suggested that the lack of children's perspectives is a limitation of their research, and that it would be a possible improvement for them to involve children's voices in research (H. Hu et al., 2014; Y. Hu et al., 2014). The main challenge for achieving this goal is the gap between child expression and research tools requiring 'sufficient verbal skills', which refers to languages used by modern educated people (Bettmann & Lundahl, 2007; Y. Hu et al., 2014). To replace research approaches designed for modern educated adults with research approaches designed for children that would use their expressions to make their perspectives on their own experience and development processes heard and understood, the Mosaic approach was employed as a solution in the current research.

A Mixed Methods Research Design

The current study used a mixed methods research design, underpinned by bioecological systems theory and the theory of constructed emotion to study the lived experience of ‘left-behind young children’ (LBYC) raised by grandparents and the emotion regulation of these children. The mixed methods design incorporated aspects of phenomenology and case study to attach importance to children’s perspectives and the exploration of meaning and people’s lived experience.

The bioecological systems model of LBYC served as a framework in the current study to generate and analyse elements and relationships of lived experience in data analysis. The researcher’s aim was for children’s lived experiences to be interpreted through their interactions with and perceptions on family members and their development of emotion regulation. Pellegrini (2013) suggested research methods for studying children in natural contexts, including qualitative insider approaches and quantitative outsider approaches. Quantitative outsider approaches are more likely to interpret behaviours and relationships with data from objective and physical measurements, while qualitative insider approaches are more likely to interpret behaviours and relationships based on meaning constructed by the participating individuals (Pellegrini, 2013, pp. 59–89). The methods used in the current study to explore children’s interaction with and perceptions on family members, to address the first research question, were qualitative insider approaches in Pellegrini’s category. To study children’s emotion regulation development, quantitative approaches were used.

Van Manen (1997) suggested that either quantitative or qualitative approaches could be used in the practice of phenomenology. He proposed that scientific approaches with concepts and codifications and human science approaches with ‘the power of thinking’,

reflection, and language can be used to understand the meaning and nature of objects, events, experiences, and knowledge (Van Manen, 1997, p. 17). He also stated that a human science approach is also a kind of scientific approach (Van Manen, 2014). In the current study of lived experience, children's perspectives and interpretations were the main focus of data for analysis. The research question, 'What are preschool-aged children's perspectives on their lived experience as LBYC-GP in rural China?' was based on phenomenological ideas. It required an approach that would allow the researcher to access and collect interpretations constructed by participants (Van Manen, 2014). In this approach, the inquiry process and the exploration of meaning were reflected and analysed with the information and data collected.

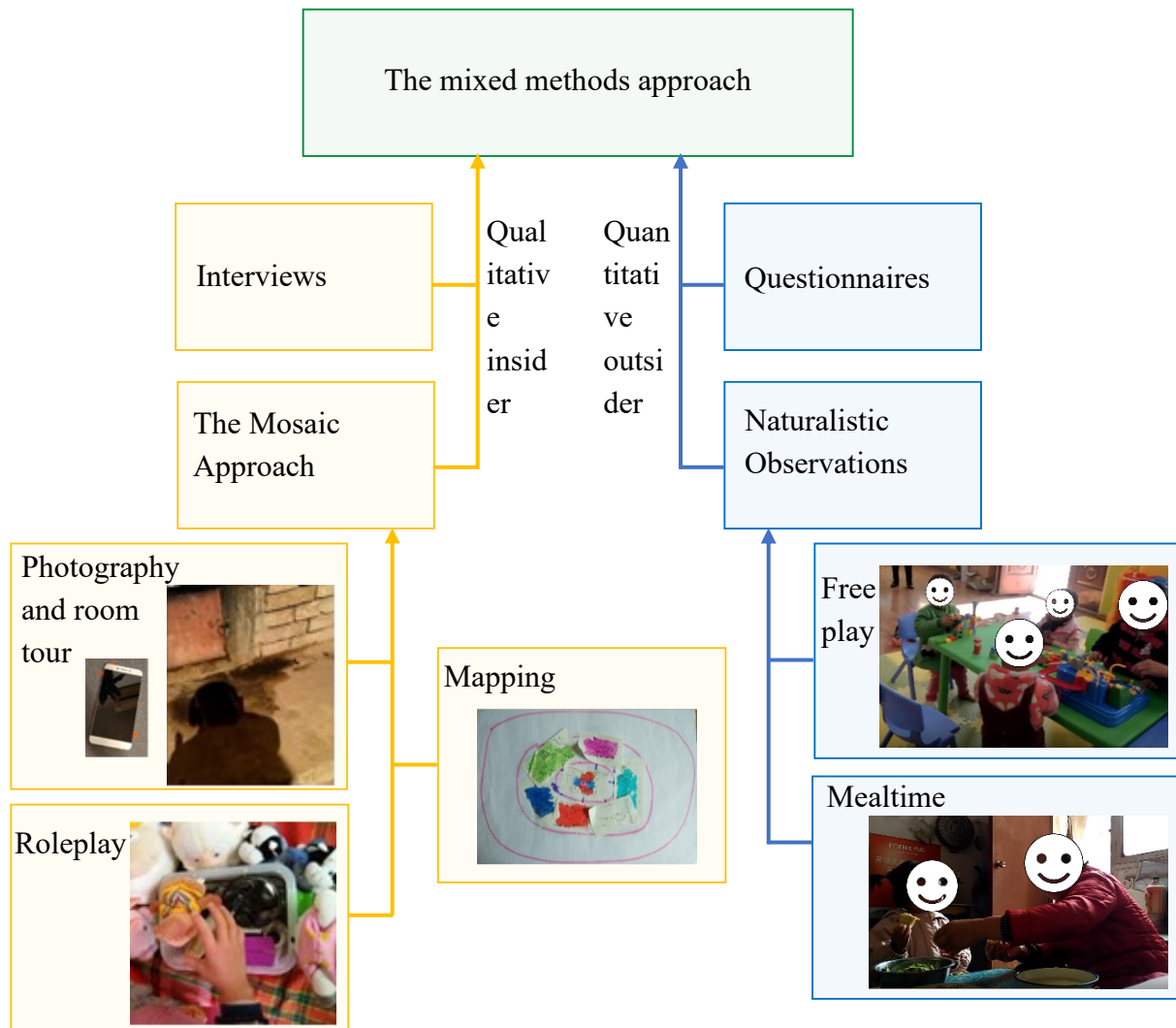
To study the development of emotion regulation as a part of the bioecological systems model, also drawing on the theory of constructed emotion (see Part *Emotion Regulation of Children*), requires both an exploration of its meanings constructed in the context of a rural Chinese village, as well as systematic analysis of the relationships among the objective behaviours of elements in children's emotional processes. In the current study, a scientific approach and a human science approach are mixed to supply multiple sources of data and modes of analysis needed to address the research questions and aims.

Research Methods and Tools

The mixed methods approach in the current study combines several approaches – naturalistic observations, questionnaires, (Carter & Nutbrown, 2016, p. 398) the Mosaic approach and phenomenological interviews. The Mosaic approach, discussed in the following paragraphs, was adopted to provide playful, creative and listening-oriented tools for children to express their perspectives of the lived experience of being reared by grandparents.

Interviews of parents and grandparents were conducted to gather supplemental information on the phenomenon to help the researcher understand the background and context of children's stories. Naturalistic observations of children's free play with peers and mealtime with grandparents were used, along with interviews with children, to collect data on children's strategies in regulating emotions. A questionnaire consisting of open-ended questions and a Chinese psychometric questionnaire were adopted to gain caregivers' understanding of children's emotion regulation and the adult-reported emotion regulation strategies of children. The natural situations of the events in the observations and examples and stories grandparents told when responding the questions in the questionnaire also revealed children's lived experiences. Instruments for all the methods adopted in the current study are in Appendix D, E, F and G.

These research methods and tools were repeated in two rounds of data collection – one at the beginning of a school semester of the preschool and one at the beginning of the next semester after about five months – to investigate the development of the child's emotion regulation and changes in his or her lived experience at different points of the year. Potential changes could include aspects of daily life, such as separation or reunion with parents, seasonal activities, or holidays. The procedures for research activities with each child case in the first and second rounds varied to adapt to the participants' schedules, local cultures, and requests. Data and materials obtained in the first round were reviewed with field notes to ensure the research tasks were suitable for the context.

Figure 3*Research Methods and Tools of the Mixed Methods Approach*

Note. The figure shows tasks and tools that were involved in the methods and approaches of the qualitative insider approach (on the left side) and the quantitative outsider approach (on the right side). The two groups of approaches composed the mixed methods approach of the current study.

The Mosaic Approach

The Mosaic approach was an important part of the research design for two reasons. Firstly, children grow up within a systematic network of interactions among multiple factors (Bronfenbrenner & Morris, 2006). The Mosaic approach investigates both personal and contextual elements with the aim of studying children's lived experiences from multiple angles, using a variety of child-friendly activities (UNICEF, 1989) and illustrating these connected components and episodes (Clark, 2005). 'Speaking' and telling in the Mosaic approach enable children to express their mind in their preferred manner and serve as the processes of both 'speaking' and 'listening' (Clark, 2005).

The Mosaic approach is a 'framework for listening', using 'multi-methods' that are 'participatory', 'reflexive', and 'adaptable' for children to reflect on and show their lived experience (Clark, 2011, p. 7). The multiple data collection tools, including observation, child interviewing, photography and book-making, tours, map making, and some other tools, offer children more opportunities and pedagogies to listen to themselves and be listened to by others (Clark, 2005). The first set of questions to be investigated in the current study (research question one and its sub-questions) are about relationships and interactions among children, caregivers, and parents. It focuses on the lived experience of children being reared by grandparents. Children could express their perspectives through interviews, photography and room tours, mapping, and role playing, while the researcher would capture the children's perspectives from information collected from these tools, as described below. The researcher introduced these tools to the child. Before that, the researcher had an initial warm-up conversation with each child to get to know them by asking the child's name, age, and favourites games, toys, food, and so on. The researcher also listened to the children in these

activities, recorded the process, and collected all the materials produced.⁴ Children were invited to do the three activities one by one in both the first and second rounds of data collection. If a child participant refused to do one of the tasks, the task for the child of that round of data collection would be cancelled. Also, children and their guardians could pause or stop a task when they wished.

Photography and Room Tour. Children can ‘speak’ with creativity and visual language with cameras, which they like to play with (Clark, 2011). In the study, a smart phone camera was introduced to each child for recording a room tour that showed their daily routines and activities with their grandparents or by themselves, such as getting up and going to bed, having meals, taking a walk, playing, collecting toys, and so on. In the room tour, the researcher asked children questions about daily activities and objects in the rooms, so as to capture child-grandparent and child-parent interactions, children’s feelings and perceptions of daily activities, and other things mentioned by children. Children were invited to take photos and videos of the objects, persons, and scenes they would like to share. When they did not want to do it by themselves but still wanted photos, the researcher helped them take the photos they wanted or agreed to keep and share. The researcher also recorded the room tour and took notes of the child’s introduction and explanation of the activities during the room tour. Photographs and videos taken by children or the researcher visualised the daily events experienced by children. Each child was supposed to then introduce these daily activities to the researcher again according to the order in which they remembered them, but the children did not do it because they showed no interest in retelling the stories. Photos were saved to the

⁴ Part of the transcription of the record, the researcher’s notes, samples of photos, and other materials produced in the process are reported in the children’s stories in *Four Child Cases: Within-case Analysis* Chapter.

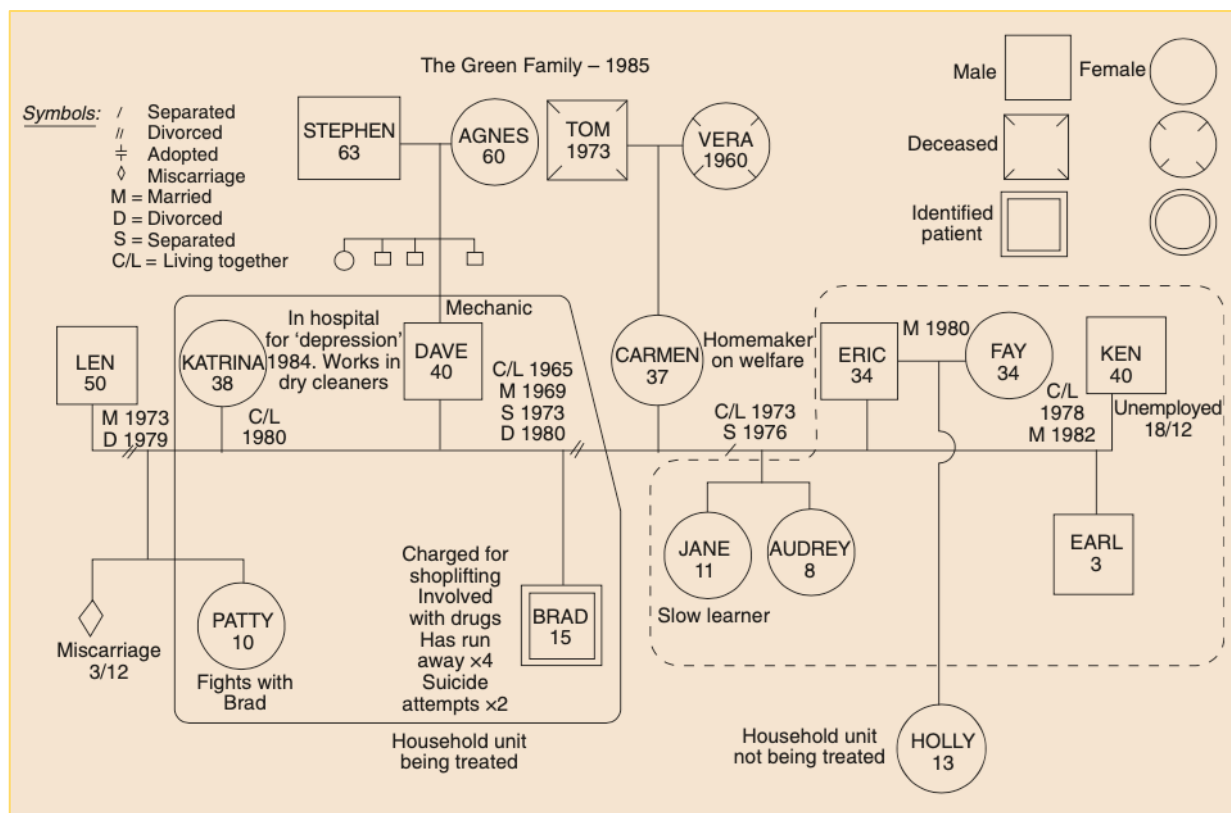
memory card of the phone and backed up in a secure cloud location. They were organised chronologically into the transcription of the record of room tours and the researcher's notes, examples of which are in children's stories in the next chapter.

Mapping. In Clark's (2011) original design, mapping means to make a map of a place. In the current study, children mapped their relationships with people related to them to show their lived experiences through interpersonal relationships and interactions, which are important to the research. This mapping is to apply genogram (Barker, 2013, pp. 75–78) and bull's eye hierarchical mapping measurement (Antonucci, 1986; Rowe & Carnelley, 2005). The former assessment, the genogram, created a family network by asking questions about family members and perspectives about events and relationships (Barker, 2013, pp. 75–83). The network (Figure 4) linked family members together, using different symbols for family members, and notes were added to family members or their lines to show their relationships and other significant personal information (see Barker, 2013, pp.75–78). The later measurement, the bull's eye hierarchical mapping, provided a three-circle diagram (Figure 5), positioning the individual in the centre and inviting the individual to position important people in concentric circles from the most significant to the least significant, from the inner circle to the outer circle (Antonucci, 1986). The current mapping task used the three-circle diagram of bull's eye hierarchical mapping. It also encouraged children to create a family network on the map by asking them questions about relationships and perspectives of family members and inviting them to add lines connecting family members and decorations on the map in response to questions (see example in Figure 3)**Error! Reference source not found..** Children were firstly provided with a large piece of paper, coloured pens, and pictures of all family members including themselves and other closely related people in the community mentioned by their grandparents and parents. Then they were asked to

organise and draw connections among the photos according to the relationship and explain their reasons to the researcher. The mapping task mainly focuses on the relationship between the child and others and the child’s perspectives on their grandparents and parents. This process was audio recorded.

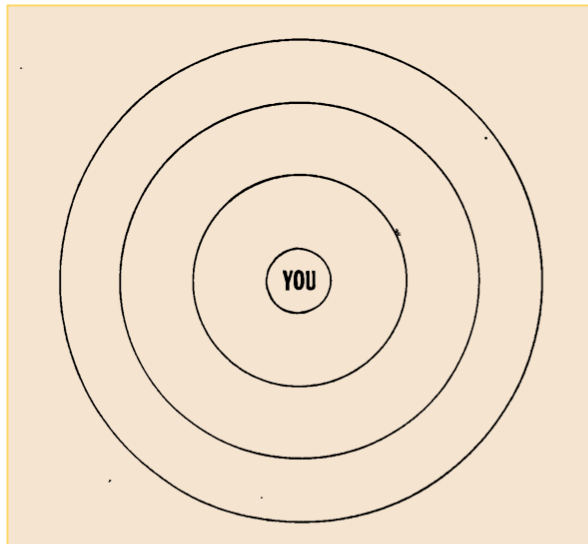
Figure 4

A Sample of Genogram



Note. From *Basic Family Therapy* (p. 77), by P. Barker, 2013, Chichester, West Sussex, UK:

John Wiley & Sons.

Figure 5*A Sample of Diagram of the Bull's Eye Hierarchical Mapping*

Note. From “The Hierarchical Mapping Technique” by T. C. Antonucci, 1986, *Generations: The Journal of the Western Gerontological Society*, 10(4), pp.10–12.

Roleplay. For this task, children were provided with toy dolls to represent a child, parents, and grandparents. They were invited by the researcher to make stories of the child, his or her parents, and grandparents according to their own experiences, feelings, or expectations of their life. In the current study, children were invited to tell a story of hanging out with family members or any other people they like because to hang out with family members is a normal activity that children may like and have experienced. They were asked about the person they would like to hang out with, to give reasons for their choice, and to introduce the activities they would do. The role play was recorded.

Interviews

To provide different perspectives on the children and families’ lived experience, as well as the Mosaic approach with children, interviews were conducted with grandparents and some parents. The researcher-designed questions (see Appendix E) were about social support

and working life, personal characteristics of the adult and the child, behaviours and activities in everyday life, such as daily routines and parent-child separation, and cultural norms of the family and the community for grandparents and parents. Responses of parents and grandparents were used to get descriptions and interpretations of their perceptions of the children's lived experiences and background information to understand the child's perspectives. The interviews were conducted by the researcher and were audio recorded.

Developmental Factors in Lived Experience: Measuring Emotion Regulation Strategies

As part of exploring children's lived experience, the current study followed the bioecological model to investigate one aspect of children's development – emotion regulation development – as discussed previously (see Part *The Development of LBC Raised by Grandparents: Emotion Regulation*). According to the theory of constructed emotion and research on emotion regulation in China, the current study employs the term 'emotion regulation strategy', which refers to at-the-moment effort of managing one's physical wellness, environmental context, or mental processes that relate to the master of emotion so that one stays healthy and fulfilled (see Part *Operational Definition of Emotion Regulation*). Based on the operational definition of 'emotion regulation strategy', it requires the combination of measurements and tools that investigate the emotion regulation behaviours of children as well as the context and sociocultural backgrounds to measure children's emotion regulation strategy. The information and data collected during the measurements on emotion regulation strategy also furnish the exploration of children's lived experience with information and stories of children's daily activities and interactions (further discussed in Part *Research Methods and Tools*).

Naturalistic observation along with interviews and questionnaires are two methods for studying emotion regulation strategies which were used in the current study. To investigate children's strategies of managing emotions in real situations of their daily life and sociocultural environment, naturalistic observations of children's free play with peers and mealtime with grandparents were used to capture a series of behaviours that children perform when they control their emotion in two daily events. Also, questionnaires were adopted to investigate the meaning of the process of emotion and emotion regulation from the perspectives of teachers and grandparents and how they evaluated emotion regulation strategies of the children. This is in accordance with bioecological theory, which suggests that persons, along with process, time, and context, are key elements in the model of human development (Bronfenbrenner & Morris, 2006), as children, teachers, and caregivers are persons included in the proximal process that is associated with children's emotion regulation development. Two naturalistic observation activities and the questionnaire were conducted in both the first and the second rounds of data collection. The events in the naturalistic observations and the stories told by grandparents when completing the questionnaire were used to support the stories of children's lived experiences collected through the Mosaic approach.

Questionnaire for teachers and grandparents. Teachers were invited to complete the Children's Emotion regulation Strategies Questionnaire (ERSQ) and the open-ended questions by themselves on a computer provided by the researcher. Grandparents, who were less literate due to lack of educational opportunities when they were young and less willing to read due to their lifestyles, reported their responses to the questionnaire and the open-ended questions to the researcher through face-to-face interviews. The questionnaire for grandparents and teachers is in Appendix D.

The Children's ERSQ. The Children's Emotion Regulation Strategies Questionnaire (ERSQ) (Lu & Chen, 2007) and six open-ended questions designed by the researcher composed the questionnaire for teachers and grandparents. The ERSQ (Lu & Chen, 2007) was designed in China based on Chinese culture and emotion regulation theories to measure the emotion regulation strategies of preschool-aged children. The concept of emotion and emotion regulation in ERSQ includes sociocultural factors in its design and categorisations. It describes the mental and physical processes used by children to control their emotions through behaviour descriptions and categorises them into six types of strategies (Lu & Chen, 2007):

1. Cognitive reconstruction is to think of the positive side of what is supposed to bring up unwanted emotion, for example, to think positively when the child's favourite toy is taken away.
2. Problem solving is to solve the presumed problem to get rid of unwanted emotion, for example, to get the favourite toy back after losing possession of it.
3. Alternative activity is to do something else to shift one's attention away from the perceived trigger for unwanted emotion, for example, to look for other toys in a situation such as the one described above.
4. Self-consolation is to think of the negative side of something wanted to decrease the unwanted emotion, for example, to think a toy is boring.
5. Passive behaviour is to do nothing and wait for the unwanted emotion to fade away, for example, to take no action in the situation.

-
6. Venting is to express one's emotion through behaviours regarded as problematic from sociocultural or mental health perspectives, for example, crying loudly for a long time or hitting other children.

The open-ended questions for adults. The open-ended questions about the understanding of emotion regulation, including the concept of emotion, the goal of emotion regulation, their expectation of children's strategies of emotion regulation and examples of children's emotion regulation strategies, were added at the end of questionnaire to inquire about teachers' and grandparents' understanding of emotion and emotion regulation.

Naturalistic Observation of Emotion Regulation Strategies. *Free Play with Peers.* Children's emotion regulation strategies while with their peers in daily activities in preschool without the presence of grandparents were observed in a 15-minute video-recorded free play session with peers, in the presence of their teacher. Ideally, this was planned to involve groups of four children – the child participant and peers, but the current study allowed more than four children to take part. The researcher observed the child participants to record their interactions with others, to ensure that their play activities in naturalistic settings were recorded with minimal interference. The activities children participated in and their behaviours were documented and their emotional states, words, quality of voice, tones, and facial expressions were recorded for duration (the time that a behaviour lasted) and sequence (the chronological order of the children's behaviours) (see Butler, 2015; Cohen, 2016). The documentation included the behavioural features listed above of both the participant children and their peers.

In the first round of data collection, the researcher conducted two free play activities for two groups of child participants. The first one was in preschool setting for three girls,

Quinn and the other two girls who withdrawn after the first the first round of data collection. The second one was in community setting in S village for Cora, Henk and Grace, who did not attend preschool in the first round of data collection. In the second round of data collection, the researcher only conducted a free play activity with Cora because the restrictions during COVID-19 pandemic during the second round of data collection (further discussed in *Procedures of Research Activities in Case One, Case Two, Case Three and Case Four in Chapter Four Child Cases: Within-case Analysis*).

In the preschool setting, the researcher asked the teacher's help to prepare a room with one door and various toys. Child participants were invited to play in the room for around 15 minutes, and they were asked to bring one of their classmates with them, which made up a group of six children in the free play activity in the preschool in the first round of data collection because there were three child participants in the class at that time. The teacher was invited to be in the room to be with the children. The researcher started video-recording the children after they entered the room and were told that they could play freely in the room for some time. Children and the teacher were allowed to leave and enter the room freely during free play without asking or informing the researcher. If a child participant did not come back, the free play observation activity of the child stopped. The researcher stopped the video recording it after 15-minutes, and the children were taken back to the classroom by the teacher. The researcher followed the children to their classroom and asked the child participants to review their feelings during the free play and their thoughts about one or two events or behaviours from the free play session that they remembered most it.

In a community setting, the researcher asked the child affair officer's help to prepare a room with various toys and invited child participants (Cora, Henk and Grace), a group of

peers, and their grandparents or parents to play freely in the room for an hour. The grandparents and parents were asked to let the children play with their peers or by themselves and not be a part of the interaction unless the children asked for their help or invited them to play together. The researcher recorded each child participant for 15 minutes one by one. Children were allowed to be with their grandparents or parents and leave the room when they wanted. It was not counted in the 15 minutes when the child participant interacted with their grandparents. The researcher would continue the recording when the child participant played with peers or by him/herself again. If the child participant left the room, the researcher would stop the recording and the free play observation activity of the child. After all the children left, the researcher revisited the child participants in their home to ask them to review their feelings during the free play and their thoughts and rationales about one or two events or behaviours they remembered most from the free play.

Mealtime with Grandparent. Children's emotion regulation strategies when they were with grandparents in daily activities at home were observed and video-recorded during an approximately 20-minute mealtime with grandparents at home. The camera was set in a corner of the room to film the dining area and the face of the child participant. It was planned that the camera would start filming before the meal started, and the researcher would leave the room for around an hour and then return to stop the filming and collect the camera. The first 15 minutes of the mealtime was used as the observation of the children's emotion regulation strategy. The video recordings also became resources of the child's daily life stories. Children's and grandparents' interactions, behaviours, movements, words, quality of voice, tones, and facial expressions were recorded for duration (the time that a behaviour lasted) and sequence (the chronological order of the children's behaviours) (see Butler, 2015; Cohen, 2016). The duration and the sequence of all the events and behaviours will be

recorded. Also, after finishing the meal, the researcher asks the children to review their feelings about the food, the process of eating, and observed episodes of their emotion regulating behaviours.

The coding Scheme of Emotion Regulation. The coding scheme of emotion regulation was designed by the researcher from the attachment behaviour of children described by Bowlby (1968) and indicators of emotions from the Specific Affect Coding System (SPAFF, J. M. Gottman et al., 1995; Shapiro & Gottman, 2013). Codes of specific facial expressions, spoken utterances and actions are adjusted from description to the expressions of emotions. The coding scheme of emotion regulation in the current study included general emotional states and emotion expressions in facial expressions, speaking language and the movement of body of the participants.

The purpose of this coding system was to cover most behaviours that related to the emotions of participants in social interactions. The descriptions of codes defined before the fieldwork in this coding system were written according the SPAFF (J. M. Gottman et al., 1995; Shapiro & Gottman, 2013), the discussion of culture practice in emotional expression in China. The descriptions of codes added during the coding process were defined according to the researcher's observation and notes on the behaviours of the children, their grandparents, and peers that generated the codes. The full version of the coding scheme is attached in Appendix F.

Data Analysis

Data from both data collection rounds were analysed in two levels – within case and across case analyses (6 & Bellamy, 2012; Ayres et al., 2003) – after finishing the second round of data collection. *Within case analyses* refers to looking deeply and carefully at a

single case to distinguish the unique information and build thorough understanding of the case (Ayres et al., 2003). Such analysis is usually conducted to study an explanatory theory (6 & Bellamy, 2012) of a phenomenon or effect. However, in the current study, the purpose was to explore the complete picture of the phenomenon through comparing pieces of information in one case to find differences between them and the uniqueness of the case (Ayres et al., 2003). In the within case analysis, the information and conversations of a child case collected from photography and room tour, mapping, role playing, interviews with parents and grandparents, questionnaires of emotion regulation, naturalistic observations of free play and mealtime, and the researcher's observations were put together to generate themes of the child's lived experience.

The Mosaic approach suggested combining the pieces of information from the child, whose perspectives were the foundation of the analysis, their family members, and the researcher to build the image and story of the child's lived experiences and reflect on and interpret them (Clark, 2011, pp. 38–55). In the current study, the Mosaic approach included photography and room tour, mapping, and role playing, and providing children's perspectives of their lived experiences. Thematic analysis (see Braun & Clarke, 2006, 2022) was employed to generate themes from information from the three activities based on children's perspectives. Because the other data collection tools used with the adults and for the researcher's observation also provided information and images of the children's lives, information from the adults' responses and the observations activities were joined in the thematic analysis to reflect on the themes developed from the children's conversations, to generate new themes, and to interpret the themes of the children's lived experiences.

A different approach to data analysis was employed for the data that was gathered about the children's development of emotion regulation skills. The results from the questionnaires of emotion regulation strategies were reported in descriptive statistics. The results of the naturalistic observations were analysed with the State Space Grid (see Granic et al., 2007; Martin et al., 2005), which provided a space map of the child's emotion regulation process. The State Space Grid is a 'map' of grids with two dimensions, which were codes of emotion regulation process of the child and codes of events involving peers in free play or grandparents in mealtime in the current study, showing the combination and sequences of children's emotion and the ongoing interactions in pairs dynamically (Martin et al., 2005). The map of the grids showed the emotion regulation process of the child without making patterns or categories, thus retaining the information of time and 'attractors' – the events that were more likely to have led to or influenced children's behaviours (Martin et al., 2005, pp. 307–307). This provided additional information on children's emotion regulation strategies in naturalistic environments which supplemented the emotion regulation strategies reported in the questionnaire. In each child's case, the descriptive statistics of the questionnaire and the space map were interpreted together with the grandparent's responses to open-ended questions about emotion regulation, thus summarising the picture of each child's emotion regulation development. Its relationship with children's lived experience was then further reflected on through a process of thematic analysis with the information from the Mosaic approach and interviews with grandparents and parents.

Across case analysis refers to comparisons between the units of information from the coding, thematic analysis and sorting of data from all cases to further interpret the themes (Ayres et al., 2003). Across case analysis researchers to explore themes and units of information that were not easy to understand or not fully uncovered by looking at information

and context provided by only one case. In this stage of analysis, information units and themes generated from each child case were compared to reflect on the commonality across cases and the uniqueness of each case, adding further interpretations on the themes of overall children's lived experiences in response to the research questions.

Thematic analysis in the current study was based on reflexive thematic analysis, which was designed for explorative, phenomenological, and experiential studies (Braun & Clarke, 2006, 2021, 2022; Clarke & Braun, 2018). Reflexive thematic analysis is usually employed in research on lived experience, which requires complex and rich data from participants and the exploration process to be interpreted (Braun & Clarke, 2021). It requires researchers to carefully design the research with appropriate theoretical frameworks while allowing them to stay close to the data and study it with knowledge from the exploration process to achieve a good qualitative study (Braun & Clarke, 2006, 2022). The research design of the current study was based on the PPCT model. It emphasised children's perspectives, taking it as the foundation of data and data interpretations. When adopting the Mosaic approach, which was to inquire about children's points of view of their lived experiences in the current study, the exploration process and the information collected were both data to be reflected on and revisited by the researcher when analysing the data (Clark, 2011). Interviews, questionnaires, and naturalistic observations were coded or analysed then joined in the reflections of children's lived experiences on multiple aspects in the PPCT model to generate a picture of children's lives. The researcher in the current study developed her research design with the aim of exploring children's lived experience phenomenologically, using a bioecological model - the PPCT model, of child development. Reflexive thematic analysis was employed throughout the data analysis process because it was appropriate for the current study's research purpose, epistemology, and research design,

supporting the research to generate organic understandings and interpretations of young children's lived experiences.

Overall, although the mixed methods approach was employed to collect data from multiple perspectives on children's lived experiences, the current study was mostly qualitative when considering its data analysis process. Reflective thematic analysis, which was the most employed method, was on the qualitative side in the 'spectrum' of thematic analysis (Braun & Clarke, 2022, p. 6) and when compared with other data analysis methods that look for themes and patterns (Braun & Clarke, 2021). However, the analyses of questionnaires and naturalistic observation data enriched the information and potential for interpreting children's lived experiences.

Conclusion

This chapter has explained how children's lived experiences were explored phenomenologically with a mixed methods design for collecting data from multiple perspectives on four child cases. The Mosaic approach, interviews with parents and grandparents, a questionnaire on children's emotion regulation strategies, and naturalistic observations of free play and mealtime were conducted with participants in each child's case in two rounds of data collection. The Mosaic approach, being the primary data resource, provided children's perspectives regarding their lived experience and made them fundamental and primary in data analyses. Multiple analyses were employed to analyse data from the research methods in a mixed methods approach so that information and data from each method and perspective were combined to understand the children's lived experiences.

However, the actual research process, tasks, and activities were not exactly the same across each case. Because the current study was explorative and phenomenological, it

recorded participants' lived experiences and life changes that happened naturally during the fieldwork without controlling the settings of research tasks and activities. The repeated research activities in the second round allowed the researcher to conduct research activities that were cancelled in the first round because of participants' schedules. The researcher also explored children's lived experiences in different seasons of the year from the repeated tasks. Some methods and tools measured overlapping qualities and information from different perspectives so that multiple perspectives from children and adults, including grandparents, parents, and the researcher were put together. The second round also made up for missing information or data when an activity was cancelled because of a child's life changes or participants' changing schedules. Details of research processes of each child case could help further reflections on the advantages and challenges of the methodology and research design in the current study.

Four Child Cases: Within-case Analysis

As introduced in the methodology chapter, four child cases – three girls and one boy aged 18 to 52 months and their family members – were included in the current study (see Table 1 in Part *Participants*), while two other girls left the study before the second round of data collection. This chapter introduces the four cases with further details, including background information on their communities, the research processes, the themes from the within-case analyses generated from stories of the cases presented by the participants, and results of the children's emotion regulation.

The background information on the communities is important for understanding the stories presented by the participants. Thus, the chapter begins with the background information recorded by the researcher from her observations of and conversations with the participants, and information from the news, which introduces the family lives and cultural backgrounds shared by the four child cases. Before introducing and analysing the four cases, the results from the children's emotion regulation are presented in the second part of this chapter. The introduction of the results of the children's emotion regulation strategies provides raw data for the analysis of emotion regulation as an organic element of the children's lived experience in the following four child cases.

The following four parts present and analyse the stories and information on the four child cases from the oldest to the youngest: Quinn and her family, Cora and her family, Henk and his family, and Grace and her family. The presentation of each case includes 1) the research process that varied to adapt to the actual situation, local culture and needs of the participant, 2) the emotion regulation development of the child and its relationship with the child's lived experiences as an element of it and 3) the uniqueness of the family life of the

child from the observations of the researcher and the special primary themes of each case (themes only in the within-case analysis) generated from information collected from the child and their family. The descriptions of the research processes and examples of the themes are written in the first person because these were the researcher's exploration of the cases and her experiences in the field. This chapter concludes with summaries of the primary themes and each child's emotional development resulting from their lived experiences.

Family Life in the Community

All participants lived in rural villages in Yi, a town in a city (City) next to the provincial capital in a province (Province) in Northwest China. Quinn lived in H,⁵ and the other three children lived in S⁶. The daily routines in the villages and the local cultures of the communities of the four cases were similar to each other.

Learning about family life in the communities helped the researcher understand the information collected from the participants. As explained in the previous chapter, the researcher met the participants through the introductions of gatekeepers who came to know about the current study in a training program of a non-profit organisation working on the early education of rural children. One of them was the head of a local preschool, and the other was the child affairs officer of the village, whom I called Teacher Wen. The children in the village called her Granny Wen because she was about their grandmother's age. Before the two rounds of data collection, the researcher asked the staff of the organisation and the gatekeepers about their experiences of working with children and their families in the area. When visiting the preschool, the teachers shared their knowledge of the local children with

⁵ The pseudonym of a village.

⁶ The pseudonym of another village.

the researcher. The ethnographic style of data collection allowed the researcher to observe and be with the participants in reciprocity relationships. Through the staff of the organisation, gatekeepers, preschool teachers and participants, the researcher was able to learn and record the background information of the four cases, which is introduced in the following paragraphs to support the presentation of the four cases.

Geographic Features and Economic Status

Yi is relatively small compared with all the towns in the province. However, it has rivers, highlands and ravines and is famous for its apples. As Yi is in Northwest China, it has four seasons: warm and sunny in autumn, cold in winter, sunny but a bit cold in spring and stormy but sometimes hot in summer. Migrant workers in this area often use public transport to travel between the provincial capital city, where most migrant workers from Yi work, and their hometowns. To travel using public transportation to the villages in Yi from the provincial capital city, one has to ride an intercity bus, then a taxi or local bus, which takes at least four hours. People in this area speak Mandarin with strong local accents in their daily lives. Young people are able to speak standard Mandarin, but old people and very young children often speak with accents. After the local government's work on economic development for some years following China's policy of lifting people out of poverty, Yi ranked in the middle in terms of residents' average incomes among the towns in the province.

Daily Routines

In this area, people usually have two meals a day – breakfast at around nine in the morning and lunch at around two in the afternoon. After returning from the fields, they sometimes have snacks at around seven or eight in the evening. They wake up at sunrise and go to sleep at around nine o'clock at night. When I made appointments with the grandparents

to film and observe mealtimes, breakfast in the morning was the best choice for most families because their breakfast time seldom changed. The time for lunch would often change, depending on the time they become hungry, the time the grandfather returns home from the farm, and the time the grandmother is free from her daily chores in the morning.

Most women in the villages often wear big smiles when they meet people and talk in bright voices. Even when they gossip, they do not whisper, but they might speak faster or in a slightly deeper voice. They laugh a lot and often dance together in the squares. They visit each other when they have free time, and they help each other finish the work in the fields during the busy seasons. The men also smile a lot, but they are less talkative and talk in a lower voice when chatting with each other and at home with the women. As I spent most of the time in the children's homes to be with the children and did not stay with the grandfathers or other men outside their houses, I do not know what they like to do when they are not at home with their families. The women in the villages prepare meals for their families, while the men work on the farmlands. The men leave home early at around sunrise to work on the farmlands. Some return for breakfast and lunch while others have porridge or noodles before leaving and when they come home in the evening. The women visit their neighbours when they have some free time from their household chores in the daytime. They chat, gossip and exchange food. However, they also go to the farmlands to help during the busy seasons. Neighbours help each other in the busy seasons. These are the usual routines of the farmers' families, although those who do not work on the farmlands may have different routines. Almost all of the villagers know each other. They have close friends in their villages but are not familiar with some villagers. They greet those they dislike when they come across each other but do not chat with or visit each other.

School Arrangements for Young Children

In Yi, children start going to preschool at three years old. Preschools have different meanings in different countries. In the current study, preschool refers to organisations that provide education and day care for children from three to six (Ministry of Education of the People's Republic of China, 2016). The preschools in Yi send school buses to take the children from the bus stops in their villages to school early in the morning and send them back by school bus after school in the afternoon. The preschools also provide breakfast and lunch to the children, which are the two formal meals of the people in the villages in the town. Not many preschool children have night snacks after they are at home. In their junior year in preschool, the children play most of the time and learn to behave themselves by practising and sitting properly and quietly. They also learn to write numbers and their names. In their last year of preschool, they learn simple maths and writing sentences. The government's guidelines do not recommend it for preschool, but the preschools in this area provide writing and maths lessons to their students from the very beginning (2014).

Seasonal Events in Yi

Many of the young and middle-aged people of the villages in this area go to school and then work in the cities or town centres. They come home for long holidays, such as the seven-day holiday for the Spring Festival, the seven-day holiday for National Day and the five-day holiday for May Day.

The pre-visit to the town (Yi) and its villages (H and S) of the current study was during the National Day holiday, while the first round of data collection was two weeks later. Many migrant workers went back to their hometowns during the National Day holiday. In the villages I visited, people who worked in the cities or far away from home also travelled with

their family members during the national holiday. The parents who worked in the cities took their children and sometimes also the grandparents to live with them in the cities and tour around the cities. The children I visited were with their parents for a few days two weeks prior. For the children who attended preschool, one-third of the autumn semester had passed. For the adults in the villages, it was the busy season to pick apples and corn and sell the apples. When I visited them in the first round of data collection, it was late autumn, and the harvest season was almost finished. The weather was sunny and cool. The people in the villages went out for walks and visited each other whenever they wanted – on the way to and back from the farmlands, in their free time or even during mealtime. Together, they chatted, sang, danced and shared food or other things. Both men and women worked on the fields that season, but they did not work for the whole day or every day.

I planned to begin the second round of data collection almost three months later, which was one month before the Spring Festival and at the end of the preschool semester. However, it was cancelled on the day I arrived because of a new COVID-19 restriction policy the town implemented on the same day in response to a confirmed case in the province's capital city, which broke the city's zero records of local cases. Thus, I visited the villages again two months later, which was one month after the Spring Festival holiday and two weeks after the beginning of the spring semester of the preschools.

The Spring Festival is for family reunions and starts at the end of the lunar year; thus, most migrant workers go home earlier than the start date of the seven-day holiday for the Spring Festival and go back to work after the holiday ends. They may stay home for days or months. They go home as early as the last weeks of the lunar year and go back to work when the first month of the lunar year ends, which are the beginning and end of the Spring

Festival in traditional practice, respectively. However, people may also be home for less than seven days if they do not have extra days of leave. In the villages I visited, the migrant workers often stayed home for at least one week during the Spring Festival holiday. Mothers stayed longer. When I visited the families after the Spring Festival, they were not as active as they were in autumn. There were fewer activities and gatherings in the villages than during my visits in autumn and the Spring Festival. In early spring, the weather was still cold, although it was sunny. The people in the villages seldom went out for walks that season, but they still liked to visit each other's houses. The children liked to play in the yard and on the 'kang'. The women chatted on the kang while the men worked on the fields from sunrise to sunset.

Although the number of left-behind children was high all over the country, and the area I visited was one of the rural areas that migrant workers were from, there were not many 'left-behind children' in the villages according to the definition of the government. The mothers often went back home to take care of their children. In Quinn's preschool, one of the child participants, less than three children were left-behind children in every class, and there were about 30 to 40 children in one class. The younger the children, the smaller the class. In Shou village where the other three child participants lived, the toddlers were more likely to live with only the grandparents, while many preschool children's mothers were with the family at home.

Introduction of Emotion Regulation

The children's emotion regulation was measured and reported in two ways using the children's Emotion regulation Strategies Questionnaire (ERSQ) (Lu & Chen, 2007) with open-ended questions (see the questionnaires for teachers and grandparents in Part

Developmental Factors in Lived Experience: Measuring Emotion Regulation Strategies in Chapter 4) and from naturalistic observations of mealtime and free play in two rounds of data collection with an interval of five months. The scores from the questionnaire items as reported by the grandparents were calculated and presented as descriptive statistics. The grandparents' answers to the open-ended questions were summarised briefly. The naturalistic observations were coded according to the coding sheet (see Appendix F) with Microsoft Excel, and the files were transformed into file formats for State Space Grids (SSG) analysis using GridWare 1.1 (Lamey et al., 2004). The SSGs of the child participants, child–grandparent dyads and child–peer dyads of two tasks and activities (mealtime and free play), the naturalistic observations and the indicators of the SSGs were reported.

ERSQ and Open-ended Questions

As introduced in the *Methodology* Chapter (Part *Developmental Factors in Lived Experience: Measuring Emotion Regulation Strategies*), the children's ERSQ reports on six emotion regulation strategies for children: cognitive reconstruction, venting, passive reaction, problem solving, alternative activity and self-consolation. Cognitive reconstruction refers to thinking of the positive side of unwanted things, venting refers to expressing emotions violently and directly, passive reaction refers to doing nothing or withdrawing, problem solving refers to resolving the situations that arouse emotions, alternative activity refers to doing other things to shift attention from emotion-arousing situations and self-consolation refers to thinking of the negative side of wanted but unavailable things. The highest available score of all questions indicating use of an emotion regulation strategy was five, the maximum score of every question in the ERSQ, and the lowest was one, which was the minimum score. The higher the average score of an emotion regulation strategy, the more frequently the child uses it. A score of one meant that the grandparent reported that the child never used the

strategy. When the average score was five, the grandparent believed that the child always used the strategy. The standard deviation indicated the variance of the scores of all the questions regarding one strategy. The results from the questionnaires after two rounds of data collection are shown in Table 2.

Results of the ERSQ. Quinn's grandmother reported that Quinn (52 months old at the first round of data collection) more than 'occasionally' (score of 3) used alternative activities ($M = 3.29, SD = 0.88$) or self-consolation ($M = 3.20, SD = 1.60$) to manage her emotions, while she was less than 'rarely' (score of 2) vented ($M = 1.80, SD = 1.20$). As reported by her grandmother, the alternative activity strategy was the most often employed emotion regulation strategy by Quinn across situations mentioned in the questionnaire.

Cora's grandmother reported that Cora (38 months old at the first round of data collection) never used self-consolation strategies ($M = 1.0, SD = 0.00$) in both the first and second rounds. Cora also employed cognitive reconstruction less frequently in the second round ($M = 1.20, SD = 0.40$) than in the first round ($M = 2.20, SD = 1.47$). Overall, the most often used emotion regulation strategy by Cora according to her grandmother was passive reaction ($M = 2.86, SD = 1.36$) in the first, and venting ($M = 2.60, SD = 1.60$) and alternative activity ($M = 2.57, SD = 1.84$) in the second rounds. However, these three strategies were not employed 'occasionally' in most situations.

Henk's grandmother reported that Henk (31 months old at the first round of data collection) never vented his emotions ($M = 1.00, SD = 0.00$) or performed self-consolation to control his feelings ($M = 1.00, SD = 0.00$). The most often employed strategy was alternative activity ($M = 3.00, SD = 1.77$), but this strategy was used only in some of the mentioned situations.

Grace's grandmother reported that Grace (18 months old at the first round of data collection) never employed self-consolation strategies ($M = 1.00$, $SD = 0.00$) in both the first and second rounds. In the first round, Grace sometimes vented ($M = 3.00$, $SD = 0.98$) or had passive reactions when managing her emotions ($M = 3.29$, $SD = 1.28$). In the second round, Grace employed all the strategies more often. She vented ($M = 5.00$, $SD = .00$) 'very frequently' (score of 5) and 'occasionally' used alternative activities ($M = 3.00$, $SD = 1.85$) or passive reactions ($M = 3.71$, $SD = 1.75$). However, the frequencies of employment of these two latter strategies varied across situations. The details of Grace's case are discussed in the Part *Emotion Regulation and Lived Experience* in Case Four in this chapter.

Open-ended Questions. As for the open-ended questions, when asked, two grandmothers replied that they did not know about emotions or emotion regulation, while the other two described it as referring to negative emotions. In their opinions, to have emotions means having bad feelings or being in a bad mood. To control or manage one's emotions means trying to get rid of the bad mood and be happy again. Most of the grandmothers thought that their grandchildren played by themselves when they were happy, and they did not play or stay with their grandparents. Only the grandmother of the youngest child participant reported that her granddaughter called her and the grandfather again and again when she was happy. All the grandparents felt happy when their grandchildren were happy. Two of them also believed that their granddaughters were lovely and well-behaved when they saw that they were happy. According to the grandmothers, not all the children cried or shouted when they were unhappy, and not all the grandmothers took action to help their grandchildren manage their bad feelings. Some comforted their grandchildren, while others believed that their grandchild's emotions would fade away. All the grandmothers said that they had no idea how to conclude and name the situations and actions mentioned in the

questionnaire, such as when other children hurt them, when strangers approach them, when an expected trip is cancelled, and so on. Two of them pointed out that this was a difficult question.

Table 2*Descriptive Statistics from the Questionnaires on the Children's Emotion Regulation*

Child's name (Age in 1 st round of data collection)	Quinn (52 m)	Cora (38 m)		Henk (31 m)	Grace (18 m)		
Time of data collection (1 st round or 2 nd round of data collection)	1 st	1 st	2 nd	1 st	1 st	2 nd	
Average score	Cognitive reconstruction	3.00	2.20	1.20	2.40	1.60	2.00
	Venting	1.80	2.60	2.60	1.00	3.00	5.00
	Passive reaction	2.86	2.86	2.14	2.00	3.29	3.71
	Problem solving	2.71	2.14	2.14	2.86	1.43	2.14
	Alternative activity	3.29	2.43	2.57	3.00	2.57	3.00
	Self-consolation	3.20	1.00	1.00	1.00	1.00	1.00
Standard deviation	Cognitive reconstruction	1.26	1.47	0.40	1.74	1.20	1.26
	Venting	1.20	1.20	1.60	0.00	0.98	0.00
	Passive reaction	1.73	1.36	1.81	1.60	1.28	1.75
	Problem solving	1.39	0.99	1.81	1.88	1.05	1.81
	Alternative activity	0.88	1.29	1.84	1.77	1.50	1.85
	Self-comfort	1.60	0.00	0.00	0.00	0.00	0.00

Note. The questionnaires were responded by the children's grandmothers.

State Space Grids of the Naturalistic Observations

The 15-minute videos of the mealtimes with the grandparents at home and free-play sessions with peers were coded second by second according to the coding scheme of emotion regulation that was designed by the researcher, which employed the attachment behaviours of children described by Bowlby (1969) and indicators of emotions from the Specific Affects Coding System (The SPAFF, J. Gottman et al., 1995; Shapiro & Gottman, 2013). Four categories of children's behaviours and grandparents'/peers' behaviours were coded and analysed with SSG analysis – emotional states, facial expressions, tones of utterances (language tone) and content of utterances (language content).

The videos were coded using Excel files with a timeline of 900 units, representing 900 seconds of each 15-minute video, and four categories of the participants' emotions and behaviours. Each category included dimensions representing different types of behaviours belonging to it: three dimensions of emotional states, eight of facial expressions, five of language tones, and 14 of language content. For language tone and content, '*not speaking*' was recorded as an additional code when the participants were not speaking. Some dimensions of behaviours in these categories were pre-described in the coding system according to the SPAFF (J. Gottman et al., 1995; Shapiro & Gottman, 2013) and Bowlby's work on children's attachment behaviours (Bowlby, 1969). During the coding process, other dimensions – such as 'crying', 'shocked' and 'wonder/puzzled' in facial expressions; 'singing' in language tones; and 'comfort', 'greeting', 'repeat', 'complain', 'agreement' and 'invite' in language content – emerged from the behaviours of the children, grandparents and peers. They were added to the coding scheme of emotion regulation in the study and described according to the observations and summary of the researcher. The definitions of all the dimensions in the four categories are shown in Table 3.

The Excel files of the codes were then transformed into trajectory list files, which were the chronological records of the code-changing process.

Table 3*Definitions of codes*

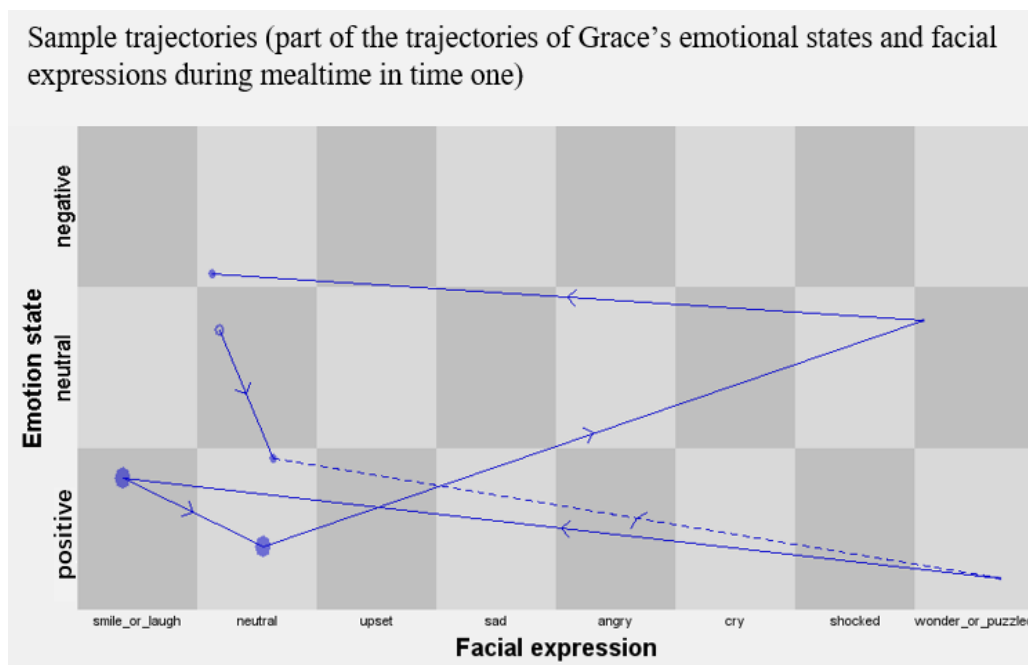
Emotion and behaviour category	Dimensions	Definitions
Emotional state	Positive	Being happy or having any emotion that can be identified as a good mood, such as being surprised about pleasant things
	Neutral	Not invoking emotions; being peaceful
	Negative	Being sad, upset, angry or having any other emotion that can be identified as a bad mood, such as being shocked, scared or depressed
Facial expression	Smile/laugh	–
	Neutral	–
	Upset	–
	Sad	–
	Angry	–
	Crying	–
	Shocked	–
Wonder/puzzled	–	
Language tone	Shouting	In a higher tone than usual; very loud compared with the perceived average speaking volume of all the people in the room
	Whisper	Cannot be heard easily from a distance of more than one person; in a very low volume compared with the usual
	Question	Talking in a normal voice and ending a sentence with the tone for asking

Emotion and behaviour category	Dimensions	Definitions
	Singing	Speaking by singing; singing a song
	Statement	Talking in a normal voice and ending a sentence with the tone for full stop
Language content	Humour	Making jokes or imitating the sounds of animals or cartoon figures or lyrics to make others happy
	Teasing	Laughing at others in order to make them upset or annoyed
	Praise	Talking about the good things about someone or something
	Criticise	Talking about the things that someone is doing wrong
	Comfort	Using words or making sounds to comfort themselves or others; making sounds to express their feelings
	Explain	Explaining the reasons for something or doing something
	Command	Making a direct command to ask a person to interact with the participant or to perform or stop an action
	Describe	Talking and describing things, events or objects; may use emotion words but in a descriptive way
	Roundabout	Talking and describing things in an indirect way
	Greeting	Saying 'hello' or 'goodbye' to someone
	Repeat	Singing after someone or repeating others' words
	Complain	Talking and expressing being unsatisfied or annoyed by something or somebody; expressing disappointment
	Agree	Saying 'yes' or other words to express agreement, approval or permission
	Invite	Making invitations to others

The SSG analysis was conducted using GridWare (Lamey et al., 2004). Previous researchers have summarised the meaning of each indicator in the SSG analysis (M. D. Lewis et al., 1999; Martin et al., 2005). The lines link the event nodes, which are the circles, with the arrows that are the trajectories of the events. The size of an event node indicates its duration. The arrows show the chronological order of the nodes. If two event nodes are linked with a dashed line, it indicates that the beginning event nodes on the two sides of the dashed line have missing value(s), which may be due to the child being out of the filming area or not showing their face to the camera in the current study. If a trajectory visits more cells, which are the cross-regions of two variables' states, it indicates that the variability of a variable dyad is higher. More event nodes in a cell indicate that the cross-states are more likely to happen. The mean return time, which is the average time between two visits to one cell, shows how long a cross-state takes to happen again after a previous occurrence. A short mean return time indicates high attraction by the cross-state to the dyads, which refers to the most likely behaviour model or pattern of the child in the state dyads in the current study (see sample SSG map in Figure 6).

Figure 6

Example of an SSG map.



First, the current study plotted i) how the children's facial expressions changed along with their emotional states and ii) how the tones and content of the children's language changed along with their emotional states to explore how they expressed their emotions with facial expressions and language and how they managed their emotions through emotional expressions. Then, the study plotted the interactions between iii) the children's emotional states and the grandparents'/peers' language tones and iv) the children's emotional states and the grandparents'/peers' language content to explore how the children reacted to the occurrence of events.

However, not all child participants were able to speak fluently. Thus, the study only plotted the second SSG analysis on Quinn and Cora in both rounds and Grace in the second round, whose adequate language skills were shown in the Mosaic approach and naturalistic

observation activities. For Grace in the first round and Henk, because they were not able to speak in complete sentences, the second SSG plots were not conducted. Furthermore, when the child quit the free play activity or finished their meal in less than 15 minutes, the videos were shorter than 15 minutes. The details are illustrated and discussed for each child case (*Case One: Quinn, her Grandmother, and her Parents; Case Two: Cora, her Grandparents and her Brother; Case Three: Henk and his Grandmother and Case Four: Grace, her Grandparents and her Mother*). The analysis and discussion of the results, including the indicators and SSG figures of each child, are also illustrated in the child cases in following Parts of *Case One, Case Two, Case Three and Case Four*.

Case One: Quinn, her Grandmother, and her Parents

Quinn was 52 months old when I visited her in the pre-visit. She lived in H village, which is nearer to the town centre than S village, where the other child participants lived. One can take a bus to the town centre from H village in about 20 minutes. However, Quinn took the school bus to the preschool in the town centre as the other children did. Most people in her village were farmers. They seldom worked in the town as people who lived in town did. Quinn's paternal grandfather had passed away, and she lived with her paternal grandmother. Her parents worked in the provincial capital city during the pre-visit and first round of data collection. In the second round of data collection, her mother was living with her and her grandmother at home.

Procedure of Research Activities

The overall procedure of the research activities with Quinn is shown in Figure 7.

In the first round of data collection, I visited her preschool to complete the free play observation with two other left-behind child participants who were her classmates before

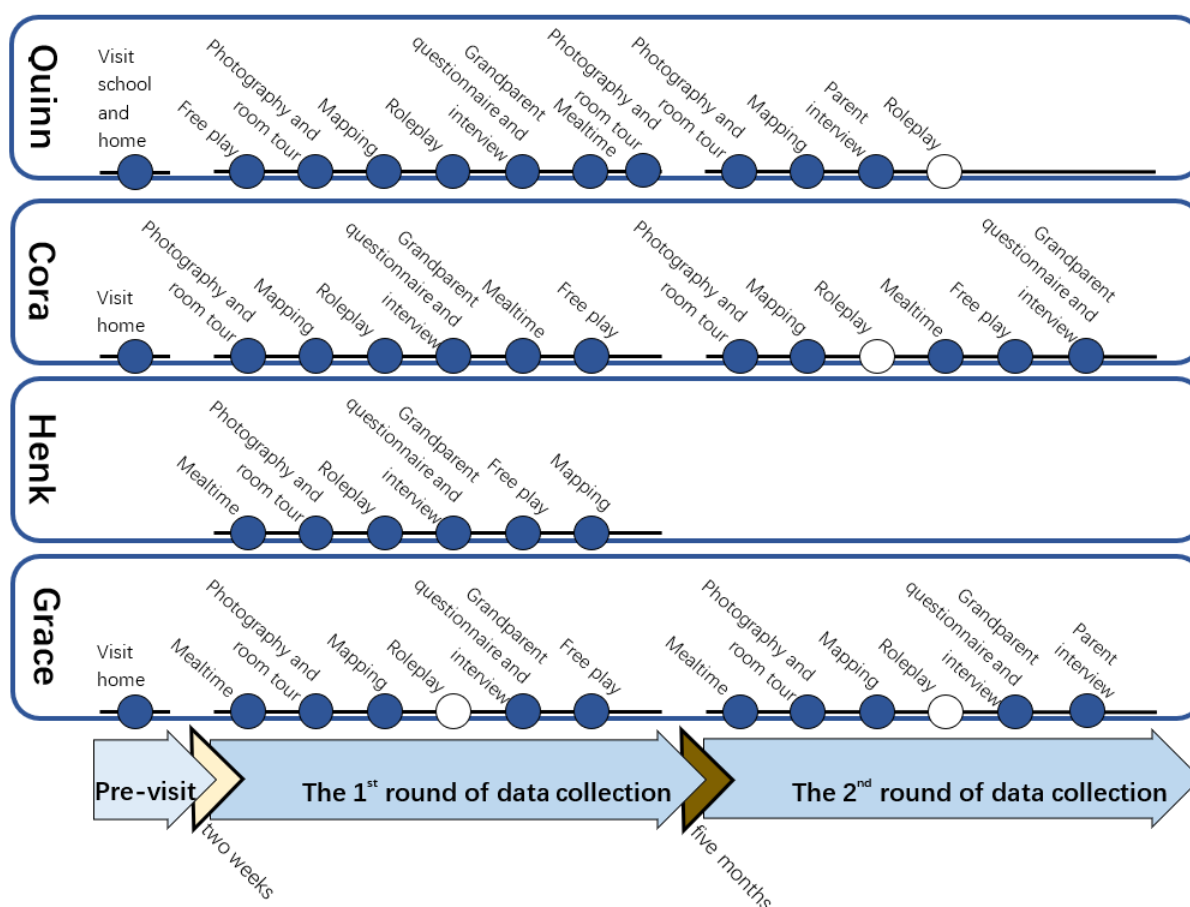
visiting the children's home. Then, I visited Quinn's home to complete three activities of the Mosaic approach and the grandparent's interview. As I did not meet her and her grandmother at mealtime, I visited her after I completed the visits to the three other child participants in S at the end of the first round of data collection to complete the mealtime observation. Quinn was excited to see me again and initially asked me to walk around the house. She introduced her toys and asked me to play with her. I stayed with her for about half an hour and recorded her second room tour by taking pictures with her agreement. Thus, Quinn had two photography and room tour sessions in the first round. However, because her parents were busy and did not have time for an interview, her parents' interview was not conducted in the first round.

In the second round of data collection, I invited Quinn to complete the three activities of the Mosaic approach to hear about her lived experiences when her mother was home because she was not a 'left-behind child' at that time. She remembered the activities when I mentioned them and took out the materials. The only activity she was interested in was mapping, but she patiently walked me around her home for the photography and room tour activity before drawing her family map. However, she wanted to play with her friend after the mapping task and refused the roleplay activity. As her mother was home, I interviewed her to learn about her opinions on Quinn living with her grandmother at home, with and without her parents. The teacher's questionnaire was missing because the teacher of their class when I visited her preschool in the pre-visit and the first round of data collection had quit her job soon after the first round of data collection, and she did not complete the questionnaire. When I learned that she did not reply because she was not the teacher anymore, I was already planning the second round of data collection. Quinn's new teacher agreed to complete the questionnaire but did not do so after receiving the link. I called to

remind her, but she said she did not have time. I could not visit the preschool in the second round because of the COVID-19 restrictions for schools, so I did not meet the teacher face to face. I was also unable to complete the free play observation in the preschool during the second round.

Figure 7

Overall procedure of the research activities of the participants.



Note. Not all research activities in the research plan were conducted. The conducted research activities are listed in the timeline chronologically. The activities with blue circles were completed, and the activities with white circles were not cancelled when they started. The research activities that were not conducted are not listed in the figure. The details are

discussed in the introduction of the procedure of each child case (see Parts *Case One*, *Case Two*, *Case Three* and *Case Four*).

Emotion Regulation and Lived Experience

Quinn, as her grandmother stated in her answers to the questionnaire, did not have extreme emotions very often. She smiled, sang and danced when she was happy. When she was upset, she tended to shift her attention from the unhappy situation and think aloud to help herself become neutral in her emotional state.

When Quinn had breakfast with her grandmother (Figure 8), she was in a neutral emotional state with a neutral facial expression. She spoke descriptively (the third SSG map in Figure 8) with a normal voice (the second SSG map in Figure 8) most of the time, although she did not talk much during her meal. In the free play activity, the neutral cells of her emotional state and facial expression at mealtime in the SSG map (the first SSG map in Figure 8) covered 76.4% of the total duration and 76.9% of the total events in the trajectory of mealtime. The cell's mean return time in the trajectory of mealtime was 6.5 seconds. In the trajectory of free play, the neutral-neutral cell still had the longest duration and the lowest mean return time – 35.9% of the total duration and a mean return time of 7.29 seconds – but the cells of positive emotional state with neutral facial expression and smiles were also potential attractors in the pair, with cell durations of 23.4% and 28.1%, respectively. The visits to the positive-smile cell and the neutral-neutral cell were the same. The events in the neutral-neutral cell were 35.5% of the total events – only 2.3% higher than in the positive-smile cell. When Quinn's emotional states and facial expressions in two situations were considered together, she was often in a neutral emotional state and showed a neutral facial expression. However, she had many positive emotions when playing alone or with peers.

Examining the results from the SSG map, the observation notes of Quinn's behaviours and the events during the activities resulted in the suggestion that Quinn, instead of keeping a neutral emotion all the time, tended to show neutral facial expressions, and she was more likely to have positive emotions when she was playing. However, this could occur when she played by herself or with her peers. When she was involved in the free play activities, she was sometimes happy and smiling when playing alone. When she was in a positive mood, she showed it with smiles, utterances and actions, such as dancing with her feet, arms and hands, which were categorised as 'not speaking' or 'neutral facial expression' in the trajectories (Figure 8). When she had breakfast with her grandmother, she concentrated on the food like her grandmother did and sometimes showed her happiness by dancing using her feet or arms. She wore a big smile when her grandmother sang the 'have enough, have enough' song and danced as she left the table after the meal. Negative emotions were never shown during mealtime even though her grandmother commanded her to do things and even criticised her once. It made sense that Quinn was not sad or angry because of her grandmother's command or criticism when it was considered that her grandmother did not shout at her during the whole process (The first SSG map in Figure 9).

Quinn's grandmother was washing things in the kitchen. Quinn walked back with a bottle of cold water that her grandmother asked her to bring to the kitchen 'if Quinn would like to drink some water'. Her grandmother then criticised Quinn for not finishing the congee before she did other things. She said, 'Look at you, not finished [your food]. It was no longer hot.' Quinn explained slowly, 'No. Little rabbit eats hot. Big rabbit does not need to eat hot.' Quinn was wearing a coat with rabbit ears and pretending to be a big rabbit that day. Her grandmother continued to wash and did not respond at once. Then, Quinn pretended to be as conceited as a big, proud rabbit

and said, 'Pshaw.' Her grandmother then slowly said, 'We finished or not? Eat quickly. Finish it, and [I will] wash your hair for you.' Quinn turned to the table, skipped to her seat and sat down to finish the congee as her grandmother instructed. Before she looked down at the bowl of congee, she looked up and ahead, and her eyes met the camera. Then, she made faces complacently before eating the congee. She also sang while eating.

In addition, Quinn was not upset when she found something wrong with her 'mo' (the local name for steamed buns). Instead, she pointed out the problem to her grandmother and explained it to her. Her grandmother was calm about it. She listened to Quinn and explained peacefully.

Quinn found hair in the mo when she split it in half. At the door (her grandmother was outside the kitchen), she said, not shouting, 'Grandma, there is hair, a hair, I split the mo and there is hair in it.' Her grandmother came back with a plastic bag of vegetables and said, 'En (I see).' Quinn's eyes followed her grandmother as she walked in. Her grandmother put a spoon in the congee, and Quinn continued, 'How come the hair fell in the mo?' Then, her grandmother explained, 'Hair fell, then fell in the mo.' Quinn did not reply but continued to eat the mo peacefully and performed a dance movement with two pieces of mo in both hands. Her grandmother continued to eat her second mo as well.

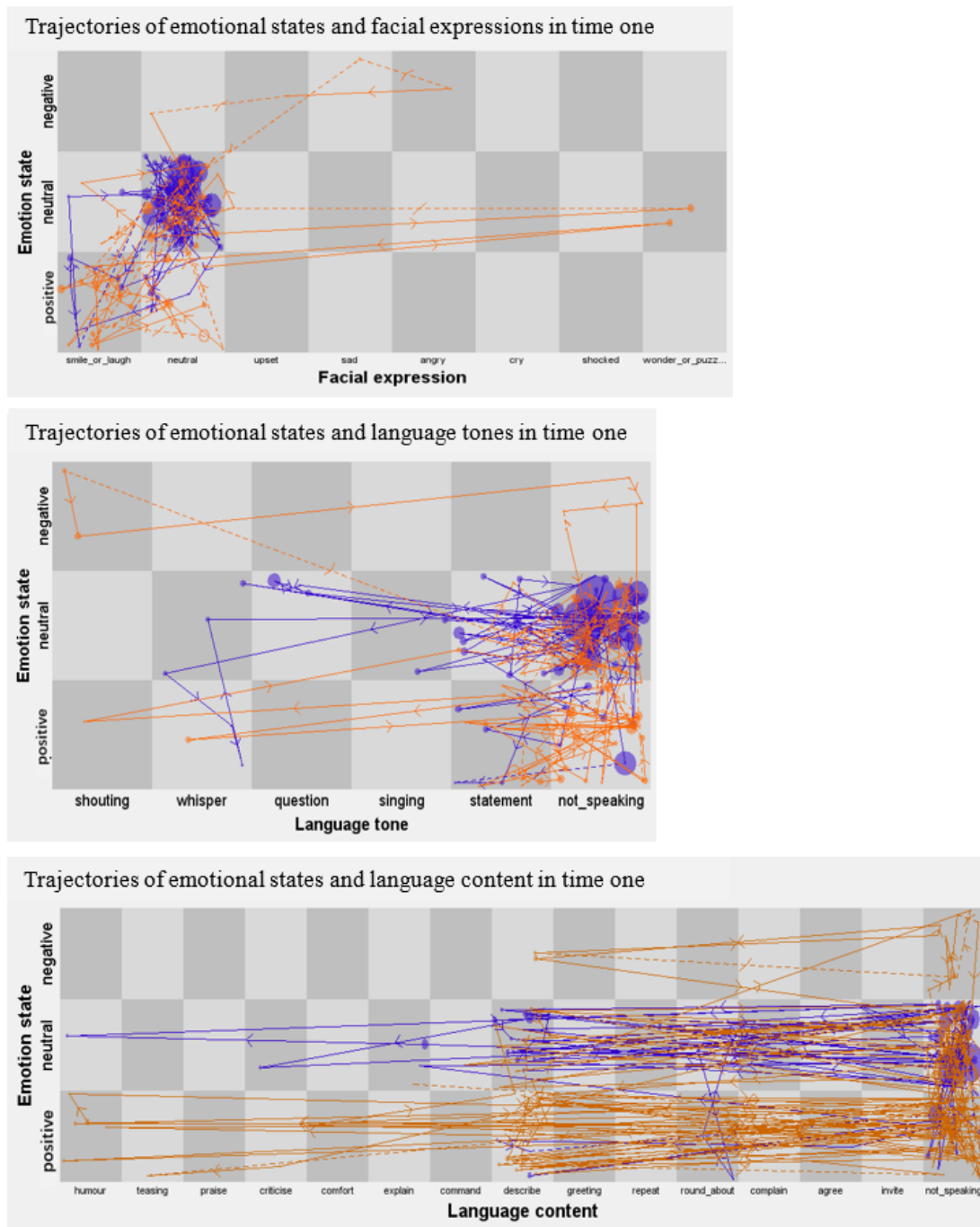
Her grandmother also mentioned Quinn's neutral emotional expressions in her answers in the questionnaire. She reported that Quinn seldom showed her emotions in extreme ways, and her most often employed emotion regulation strategies were alternative activity and self-comfort. Some examples were found during free play with peers.

When a girl took away Quinn's toy robot that she found and 'owned' at the beginning of the free play observation, Quinn said, 'This is my robot. This is. I found it first.' She tried to get it back. The girl shouted, 'That is my robot!' Quinn failed to take back the robot and said, 'Give [it to] you.' She had an upset expression, stayed for a few seconds and said again, 'Give you. I do not play with it.' Then, her upset facial expression changed to a neutral one. She climbed to the toy box to look for other toys to play with and was happy and smiling again after finding a toy clip and playing with it.

Thus, to Quinn, neutral facial expressions and neutral emotional states were the main emotion attractors and playing seemed to be the happy trigger. However, when she played with peers who showed more emotional expressions and initiated unexpected events, higher variability in emotional states and emotional expressions with facial expressions and language were evoked from her. When Quinn was with her grandmother, their emotional states and expressions were consistent. They had neutral facial expressions most of the time and showed their happiness occasionally. It seemed that Quinn had the same traits in emotion management. She stayed calm and peaceful and had a tendency to be cheerful. She had effective emotion regulation strategies to maintain her disposition.

Figure 8

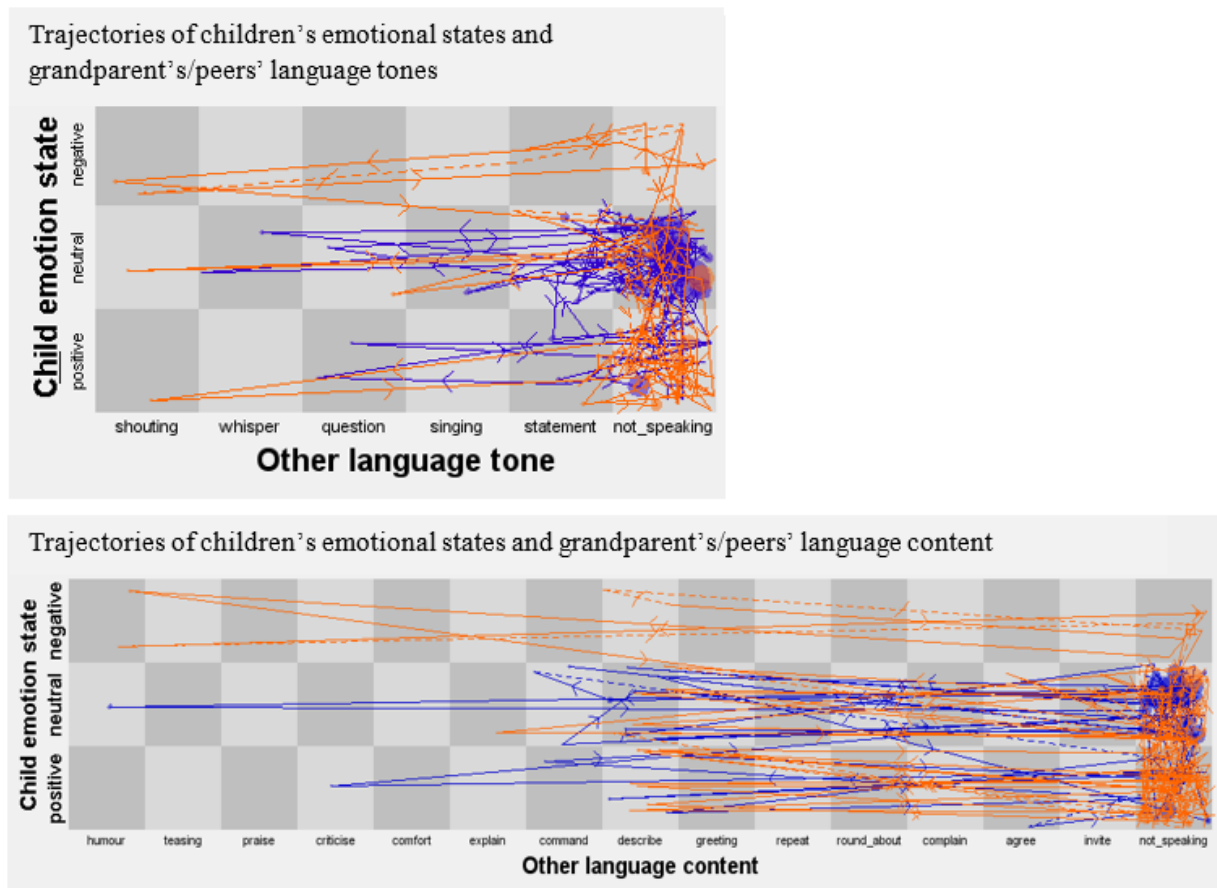
State Space Grids of Quinn in the Naturalistic Observation Activities



Note. The lines and circles in blue are the trajectories of the mealtimes activities. The lines and circles in orange are the trajectories of the free play activities.

Figure 9

State Space Grids of Quinn and her Grandparent/Peers in Naturalistic Observation Activities



Note. The lines and circles in blue are the trajectories of the mealtime activities. The lines and circles in orange are the trajectories of the free play activities. 'Child' in y axis refers to Quinn. 'Other' in x axis refers to grandparent in mealtime and peers in free play.

Within-case Themes: Cautious and Attentive Parents

The parents were more hesitant about their children participating in the research project than the grandparents. Most grandparents agreed to participate and welcomed my visit after I briefly introduced myself and the project to them. Before they agreed, the parents would ask questions about the project regarding its purpose, procedures and benefits for them.

I met Quinn's father during the first visit and her mother during the second, which helped build a stable research relationship and trust between us. I met Quinn in her preschool in the pre-visit and then contacted her family to make an appointment to visit her home. Her father and grandmother were home with her when I arrived at her home. Quinn and her father were about to go to a wedding in their village. Meeting her father face to face helped a lot in building the relationship with the whole family. He asked questions about the current study and then agreed to participate. In the first round of data collection, I sent a message to her father to help make an appointment with her grandmother on the weekend. Because she went to preschool on weekdays and did not have meals at home after school, I visited her on weekends in the first and second rounds of data collection. I arranged the times with Quinn's grandmother when I planned the data collections and confirmed them with her before the visits when I arrived in the town.

In the second round of data collection, Quinn was not actually a 'left-behind child' because her mother came home to live with her and her grandmother. However, Quinn's family decided to remain in the study. When I called her grandmother to make the appointment for the second-round visit, she was happy for it to proceed. When I called to notify her father about the second visit, he told me that Quinn's mother was home and asked

if it was still okay to participate. He welcomed my visit to the family when he knew that I would still visit them, perform some activities with the children and interview Quinn's mother. When I arrived at Quinn's home, Quinn was playing with her friend on the street in front of her home. Her mother watched her from the door of their house, and her grandmother was doing housework at home.

Case Two: Cora, her Grandparents and her Brother

Cora was 38 months old when I met her in the first round of data collection. She had lived with her maternal grandparent in S village since she was about three months old. She had a younger brother. He was six months old and did not live with her during the first round of data collection, but he was sent back to their grandmother and lived with them in the second round. Her parents had worked in the provincial capital city since before she was born. She also had an uncle, who did not live with her.

Cora was able to speak fluent Mandarin and the local dialect when I met her in the first round of data collection. She was able to express her ideas clearly. We could communicate without her grandmother's help, and she was happy and confident when talking to people. Her Mandarin became even better in the second round of data collection. Cora's grandmother could also speak Mandarin without an accent, which seemed to indicate that she had higher levels of literacy than the other grandparents I visited, according to the social norms in the community, because her Mandarin was more standard. She always smiled and spoke in a gentle but high-toned voice.

Cora's parents were at home with her for a few days because of the national holiday during the pre-visit. Her father took her to the town to play and go shopping. I met her mother, younger brother and maternal grandmother when I visited them. Her grandmother was at home and had a casual chat with me. She mentioned that Cora's parents planned to take one child with them to the city and leave the other one after that holiday because they missed their children and wanted to live with them. Cora's younger brother was with their parents before the holiday, but their grandmother was unsure whom they would take with them. Her mother was visiting neighbours with her younger brother and came back just

before I was about to leave. I briefly introduced the current study, and she agreed to participate after asking a few questions. Cora's grandfather had gone to work at their farm, which was his everyday routine. I did not meet him during any of my visits.

Cora's home was neat and clean. Everything not being used was tidied away. Her grandmother was energetic, easy-going and optimistic. She always smiled and spoke in a clear and bright voice. In her opinion, she was like Cora's mother and took care of her carefully, and she fed and clothed her. She also mentioned that she would take her out to play during the first visit. However, on the second visit, she said that Cora would play by herself, get dressed and go to the toilet by herself since she had grown up already.

Procedure of Research Activities

The overall procedure of the research activities with Cora is shown in Figure 7.

In the first round of data collection, I visited Cora's home on the day I arrived to complete the three activities of the Mosaic approach and the grandparent's interview. Then, I filmed the mealtime observation and free play observation with Henk, Grace and some other children in the village in the village children's playroom over the next two days. In the second round of data collection, Cora also remembered the three activities of the Mosaic approach, like Quinn did. She was happy to show me the new things she had acquired and the changes in the house, and she was interested in mapping. However, she was not interested in the roleplay activity and refused it.

The teacher's questionnaire was missing because she did not have a teacher in the first round, and I could not visit her school in the second round because of the COVID-19 restrictions for preschools. The parent's interview was missing because her mother was busy and did not set times for interviews in the first and the second rounds.

Emotion Regulation and Lived Experience

Cora was happy most of the time, and she has her way of recovering from negative emotional states. The mean duration of the positive emotional states of the trajectories of all the observation activities in the two rounds covered 77.5% of the total duration.

The positive emotional duration was longer at mealtime than in free play. In the mealtime observation of the first round of data collection, the positive emotional states were 83.7% of the total duration, and 75.6% of the positive emotional states were with neutral facial expressions (Figure 10). Cora watched a cartoon when she was having breakfast. She smiled cunningly as she watched the cartoon and sang the song (the logo song of a website) at the beginning of the show every time it played. When she watched the cartoon, she devoted herself to it. Her eyes were on the screen, and she had neutral facial expressions most of the time. Her facial expressions changed according to the stories of the show. In the second round of data collection, the positive emotional states at mealtime were 82.7% of the total duration, and 79.0% of the positive emotional states were with smiles/laughs (Figure 11). Cora played with her friend as she had her evening snack after school. They laughed and shouted excitedly as they initiated games. They took turns doing so and imitated or joined each other's games.

The lowest percentage of the positive emotional states was the free play following the mealtime observation of the evening snack time in the second round of data collection, which covered 47.8% of the duration. Although it was a bit lower than the percentage of the neutral emotional state, the positive-smile/laugh cell had the highest duration of all the cells, covering 22.1% of the total duration time (Figure 11). It was the main attractor to Cora's emotional states and emotional expressions. In the free play, Cora's friend began to eat the

evening snacks after Cora finished hers and interacted more with her brother instead of Cora. Cora spent more time chatting with me and her grandmother. She showed more neutral emotional states with neutral facial expressions than she did in mealtime (the second and fourth SSG maps in Figure 12).

When Cora was playing or enjoying something by herself, she showed excitement and happiness at the beginning and then concentrated on her game or enjoyment with a neutral face most of the time. When she was interacting with others, such as playing and chatting with other people, she smiled and laughed a lot and even screamed to show her happiness and excitement.

She gazed at the cell phone after sitting down and then smiled cunningly, stood up to reach the cell phone and played the cartoon for herself. She smiled with bright eyes as she watched the show. She concentrated on the cartoon while she ate the egg in her hand, and she had a concentrated-neutral facial expression. When the logo song of the website played, which indicated the end of one episode and the start of another, Cora sang it to her grandmother. She changed the lyrics from 'the world is very good' to 'the world is very cool'. Her grandmother watched her as she ate and sang the song with Cora's lyrics: 'Yeah. The world is very cool.' Cora smiled at her grandmother and said, 'Yes.' She continued to concentrate on the show and ate the egg with a 'concentrating' facial expression. (In mealtime of the first round of data collection)

However, it was sometimes not easy to tell whether Cora was happy or not from her smiles, laughs and giggles because she also refused to follow her grandmother while smiling and laughing, and she even acted like she was playing with her grandmother. An example

was that in the first round of data collection Cora wanted to go outside when she and her grandmother were having breakfast, but Cora's grandmother asked her to sit down and eat her breakfast:

'No,' Cora said, then turned to the door and tried to walk out. But her grandmother held her elbow and did not let her go, and she said, 'Give you congee to eat. Have some congee, come on.' She pulled Cora back to the table and continued to say, 'have some congee'. Cora kept laughing and groaning as her grandmother held her elbow and did not let her go. She turned back when her grandmother mentioned congee but refused when her grandmother asked her to sit down again. Cora said coyly, 'No, I won't,' then looked into her grandmother's eyes with a big smile on her face. She laughed as her grandmother pulled her back. Her grandmother also smiled and did not show any anger.

Comparing this with Cora's transparent expressions of negative emotions, her smiles, laughs, and giggles were considered expressions of a positive emotional state. She said 'no' to her grandmother because she disliked the food, groaned with negative facial expressions as she refused to listen to her grandmother, and she pushed or stared at the other children when she fought or argued with them.

According to her grandmother, in the first round of data collection, Cora often vented her emotions or reacted to them passively. This seemed to be the case, as she pushed the other children when she was not happy with them and ran away or hid herself when she did not want something from her grandmother. In the second round, her grandmother reported that Cora used alternative activities to manage her emotions. Cora showed her

emotional management skills of alternative activities and cognitive reconstructions during the free play and mealtime observations in the second round:

Cora and her friend played in the room. They laughed and screamed excitedly as they threw the Peggy pig's dad on the floor and picked it up again. Cora's younger brother knocked over his potty when he stood up from it. Cora's friend and Cora stopped playing and looked at the younger brother and the potty. They froze for a second. Then, Cora's friend helped put the potty back up, and Cora ran to the door to get the mop. As Cora was mopping the floor with one hand, she had a mo with egg, the evening snack, in her other hand. She sighed and said, 'Oh dear. Everyone knows that Cora was a big, big kid.' She continued to mop the floor expressionless and with a lot of strength and took a bite from the mo in her hand. She looked up, and her gaze met her friend's eyes. They smiled and laughed as Cora continued to mop the floor.

(An example of cognitive reconstructions)

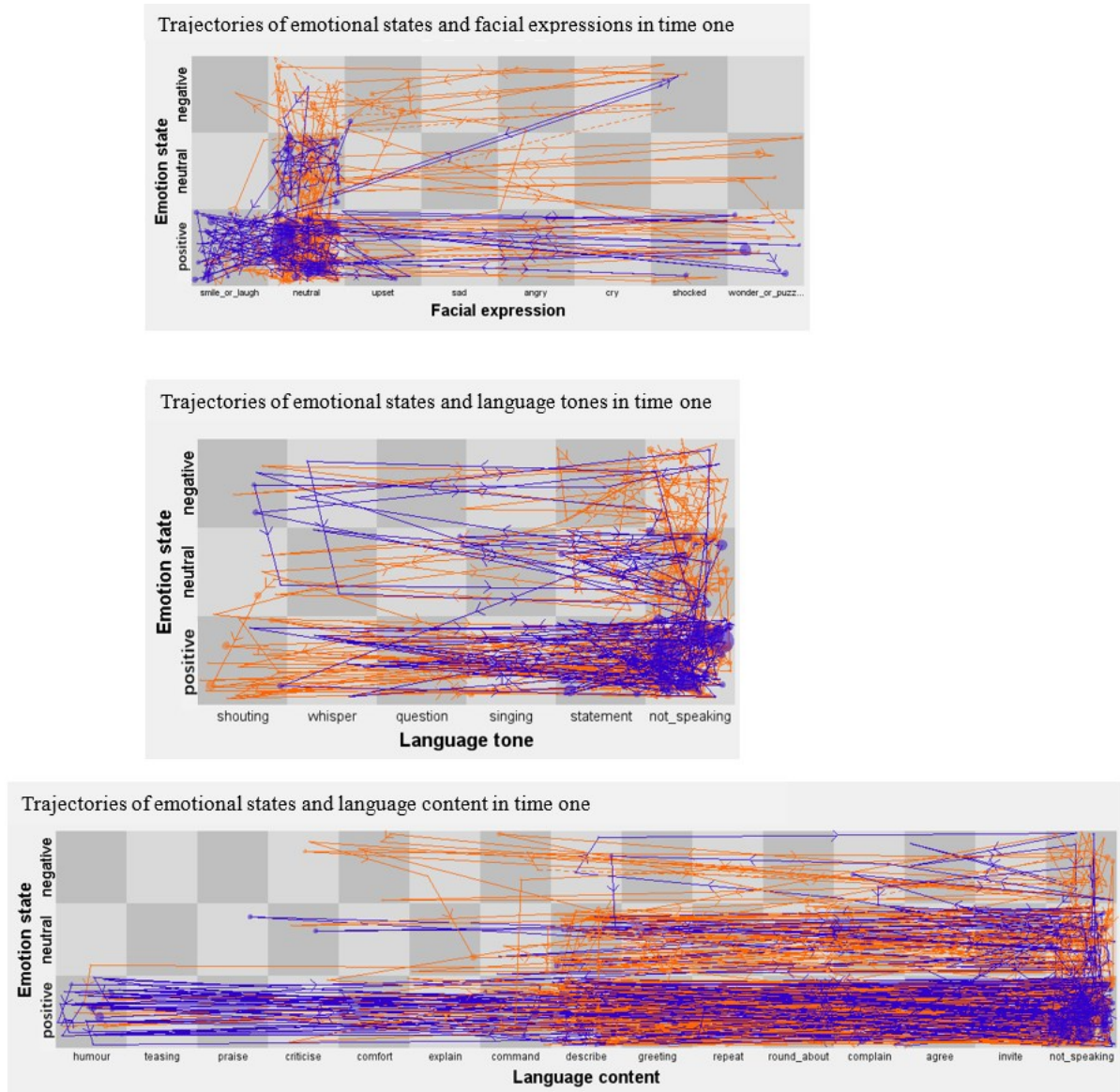
Cora helped her grandmother with the zipper of her coat and checked her friend's coat's zipper. She walked to me and said with a smile, 'Why is yours open?' I did not understand her words and asked, 'Yes?' She repeated her question, 'Mine, mine is not zipped up. It is open.' As I did not understand Cora's purpose for asking, I said, 'Ah?' She still smiled, and we said 'ah' to each other a few times. Then, Cora put down the bottle from which she had been drinking since she finished her evening snack and said seriously, 'I will zip it up.' She held her zipper, looked at it and then looked at me. I did not zip up my coat as she suggested, but I asked her, 'What will happen when [I] zip it up?' She looked down at the zipper of the coat again and then turned away. She let go of the zipper and make a 'woo' sound. She turned back to me,

laughed, looked up, pointed to the sky and said, 'Sun. Moon.' (An example of alternative activities)

Overall, the emotion attractor to Cora was positive emotional states, but she showed high variability in her trajectories, as she switched from positive to negative and from wonder to neutral or smiles/laughs. She often smiled as she interacted with people. This was similar to the way her grandmother interacted with others, except when she was complaining and worrisome, which was seen in the second round of data collection when Cora's grandmother visited Grace's grandparents with Cora's younger brother and chatted about taking care of one more child. As with Quinn in the former case, Cora also learned emotion management strategies from her grandmother.

Figure 10

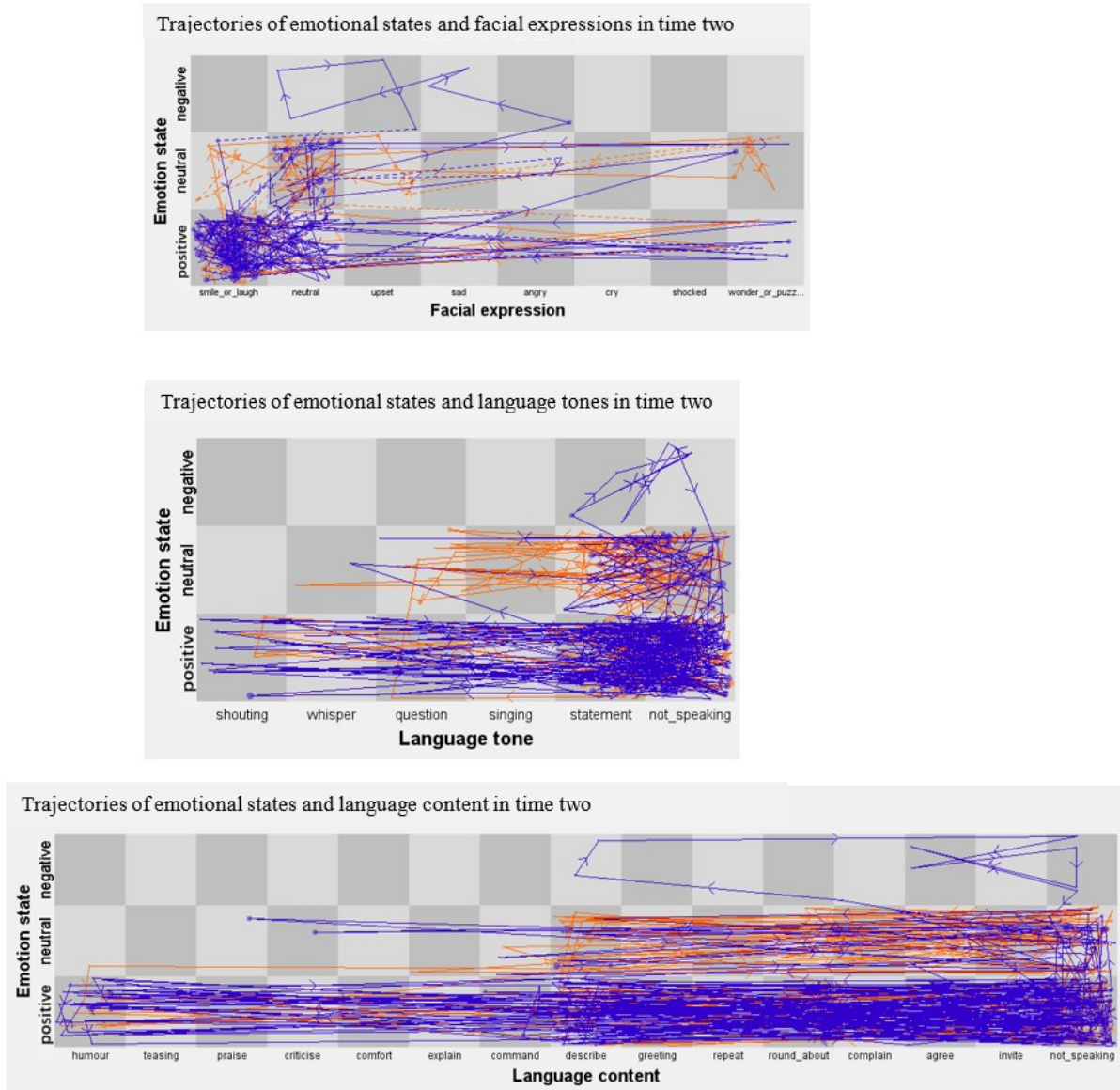
State Space Grids of Cora in the Naturalistic Observation Activities in Time One



Note. The lines and circles in blue are the trajectories of the mealtimes activities. The lines and circles in orange are the trajectories of the free play activities.

Figure 11

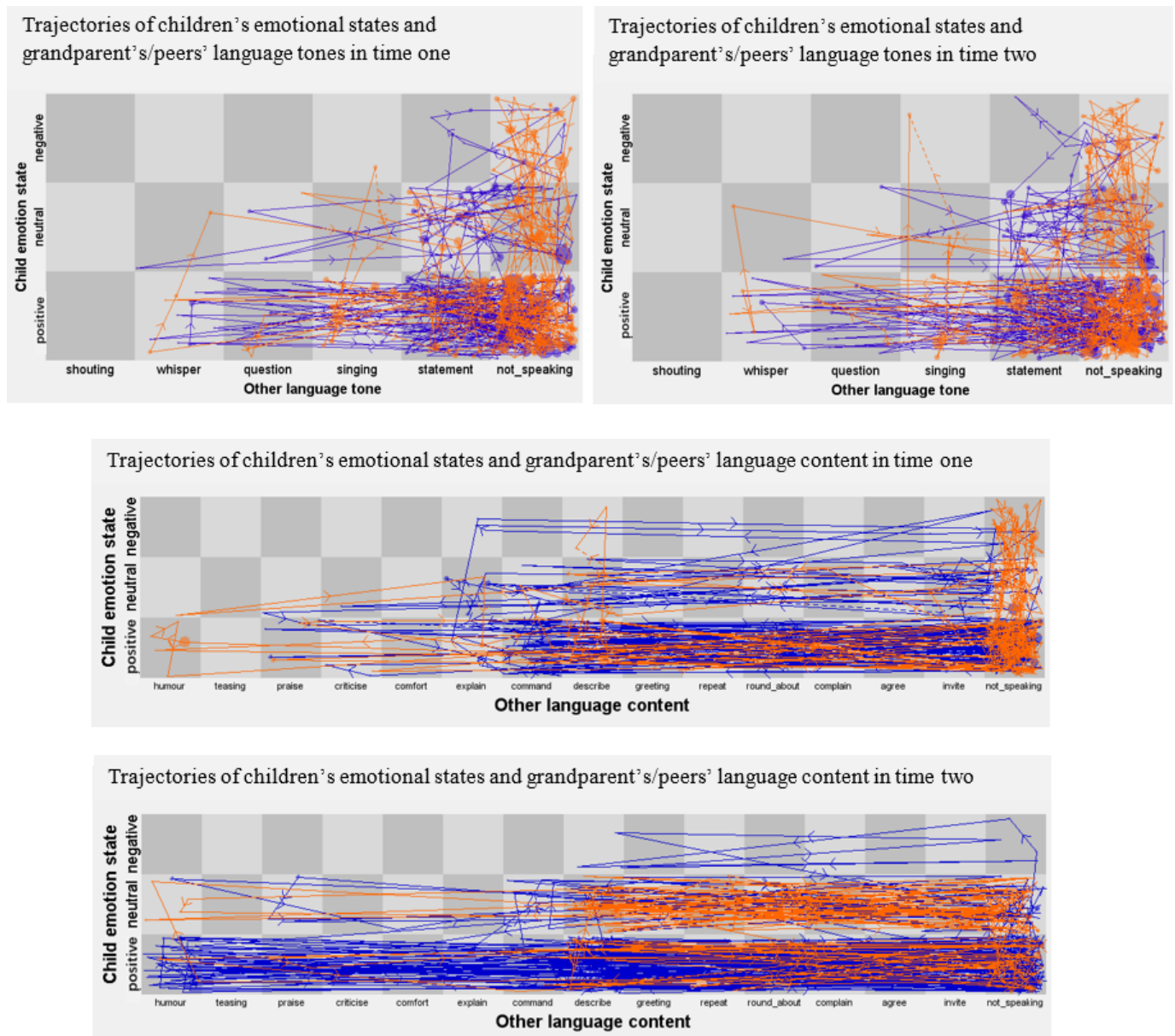
State Space Grids of Cora in the Naturalistic Observation Activities in Time Two



Note. The lines and circles in blue are the trajectories of the mealtime activities. The lines and circles in orange are the trajectories of the free play activities.

Figure 12

State Space Grids of Cora and her Grandparent/Peers in the Naturalistic Observation Activities in Two Rounds



Note. The lines and circles in blue are the trajectories of the mealtime activities. The lines and circles in orange are the trajectories of the free play activities. 'Child' in the y-axis refers to Cora. 'Other' in the x-axis refers to the grandparent at mealtime and the peers during free play.

Two Within-case Themes

Being an 'elder sister'. In the first round of data collection, Cora was at home with her grandmother. Her grandfather was working in the field as usual. She lived with her maternal grandparents, and her younger brother lived with her parents in the city, as he was still breastfeeding. That was the first time I met Cora. During my visit, some neighbourhood children and their grandmothers or mothers, including Grace and her grandmother, came for a visit. The children played together, but Grace followed Cora all the time except when she wanted to be with her grandmother. Cora accepted Grace as her 'little tail' and sometimes taught her how to play. This occurred not only when I visited her home but also in the free play observation. She also played with another girl who was about her age most of the time. According to their grandmothers and mothers, Cora lived on the same street as Grace and the girl, and they were both her friends. Most of the neighbours did not stay long. Grace and her grandmother left earlier because Grace wanted to play with me, and her grandmother did not want her to interrupt my work. The girl and her mother stayed longer than the others. The girl played outside with the other children as I carried out the activities with Cora. They all left when it was time to prepare lunch.

In the second round of data collection, Cora, who was 43 months old then, was at home with her grandmother, younger brother and good friend – the girl she played with most of the time in the first round of data collection. Her younger brother came back for the Spring Festival with her parents and stayed with the maternal grandparents. He was almost 12 months old. His mother left him with his grandmother when the breastfeeding period ended. While in the room, Cora's younger brother knocked over his potty during a gap in the research activities. Cora and her friend were not shocked or asked for an adult's help at once. Her friend asked the younger brother to stay still while Cora picked the toys up from the

floor. She then went to get a mop, cleaned the floor, put the mop back and came back to continue playing with her friend in the room. Cora's grandmother came in and realised what had happened. She changed Cora's younger brother's pants and let him play as well.

Starting Preschool. Cora began to attend preschool about a month before the second round of data collection. She took the school bus to school in the morning before breakfast and came home late in the afternoon. The school bus stopped at the village square every early morning to take the children to school and brought them back to the square in the afternoon. She stayed at the preschool in the daytime and had breakfast and lunch in school. However, the people in this area often only had breakfast and lunch. They had a snack in the evening if they were hungry. Because I visited her on a school day, we met in the late afternoon and evening when Cora was home having her night snack. When I arrived at her home, Cora's grandmother was about to prepare the meal for Cora and her younger brother, and Cora had just arrived home from school.

Cora's grandmother told me that Cora's friend's mother met Cora and her friend at the village square and brought them back to Cora's home. The two girls played together for a while, and Cora's younger brother was with them. Her friend's mother was not in Cora's home when I arrived, but she came later. She went back home to do her house chores while her daughter played in Cora's home. This was their routine during school days.

Case Three: Henk and his Grandmother

Henk was 31 months old when I visited him in the first round of data collection. He lived with his paternal grandparent in S village while his parents worked in the province's capital city. His grandmother was the primary caregiver. I did not meet Henk's family in the pre-visit to the village, as he was recommended by Granny Wen when I arrived at their

village in the first round of data collection to replace the boy I visited in the pre-visit who refused to participate when I contacted his family after the pre-visit to ask for consent. This was the first and only time I visited Henk's home because his family agreed to participate in the first round but withdrew before the second round. Henk did not talk much but was active and energetic. Before I began the research activities, his grandmother told me that he was not good at speaking. He did not speak Mandarin but could understand a little. Henk spoke in the local dialect during the activities and often used single words. However, he could speak in simple short sentences, as I had heard a few times during the activities. He also repeated some words in Mandarin after I said them as a method of affirmation or attracting attention in order to continue our conversations.

Procedure of Research Activities

The overall procedure of the research activities with Henk is shown in Figure 7.

In the first round of data collection, I visited Henk's home before breakfast to film the mealtime observation and complete the three activities of the Mosaic approach and the grandparent's interview. However, Henk was not interested in mapping and preferred roleplay after the photography and room tour. He spent a long time in roleplay because he took me out to play on the street for a long time until his grandmother, who was chatting with neighbours on the same street, decided it was time to go home for a rest when he was invited to tell a story about playing outside (see role play task instructions in Part *The Mosaic Approach*), leaving little time to try mapping again. Thus, I visited his home in the afternoon of the same day after the free play observation to ask him to draw the family map. Henk's parent's interview was missing, as his mother did not refuse to do the interview but did not agree, either. His mother always said that she was busy when I invited her for an interview.

Henk's teacher's questionnaire was not included because he was not in preschool yet and did not have any teachers.

Emotion Regulation and Lived Experience

From the exploration of Henk's facial expressions and emotional states during two activities (Figure 13), it can be seen that Henk was mainly in a positive emotional state while having breakfast at home. He showed that he was happy more than 70% of the time. He was mainly in a neutral emotional state in free play, which covered almost 60% of the duration of the observation. He was not as happy in the free play activity as he was at the mealtime activity. Regardless of his emotional state, Henk smiled or laughed for about 30% of the duration but had a puzzled or wondering expression when he looked at other children for almost the same duration. The times that he wondered about his surroundings (neutral-wonder/puzzled cell) and smiled happily (positive-smile/laugh cell) were the same. He had a neutral (neutral-neutral cell) or bored (neutral-upset cell) facial expression for one-fifth of the duration.

The positive and neutral emotional states were the two main attractors of Henk's emotional states. Figure 14 shows that he was happiest when his grandmother was not talking. During free play, he was also happy but mostly when the other children were not talking to him. The observation notes illustrated that the reason for his 'silent' happiness was food. He was happiest when eating, putting food in his mouth and having food in his hands at mealtime. The longest happy time recorded during free play was when he found a snack on the floor, picked it up and ate it for a while. At mealtime:

Henk's grandmother put stir-fried potato strips, the main breakfast dish on the day of the visit, into the mo to prepare it for him. Henk stared at the mo and

swallowed. When the mo was ready and his grandmother handed it to him, he immediately opened his mouth and stretched out his neck to reach it. His grandmother asked him to eat by himself. He grabbed the mo and opened his mouth widely to bite it as quickly and hard as possible. He used his facial muscles to help as well. As he chewed a big mouthful of mo, he rocked his chair back and forth quickly and made 'tuk-tuk' sounds.

When he was in free play:

Henk wandered around the room and looked at the children and adults in the room with a puzzled facial expression after fighting over the blocks with Cora. His grandmother pointed at the blocks on the floor and suggested that he pick them up to play. She said, 'There are other blocks.' Henk looked in the direction she pointed and smiled. However, he crawled under the table after seeing a baked sunflower seed on the floor. He picked it up, stood up, leaned his elbows on the table and began to eat it. He watched Cora and the other children with interest and smiled from time to time as he ate the snack.

In addition, Henk did not react to commands or the negative emotions of others with emotional changes or actions. Figure 14 shows that Henk was never sad or angry when his grandmother shouted at him, but her whispering triggered 63.2% of his negative emotions at mealtime. He had no negative emotions when his grandmother criticised him, but he became angry when she praised him at an event node. When his grandmother commanded him to do something or stop doing something, he stayed in a happy mood almost 45% of the time. For another 45% of the time, he was not annoyed or angry. He was not sad most of the time when the other children shouted at him. No attractor for the interaction between the languages of the peers or the grandmother and Henk's emotional states was found in the two SSG maps in

Figure 14. It again supported the observation notes that food was the main emotional trigger for Henk.

The SSG maps and observation notes also suggested that Henk did not listen to his grandmother when her command was against eating the things he wanted or the way he was eating. However, when she whispered into his ear, he became angry or annoyed. His emotions recovered from the negative side after his grandmother spent a long time explaining the reasons for her commands, which was how she phrased her commands or criticisms every time during the observation. He did not do as he was told if the command was about not eating the things he wanted. For example, in the mealtime observation, Henk wanted his grandmother to go to the room and take the tangerines there for him to eat, but his grandmother tried to stop him:

His grandmother cooled the congee by stirring it with a spoon. When the congee was ready, Henk stood up after looking around the room for a long time and walked away from his seat. His grandmother said to him, 'Come eat.' He ignored her. Again, she said, 'Come, come quickly to eat, come.' He did not return, so she said again, 'Quickly, come. Have breakfast. Come here.' He went back after that but refused to eat. He pushed her hand away when she put the bowl of stir-fried potato strips in front of him. Ignoring her whispers to him asking him to eat his breakfast, Henk pulled her up from her seat. His grandmother did not stand up at once, which made Henk angry. He pulled her up again, and they walked to the room, which was five or six steps away. She said, 'You sit down to eat. Why do you walk away?' Henk headed to the room and did not look at her while pulling her. 'Hey, you are strong,' his grandmother said, smiling, as they went to the room.

After they took the tangerines from the room and returned to the table, Henk smiled and held the tangerines in his hand.

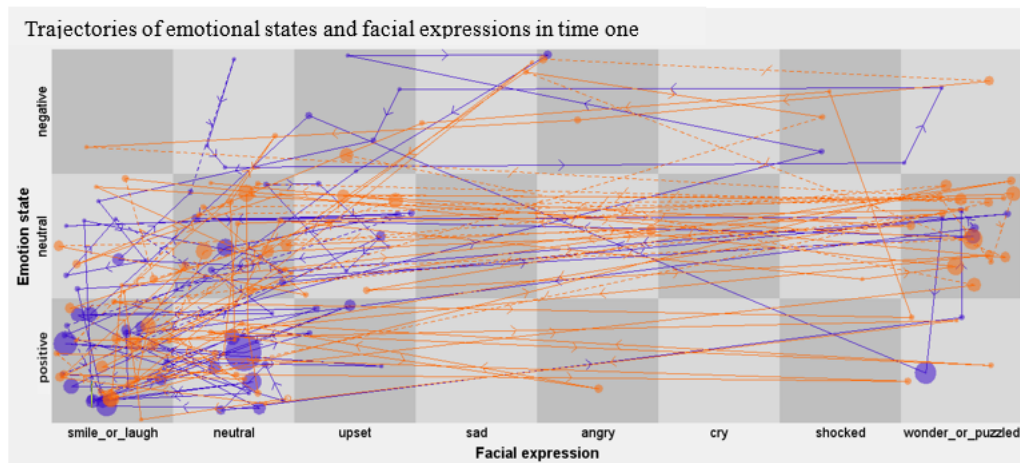
When Henk rocked his chair as he ate, his grandmother also tried to stop him:

Her grandmother said, 'Eat and behave yourself. What are you rocking (the chair) for?' Henk ignored her and continued to rock his chair. She stopped him with her arm. Henk slowed down a little when she touched him and whispered in his ear that he should behave so that he could play later. Henk pouted as he ate his mo. Henk continued to rock his chair, and she did not stop him anymore.

Henk's grandmother reported that Henk did not vent his emotions, which was contradictory to the observation notes. He did not get a chance to play with the blocks, so he showed upset and annoyed facial expressions. He pushed another child's blocks when he saw the child playing with some blocks. He smiled as the child became sad. He also shouted at his grandmother when he was angry that she did not let him take the tangerines he wanted before breakfast. Henk's grandmother also reported that Henk employed an alternative activity strategy to manage his emotions. Henk showed this in both observation activities. When he was upset about a situation, Henk quit or did not listen. In the free play activity, he left early after the other kids rejected him. He had a sad facial expression and looked around the room at his peers before he left. At the mealtime observation, he did not listen to his grandmother's words and did what he wanted to do.

Figure 13

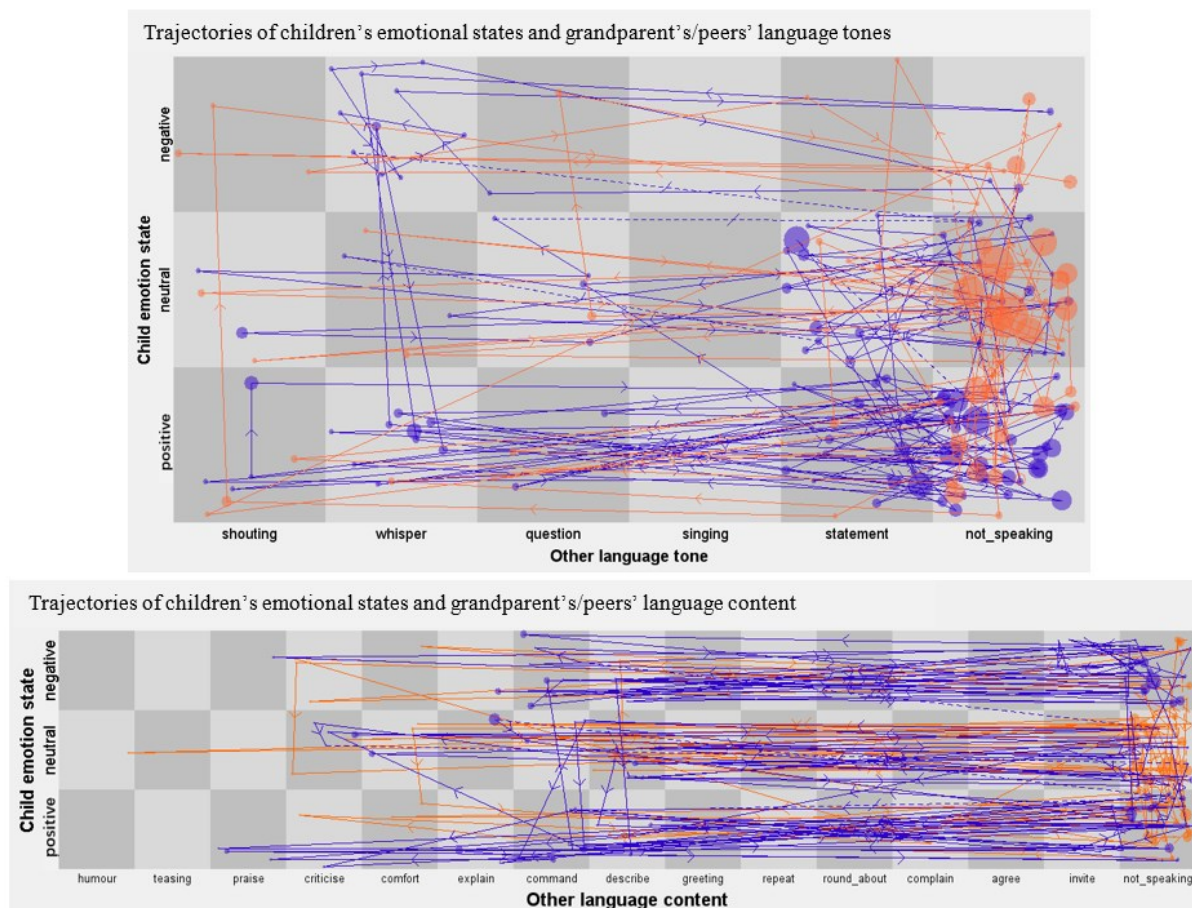
State Space Grids of Henk in the Naturalistic Observation Activities



Note. The lines and circles in blue are the trajectories of the mealtime activities. The lines and circles in orange are the trajectories of the free play activities.

Figure 14

State Space Grids of Henk and his Grandparent/Peers in the Naturalistic Observation Activities



Note. The lines and circles in blue are the trajectories of the mealtime activities. The lines and circles in orange are the trajectories of the free play activities. ‘Child’ in the y-axis refers to Henk. ‘Other’ in the x-axis refers to the grandparent at mealtime and the peers during free play.

Two Within-case Themes

Shy and vigilant grandmother. Henk's grandmother was a quiet woman compared with the other women I met in the village during my visit. When I visited Henk's family, his grandmother was welcoming, cooperative and smiling, but her voice was low, and she sometimes whispered when she spoke. Her house seemed to be quieter as well. When she went outside to talk to her neighbours while I performed the activities with Henk, her neighbour laughed out loud and talked with a bright voice, but her voice was softer than theirs, and she only smiled more widely but did not laugh. Her expression was frozen when I took a photo of her for Henk to do the mapping. However, when she looked at the picture I took, she smiled and moved her head and body coyly. She also stayed away from us during my visit. In China, people often regard this way of reacting to others' invitations as shyness and bashfulness. In the terminology of psychology, this is a kind of withdrawal behaviour.

Henk and I played with a fishing toy on the bed, and his grandmother sat on the sofa on the other side of the room, which was not very close to us. He said to his grandmother, who was watching us and sometimes talking to others in the room or acting as my translator, 'Grandma, you catch.' His grandmother did not come and join the fishing game when he asked. Henk repeated, "Grandma catch, too." Whispering in a high-pitched voice, he walked to his grandmother and grabbed her hand. I repeated what he said and tried to convince his shy grandmother to join us. After hesitating for a while, she allowed Henk to pull her to the bed.

Furthermore, she was cautious and scrupulous regarding social policies and current affairs. When I called his grandmother to confirm the appointment for the second round of data collection at the initially planned time, his grandmother answered my call and was

welcoming. She said that Henk's mother had returned home and was ready for the parent interview. However, she also suggested that I visit a few weeks later as there might be a COVID-19 restriction in their town and village because there was a new case of COVID-19. This was the only new case for months in the capital city of the province. She was the only one who mentioned the COVID-19 restriction. I have to return on the next day I arrived in the town because the new restrictions were implemented on the day I arrived.

Modern House Style. Henk's family was the only one who presented themselves as having a modern style, although they lived a village life. Their house was closer to the village square compared to those of the other participants from his village (Cora and Grace). It was built and partially decorated in the latest modern style. It was more modern than all the other participants' homes.

The people in the village usually use one room as the living room, bedroom and sometimes dining room, but Henk's home followed the modern style, which differentiates the functions of the rooms. Henk's parents' room was used as the living room, and his grandparents' room was used as the bedroom. Henk slept with his grandmother in the grandparent's room, but no one mentioned where his grandfather slept. Its yard has a plastic roof. White tiles were used on the walls facing the yard. The windows of all the rooms were made of aluminium alloy and had marble sills.

The materials used were very similar to the demonstration houses built and designed by the local government as examples of 'good' and 'latest style' houses in the village. The demonstration houses also differentiated the functions of the rooms and had separate bedrooms, a living room, a kitchen, a bathroom and a backyard. The local government built the demonstration houses beside the village square. The designs and sizes of the houses were

the same. However, it was not free for the village people to own one of these houses. They had to pay the house bills if they wanted to have one of the new houses. Henk's home was not a demonstration house, but it was in a similar style, and they built it by themselves.

Like the other houses in the village, the parent's room was in modern style. It had a Western-style bed instead of a kang. The grandparent's room was in the traditional style. Unlike the other families, Henk's grandmother did not meet guests and neighbours in the room where they slept, which was the traditional-style room. She met visitors to her house in the modern room, which was her parents' bedroom. Henk's grandmother made preparations for the mealtime filming by putting the dining table in the middle of the yard before I arrived. She did not mention that, but the yard did not seem to be their usual dining place. During the room tour, Henk did not say that they had meals in the kitchen, as the other children did, or in the yard (which he and his family did on the day of the visit).

Case Four: Grace, her Grandparents and her Mother

Grace was 18 months old when I visited her in the first round of data collection. She lived with her paternal grandparents in S village, while her parents worked in the province's capital city. She had an aunt who was not married and lived in the city.

Grace did not speak very fluently in the first round of data collection. She could only use single words to express herself and pronounced some words unclearly. However, she was talkative and responded to others with spoken language and actions. Her grandmother followed us most of the time to translate her words and encouraged and gave her hints to answer my questions. In the second round of data collection, she spoke in simple short sentences. We communicated most of the time without others' help, but her grandmother was still warm and very helpful. She would explain Grace's behaviour and words to me and provide background stories and information on what Grace showed me.

Procedure of Research Activities

The overall procedure of the research activities with Grace is shown in Figure 7.

In the first and second rounds of data collection, I visited Grace's home in the morning to film the mealtime observation, then completed the three activities of the Mosaic approach and the grandparent's interview and questionnaire. However, Grace did not take part in the roleplay activity in the first round because she was too young to understand the task of telling a story with an imaginary background and situation. Although Henk also misunderstood the task and acted like the pretend situation was a real one, which was not telling a story but making it happen, Grace was the only one who ignored the guidelines of the tasks. She played with the dolls prepared for the task for a while and then put them away

and went to play in the yard. In the second round, she did not remember the activities of the Mosaic Approach. She was not interested in roleplay and refused to do it.

The parent's interview was missing in the first round. Grace's mother stated that she was busy when I contacted her to make an appointment for the interview in the first round. When I visited Grace's home in the second round, I asked her grandparents what time Grace's mother might be available for an interview. Grace's mother replied to me when I contacted her at the recommended time and agreed to the interview right away. Grace's teacher questionnaire was not completed in the first and second rounds because she did not attend preschool yet and did not have any teachers.

Emotion Regulation and Lived Experience

Grace was in a positive mood for more than half of the time in all the observation activities in the first and second rounds. She was in a positive emotional state for 59.9% and 66.8% of the durations at the mealtime observations in the first and second rounds of data collection (Figure 15 and Figure 17) and 51.3% of the duration in the free play observation in the first round (Figure 15), which was less than that of the mealtime activities. The chaos and fights of her peers during the free play activity upset Grace, and she was unpleasant when she saw other children crying or feeling upset.

Grace stood on the opposite side of the table when Henk and another boy got into a fight. Henk approached the boy's blocks, and the boy stopped him with his arms and said, 'No.' The boy failed to stop him, Henk pushed the blocks down. The boy cried out, 'Fall! Ahhhhhhhh.' Grace frowned at them and looked around to scan the adults' reactions. The boy cried loudly and was very sad. Then, with an angry face, he hit Henk and said as he cried, 'Who let you push mine!' Grace had an angry facial

expression when she saw this. She stayed still for a second and then walked away from the table.

She showed her happiness mainly with smiles and laughter. Three observation activities' mean duration of the positive-smile/laugh cell was 224 out of the mean duration of the 389 positive emotional state cells. She also showed her positive moods through actions, such as eating, looking around and wondering about the things around her. The mean durations of the positive-neutral and positive-wonder/puzzled cells were 122 and 36, respectively (Figure 15 and Figure 17).

Grace ate a piece of steamed apple. She held it in her hand, biting and chewing like a hamster. Her head moved up and down slightly as she bit. Her body also moved slightly as her head moved. There were many people in her home, as early autumn was the end of the busy harvest season, and people often visited each other. Grace's family had breakfast later than most families that day, so some neighbours already had their breakfasts and visited Grace's family as they were having breakfast. A neighbour was sitting near the door with her grandchild, a baby. Grace turned around to look at them when they made sounds, she continued chewing the steamed apple like a hamster. Then, Cora's grandmother called her name and asked her to eat facing the table so that I could film her face. Grace turned back and looked around with eyes wide open. The steamed apple was in her mouth and hand, and she continued chewing like a hamster. She looked around at the people with wonder and interest, and then she smiled at them. (In mealtime of the first round of data collection)

Grace showed her negative emotions explicitly with facial expressions and actions in both activities in the first round of data collection, but she did not have very many negative emotional states (9.8% of the mean duration). For most of the durations ($M = 93.5\%$) and events ($M = 92.9\%$) of Grace's negative emotional states, she had an upset, sad, angry, crying, shocked or puzzled facial expression (Figure 15). Grace showed negative facial expressions, shouted and cried when her needs were not noticed or satisfied after expressing them positively or neutrally. However, she recovered quickly from her negative feelings when her grandparents took away the things she disliked or gave her something else to attract her attention from the things that upset her. She also learned to express herself when her grandparents showed a high variability of emotional expressions with words. For example, she learnt to express her feelings through her interaction with her grandparents in mealtime in the first round of data collection:

Grace's grandmother said 'pao mo'⁷ to Grace and dipped a few pieces of mo into the congee. Grace made a sound that sounded like 'no' and pointed to the mo. Her grandmother then said to her, 'This is Mo,' and continued to put them in the congee. Grace seemed unsatisfied with the pao mo, as she showed an upset facial expression. Her grandmother then whispered to her, 'Pao mo. Pao mo.' Grace stepped back, waved her hands violently and then clapped and made crying sounds as she refused the pao mo. Her grandfather watched them and said, '[She] doesn't want it.' Her grandmother said, 'You like it. Dip it in and eat it. I give you mo to eat. Come on.' Grace then said clearly this time, 'Don't want it, don't want it.' She cried aloud as her grandmother insisted on offering her the pao mo. Grace was peaceful when her

⁷ Dip the steam bun into congee or soup. It is a traditional and common way of eating steam bun or bread in the north part of China.

grandmother mentioned congee but refused again when she mentioned mo. Then, her grandmother said, '[If you] continue shouting, [I'll] give this to your grandfather to eat.' Her grandfather also said, 'Don't shout.' He opened his mouth and said, 'Give it to me to eat, ah' as her grandmother pretended to feed the mo to him. Grace stopped crying immediately, laughed and clapped her hands. The grandparents both said 'ah' to Grace to ask her to eat. Her grandmother offered the spoon to her again. Grace did not go to her grandmother, but she was still happy and did not shout. Her grandmother walked to Grace and said, 'Quickly.' Her grandfather said 'ah' and opened his mouth to coax Grace into opening her mouth. Grace then opened her mouth and ate the food on the spoon with a smile as her grandmother fed her.

In the second round of data collection, Grace expressed her needs and feelings with words to her grandparents and dealt with them without using negative emotional expressions. Her negative emotional states in the observations in the second round were less than that of the first round, covering only 1.2% of the duration of the mealtime observation (Figure 17).

After a few spoons of steamed egg cake, she walked away with the piece of mo again. Her grandfather said 'hey?' and pointed to the steamed egg cake in her grandmother's hand as she walked away. Grace responded with 'en' and had a bite of the mo. She smiled at her grandparents but did not go back to her grandmother to continue eating the steamed egg cake. 'I want to eat,' her grandfather then said and pointed at Grace's bowl to coax Grace into having some more steamed egg cake. However, Grace laughed and repeated his words, 'You want to eat.' She pointed at the bowl in her grandmother's hand as her grandfather did.

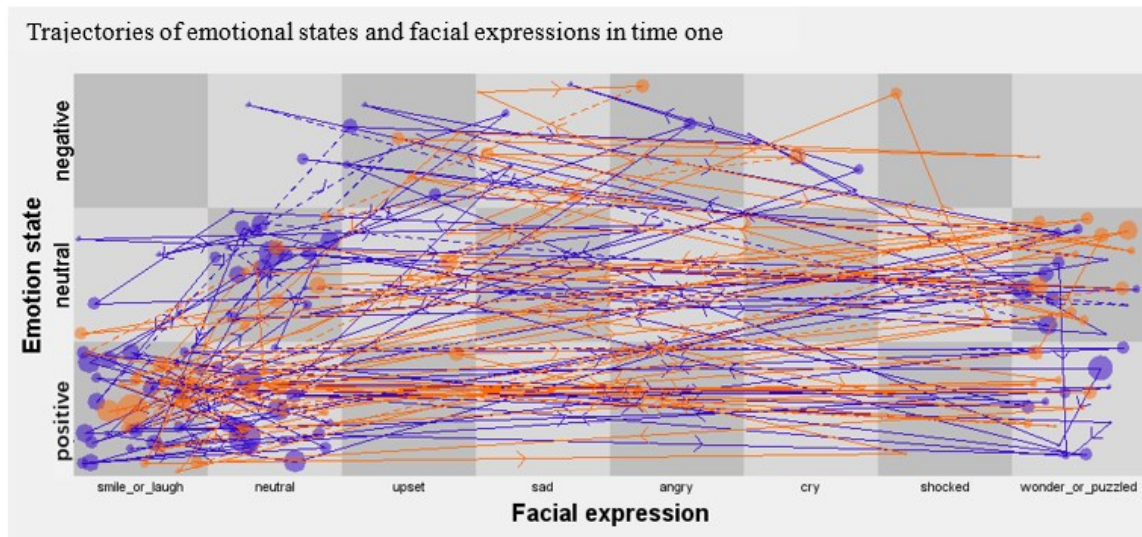
Overall, the positive emotional state was the main emotion attractor for Grace, even though she showed high variability of emotional expressions in the first round of data collection. When she was older and developed more language skills and cognition, she showed fewer puzzled and wondering facial expressions and expressed herself with words instead of extreme emotional expressions. However, her grandmother reported that venting emotions and reacting passively were Grace's two most often employed emotion regulation strategies. She also told the neighbours and reported in the questionnaire that Grace was naughty and disobedient. When she chatted with the neighbours, she complained in a light-hearted way that Grace was a 'pig child' – a local word meaning that a child was naughty, not eating properly, or obedient in a loving and uncriticising way.

Grace's grandmother called Grace to go to her when she saw that when she saw Grace was about to be involved in chaos or a fight among the other children during the free play activity. She asked Grace to withdraw from situations that evoked negative emotions, which was an example of a passive reaction strategy. Grace also used extreme emotional expressions to show her needs and gain her grandparents' attention in the first round of data collection, especially when the grandparents were chatting with the neighbours. She expressed her emotions clearly with various facial expressions and words consistent with her emotional states (Figure 15). Her grandmother was aware of her negative emotions and took action quickly. Emotion venting was a successful strategy for Grace to communicate with her grandmother. The grandparents also showed high variability of emotional expressions with language (Figure 16 and Figure 18), which was consistent with Grace's high variability of emotional expressions with language in the second round (Figure 17) when she developed her language skills as she grew older. Taken as a whole, the grandmother's report on Grace's emotion regulation strategies in both rounds suggested that Grace was developing skills in

emotional expressions and emotion management well by learning from her interactions with the grandparents.

Figure 15

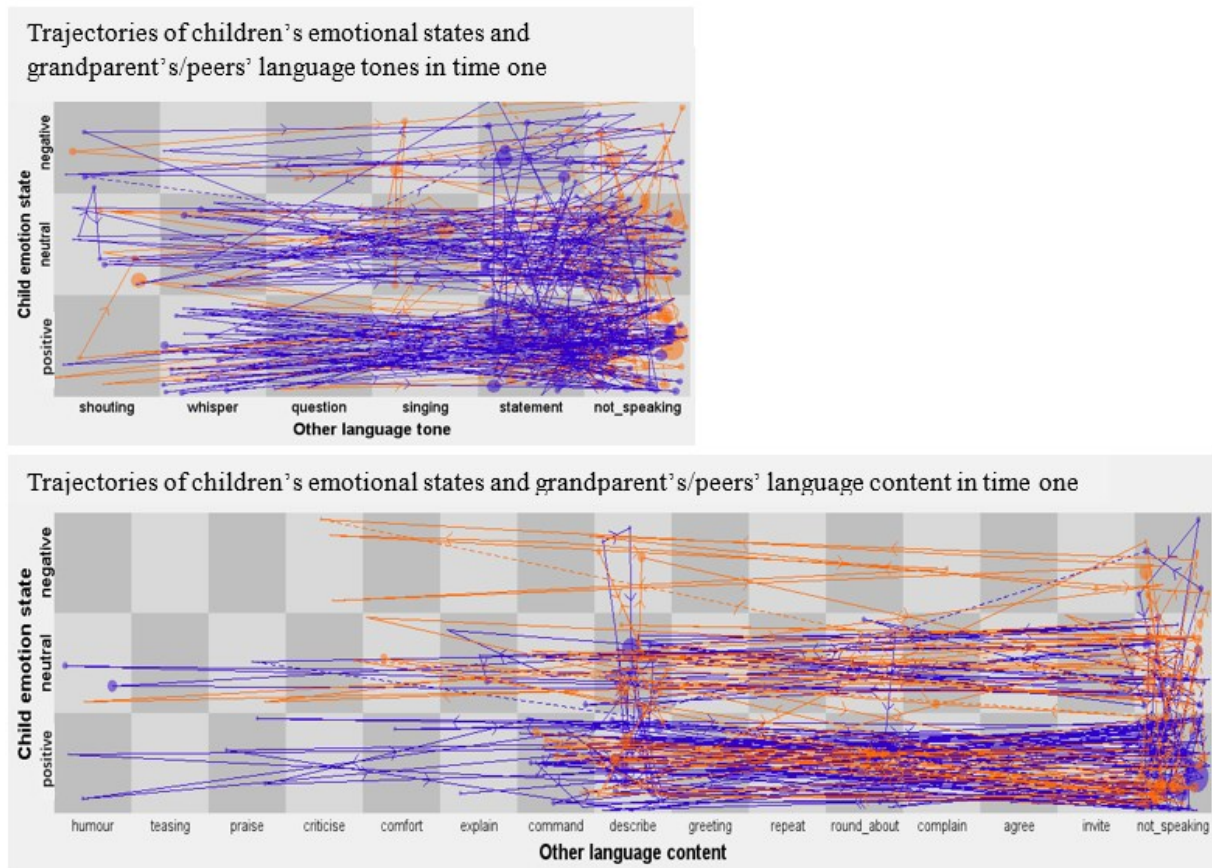
State Space Grids of Grace in the Naturalistic Observation Activities in Time One



Note. The lines and circles in blue are the trajectories of the mealtime activities. The lines and circles in orange are the trajectories of the free play activities.

Figure 16

State Space Grids of Grace and her Grandparent/Peers in the Naturalistic Observation Activities in Time One



Note. The lines and circles in blue are the trajectories of the mealtime activities. The lines and circles in orange are the trajectories of the free play activities. 'Child' in the y-axis refers to Grace. 'Other' in the x-axis refers to the grandparent at mealtime and the peers during free play.

Figure 17

State Space Grids of Grace in the Naturalistic Observation Activities (Mealtime) in Time Two

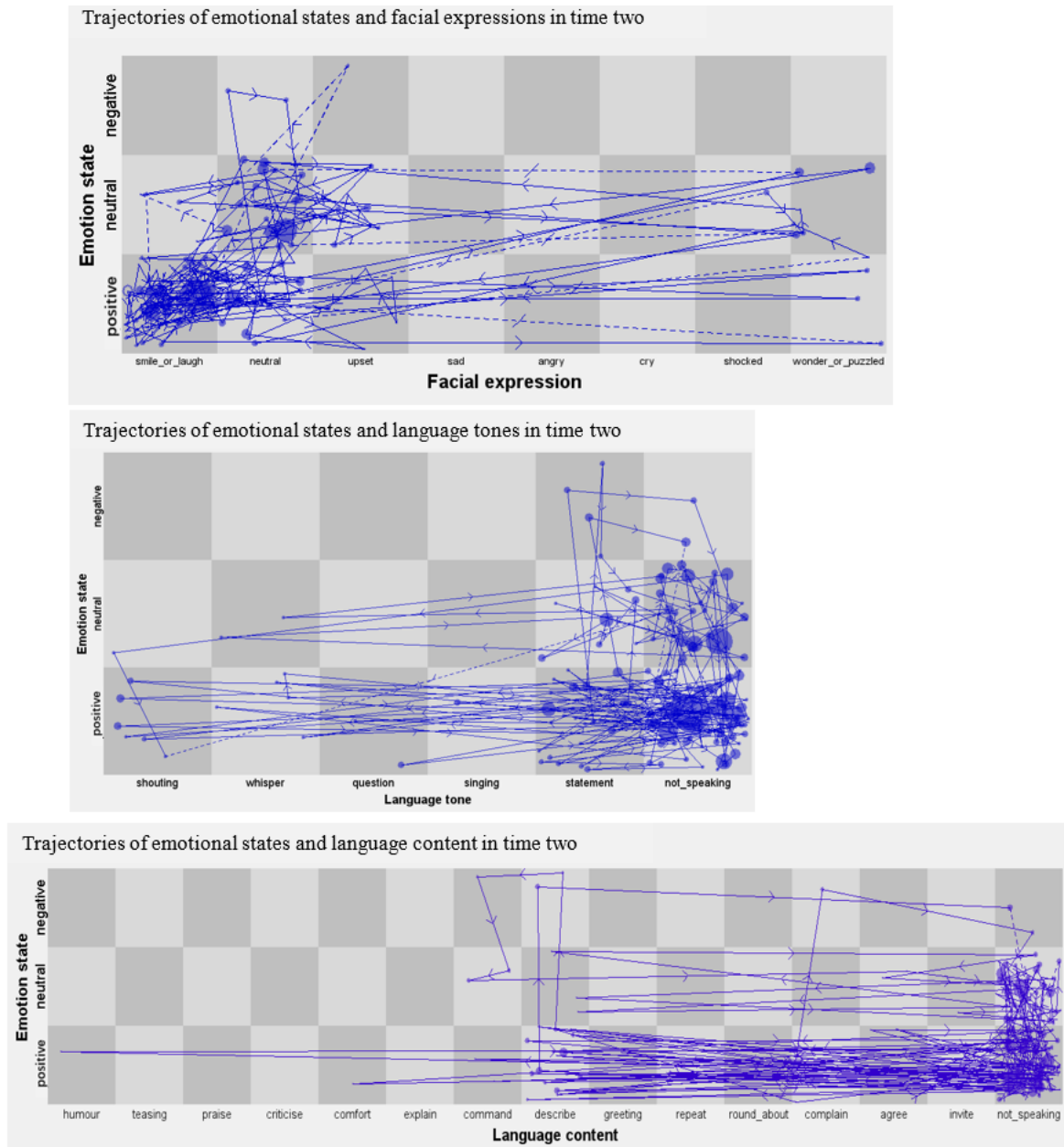
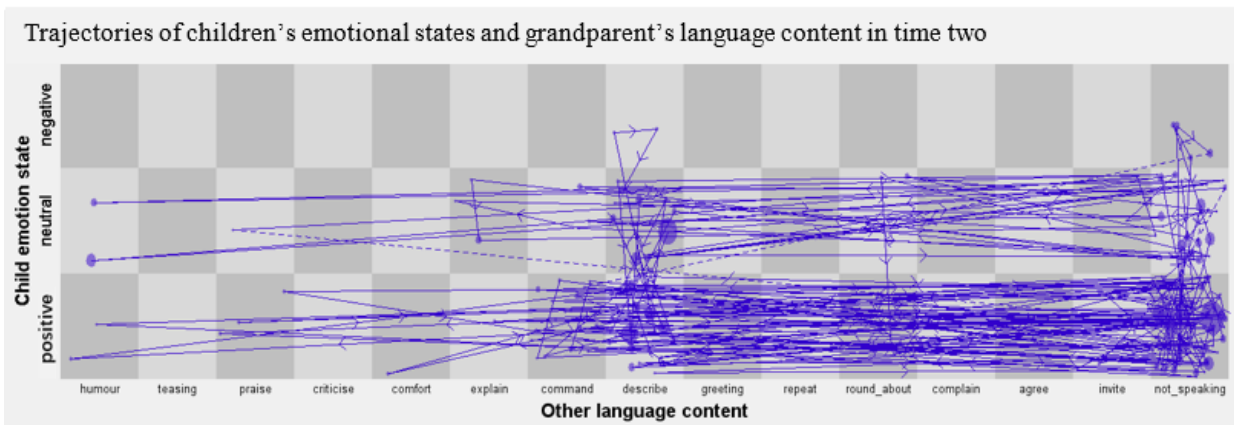
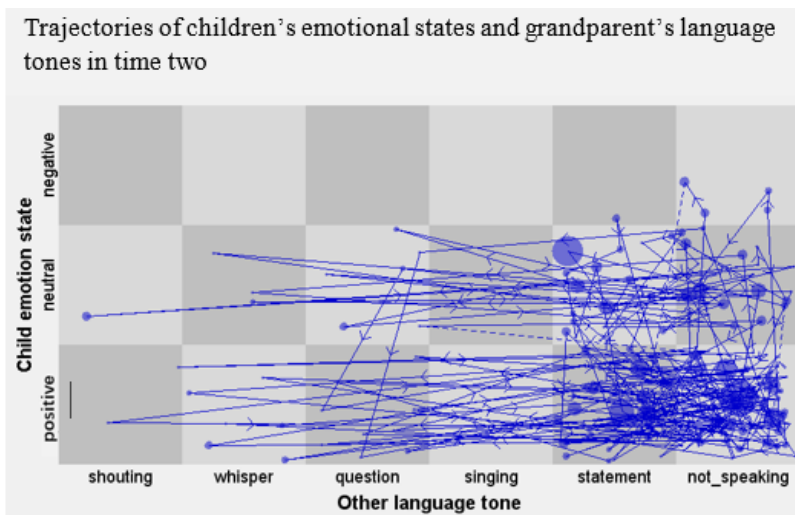


Figure 18

State Space Girds of Grace and her Grandparent/Peers in the Naturalistic Observation (Mealtime) Activities in Time Two



Note. 'Child' in the y-axis refers to Grace. 'Other' in the x-axis refers to the grandparent at mealtime and the peers during free play.

Within-case Themes: Grandfather being with the Child

During the first round of data collection, I filmed mealtime videos of Grace and her grandparents after greeting them in the morning. I planned to set up the camera, but I stayed in their home longer than in the others' homes because they waited for the grandfather to return home for breakfast. To film their mealtime videos at breakfast time, I went to their house more than once after calling them to reconfirm the appointment times in the morning before going to their home to film the mealtime videos for both rounds of data collection. During the first round, Grace and her grandmother waited for Grace's grandfather to return from work on the field so that they could have breakfast together as usual. After he went home and they were about to have breakfast, I visited again for the filming. This was the first time I met him. He was interested in my project and wanted to know how to provide good-quality early education to Grace. He also went to the field later than usual that day and joined us when I performed the activities with Grace. He chatted with me when I was available during the gaps in the activities. I stayed longer than planned for the filming of the mealtime video because Grace did not stay at the table as the older kids did during breakfast. In order to film Grace who moved around the room during breakfast, I held the camera and stood in a corner of the room. Her grandparents sometimes chatted with me during breakfast. The neighbours who already had their breakfast also came to visit and chat with family as they were having breakfast.

It was not very common for grandfathers to have breakfast at home in this area. Meeting the grandfathers was also not as typical as meeting the grandmothers, although this does not mean that grandfathers were not significant caregivers of the children. Grace's grandfather was the only grandfather who had breakfast with the child and grandmother every day among the four participating families. There was another grandfather who also had

breakfast with his grandchildren at home, but that family stopped participating in the study. That particular grandfather was the primary caregiver of the child, and the grandmother was not an adequate caregiver.

Grace's grandfather often went to work on the field early in the morning and then returned home for breakfast. Grace and her grandparents did not sit at the table and eat quietly all the time during breakfast. The grandparents chatted with the neighbours and walked away if they had other things to do. Grace sat on the sofa or the children's wooden bench, or she stood beside the table during the meal. Her grandmother suggested that Grace 'did not eat properly'. Her grandfather cooperated with her grandmother by helping to watch her and coaxing her to eat the food.

Grace wandered around and did not sit down to eat properly. Her grandmother pulled her bench to the side of the table where Grace stood before and said, 'Sit down, sit down here, eh.' She tried to take Grace's arm to pull her closer and said, 'Come'. Grace did not let her take her arm and brought the bench to the door. Grace's grandfather laughed as Grace moved the chair away. Grace put the chair down, walked to the door and looked for Cora. Her grandmother shouted, 'Come! Eat! Come on!' Then, Grace's grandmother walked back to the sofa and sat down, but Grace did not do as she was told. Her grandfather called her name loudly, 'Grace! Grace!' Her grandmother also said loudly, 'Cora is not here.' However, Grace still stood at the door of the house and looked out to the yard. Then, she ran out to look for Cora. Grace's grandmother saw her run out of the room but chatted with the neighbour inside the room for a while and had some congee. They chatted about why Grace ran out of the room, and Grace's grandmother explained that Grace was

running after Cora. Grace's grandfather suddenly said, 'She ran away.' At that point, Grace's grandmother stood up and ran out to bring Grace back. (In the mealtime observation of the first round of data collection)

After breakfast, Grace's grandfather stayed at home with her and her grandmother for a while and played with Grace when she asked him to. Grace's grandmother helped him with the farm work at home. Afterwards, he went to the nearby field to continue working. This was their regular morning routine with their neighbours during and after breakfast. Grace or her grandmother did not tell me about the grandfather's schedule. I learned it from my naturalistic field observations and by chatting with him.

In the second round of data collection, when I made an appointment with them, Grace's grandmother asked me to go to their house at breakfast time that day without calling them to reconfirm because they had known me well enough. Grace's grandfather was not there when I arrived. He came back late that morning, so Grace and her grandmother waited for him before they set the table and had breakfast. I waited and chatted with them as I played with Grace in the same manner as a neighbour or acquaintance. Grace's grandmother worried that I was waiting too long, as I had not had breakfast, but I refused her invitation to have breakfast with them after waiting for almost 30 minutes. She insisted on giving Grace a bowl of egg custard so that I could film a little before the formal meal. I told her I was not hungry. Grace did not sit at the table properly while eating her egg custard. She kept running to the door of the house to check whether her grandfather was back or not. She suddenly became excited and said that her grandfather was back. Her grandmother and I did not think so because her grandfather did not show up when we followed her to the door. Grace was pretty sure that her grandfather was back and insisted on

going outside to greet her grandfather. Her grandmother said that Grace might have heard the sound of her grandfather's agricultural tricycle, but he did not arrive. When I followed Grace to the street, we found her grandfather around the corner of their house organising some objects in his agricultural tricycle. Grace became excited and went to help him. When he was almost finished with his work, he asked us to go back into the house and said he would be right back. Grace did as she was told and welcomed him with her grandmother at the door when he drove in and parked in the yard. Then, Grace's grandmother set the table, and they began to have breakfast. I left the camera in place and left. Cora's grandmother then showed up with Cora's younger brother and stayed with them during their breakfast. They chatted about their daily lives and the news and shared food and stories of the grandchildren.

Conclusion

Overall, six primary themes were generated from the children's stories in the four cases and the observations of the researcher. There were: the cautious and attentive parents in Quinn's case, being an 'elder sister' and starting preschool in Cora's case, the shy and vigilant grandmother and the 'modern' house style in Henk's case, and the grandfather's being with the child in Grace's case. The themes showed that the people, social roles, life events and spaces were unique to each child's case.

In relation to the primary themes generated within each case, the influence of the grandparents on the children's emotional expressions and management was shown in the analyses and reflections on the children's emotion regulation development. The influence of grandparents and their way of teaching and rearing the grandchildren are further discussed with other across-case themes in the next chapter. The across-case analysis in *Themes from*

the Across-case Analysis Chapter shows the across-case themes from the information collected and explored from the four child cases and the research process.

Themes from the Across-case Analysis

This chapter introduces the five themes inductively generated from an across-case thematic analysis with deductive discussions referring to the Person-Progress-Context-Time model of the left-behind young children (PPCT model, see *Methodology* Chapter), which underpinned the design of the current study. The five themes are children's playing, family relationships, different perspectives from adults, learning and education and community life.

The four child cases (Quinn at 52 months, Cora at 38 months, Henk at 31 months and Grace at 18 months of age in the first round of data collection) shared some similarities in the children's lived experiences and includes information belonging to the same topics. Using the lived experience stories expressed by the children through the Mosaic approach, the observations of the researcher and the analysis of and findings from the two measurements of the children's emotion regulation development, an across-case thematic analysis returned five recurring themes. In this chapter, these themes are presented in a central-outer order of circles within the PPCT model, with the child as the centre (see Figure 4-1 in *Methodology* Chapter).

The first theme, playing, introduced three topics: *time, toys* and *friends, peers and other playmates*. These were important parts of the children's proximal process. The topics showed when, where, with whom and how the children played each day from their perspective and indicated the significance of playing as the main activity of their daily lives. The three topics also revealed the children's characteristics, motor development and social development, which were personal factors for the children, by the children's toy preferences and the way they played with their toys as well as their interactions with peers and playmates.

The second theme summarised the children's family relationships, significant factors for the microsystem and proximal process in the PPCT model of the children's lived experiences, through four topics that were central to the children's lived experiences: the children's closeness with their family members, absent family members, the children's concept of family members and changes among household members. The four topics not only reflected the children's relationships and interactions with their parents and grandparents, but they also showed the children's perspectives on their family. The children in the current study showed close attachments to their family members, including parents, grandparents, uncles and aunts.

The third theme was the differences between the children's perspectives and the grandparents' perspectives on children's lived experiences, which were the personal factors in the microsystem. Through comparison, the researcher was able to introduce and discuss how the children and their caregivers expressed and viewed their lived experiences from different perspectives and what the differences between the cases were.

The learning and education activities of children, the fourth theme, was a significant theme generated across the cases. It showed the children's reactions and perspectives on their grandparents' and parents' actions and beliefs that their grandparents and parents showed in their interactions with the children. The parents and grandparents showed their methods of disciplining and encouraging the children and their efforts to develop their literacy skills during the activities of the Mosaic approach and the naturalistic observations of children's emotion regulation. This theme also showed the children's lives when they attended preschool; it showed the children's daily lives both within the microsystem and the mesosystem.

The fifth theme was about the culture of the community, a contextual factor for the exosystems and meso- and macro-time frames (Bronfenbrenner, 1994). Although the children and grandparents of the four cases had slightly different lifestyles, the communities, grandparents and children expressed similar standards of ‘good child’ and ‘good grandparent’ and showed flexibility in their daily lives during the research process. This was related to local culture, Confucian philosophy and the trend of modernisation in China.

As an overall picture of the lived experiences of young left-behind children, the conclusion of this chapter summarises the themes in relation to the research questions and the PPCT model. The children’s lived experiences were shown in the results of the children’s emotion regulation and the within-case themes in *Four Child Cases: Within-case Analysis* Chapter. The across-case themes in this chapter are reflected and discussed in the next chapter in response to the research questions, such as what the children’s lived experiences were like from their perspectives and their interrelationship with their emotion regulation development.

Playing

All of the children in this study showed their love of playing. When the children introduced their homes and their daily routines to the researcher in the photography and room tour task of the Mosaic approach, their most frequent and enthusiastic topics were toys and games. They were excited when they were invited to join the free play activities and when they could play freely with the researcher and other people present during the breaks in the research activities. Besides being an activity that the children loved, playing was their main activity daily, which was inferred from the children’s frequently mentioning it and the grandparents always using the children’s play activities as examples when they talked about

their daily lives with their grandchildren and answered the questions in the emotion regulation questionnaire.

According to the PPCT model, the children's play activities are part of the proximal process in the model that relates to the personal and interpersonal factors of the focal individual (Bronfenbrenner, 1994). In the current study, playing showed the children's characteristics and the development of their social and motor skills through their preferences for games, toys, locations, peers, activities and individual ways of interacting with peers and caregivers.

Time of Playing

Playing was the children's main activity throughout the day in the current study. The younger ones – Grace, Henk and Cora – who did not attend preschool or had just begun their preschool life, did not introduce their play schedule in the Mosaic approach but showed that they were always playing. They were playing at home with their grandparents or by themselves when the researcher arrived in their homes. They also played with the researcher during the activities of the Mosaic approach and played alone, with peers or with adults after the activities were completed. They often walked away from the dining table during mealtime to play with toys, or they played with their friends and peers while eating.

The oldest child in the current study, Quinn, described the time and place where she played on the days she did not go to preschool, as she did in the photography and room tour task in the first round of data collection.

Researcher: What do you usually do after breakfast?

Quinn: I play.

Researcher: Where do you go to play?

Quinn: *The square.*

Researcher: *The square.*

Quinn: *Yeah.*

Researcher: *Which one is the square? Is it the one nearby?*

Quinn: *No, it is not. Walk along the shops and you will arrive [at the square].*

Researcher: *I see. Who will bring you there?*

Quinn: *My father or whoever wants to take me there when I ask them to take me there.*

Researcher: *Well, who usually brings you there if your father is not here?*

Quinn: *My grandmother takes me there.*

.....

Researcher: *How long before you have to come back from the square if you go to the square to play?*

Quinn: *Five minutes.*

Researcher: *Just five minutes?*

Quinn: *Yes.*

Researcher: *That is still a long time before lunch.*

Quinn: *Five minutes is when I arrive at the square and play. It is six minutes.*

.....

Researcher: *What will you do after lunch then?*

Quinn: *Go to the square to play.*

Researcher: *You will go to the square again. Will you meet other children as well?*

Quinn: *Yes, I will.*

Researcher: *What time will you come back at night?*

Quinn: It is ten minutes in the evening.

She understood that the researcher was asking about the time she spent playing, but she did not know the exact time. However, she made it clear that she played at the square in the daytime with her friends except for breakfast, lunch and evening snack time. Her description also indicated that her play hours in the morning were shorter than in the afternoon, which was consistent with the shorter gap between breakfast and lunch than the gap between lunch and evening snacks. Her grandmother went to the square with her sometimes and sat on a bench to chat with the neighbours. Since the village people were assumed to be asleep before breakfast and after evening snacks and school started before breakfast and ended just before the evening snack, it can be inferred that Quinn meant that she played with her friends all day at the square on weekends and holidays with her grandmother or her father as her companion.

Toys

All the children showed great interest in showing their toys when they were asked to show their homes to the researcher. They also invited the researcher to join in their play with their favourite toy during the research activities and during the breaks between the activities. There were many types of toys, such as push cars, children's cars, children's tricycles, toy cars, fishing toys, flashcards, dolls, balloons, toy guns, snowflakes and bricks. The children also played with things that are not normally categorised as toys, such as corn, mobile phones, chairs, tea tables and iron cages. The children had their preferences and favourites. Table 4 shows the toys shown to the researcher by the children, toys that the children did not mention but appeared during the room tour and objects not typically thought of as toys, but the children explained how they played with them.

Table 4*Children's Toys and Objects They Played With*

Type of toy (introduced or showed)					
Child case	Gross motor development	Fine motor and visual development	Literacy training	Pretend play	Other
Quinn			Storybooks	Dolls (mouse, cat, hedgehog and Barbie doll) and toy gun	Mobile phone, bunk bed and sofa
Cora	Balloon, children's vehicles and hopper ball	Fishing toy, snowflakes and remote controlled car	Inserting toys with figures and characters	Plastic toys (dinosaur, Peggy pig's dad and Ultraman), dolls (rabbit and bear), toy shovel and car	Mobile phone, tea table, weighing scale and safety helmet
Henk	Child's tricycle and balloon	Fishing toy	Whiteboard and flashcards		Mobile phone, table, TV table, iron cage, corns and rapeseeds
Grace	Balloon and push car	Match blocks	Flashcards		Mobile phone, bush, pen and weighing scale
Type of toy (not introduced)					
Child case	Gross motor development	Fine motor and visual development	Literacy training	Pretend play	Other
Quinn	Balls and child's bicycle	Blocks			
Cora	Rattle	Wind-up toy	Flashcards		
Henk				Toy gun	
Grace		Fishing toy		Doll	

Gross Motor Toys. Toy cars, bicycles, tricycles and push cars were popular among the children. The children had yards in their homes to ride their vehicles. They also rode on the street and village square when the weather was warm without rain or snow. Cora, Henk and Grace, who were at the stage of developing their gross motor skills (MOE, 2012), showed their love and interest in toy cars. For example, Henk showed his tricycle to the researcher in the photography and room tour task in the first round of data collection:

He led me to his car park in the yard and got on his tricycle (Figure 19). He rode it around the yard and imitated the ‘uhuh’ sound of a car or motor-tricycle. He rode fast and crashed on the walls a few times but turned around quickly and flexibly, making sounds of the tires rubbing against the ground. Then he parked his tricycle back in the car park, positioning it in almost the same place and angle as when he rode it out.

Figure 19

Henk's Car Park and his Child's Tricycle



Quinn, the oldest child among the four, also had a child's bicycle in the storage area of their house, but she did not show it to the researcher. She took the researcher to the storage

area only to introduce her Barbie doll. She said ‘yes, I have many’ when the researcher showed interest in the boxes of toys in the storage area.

Children’s vehicles are a type of toy that children can use to develop their gross motor skills. Other toys for gross motor development that were seen in the cases included balloons (Grace, Henk and Cora), weighing scales (Grace and Cora), a hopper ball (Cora), furniture (Quinn, Cora and Henk) and a bush (Grace), as shown in Table 4. All the children in the cases had toys and other things to play with for gross motor activities, but the younger ones were more likely to play with these kinds of toys at home. Quinn, who was almost four years old, engaged in gross motor activities by playing with furniture, wandering around the neighbourhood and helping with house chores.

Fine Motor and Visual Motor Toys. The children in the cases also showed the researcher their fine motor and visual–motor toys. One of the most popular was a fishing toy. All the children in S village had fishing toys because Project Z gave out fishing toys as gifts when their project began. Grace, who was so young (18 months old) and did not develop the fine motor skills needed for the game, did not play with a fishing toy or show one to the researcher. Henk and Cora introduced their favourite fishing toys to the researcher but played with them in different ways (see Cora’s in and Henk’s in Figure 21). Henk was not able to catch the fish by himself. He ordered others to fish and knocked the caught fish against each other. He had weak fine motor and visual–motor skills compared with Cora who was also about three years old. She showed her fine motor skills in the photography and room tour task in the first round of data collection when she introduced her fishing toy:

Figure 20

Cora's Fishing Toy Bought by her Parents

**Figure 21**

A Type of Fishing Toy Similar to Henk's (Given by Project Z)



(Cora prepared to play with the fishing toy.) She knew how to do everything. She took out the fish, rods and small pool and filled the pool with tap water. She placed the fish into the pool and distributed the rods. She needed help from her grandma to take the toy to the room because the water in the pool made it too heavy, and it was difficult to move. She told her grandmother, 'We go fishing. Grandma, we go fishing.'

As we played a fishing game, Cora caught a shell and showed it to me excitedly. 'Look, I got a shell.' She asked me to catch a fish by saying, 'Many, many fish. Auntie, come on, catch a fish.' I caught a blue fish and asked her, 'What kind of

fish is this?’ She said, ‘I do not know.’ I told her that it was a blue fish and asked her to help put it aside. Cora said, ‘No problem.’ She groaned and pretended that it was a real fish that she was trying hard to get from the rod. Then, she said, ‘Look, the duck was there. Quack quack quack.’ I asked her, ‘Catch the duck?’ She said, ‘Yes, catch the little duck.’ She was excited and asked me to catch one. I agreed but asked her to first catch a fish for me. Cora agreed but decided to catch a different one at first, then changed her mind to catch the one I asked for. When the fish did not stay in place, she pretended that the fish I caught ran away and chased it. When we had caught almost all of the fish, I asked her to show me the place she had meals by saying, ‘Let’s cook the fish.’ She refused and told me that ‘(the fish) cannot be eaten’.

Henk and Grace had only one set of the fishing toy each, while Cora had two sets. The one she liked to play with was bought by her parents. The one given by Project Z was mentioned by her grandmother. When her grandmother suggested she show both sets to the researcher, Cora replied ‘en’ but continued to show the set bought by her parents and prepared to play with it with the researcher.

Toys for Literacy Training. Toys for literacy training were also popular. Quinn, the oldest of the four children, had storybooks. She said that she loved to read but could only read by herself because her friends did not like reading and did not share her love of books. Cora and Henk, who were about three years old and attended preschool during the second round of data collection, had flashcards that their grandparents used to teach them words and reading. However, Cora, who was able to express her feelings, intentions and needs and could describe things in complete sentences, did not show her flashcards to the researcher, nor did her grandmother suggest she show them. Henk, who could only use single words and showed

his emotions and intentions by shouting and taking action, showed his flashcards to the researcher and named some of the objects on them when prompted by his grandmother.

Grace, the youngest, also had flashcards. In addition, she had block figures, which her grandparents used to teach her to recognise colours, figures, animals and jobs. Grace did not show the flashcards or block figures (Figure 22) to the researcher, but she played with the cards and block figures with her grandmother happily and invited the researcher to play together when her grandmother brought them out to distract her attention from the researcher's bag as we waited for her grandfather to have breakfast and start the mealtime observation.

Figure 22

Grace's Match Block Figures



Toys for Pretend Play. Toys that required the imagination of the child or were used for pretend play were also introduced by some of the children. The girls had dolls and plastic toys, and the boy had a toy gun. Cora and Quinn made up stories with their dolls and plastic toys, while the youngest, Grace, did not mention it to the researcher. Henk did not mention his toy gun to the researcher, either.

Cora pointed at the doll on the bench and said, 'Ultraman! Ultraman fights with the monsters. He is lying here, sleeping.' (Figure 23) (In the photography and room tour task in the first round of data collection)

Cora threw Peggy pig's dad on the ground and walked away. I asked her, 'Oh, where is Peggy pig's dad?' She walked back and said, laughing, 'It's on the

ground.' She picked it up and put it into the safety helmet together with the dinosaur. She said, 'Peggy's dad did not like the dinosaur.' She raised the dinosaur up and said, 'The dinosaur can fly. Look.' Then, she raised up the helmet and said, 'Peggy's dad can fly, too. They are flying. Woo, woo.' She raised the helmet and dinosaur and walked around, pretending that they were flying. (In the mealtime in the second round of data collection)

Figure 23

Cora and the Sleeping Ultraman



Mobile Phones. Mobile phones were also notable toys for the four children in the current study. All of them mentioned or showed a mobile phone as one of their favourite things to play with. They were familiar with it and used it to do different things. Grace asked for her grandmother's cell phone when she showed the researcher around her house. She held the phone by herself and used it to play songs as she danced. Cora watched a cartoon on her grandmother's phone while she had breakfast. When her grandmother stopped the cartoon show, Cora left the room with her mo, the local name for steamed bun, although she did not have an upset expression. Henk took the researcher's phone and was stopped by his

grandmother, who asked him to explain why mobile phones were forbidden. Henk answered immediately, 'Eyes wrong.' He meant that the phone would hurt his eyes.

Quinn said that one of her favourite activities was playing with the mobile phone in her father's room and showed me the sofa she sat on when she used the phone.

When we were in the room, she explained in a lower voice and sign (seem to show that she felt pity about it) 'My grandmother did not like this room.' She added, 'I can only use mobile phone when my dad is here. My grandmother does not have a mobile phone.' Her grandmother had a mobile phone but not a smartphone. When I noticed that she was tired after walking around in the rooms, she said, 'Yes, a bit tired, because I watched things on mobile phone this morning for a while.' (In the photography and room tour task in the first round of data collection)

All the grandparents were not supportive of their grandchildren's use of mobile phones, but the children showed expertise in using them and had fun with them in their own ways.

Friends, Peers and Playmates

Peers and neighbours were part of the children's lives in their communities, as they met one another almost every day. They were the children's friends and playmates, as implied by the children during their mapping tasks in the current study, as well as their explanations of their daily activities that were shown to the researcher during the research process. Table 5 summarises the friends, peers and playmates as indicated by the participants.

Table 5*Friends, Peers and Playmates of the Children*

Child's name	Indicated by				
	Child	Grandparents	Friends and peers	Neighbours	Observed by researcher
Quinn	<ul style="list-style-type: none"> Friends: children in the neighbourhood and a girl in her class 		<ul style="list-style-type: none"> Friends: a girl in her class and a girl of the same age living in the neighbourhood 		<ul style="list-style-type: none"> Friends: a girl in her class and a girl of the same age living in the neighbourhood Peers: classmates
Cora	<ul style="list-style-type: none"> Peers: Grace Friends: a girl of the same age living on the same street 	<ul style="list-style-type: none"> Friends: Grace and a girl of the same age living on the same street 	<ul style="list-style-type: none"> Friends: a girl of the same age living on the same street Playmates: Cora 	<ul style="list-style-type: none"> Friends: Grace and a girl of the same age living on the same street 	<ul style="list-style-type: none"> Peers or friends: Grace and a girl of the same age living on the same street
Henk	<ul style="list-style-type: none"> Friends: some older boys living in the neighbourhood 	<ul style="list-style-type: none"> Friends: some older boys living in the neighbourhood Playmates: neighbours living on the same street 	<ul style="list-style-type: none"> (children of a similar age did not want to play with Henk) 	<ul style="list-style-type: none"> Playmates: neighbours living on the same street 	<ul style="list-style-type: none"> Playmates: neighbours living on the same street and grandmother

Child's name	Indicated by				
	Child	Grandparents	Friends and peers	Neighbours	Observed by researcher
Cora	<ul style="list-style-type: none"> • Playmates: 	<ul style="list-style-type: none"> • Friends: 	<ul style="list-style-type: none"> • Peers: 	<ul style="list-style-type: none"> • Playmates: 	<ul style="list-style-type: none"> • Friends:
Grace		<ul style="list-style-type: none"> • Playmates: other children in the neighbourhood, grandparents and neighbours	Cora	<ul style="list-style-type: none"> • Peers: Cora	<ul style="list-style-type: none"> • Playmates: Cora's younger brother, neighbours and grandparents

Friends and Peers. The children had friends in preschool and around the neighbourhood. When the children were not in preschool they played with their friends in each other's homes, on the street or in the square. Quinn, the oldest child in this current study, often played with her friends of a similar age. Two friends of hers, a classmate and a girl living in the neighbourhood, showed up during the research process and agreed that they were friends with Quinn, and they all played together.

Researcher: Oh, by the way, do you play with your grandmother or do you play with other children when you are in the square?

Quinn: I play with other children. I can ask my friends to come out and play together when it is not a school day. (In the photography and room tour in the first round of data collection)

The researcher asked Quinn to invite one of her friends from class to join the free play activity. As soon as she was asked to do so, she immediately walked to a girl and chose her. The girl did not appear surprised by her choice and agreed happily. She stood up quickly and went to Quinn. Wearing happy smiles, they waited for the other children to invite their friends. (In the free play in the first round of data collection)

When the researcher arrived at Quinn's home, she was playing with a girl. Her mother said the child lived in the neighbourhood. She agreed with the researcher when the girl was referred to as 'Quinn's friend'. While the girl was waiting for Quinn to complete her map so that they could play blocks together, the researcher asked her whether she and Quinn were friends. The girl agreed, and Quinn also said, 'That's right.' (In the second round of data collection)

For the children of preschool age, they could also be each other's schoolmates, such as Cora and her friend. As their parents and grandparents usually chose the same preschool, they went to school and came home together on the same school bus, and they played together after school. They also played with each other at home after school. Cora's free play activity in the second round was filmed during the daily after-school playtime.

Furthermore, Quinn and Cora showed their abilities to be the play initiators and leaders among their peers and friends, as well as their attachment to their close friends. Cora and Grace also showed their ability to lead and take care of their peers who were younger than they were when they played together.

Other playmates. The neighbours visited each other and became part of the children's play environment as well. They sometimes became the children's playmates. Henk's neighbours played with him happily during the research activities and reported that Henk played with them every day and that they liked him very much. Although Henk named two of his friends in the mapping task and his grandmother agreed with him, none of his friends showed up during the study, and he was rejected by all the children in the free play activities – the children tried to keep the toys away from Henk when Henk stayed close to play together. Grace was also popular among the neighbours. In the second round of data collection, Granny Wen commented that Grace was interesting to play with and that she often played with the ladies in the neighbourhood during the Spring Festival.

Family Relationships

The children showed their attachment to their parents, grandparents and other family members when they showed their homes (photography and room tour task) and drew their family map (mapping task) for the Mosaic approach. The grandparents also mentioned the

children's relationships with them and their parents in their interviews, answers to the questionnaires and conversations with the researcher. The children felt a strong attachment to their family members. Their concept of family was revealed when they discussed the structure of their families and their lived experiences. This concept is not the same as the concept of the core/nuclear family. Their favourite and closest family members were not necessarily the ones who lived with them and always communicated with them.

Closeness with Family Members

The children in this study were reared by their grandparents, who shared the responsibility of caregiving in different ways among the families. The parents also took part in the caregiving activities by providing materials, visiting and making video calls to their children. Thus, the children had multiple care providers even though they lived with their grandparents in the rural villages, and the grandparents were the main caregivers. These care providers provided different kinds of resources to meet the children's mental, physical and material needs. The children mentioned their care providers according to their perceptions of how their needs were being met. Their discourse reflected their closeness with different family members.

Quinn showed her connection with her grandmother and her parents through her descriptions of the spaces and objects of her home, as well as her daily life in the tasks of the Mosaic approach in the first round of data collection. When she introduced the spaces in her home in the photography and room tour task:

After showing her parent's room and her grandmother's room, Quinn stood in the yard with the researcher.

Researcher: Do you have any place that you think is awesome and would like to show me?

Quinn: Ummm, I don't have pretty rooms. Only these two rooms.

Researcher: Oh, I see, but these two rooms are great, too.

Quinn (raising her tone and saying in a louder and brighter voice): I have two rooms.

When she introduced her beloved dolls in the photography and room tour task:

Quinn and the researcher entered the main room.

Quinn (directing the researcher to look at the dolls on the sofa): Some dolls were also put here.

Researcher: Whose dolls are those?

Quinn (raising her voice a bit): They are mine. My father and my mother bought them. And my aunt.

Researcher: I see. Do you have a favourite one?

(Quinn walked fast to the dolls, held them up and introduced them one by one earnestly, then she waited for the researcher's reaction.)

Researcher: Oh, that's a hedgehog. They are all very cute.

Quinn (nodding her head and saying proudly): Yeah. They are.

When she introduced her daily activities in the photography and room tour task:

Quinn and the researcher were in the kitchen chatting about Quinn's meals.

Researcher: Who do you think is best at cooking?

Quinn: My father and my mother (taking a breath) do not know how to cook.

My grandmother knows how to cook. Grandma cooks best.

Researcher: Oh, grandma cooks best. Do you have a favourite dish cooked by grandma?

Quinn (answered quickly): Mimi⁸ and rice congee!

When she introduced her interactions with family members in the mapping task:

Researcher (after Quinn drew lines to connect all the family members to her on the map): What do you usually do with your father?

Quinn (thinking for a second, then whispering): Umm, I don't know.

Researcher: What about your mother?

Quinn (whispering and laughing): Wash dishes.

(Her mother and the researcher also laughed)

Researcher: Wash dishes. Do you wash the dishes or your mother washes them?

(Quinn pointed to her mother and giggled.)

Researcher: So, what does your grandmother usually do with you?

Quinn (with a big smile): Also wash dishes.

(Researcher and her mother laughed):

Researcher: All wash dishes. Is there anything else?

Quinn (shaking her head, smiling and jumping): Nooooo.

Researcher: And your aunts? What do you call them?

Quinn: Little aunts.

Researcher: I see, little aunts. What do you do with them, usually?

Quinn: Well, my aunts, they go to work.

Researcher: Do they come and play with you?

⁸ A kind of congee commonly seen in the town.

(Quinn nodded.)

While other children in the study referred to some of the rooms as their parents' or grandparents', Quinn said that her parents' room and her grandmother's room were both her rooms. At first, she introduced the two rooms as 'my father and mother's room', 'my father's room' or 'my grandmother's room'. She told the researcher how much she liked both rooms and what she did there but later stated, 'I have two rooms.' This suggested that those were her rooms as well. However, she did not perceive the rooms that she shared with her parents and grandmother as special or pretty. She only referred to them as ordinary spaces she used daily. Quinn's perception of ownership of the rooms in her house indicated her connections to her family members through the physical spaces of the house. When she mentioned that the rooms were spaces she loved, this also showed that the connections were part of her daily lived experiences that she liked. Quinn also related her beloved dolls to her parents and aunts. She said that they bought the dolls for her and that she liked them. She placed them all over the sofa she liked to sit, play and rest on (see Figure 8). She also mentioned that she liked her grandmother's cooking and playing with her father's cell phone in her parents' room. She mentioned her favourite cookies that her father bought her when she walked with the researcher to the kitchen, parents' room and food storage room. In her mapping task in the second round, that her aunts visited home and played with her occasionally, although they worked in other places. When her mother came back to live with her, she joined her in washing dishes, which was part of the normal daily activities of Quinn and her grandmother from Quinn's perspective. Quinn was happy when she mentioned it, which indicated that she enjoyed this house chore, as it was a moment for connecting the family.

Henk also showed the researcher his favourite toys that were related to his parents and grandparents. For example, when Henk rode his favourite tricycle in the yard, he rode to a whiteboard and stopped there to show the whiteboard and a balloon tied to it. Although he did not tell the story very clearly and with many details, he recalled the events from the time his parents were at home and what they did that day, indicating that he perceived his parents as part of his life through the toys.

Cora also showed her relationships and interactions with her grandparents and parents through her toys, her daily routines and other objects in the house. In the first round of data collection, her grandfather was suggested to be a toy provider. Cora showed that she was familiar with her grandfather's routine by telling the researcher that he usually worked at that time of the day and that he bought toys for her. However, the toys were bought by Cora's mother, according to the report of her grandmother in the first round of data collection. The grandmother also told the researcher that Cora made phone calls to her mother and asked her to buy toys for her. She had positive feelings for her parents and younger brother and showed it with her excitement when she introduced the family pictures and the 'most beautiful' room in the house, which was her parents' room, during the first round of data collection. When she led the researcher to her parent's room, she showed the pictures of her parents and younger brother one by one, picked up the toys she had left in the room and played with them with the researcher for a while.

Absent Family Members

When the children discussed their daily lives in the tasks of the Mosaic approach, they mentioned their family members. Some of the family members were talked about many times, and others were mentioned just once or twice. A few were not mentioned at all. The

family members ignored by the children in the current study included Henk's grandfather, who lived with him, Grace's mother in the first round of data collection and the aunts and uncles of Cora and Grace in the second round of data collection.

Henk mentioned his grandfather once during the data collection, which was urged by his grandmother when the researcher asked him a question to which the correct answer was 'grandfather'. However, when he showed the researcher his grandfather's car, he did not mention him anymore and stopped talking about the car when the researcher asked him whose car it was. He also completely skipped his grandfather when he made the family map.

Henk led the researcher to the main room of the house. He went into the room and walked straight to the shelf where his toys were, ignoring the researcher's questions about the room. He picked some more toys from the shelf and gave them to the researcher, saying, 'Take this (with us).' The researcher then asked him what was on the shelf. He ignored again, saying, 'Also take this.' The researcher took the toys and asked him who used the room. His grandmother then asked him to tell the researcher who slept in the room. She urged him by asking him to 'tell quickly' a few times. Then, he said, "Grandpa." His grandmother added, 'Yeah, your grandpa, your grandpa's room.' Henk ignored her and continued to pick up toys, then he led the researcher out of the room. (In the photography and room tour task in the first round of data collection)

(Henk's grandmother said they did not have family pictures or pictures of his grandfather. Henk included his parents, grandmother, friends and himself on his map.) The researcher asked him what else he would like to draw on the map and suggested 'your grandfather and other friends'. He said something and picked up the

coloured pens. The researcher did not understand what he said at first. It sounded like 'the next one to draw' or 'colour'. The researcher then asked his grandmother about it after he finished speaking. His grandmother said, 'He said, which colour to choose.' He repeated his grandmother's words to me and continued to pick up the coloured from the box and table. (In the mapping task in the first round of data collection)

Grace did not recognise the photo of her mother wearing a wedding dress and makeup in the mapping task and did not mention her in the photography and room tour task in the first round of data collection. Nevertheless, her grandmother said that she sometimes missed her mother at bedtime and made phone calls to her.

Concept of Family

In the mapping task of the Mosaic approach, the children name the family members that came to mind when asked. They named their parents, grandparents, aunts and uncles, which indicated that an extended family structure was their concept of family. However, some of the children also included people who were not their family members on the map, such as Cora and Henk, who included their friends (see Figure 24 and Figure 25). The younger children were more likely to put other people on their family maps, since they liked being with them. The older children included only family members on the map.

Cora and Henk, both around three years old, added other children to their family maps (Figure 24) when they were asked whether they had finished mapping. The researcher reminded them that the map was only for family members during the introduction of the task, printing of the photos and preparation of the map, and she mentioned the word 'family' during the task (e.g. 'who else in your family'), but Cora and Henk decided to put their

friends on the map. Cora even included the researcher. She also named her friend and included her in both rounds of data collection. Henk chose boy figures to represent his male friends but did not name them.

Comparing the maps of the first and second rounds of data collection revealed that Quinn included the same family members – grandmother, parents and three aunts – in both rounds, which showed a steady concept of family, i.e. the extended family. Cora and Grace included their aunts and uncles in their maps during the first round but not in the second round. This may be because they met their aunts and uncles a week earlier during the national holiday in the first round, but in the second round, it had been a month since she saw them during the Spring Festival. One month may have been too long for the younger ones to remember the aunts and uncles in the half-hour mapping task without any hints from the adults.

To summarise, the children in the current study perceived family with slight differences. Quinn's concept of family was an example of the extended family, and Grace's emphasised the caregivers, meaning her concept was caregiver-based. Cora and Henk suggested that other people they were close to in their communities should be part of their families. Their perception of family included the caregivers and their perceived intimacy with the people in their communities.

Figure 24

The Family Maps of Quinn, Cora, Grace and Henk

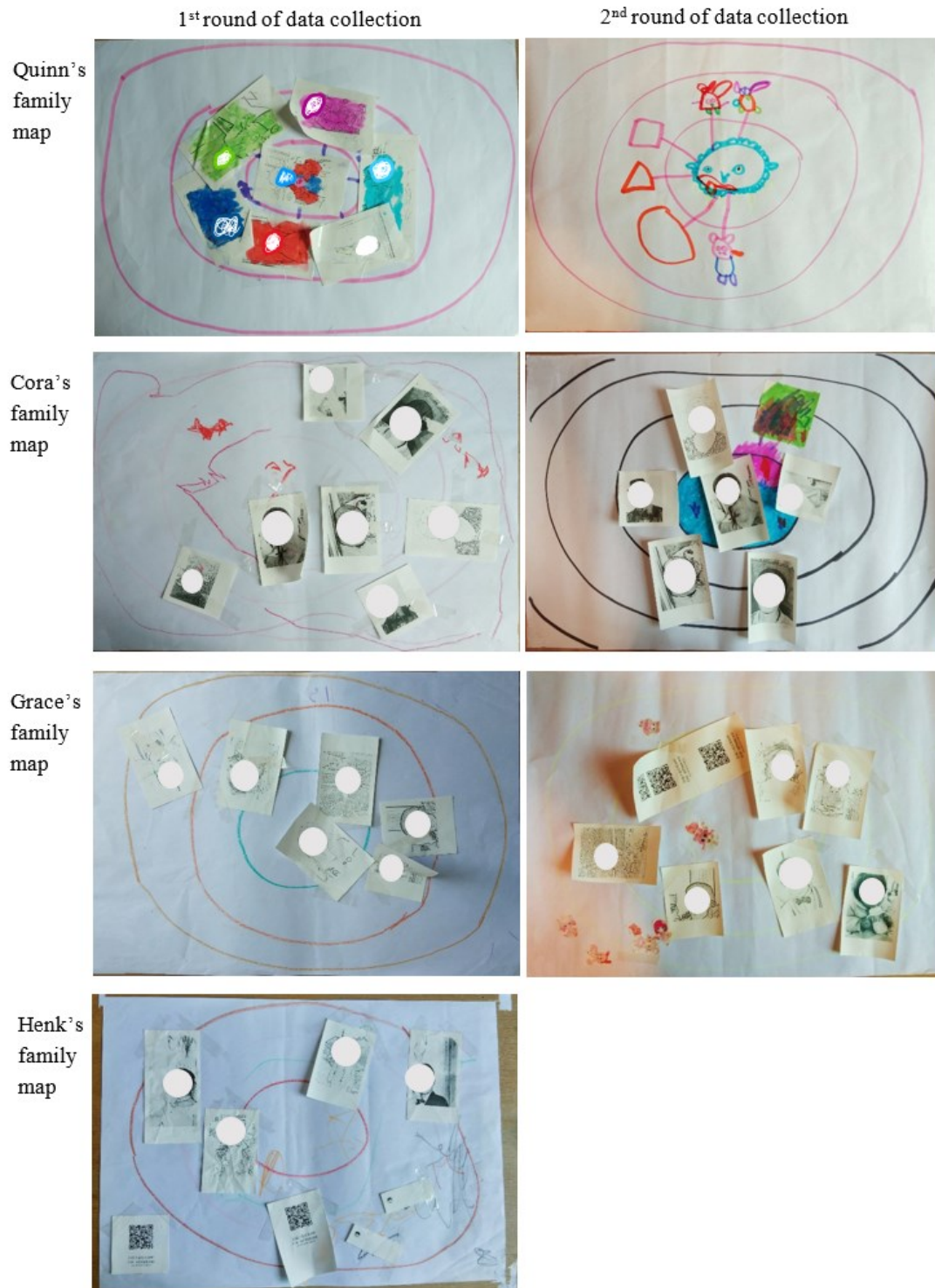
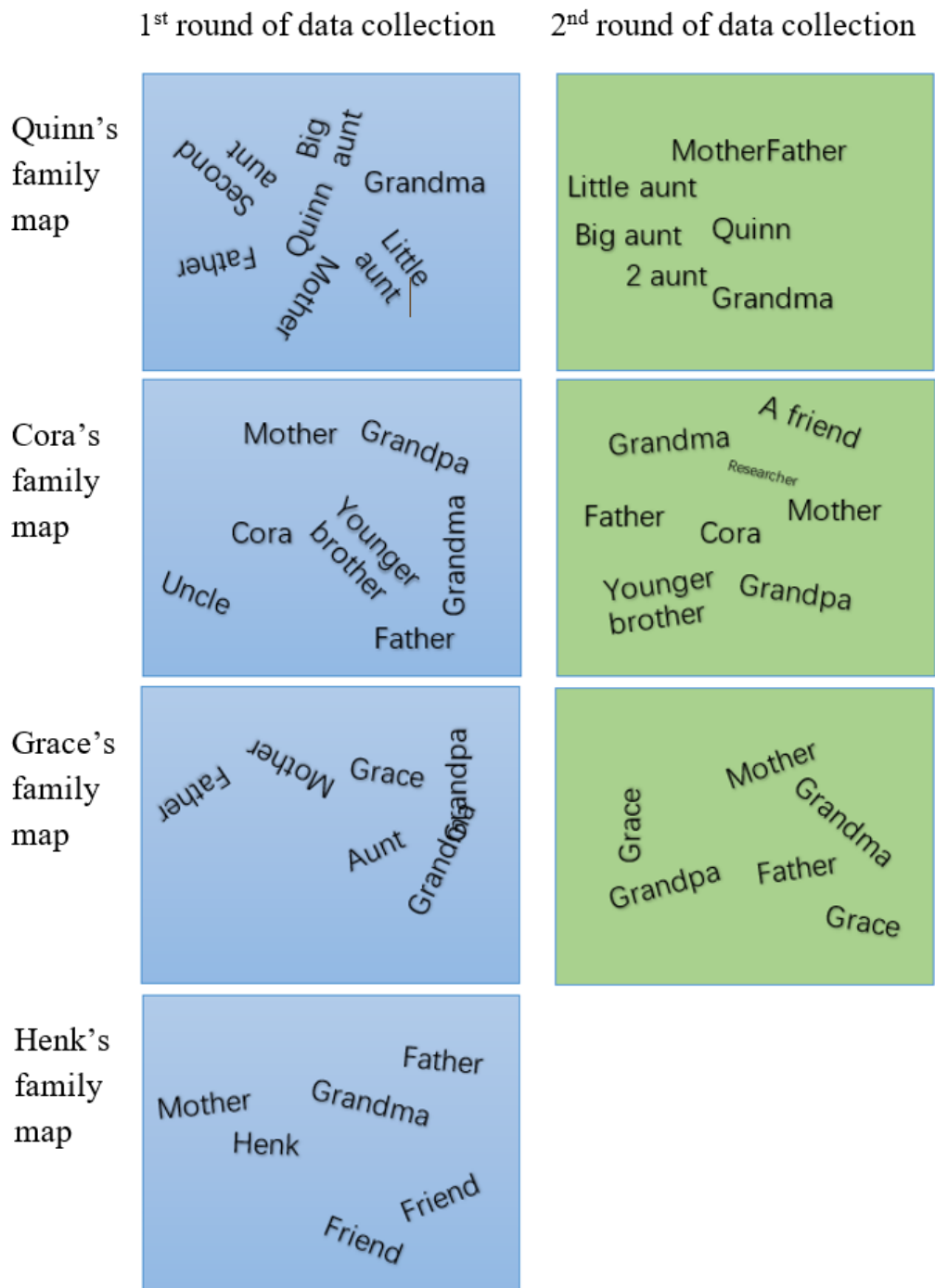


Figure 25*Illustrations of the Children's Maps in Figure 24*

Changes among Household Members

The family members who lived with the children were not the same all year. The parents sometimes came back to take care of the children when they were older, when the parents finished or quit their work in the cities or during holidays. Other family members came and lived with the children for a short time when they visited the children's grandparents during the holidays. The children showed awareness of the changes among family members living in their houses during the tasks of the Mosaic approach through their introduction of their daily lives in the photography and room tour task and the family maps they made in the mapping task.

Henk's mother and Quinn's mother both came back to live with their children in the second round of data collection because the children were about to take literacy lessons harder than before. This was suggested by the villagers when they referred to changes related to schooling, such as attending preschool and learning literacy. Because of the COVID-19 pandemic and restriction policies, the second round of data collection was delayed for almost two months. The time had to be changed from just before the Spring Festival to a month after it. Henk's grandmother wanted to withdraw from the study when she was contacted after the Spring Festival because Henk had begun to attend preschool, and his mother was at home with him. Quinn's mother also came back to live with her during the Spring Festival, but she agreed to continue their participation and welcomed the researcher's second visit. She expressed her belief in the significance of literacy learning and stated that she came back to take care of Quinn mainly because someone need to tutor Quinn on literacy, and Quinn's grandmother was not able to do that.

Another situation that changed the compositions of the household members was the family members coming home for family reunions during the long holidays, such as the Spring Festival and the national holiday, which were a month before the second round of data collection and about two weeks before the first round of data collection, respectively (see background information in Part *Family Life in the Community*).

In the first round of data collection, Quinn mentioned that her family members gathered in the house during the holidays and that she liked being with them. She explained how her aunts and other relatives would grab their favourite seats on the sofa in the main room when they had snacks and meals during family gatherings. Quinn requested the researcher to take photos of her and the furniture she liked, which are shown in Figure 26. She also told the researcher that she liked having meals with all her family members more than having meals only with her grandmother. She stated that her three aunts used to play with her at home, but they were at work then. She mentioned this as she included her three aunts in the family map during both rounds of the data collection (Figure 24).

Figure 26

Quinn Showing the Furniture that She and her Family Members Liked to Sit on During Family Gatherings and Meals



Grace also included her aunt, while Cora included her uncle in their family maps, but only in the first round of data collection (Figure 24). In the first round, which was less than two weeks after the family gatherings of the national holiday, Cora told the researcher which bed her uncle slept in when he was at home when she led the researcher to the storage room with the beds. At the same time, Grace became excited when she recognised her aunt's photo.

Cora lived with her younger brother during the second round of data collection. As indicated by her stories in Part *Two Within-case Themes* in *Case Two*, she was well-behaved and acted like an older child leading and taking care of her younger brother. She also stated this in her conversations with others; for example, by saying 'Cora is a big child' and 'big child will take this'. She did not tell the researcher that she fought with her younger brother, and it seemed that she was well-informed about what an elder sister should be like. She accepted this role by adopting the responsibility and pride of an elder child.

Having Different Perspectives from the Adults

The current study explored and attempted to understand the children's lived experiences through their perspectives as well as the perspectives of grandparents' and parents'. However, when the perspectives of the children and adults were examined together, they showed that the children had different perspectives on their daily lives and family members compared with the opinions of the adults. The children's behaviours when they reacted to circumstances were different from their grandparents' opinions as well.

For example, Quinn insisted on calling her youngest aunt 'little aunt' in the mapping task of the second round of data collection even though her mother 'little aunt' is 'third aunt'. She also corrected the researcher when she said, 'third aunt'. The formal way to call an aunt or uncle in the community is to refer to their rank among the siblings and added the ranking number before 'aunt' or 'uncle'. Thus, Quinn's little aunt was her third aunt because she was the third and youngest daughter in the family. Toddlers or babies sometimes used little aunt to refer to the youngest aunt, but this was not typical. Quinn may have called her youngest aunt 'little aunt' when she was younger and insisted on her own way of naming this family member. She also emphasised the word 'my' when she mentioned her aunts.

Cora and Grace, who lived on the same street and were familiar with each other, had different ideas regarding friendship compared to their grandmothers, who often visited each other. The two girls played together whenever they met and sometimes asked their grandmothers to bring them to visit each other's homes. The grandmothers said that they were friends when asked by the researcher about their relationship. However, when the researcher asked whether Cora was her friend, Grace did not answer the question, although she showed that she heard the researcher by looking at her and not turning away as she was

being asked. Cora had added a friend to her family map in both rounds, but that friend was not Grace. When she was asked whether Grace was her friend, Cora kept silent, indicating that the answer was probably 'no'. When asked about the other girl, she replied, 'Yes.'

Cora also had a different idea of who bought toys for her. She had a different perception of the toy buyer compared with her caregivers. Her toy box contained many toys. In the first round of data collection, when the researcher asked who bought toys for her, she said it was her grandfather. However, her grandmother told the researcher that her toys were bought by her mother and that she asked her mother to buy toys for her when she spoke with her on WeChat.

Some of the children's emotion regulation behaviours were also different from their grandparents' opinions, as shown by the comparison of the descriptions and examples the grandparents gave in the questionnaires on the children's emotion regulation with the children's actual behaviours that were recorded in the naturalistic observations (mealtime and free play activities). For example, Henk vented his emotions by shouting and through mischievous behaviour when his needs were not met, but his grandmother insisted that he never did so and that he was a good child. In the free play activity during the first round of data collection, Henk did not shout at other children or express his negative feelings with words, but when Cora took away his blocks, he pushed Cora's blocks down to show his displeasure. He also shouted at his grandmother at home when she did not agree to leave the table with him to get tangerines from the other room while having breakfast (see the example in Part *Emotion Regulation and Lived Experience in Case Three*). Henk's grandmother smiled at the situation and did not categorise these behaviours as venting in the emotion regulation questionnaire.

While Henk's grandmother did not report Henk's venting of emotions although she saw and experienced it, Cora's grandmother reported that Cora knew nothing about emotion regulation, but then she told a story of how Cora managed the emotions of her grandmother and herself as an example of her understanding of emotion regulation. Cora's grandmother confessed, giggling, that she hit Cora when she was in a bad mood or annoyed. Cora would then comfort her and take control of the situation by saying, 'Grandma, do not hit me. It hurts.' According to this vignette told by her grandmother, Cora expressed her feelings and requirements to her grandmother without shouting or crying, but her grandmother insisted that Cora seldom used emotion regulation skills, which contradicted this vignette that she herself related.

Learning and Education

The children's education was valued by the caregivers in the communities, which was shown by the children's stories and expressions and information from the grandparents. Moreover, when the gatekeepers discussed community life with the researcher, they proudly announced that the local people highly valued children's education, which they thought of as evidence that the people in the town took good care of their children.

The children received their education from different organisations according to their ages. As described in Part *Family Life in the Community*, the children started attending preschool at three years of age and learned simple maths, such as counting and numbers, as well as literacy, such as writing their names. When they were in their last year of preschool at six years old, they were required to sit properly in class, learn mathematics and write sentences to prepare for primary school lessons. Their playing time was reduced compared with the junior classes in the preschool. Children younger than three years old learned

literacy and numbers at home from their parents and grandparents. In the first round of data collection, an early childhood education program (Project Z, introduced in Part *Ethical Process*) that provides materials and small-sized classes for early childhood education for children younger than three years old and their caregivers began operation. Children older than three were required by social norms to go to preschool, while younger children were educated at home or had the option to take lessons for free at Project Z.

In the current study, as shown in the table of basic information on the participants (Table 1) in Part *Participants*, Quinn attended preschool, as she was almost four and a half years old during the first round of data collection. Henk and Cora began to attend during the second round because they were more than three years old at the annual preschool enrolment time for new students. Grace in both rounds of the data collection and Cora in the first round were taught by their grandparents at home and participated in Project Z, while Henk was only taught by his grandmother and did not participate in the project during the first round. Besides the grandparents, preschools and early childhood education programs, the parents also provided resources and support for the education of the children, and the communities provided the environment for the children to develop social skills.

Learning activities, educational resources and teaching or tutoring the children were topics that appeared in the discourse with the children, grandparents and parents. They were generated from the discussions of many other themes, such as playing and family relationships. This part introduces the learning and education of the children with two topics. One is the children's socialisation with discipline and encouragement from the grandparents and neighbours, as shown in their interactions during the research activities. The other is literacy learning, which was specified by the children, grandparents and parents.

Observing Others

During the research activities, the children were always surrounded by adults, including their grandparents, parents, grandparents of their peers and neighbours. As observed in the interactions between the children, their peers and the adults, the children learned social skills and norms and how to behave themselves through observing others and referring to their grandparents. For example, in the mealtime observation of Grace in the first round of data collection:

Cora and her grandmother were standing at the door of the room, and Cora said, 'Cora wants Grace's toys.' Her grandmother tried to refuse her and explained, 'Grace is eating breakfast. I do not know where Grace's toys are.' But then, Grace's grandmother heard their conversation although she was chatting with Granny Wen at the time. She turned around to the sofa pillow behind her, took Grace's toy box and said to Cora, 'Come'. Grace watched her grandmother, frowning, as she took the toy box, and she said loudly and quickly, 'No, no. Grandma, Grandma!' She raised her hand to the toy box as if to stop her. Cora walked to Grace's grandmother as Grace protested. Both her grandmother and Cora did not listen to Grace, and the box was given to Cora. As Cora walked past Grace to the door, Grace's eyes followed Cora. Her hand was still raised as Cora walked beside her, and then she turned to look at her grandmother with wide-open eyes. Her grandmother then asked her to eat her meal, 'Quickly, eat mo.' Grace took a bite of the mo. Then, her grandmother said, 'Eat properly. Look, fried veg.' She showed Grace some vegetables with her chopsticks. Grace kept glancing at her grandmother as she bit into the mo, and she continued to eat her breakfast.

Grace was cautious when her grandmother gave her toy box to Cora at first but accepted it when her grandmother showed that it was okay to share and that breakfast was more important by simply asking Grace to continue eating. Grace also learned to share food with the neighbours from her grandmother. Grace was looking at her grandmother when she offered Cora steamed apples during mealtime in the first round. Grace's grandmother then told her that they should share the food they liked with Cora. During mealtime in the second round, Grace shared her mo, which she liked, with Cora's younger brother. Henk, on the other hand, learned that he could push other children when many of his peers were playing together after he was pushed by Cora during free play in the first round.

Discipline and Encouragement

The children in the current study also learned social skills through their grandparents' and neighbours' disciplinary actions and encouragement.

Henk was praised and encouraged by the adults in neighbourhood when he rode his tricycle on the street. The neighbours smiled and praised him as 'awesome' when he rolled over some rapeseeds. Henk smiled and did it again many times. He also rode around and through the chatting neighbours from time to time. They said he was 'awesome' and 'terrific' with large smiles on their faces almost every time he rode past. For example, in the roleplay task in the first round of data collection:

Henk rode through the middle of the ladies, then he rode away along the street. He rode back through the ladies every time he passed by. He was thrilled all the time and wore a big smile on his face. Sometimes, the neighbours called him and played with him when he passed by. They praised him and pretended that they wanted him to give them a ride by asking him whether he would do so. Henk laughed and did not answer but invited them to get in the basket behind his tricycle. He pretended that was 'a ride' when they walked after him (Figure 27).

Figure 27

Henk Playing on the Street in front of his Home



Henk's grandmother often praised him as well. During the mealtime observation, his grandmother said '[you (Henk)] eat so well' numerous times while she fed Henk, as she followed Henk when he ran away from the table and when Henk refused to eat the food she gave him and asked for other things. But when Henk was playing with the other children, he was not praised. Instead, he was shouted at for pushing a baby. For example, in the free play observation in the first round of data collection:

The boy next to Henk walked away for a while, and Henk looked around.

Then, the boy saw that Henk was facing his blocks and ran back to the table to protect his blocks with his whole body. He pushed Henk away from his blocks and said,

'Mine.' A baby walked by and watched their interaction. Henk turned around and saw the baby. They looked at each other, then Henk pushed the baby down. A mother standing at the other side of the table saw this and shouted, 'Oh! What are you doing?' The baby cried out loud for a second, then stopped when Granny Wen said 'stand up, stand up' to comfort him. The other grandmothers, including the baby's grandmother, continued to chat and made casual comments, such as 'it's okay, just stand up and play' and 'little children are so playful'. Henk was still looking at the baby. The baby could not stand up and cried again. The baby's grandmother said, 'Ha ha, the baby's cries sound like "wow wow".' The other adults smiled or laughed, but no one helped the baby or criticised Henk after that.

The baby was in Henk's way when Henk wanted to walk past him. He looked at the baby and pushed his head to move him away. The baby's grandmother shouted, 'Aye!' Then, she said to Henk calmly, 'Don't touch the baby.' Henk became alert and looked at the baby's grandmother, but the baby did not cry and only looked at Henk.

Cora, who was the same age as Henk, shaped her behaviour according to the encouragement and disciplinary actions of the adults. She learned to praise and encourage herself when learning new skills and being pro-social. She did such 'positive' things initially as she was praised by adults when she showed her competence, cooperativeness, kindness, and caring, but she was stopped by the adults when she was rude to the other children, such as when she took Grace's blocks without Grace's permission and told Grace to put the blocks together with hers.

Ownership and sharing were two topics the children learnt from an early age with their grandparents' and community support. The children would continue to practice by themselves when they attended preschool. As the children in the current study had peers and

friends to play with almost every day, their grandparents would ask them to share toys and play with each other. At the same time, the children were aware of the concept of ownership by using 'my' to refer to their own toys and 'theirs' to refer to the toys of their peers. Their grandparents also said 'Cora's toys', 'Grace's toys' and 'play with yours (your toy)' when they referred to the children's toys or to toys that belonged to the children temporarily, such as during the free play activity. Although sharing was valued and taught by the grandparents, ownership was clarified and stated all the time, and refusing to share was also accepted by the grandparents. For example, Cora refused to share her blocks with her friend, and they fought over them, but neither Cora's grandmother nor her friend's mother disapproved of the girls' behaviour.

Literacy Learning

The families and communities paid much attention to the children's language development and emphasised literacy learning. As reported and shown by the grandparents of Cora, Henk and Grace in the research activities, they took the opportunity to teach their grandchildren by naming foods, jobs, animals, etc. using flashcards, matching blocks and toys with figures and characters. Cora's and Grace's grandmothers also encouraged their grandchildren to speak and write. In addition, Henk's and Quinn's mothers went back to live with them because they began to take literacy lessons at a higher level in preschool.

Henk showed the researcher his flashcards because her grandmother asked him to. He also had a poster of characters and numbers on the wall of the room he and his grandmother slept in. Although the three girls also had flashcards, which were seen by the researcher in their toy boxes, they did not mention them when they showed their toys. Grace did not play with flashcards, but her grandmother played match blocks with her and taught

her the numbers, figures and shapes on them while Grace, her grandmother and the researcher waited for her grandfather at breakfast time in the second round of data collection. Her grandmother also encouraged her to name her family members when she chatted with the neighbours and practise writing her grandfather's name during the mapping task.

Cora did not show her flashcards but showed that she was good at playing with her inserting toys with figures and characters on them in the second round of data collection. She knew the figures and characters well and introduced them to the researcher. She also showed the new desk her mother bought for her to do her literacy homework enthusiastically, even though the researcher did not ask about it. When she talked about the desk, she said that her mother bought it for her because she had started to go to school to learn things there, and she would have homework. As she ate her evening snack, Cora also showed her cars to the researcher by counting them. When she chatted with the researcher in the first round of data collection, she made up stories about her toys, and she was able to add more details, such as feelings and descriptions of actions, in the second round (see Part *Toys*). She also had fun chatting about how to name things she saw in the sky with the researcher. Through Cora's words and actions, she showed that literacy learning was part of her daily life and that she enjoyed playing and was good at it (Figure 28).

Figure 28

Cora's Inserting Toys and her Desk in the Second Round of Data Collection



Quinn, by contrast, said that she loved reading and showed the researcher her favourite books and discussed their stories. She stated that she was happy that her mother was back to live with them, although she did not mention the reason reported by her mother in the interview, which was to tutor Quinn in literacy learning, especially writing characters.

Community Life

According to the PPCT model (see *Theoretical Framework* Chapter), contextual factors, which formed the exosystem of the children's lived experiences, were part of their daily lives and influenced the other parts of their lives, such as their interactions with their caregivers, peers and neighbours, the physical materials provided to them, their psychological development and their learning and educational activities. The contextual factors were discussed in the four themes of this chapter and the background information on the communities. The fifth theme, community life, was generated at the contextual level as part of the exosystem of the children's lives and development (see Part *Conclusion: A Bioecological Model of Children Lived Experiences*), reflecting the stories and information

provided in the four themes discussed above and the background information introduced in *Four Child Cases: Within-case Analysis* Chapter (see Part *Family Life in the Community*). The factors and topics of the exosystem of the children's lived experiences and development in this part also reflect the historical and cultural values belonging to the macro-time system (see Figure 1 in *Theoretical Framework* Chapter) and recent policies and contemporary socioeconomic factors and influences belonging to the meso-time system (see Figure 1 in *Theoretical Framework* Chapter). Overall, the cultures and norms of the communities that the children and their families adopted are shown in three topics: the local concepts of 'a good child' and 'a good grandparent' and the flexible lifestyle of the community.

Being a 'Good Child'

In the current study, Quinn, Cora, and Henk were called good children by their grandmothers. Cora was also praised as 'good' by the neighbours. She was Grace's role model. For example, Grace always followed Cora when they were together and learnt to play blocks from observing Cora. Grace's grandmother also asked Grace to learnt from Cora and behave herself in mealtime. However, Henk was not praised by the neighbours. Grace's grandmother stated that Grace was naughty to the neighbours and researcher, but the neighbours believed that Grace was cute and fun. Reflecting on the children's behaviours and the comments they received, it can be said that some traditional Chinese cultural values and the stereotypical values of the grandparents made up the cultures and norms of the communities.

Neutral Emotions. In Quinn's stories and vignettes in this chapter and *Four Child Cases: Within-case Analysis* Chapter, she appeared to be in a neutral emotional state and could manage her emotions effectively. She communicated well with other children, and she

stayed calm and did not shout or scream when she had conflicts with her peers (*Part Emotion Regulation and Lived Experience in Case One*). She also joined her grandmother and mother in doing household chores, loved reading and was not talkative during mealtime. These traits and behaviours are valued and appreciated by the local culture and traditional Chinese culture.

Keeping calm and peaceful, reacting positively to one's surroundings and not exhibiting extreme emotions are positive emotional states in Chinese culture. For example, Confucius commended his student Yan for 不迁怒 (being able to calm down and resolve his anger as soon as he was exasperated) (Confucius, n.d.). He also emphasised 仁 (humanity) – a highly valued quality – initiative without precedence, restraining oneself and practising rites, which all lead to longevity, happiness and peacefulness (Confucius, n.d.). Being in a positive mood and showing a neutral expression are appreciated, as these indicate a cheerful and calm emotional state in Chinese culture. It can be hard to distinguish positive emotional states when children are calm and peaceful using the observation and coding methods of psychological research (Hester, 2019; Slot et al., 2017). Psychological research tools suggest that neutral facial expressions represent neutral emotional states, and perceiving positive or negative emotions when people show neutral expressions can be an overgeneralisation of emotion understanding (Hester, 2019). However, cheerful and calm feelings was showed with neutral expressions with occasional actions that show happiness always induce positive reactions. In the current study, neutral facial expressions and positive emotional states were coded when the children were calm but showed a positive mood with actions and body movements during the observation activities.

As a young child, Henk was energetic and did not speak much in his daily life. As shown in his stories (see Part *Emotion Regulation and Lived Experience in Case Three*), he did not shout or scream except when he was with his grandmother, and he was energetic when playing with his neighbours. The grandmothers and mothers of the other children commented on children's playfulness in a general manner during his interactions with his peers, and his quietness and energy were appreciated by his grandmother and neighbours.

No Chatting at Mealtimes. Chinese culture regards 'eating without words and going to bed without words' (食不言，寝不语) as behaviours that indicate good manners, etiquette and education. Quinn and her grandmother were silent most of the time when they had their meal. They only exchanged a few words when necessary, such as when Quinn had a question about a hair she found in the mo. However, their positive mood was shown through actions, such as Quinn's dancing feet and her grandmother's song when she finished her meal (see Part *Emotion Regulation and Lived Experience in Case One*).

Stay Connected with Family Members. Being with family members during daily routines and always thinking about each other are also valued in Chinese culture, as they show the unity of the family, which is a significant component of Chinese culture and society (Lin, 2000). Quinn showed her regard for family unity and love for family members by doing household chores with her grandmother and mother and going out with her father when he was at home. Grace learned about her connections with family members and neighbours from her grandmother. Grace's grandmother encouraged Grace to name her aunt in the mapping activity of the first round of data collection and taught Grace the names of the family members and the titles of the neighbours in the second round.

Eat Quickly and a Lot. Another issue related to ‘good’ and ‘bad’ is whether the children eat a lot, quickly and with big mouthfuls. Henk did not eat by himself and often left the table during mealtime, but he ate a lot and with bigger mouthfuls than the three girls. He was also stockier than the other children except for a baby, as seen by the researcher in the village. His grandmother said that he ate properly and praised him during mealtime (see Part *Discipline and Encouragement*). By contrast, Grace’s grandmother complained that she was naughty because she did not eat by herself and would leave the table during mealtime. Grace did not eat very fast, as she liked to observe her peers and neighbours in the room while she was eating. She played with them when she was supposed to be eating her meal. She also ate with small mouthfuls and was trim.

It is not a strict rule in the local culture or traditional Chinese values that children should be stocky and eat a lot, but some grandparents and parents, especially with male children, believe that a ‘chubby boy’ (大胖小子), which is an idiom commonly used in the modern era, is a child who is healthy and living with competent parents and grandparents. When they want to have babies, posters of chubby babies were put in their rooms, which showed their wishes for healthy babies. The preference for chubby boy twins and chubby boy–girl twins is also suggested by the posters, as there are no pictures of chubby girl twins (Figure 29).

Figure 29

Babies' Posters that All Families Have at Home



Independence. Independence is also appreciated by many caregivers in the community, which is a trait that is valued by traditional Chinese culture, child development psychology and early childhood education adopted from the Western world.

Cora was praised by Granny Wen during free play in the first round of data collection because she could play quietly and productively by herself. She was also regarded as Grace's role model by Grace's grandmother because she could eat by herself. In the mealtime observations of both rounds, Grace's grandmother asked her to eat by herself. She fed Grace only after Grace tried to use a spoon to eat but failed. She also praised Grace when she tried or successfully put food into her mouth. When Grace messed up, her grandmother said 'tut', cleaned her up and fed her. Likewise, Henk's grandmother asked him to eat by himself when breakfast began, but she also started to feed him as soon as she saw that Henk did not lift his spoon. It seemed that independence was not very important to her.

The children were proud of themselves when they stated that they were functionally independent. During the photography and room tour session in the first round of data collection, both Quinn and Cora told the researcher that they dressed themselves and woke up by themselves. Grace, the youngest child in the current study, refused to be fed by her

grandmother even though she was very clumsy in using a spoon and ate slowly in the second round of data collection when she was almost two years old.

Being a 'Good Grandparent'

The grandparents in the current study, especially the grandmothers, often talked about their grandchildren when they were with other grandmothers and mothers in the neighbourhood. They exerted much effort in taking care of their grandchildren, and the efforts they made were part of the 'good grandparent' image in their opinions and according to the cultural values of the communities.

Feeding and Dressing the Grandchildren. Feeding the grandchildren was one of the most common topics discussed by the grandparents at the mealtime observations and in their interviews. All the grandmothers and Grace's grandfather tried many ways to ensure that their grandchildren ate fast and a lot. Quinn's grandmother was a good cook. Quinn told the researcher that her grandmother was the best cook in her family, and her favourite dish was corn-flavoured congee. Cora's grandmother watched her all the time during mealtime except when she picked up food with her chopsticks. She also praised Cora immediately when she put a big mouthful of food into her mouth. Henk's grandmother praised him for eating properly no matter whether he ate the food she fed him or refused and ran away to play. Grace's grandfather pretended that he wanted to eat Grace's food to cooperate with Grace's grandmother when they coaxed Grace to eat her vegetables.

In the conversation between Grace's and Cora's grandmothers, Grace's grandmother comforted Cora's grandmother who complained about the pressure of taking care of two grandchildren by saying, 'That's fine. You don't have to worry so much. Just take good care of the two children and feed them well.' Feeding the children well and making sure that they

were warm were statements stated by all the grandmothers in their interviews regarding what they usually do for the children. None of them indicated that they played with the children or taught them except Quinn's grandmother. Nevertheless, they all played with and taught the children things during the research.

Literacy Learning. The grandparents of the children in the current study, like the parents and grandparents of the other children in the communities, were enthusiastic about new staff and materials that could help them teach the children literacy skills. During the free play activity in the first round of data collection, the caregivers in the room began to share children's songs on their mobile phones, which could be used to teach the children new words, after Granny Wen said that she had some new songs for the children.

Flexible Lifestyle

The schedules of people's daily activities and works in the villages were flexible. Although the researcher made appointments with the participants before visiting them, she often found that the participants had arranged other activities at the same time. Although they were busy, they seemed to welcome the visits and joined each other in neighbourly chats at any time during the daytime, which caused changes in the schedules, since they were always ready for new activities.

For example, Quinn was about to attend a wedding feast when the researcher arrived, but her grandmother said that it was fine to start the research activities. It turned out that Quinn was late for the wedding feast and ran there for her lunch after the research activities were completed, but she also said that being late was not a problem and that she did not care much about the time and could go there by herself. Neighbours visited Grace's grandmother every morning around breakfast time. However, when the researcher set an

appointment with her, she did not tell the researcher that there would be visitors. It was taken for granted that visitors and neighbours could come at any time during the daytime. Grace's grandmother walked out to chat with the visitors and left Grace to play with the researcher alone in the room during the first round of data collection. She even did not ask the researcher to take care of Grace and just left and came back. Henk's grandmother also left the researcher alone with Henk in the house with all doors wide open without telling the researcher first that she was going to join the neighbours' chats on the street. When the grandmothers came back, they were not surprised that the researcher was in their rooms and continued to chat with her and their grandchildren naturally.

Summary

This chapter introduced five themes generated across the four cases: children's play, family relationships, different perspectives among the children and adults, the learning and education of the children and community life. The chapter first discussed playing, the family relationships of the children and different perspectives among the children and their grandparents, which were the three themes of the children's proximal process in the microsystems. The chapter then introduced the learning and educational activities of the children, which included the activities of the microsystem and mesosystem, such as preschools. The last theme discussed the contextual factors that partially composed the exosystem across the meso- and macro-time of the children's bioecological life models.

The five cross-case themes and the other within-case themes introduced in *Methodology* Chapter were reflected and discussed to conclude the findings and respond to the two research questions regarding the lived experiences from the children's perspectives and their inter-associations with the children's emotion regulation development.

Findings and Discussion

This chapter discusses and presents three overall findings on the ‘left-behind young children’s (LBYC)’ lived experiences and their interrelationship with emotion regulation development. As discussed in the *Literature Review* Chapter, the lived experience and perspectives of left-behind young children under seven years old have seldom been studied. LBYC are children with both parents working away from home as migrant workers or one parents working away from home while the other parent is not capable of performing his/her guardianship duty (The State Council, 2016). LBYC are often taken care of by grandparents, and children in this living situation are the focus of this study. In order to thoroughly explore their lived experience and understand their lives, it is necessary to consider contextual factors and children’s developmental factors and potential relationships between these factors. This study has focused on sociocultural factors in the participants’ villages and communities and the children’s emotion regulation development.

The findings were based on analysis both within and across the four child cases, using themes generated from all data sources: children’s expressions in the Mosaic approach, results of the questionnaire and naturalistic observations on emotion regulation (see *Four Child Cases: Within-case Analysis* Chapter), and reflection on researcher’s notes and the research process. Firstly, the across-case analysis revealed that playing, the children’s main activity, was very important to them. Secondly, thematic analyses within and across cases showed that the children were securely attached to their family members, including their grandparents, parents, siblings, aunts and uncles, encompassing their extended family. Thirdly, the mix-aged, intergenerational, and naturalistic context of the community and the

extended family was found to be beneficial to and positively associated with the children's emotion regulation and motor and cognitive development.

In this chapter, these three findings are discussed in relation to the research questions, with reference to the PPCT model and relevant literature, to present an overall picture of left-behind young children's lived experiences, focusing on the children's perspectives. The first and second findings respond to the first research question regarding what the children's lived experience is from their own perspectives. The third finding responds to both the first and second research questions, introducing the children's lived experience in their family and community contexts and showing how the children's emotion regulation developed as part of and influenced their lived experiences, respectively. The findings cover factors within the children's microsystems, including the proximal processes involving peers, friends and neighbours the children met every day. They also cover the children's mesosystems and exosystems and consider the meso- and macro-time frames (Bronfenbrenner & Morris, 2006), such as the joint effects of family and neighbourhoods, school lessons and various sociocultural factors.

Play During the Day

Playing was an across-case theme generated from the children's descriptions of their daily lives (see Part *Playing*). Through the children's introductions of their toys, friends, playmates and games and the vignettes of their playing activities generated from naturalistic observation, playing was revealed as the main significant activity of the children's proximal process on the microsystem level (Bronfenbrenner, 1994). Carter and Nutbrown (2016) in their study of school children in England suggested that playing is a significant socialisation and learning process of children, through which the children also show their perspectives on

their lived experiences. Similar to the older children in Carter and Nutbrown's study, young children in the current study also built and maintained their social relationships with friends, peers, neighbours and grandparents and developed their cognitive and motor skills through play activities. They also showed their perspectives on their lived experiences of their socialisation and learning process through their playing activities. When comparing the play of children in the current study with those of their rural peers raised by parents or grandparents and urban peers, as recorded by other research on young children in China (e.g. L. Chen et al., 2020; Duan, 2012; Yuan, 2020), it seems that the children in the current study had supportive social relationships, more outdoor activities, less screen time and fewer electric toys and video games. This may explain and support the findings of some former studies on left-behind children (e.g. Huang et al., 2018; Tao et al., 2014; Wen & Lin, 2012), indicating that they are healthy and satisfied with their living conditions and have fewer mental problems and better health condition than migrant young children living with parents (see Part *LBC in China* and Part *LBYC Raised by their Grandparents* in *Background and Literature Review* Chapter).

Playing with Friends, Peers, Neighbours and Grandparents

The social and peer relationships exhibited by the children in this study were well established and supported their playing activities on a day-to-day basis. The children played with friends in the neighbourhood on weekends, on holidays and even after school, and they had friends in preschool as well, as demonstrated and expressed by Cora and Quinn (see Part *Friends, Peers and Playmates*). Henk, the boy of the same age as Cora, and Grace, the youngest girl, also had peers and neighbours who they felt close to and often played with (see Part *Friends, Peers and Playmates*).

Additionally, the children exhibited well-developed and context-adjusted social skills in their interactions with peers and neighbours. In particular, the two girls demonstrated leadership among their peers; Quinn led two of her classmates in building a house with blocks, and Cora acted as a role model for Grace. Grace, the youngest girl, also showed that she learnt social skills when playing with Cora and used them with Cora's younger brother. Henk, the boy of the same age as Cora, showed that he learnt social skills from observing other's reactions and following his grandmother's instructions. Although Henk was rejected by peers in free play and liked 'violent fantasy' (Dunn & Hughes, 2001, p.492), such as being mischievous to peers and pretending to knock things down (which is related to maladjustment in peer relationships) (Dunn & Hughes, 2001), he was popular among neighbours and praised by his grandmother, indicating that his social skills reflected the social norms of his family and the neighbourhood.

However, previous research has suggested that two-thirds of 'left-behind children' (LBC) in grades three and five in rural China were maladjusted and had worse peer relationships than their peers who lived with parents (Z. Li et al., 2014). This proportion of children with good peer relationships to those with maladjustment and poor peer relationships differs from that measured by the current study. As no research has explored Chinese 'left-behind young children's' (LBYC) longitudinal development in peer and social relationships, clarity is lacking regarding the causes and mechanisms that explain the differences in peer and social relationship between the students in the previous study and the young children in the current study. Nonetheless, research on European and American children suggests that young children with age-appropriate social skills are able to develop good social relationships when they grow up to school age (Legkauskas & Magelinskaitė-Legkauskienė, 2021; Øksendal et al., 2022; Peterson et al., 2016). The children in the current study demonstrated

age-appropriate social skills according to the development guidance of the Chinese government (MOE, 2012). Thus, they may continue to develop good peer relationships when they grow up. In conclusion, the children's closeness with their peers and neighbours in the current study does not suggest that the previous findings were incorrect or false but instead provides an example of LBYC building relationships and making friends with community members and peers.

The children in the current study not only played with their grandparents as companions but also had close friends, peers and neighbours to play with. In contrast, previous research has predicted or found that LBC have poor peer relationships and maladjustment when attending primary school (e.g. Z. Li et al., 2014; Liao et al., 2014; X. Wang et al., 2015). To determine the development trajectory of the maladjustment found in previous research, the well-established social relationships of the children in the current study suggest an exploration was undertaken as to the contextual factors within the mesosystem, such as the school structures, standards of behaviours and rules and teacher beliefs, and their interactions with the microsystem of the children, such as their family lives and personal factors. The previously identified maladjustment and poor peer relationships were evaluated by Chinese academics according to psychological measurements (e.g. Liao et al., 2014; Ling et al., 2017) and the social norms in school settings (e.g. X. Wang et al., 2015) among schools in rural China. These are considered the meso- or exosystems that could impact the children's interactions with others. They are also the proximal processes when constructing a bioecological system (Bronfenbrenner, 1994) and are the mechanism indicated by the explanation of children's maladjustments provided in the literature (Liao et al., 2014; X. Wang et al., 2015). The changes in the contextual factors of the meso- and exosystem from community, preschool to primary/middle school interacted with family factors and the

children's active roles, influencing their well-being and development. As the negative outcomes were associated with the standards and norms of the contextual systems and developed through the interactions among the active efforts made by 'left-behind children' and the influences of the contextual and cultural factors, a chronological overview and comprehensive exploration of the factors and perspectives on both sides as opposed to an oversimplifying description or explanation of the 'problems' could provide insight into the phenomenon (Bronfenbrenner, 1994; Fogel et al., 2007; Tudge et al., 2016).

Traditional Toys and Outdoor Activities

The children in the current study had greater opportunity to engage in outdoor activities and more often played with traditional toys when compared with their urban and other rural peers (e.g. Duan, 2012; Yuan, 2020; Y. Zhang, 2010). In particular, they had yards at home and streets and squares available in the community for play. They also had fewer electronic toys and no video games when compared with children living in urban areas in China.

As shown through the theme of playing (*Part Playing*), the children in the current study had boxes of age-appropriate toys for literacy and cognitive and motor skill development, such as brain flakes, blocks and flashcards as well as child vehicles for the three participating children younger than three-and-a-half. These toys were brought by their parents working in the city, who placed importance on their children's psychological development and valued toys that could support and train them in this regard. Research on Chinese parents' choice of toys has suggested that parents of both rural and urban children value toys that benefit their children's psychological development (Duan, 2012; Wan, 2008; Y. Zhang, 2010). However, parents in urban areas purchase more electronic toys, such as

remote control cars and animated dolls (Y. Zhang, 2010), while children in villages are more likely to have plastic toys, and almost all of them have child vehicles (Yuan, 2020). Blocks are the toys parents share the most interest in (Yuan, 2020; Y. Zhang, 2010).

Although electronic toys are popular in families in urban areas in China, as urban parents believe the toys are more technical and more attractive to children (Duan, 2012; Wan, 2008), the participating children in the current study were still attracted to traditional toys, which seemed to be helpful in their development. Also, their grandparents played with them with the toys and helped them learn from the play activities. Having their grandparents as all-day companions in playing was one of the advantages experienced by the children in the current study. Researchers have suggested that having caregivers as companions while playing with toys is important for children because it improves caregiver–child relationships as well as social skills (J. Huang, 2006; Sung, 2017). The relationships and social skills were both shown to be well developed among the children in the current study. Unlike the grandparents in the current study, caregivers in urban areas tend to simply give toys to children and not to engage in play with them (Duan, 2012; Y. Zhang, 2010).

Using a mobile phone for fun, such as through playing video games or watching cartoons, was a common activity among the children in the current study and is also an activity among children in urban areas of China (L. Chen et al., 2020; Yuan, 2020). However, the children in the current study were less likely to play with mobile phones because their grandparents did not allow them to, and the mobile phones, which were their grandparents', were also sometimes out-of-date or without games. Still, they sometimes watched cartoons and played songs to dance or sing along with when they could use their grandparents' mobile phones (see Part *Toys*). Research in the United States has suggested that mobile phone use

among mothers and young children in early years is related to behavioural problems in children when they reach school age (Divan et al., 2008, 2012). Urban parents in China are cautious about the negative effects of mobile phone use among young children, but more than half of them still suggest that mobile phones free them from the disturbance of their children (L. Chen et al., 2020). They also use mobile phones to train their children's cognitive skills, although they seldom care about what their children are doing with the mobile phones (L. Chen et al., 2020). Having a real person to interact with and real objects to learn from is considered out-of-date according to some research on children toys (L. Chen et al., 2020; Wan, 2008), but they are not necessarily detrimental in terms of child development and safety, especially considering the possible negative outcomes associated with mobile phone use.

Additionally, interaction with nature and the real world, such as through outdoor activities, was found to be important to the development of social skills and imagination among children (J. Huang, 2006). The grandparents in the current study preferred outdoor activities. The mobile phone use of the children in the current study, especially Henk, Cora and Grace, was under strict control of their grandparents, while their grandparents' out-of-date mobile phones sometimes did not support the functions of a smartphone, as in Quinn's case. However, the children were allowed to play with toys or games with their friends, peers or by themselves in the yard at home, in rooms at home, in the village streets, in their peer's homes and in the village square. The places the children played in were mostly outdoors. The grandparents were in the same space while the children were playing but would watch and interact with them only when the children required it. However, according to research on young children in villages and cities in eastern China, playing outside is not as common as it

used to be due to the urbanisation of villages and the isolation-based community space structure in cities (Yuan, 2020).

Overall, the children in the current study enjoyed their lives of all-day playing in a community with different kinds of playmates, including friends, peers, neighbours and grandparents. They played in grandparent-headed households that provided them age-appropriate, developmental toys, with access to outdoor spaces that were available at any time (at home and in the community and nature) - something not commonly available for children living in cities and villages in some parts of China. Significantly, some research has found that young Chinese children living in rural villages scored higher in motor development and time and space understanding, because outdoor space and free play with peers without adult interventions are always available for rural children (Gan et al, 2016). Such findings may also apply to the motor skills and understanding of time and space of the children in the current study because the time spent with playmates and physical environments that provide them more opportunities to practice and develop these skills and knowledge. Thus, playing is not only a significant activity of the children, but also supports their motor and cognition development.

Secure Attachment with Family Members

The children in the current study were securely attached and had close relationships with all members of their extended family, including their parents, grandparents, aunts and uncles, which contradicts some findings of previous research, which were that ‘left-behind children’ at school age were lonely or depressed because they did not have close relationship with parents and did not feel close to their grandparents (e.g. Cheng & Sun, 2015; Ling et al., 2017). As discussed in the literature review chapter (see Part *LBYC Raised by their*

Grandparents in *Background and Literature Review* Chapter), children's age of separation, and who they were separated from, can have different effects on children. In line with the suggestion that young children may be able to deal with parent-child separation (Tao et al., 2014), the secure attachment and closeness with extended family seemed to buffer the young children in the current study who were living with and being raised by their grandparents, against loneliness and depression. However, it should be noted that although secure attachment with grandparents, extended family members, and friends and neighbourhoods moderates children's mental well-being, it may not fully protect school-aged children from loneliness and depression, especially if the children become 'left-behind children' at school age (Cheng & Sun, 2015; Jia & Tian, 2010; Ling et al., 2017).

In the current study, children's perceptions on their family relationships and lives were illustrated through the across-case theme of family relationship (Part *Toys*) and some of the within case themes, including Quinn's cautious and attentive parents, Cora's being an elder sister, Henk's shy and vigilant grandmother and the modern home style and Grace's grandfather being with Grace (Parts of *Within-case Themes* in Case One, Two, Three and Four). As discussed in the literature review (see Part *LBYC Raised by their Grandparents*), previous researchers have called for further studies to illustrate details of grandparents raising grandchildren, such as caregiving behaviours and activities, caregiver-child relationships, to understand this rearing pattern and its outcomes for children (Mo et al., 2016; Tao et al., 2014). These are what this study sought to explore. Findings in the current study indicate that the children's perceptions of their family members showed their understanding of how their family daily lives functioned, thus its findings provide some of the details that previous researchers have called for. It also showed the microsystems of the children's development

(see the PPCT model in Part *Conclusion: A Bioecological Model of Children Lived Experiences*) through their own perceptions of their lived experiences.

Closeness with Family

Closeness with family was shown through the children's daily activities and interactions with their family members, as demonstrated through the family relationship theme in the Part *Closeness with Family Members*, as well as some within case themes, including Quinn's cautious and attentive parents and Grace's grandfather being with her. According to intergenerational solidarity theory (Bengtson, 2001; Bengtson & Roberts, 1991; Silverstein et al., 1998), closeness between grandparents and grandchildren can be accessed by six factors: social contacts and activities, feeling intimacy, consensus on values and beliefs, resource exchange, commitments to family norms and roles and geographic distance or accessible methods of being together. Some of these were found in the daily activities of the children and their interactions not only with grandparents but also with other family members, such as parents, aunts and uncles. For example, Quinn's aunts would come home regularly and play with her, although they also worked in cities away from home. Quinn's family members would get together on long holidays, which were some of Quinn's favourite events. Grace insisted on waiting for her grandfather so they could have breakfast together when he came back late from the farmland. Henk's grandmother was available when Henk needed her comfort and support, such as after he was rejected for many times during the free play activities. Cora's mother had phone calls with Cora regularly and bought toys for her. The interactions shown by the children and the materials and events related to their family members theoretically supported and vividly illustrated the closeness between the children and their family members.

The children also shared their grandparents' love for family reunions. It has been suggested that grandparents are the core of connection among the extended family and that they enjoy family reunions and serve as a mental connection and cultural transmitter for their families (Beckreck, 2018; J. Lewis et al., 2018). In China, grandparents or other senior family members are the connections and cores of the family, who are supported, respected, and regularly visited by the whole family. Living with their grandparents, the children in the current study were attached to and supported not only by their parents but also by other family members. They had additional opportunities to be with all their family members and to learn the culture and beliefs of the family. They also enjoyed being with their other family members during holidays at their home and were partly hosts themselves because they lived with their grandparents. One benefit of being cared for by grandparents is that the grandchildren felt a stronger sense of belonging to their family and the community, which reduced the feeling of having their identity lost in the rapidly changing and urbanising society (Beckreck, 2018; J. Lewis et al., 2018; Sykes, 2018).

However, because the children enjoyed and anticipated family reunions as their grandparents did, it could be argued that they also shared the loneliness of not living with all their family members, as suggested by certain research (Mtshali, 2016). In accordance with this idea, previous research has concluded that LBC can be lonely and depressed due to a lack of mental and physical connection with and support from parents (Jia & Tian, 2010; Ling et al., 2017; Su et al., 2013; Sun et al., 2015). This was not the case in the current study as the children appeared to have close relationships with their family members associated with positive emotions. The children in the current study showed that they missed their parents and family members, but loneliness was not expressed. They mentioned their parents and other family members by describing their happy memories and connections with them,

indicating that relationships and interactions with family members were part of their lives and attachment systems and that they had a sense of belongingness to the extended family. As the children had positive feelings when they reflected on their close relationships with family members, which has been suggested as a protective factor decreasing children's loneliness and behaviour problems if it was for adolescents (Attar-Schwartz et al., 2009; Flouri et al., 2010), the current study found that children in the current study at least did not suffer from loneliness and felt close to their extended families.

Research on LBC has also suggested that intimacy and familiarity with parents are associated with the frequency of physical connections, such as when parents come home to meet their children, and that materialistic connections, such as those established through parents buying toys for them, might explain younger children's perceptions of family members (Su et al., 2013). As shown in the current study, materialistic connections and regular physical connections reminded the children of their family members, such as in Quinn's, Henk's and Cora's cases, while physical absence over long periods decreased the familiarity of the children with their family members, such as in Grace's and Cora's cases. When family members did not show up for a long time, which included periods longer than a month in the current study, the younger children tended to not mention them as family members initially. For example, Grace and Cora did not mention their aunt and uncle when they mapped their family members a month after a family gathering for the Spring Festival but had happily included them almost two weeks after the national holiday. Additionally, Grace was unable to recognise her mother in her wedding photo. She also forgot about her mother when she introduced her home as no toys or other objects served as a reminder. The other two participants, Quinn and Henk, recalled and told stories of their family members when introducing toys related to them (see Part *Closeness with Family Members*). All the

children in the current study showed that physical and materialistic connections were activators that connected the family together.

Children's Family Members

Fathers and Grandfathers Participating in Childcare. Chinese researchers have suggested that fathers living with their children or working away from home are often absent in their roles as caregivers to their children, which has negative effects on the children's social development and father-child relationships (Fan, 2013; Zhao, 2007). However, the fathers in the current study were both attached to their children and a part of their lives. They took them to play when they were at home, brought toys for them which seemed to show they cared about their child's development. Additionally, not only the fathers but also the grandfathers of Cora and Grace had close relationships with their grandchildren and shared the caregiving responsibilities with the grandmothers. Grace's grandfather would have breakfast with Grace and her grandmother at home and spent some time in the morning playing with Grace (see Part *Within-case Themes: Grandfather being with the Child in Case Four*). Cora's grandfather stayed with her at night because she moved to another room to sleep without her grandmother and always brought back toys for her, which were bought by her mother.

The image of males being absent within the family and for childcare was apparent only by Henk's grandfather, who did not appear to have a close relationship with Henk (see Part *Absent Family Members*). The only time Henk mentioned his grandfather was when the researcher pointed out a toy gun and asked who had purchased it. Henk answered, 'my grandpa', after his grandmother urged him to respond to the question. His grandfather then said, 'yes', and finished the discussion after Henk's short answer. Henk's grandmother also

did not talk about her husband. When Henk was making his family map, his grandfather was not mentioned at all and was absent from the map. Henk's grandfather seemed to show the stereotype of the absent father from older generations, while all the fathers in the current study did not appear to follow the tradition of their own fathers. Henk's grandfather was absent in the house and during the family member's introductions of their daily life, which was not the case for the other children in the current study. Recent research on the role of the father over two generations in the United States suggests that fathers of the younger generation born after 2000 participate in the lives of their children as nurturers and share in the caregiving responsibilities, while those of older generations kept a distance from their children (Sarfaraz et al., 2021). In the current study, only Henk's grandfather was a model of these findings of older research, and the other fathers and grandfathers all took on the new role proposed by scholars. Considering that Henk's family was the only one among the four cases that decorated their house with a 'modern style', adapted from the West and urban areas, it would be interesting to find out more on the associations between family philosophy and lifestyle.

Mothers and Grandmothers as the Main Caregivers. In the current study, the grandmothers were the main caregivers. Grandmothers are traditionally responsible for taking care of younger family members and homes in the Chinese community culture. When the grandfathers worked on the farmland from early morning until evening, the grandmothers stayed home to take care of the children and the home. They also helped with the farming work at home, such as drying the rapeseeds and corn and packing the agriculture products during harvest seasons, while they looked after their grandchildren. In slack seasons, they were not as busy and would visit the neighbours and dance together in the square, taking their grandchildren with them. Normally, in the community, grandmothers take the responsibility

of being with the children all day. The children in the current study knew their grandmother as the person they could always go to for help and support. For example, Henk asked for his grandmother's attention and comfort when he was rejected by peers; Grace chased her grandmother while she was in the yard playing and her grandmother appeared to leave the house; and Cora asked for her grandmother's help when the pool she prepared for the fishing game was too heavy for her to carry. In this way, the grandmothers were always the first ones the children went to when they needed something.

The mothers in the current study also shared in the main responsibility of taking care of the children when compared to the fathers. When the researcher mentioned the interview with the parents, the grandmothers and fathers recommended that the mothers be interviewed. Although the fathers were also attentive to their children's development and caregiving, and the mothers were also busy with their jobs in the city, the mothers were the ones with the main responsibility for the children. Henk's and Quinn's mothers came back to live with their children because their children were about to take literacy lessons that could be challenging, such as entering preschool or moving up a grade in preschool. It is a tradition in the area to value education and academic achievements. Thus, it is not a surprise that a transition in the academic period was a common cause for some parents to return home and change the household structure and rearing pattern as discussed through the theme of learning and education (see Part *Learning and Education*).

Generally, previous research has also found that grandmothers and mothers worldwide take on the responsibility of caregiving for children, suggesting that a larger proportion of grandmothers than grandfathers take on the responsibility of caring for their grandchildren among all cultural groups and communities globally (e.g. Hawkes et al., 1998;

Lee & An, 2019; J. Lewis et al., 2018; J. Yang et al., 2018). In the community culture and according to the children's perspectives, maternal care and companionship were still the main resources for childcare and household leading. However, most fathers and grandfathers joined in the childcare and shared this responsibility with their wives. This was also perceived by the children in the study as they were close to their fathers and grandfathers as well. As seen in the family maps (Figure 6 in Part *Concept of Family*), all the children were secure and surrounded by their family members. Overall, the children appeared closely and secured attached to their parents, grandparents and other family members.

Benefits From the Family and Community Context

The family and community contexts of the 'left-behind young children' in the current study were beneficial for the children's development and their well-developed and culturally adjusted social skills, positively influencing their social and peer relationships within the community. As discussed in the literature review chapter, contextual factors are central to understanding various development outcomes of 'left-behind children' (Ge & Adesman, 2017; Mo et al., 2016; Tao et al., 2014). According to the PPCT model and children's perspectives, the contextual factors of family and community influence children's development in relation to micro, meso-, and macro-time and mesosystem contexts (Bronfenbrenner & Morris, 2006). Their associations with family members, peers, neighbours and the physical environment interacted to influence the children's emotion regulation development and lived experience. The children in the current study developed their social and cognitive skills, such as their literacy and emotion regulation skills, both at home and in the community.

Reflecting on the background information on the community and the children's stories from the across-case theme of learning and education (see Part *Learning and Education*) and the within case themes in Henk's (see Part *Case Three*) and Cora's cases (see Part *Case Two*), the current study concluded that the children's development of emotion regulation, motor skills and literacy skills benefited from the mixed-age, one-on-one, intergenerational and naturalistic context of their family and community. It was also concluded that the children's social skills and ability to meet the cultural and social norms of the community were associated with popularity among neighbours and peers.

Children in the current study had emotional and cognitive development aligned with the expectations of members of the children's families and the local community. This may contradict some Chinese researchers' suggestion that rural young children scored lower in standard tests on emotional and cognitive development than urban young children because of claimed low quality education and limited social, cultural and other learning activities in rural areas (Gan et al, 2016). This suggests it might be problematic to evaluate children's development only with standards developed outside the community, as discussed in the part *Benefits From the Family and Community Context*.

Children Development in Community with Mixed-aged Peers and Intergenerational Neighbours

As shown in the discussions of the themes regarding children developing their skills through observing others (Part *Observing Others*), learning from discipline and encouragement (Part *Discipline and Encouragement*), adopting the culture of the community (Part *Community Life*) and being an elder sister (Part *Two Within-case Themes in Case Two*), a mixed-age, intergenerational and naturalistic community setting was beneficial for the

children's development. This is consistent with the literature on the social development of children, which suggests that the mixed-age and intergenerational family and community environment positively supported children's acquisition of social and cognitive skills, local culture and values, and sense of belonging based on the contextual background (Beckreck, 2018; Sykes, 2018). It is traditionally accepted in China for grandparents to take the role of primary caregivers of their grandchildren when parents are not available (Song, 2016). Grandparents take the role as a way to help the family and show their love for their grandchildren; thus make considerable efforts to take good care of their grandchildren. Also, families, being parts of the local community, have friends, social support in the neighbourhood, and community services that support children's lives and development, which are Chinese social traditions and also the 'New Socialist Countryside'⁹ goal of the Chinese government (The State Council, 2006). The participating families' relationships with their community are shown in the *Four Child Cases: Within-case Analysis* Chapter. The benefits of a mixed-age and intergenerational community are revealed in the current study, included having contexts that support social, cognitive, motor and functional skills and literacy development and having a sense of belonging. The contexts that supported children's development were having role models, discipline and encouragement from neighbours and grandparents, supportive grandparenting behaviours, literacy education activities and opportunities to join in domestic work.

Development of Emotion Regulation; Cognitive, Motor and Functional Skills; and Literacy. Researchers have suggested that when playing and learning with a mixed-age

⁹ The goal of building 'new socialist countryside' includes many sub-goals that support rural residents and make their lived easier, better, and healthier (The State Council, 2006). Providing community services to people living in rural area and better education – more knowledgeable teachers and upgraded school facilities – are parts of the goal.

peer group, children have role models to help them learn social norms, younger peers to help them learn responsibilities and older peers to provide them with challenging and scaffolding activities with support to practice and develop their cognitive skills (Teszenyi, 2018). This is also a traditional value in China, where older children take care of younger ones and the younger children respect, and learn from the older ones. Grace, the youngest child in the study, learnt local table manners, the ability to express her feelings verbally and motor skills from playing with Cora, her role model, and observing how Cora played with toys. Grace also practiced the things she learnt, such as sharing food, comforting others and leading the playing activity, with Cora's younger brother. Furthermore, Cora practiced her leadership and functional skills by playing with and caring for her friends and peers and regulating her emotions when facing difficult situations, such as cleaning up for her younger brother (see *Part Two Within-case Themes in Case Two*). Grace and Cora thus provide examples of the benefits of having a role model to learn from and peers to practice with.

Learning from discipline and encouragement from adults in the neighbourhood is another benefit to social development among children living in an intergenerational community (Teszenyi, 2018). Tradition values in China also suggest people to take care of other's children in the way they take care of their own children, which is still adopted by the participants' neighbourhood. For Cora, who was a role model and leader of the younger children, complements and discipline from neighbours guided her socialisation. In particular, she modified her behaviours, managed her emotions and learnt social norms from the compliments and discipline of her grandmother and her neighbours (see *Part Discipline and Encouragement*).

The grandparents' supportive and positive grandparenting practices were also beneficial to their children's socialisation. The literature has suggested that intervention in caregiving behaviours is necessary for some LBC who are in a developmental crisis due to the poor parenting practices of their caregivers (Tao et al., 2014; Yue et al., 2017). On the contrary, the children and grandparents in the current study provided positive examples of caregiving behaviours that were initiatively performed by the grandparents. For example, Grace's grandmother took Grace with her to dancing, socialising and singing activities in the neighbourhood; invited her to join in the activities; and taught her how to dance, sing and express herself during the activities (see *Parts Friends, Peers and Playmates, Literacy Learning and Being a 'Good Child'*). Grace developed her social and cognitive skills through these activities as they included exercising, singing and storytelling. The fact that these were naturalistic instead of standardised and pre-designed education activities or programs suggests that the grandparenting practices of the grandparents in the current study were good examples of providing support to children's development and that interventions from outside the community context are not the only 'correct' form of parenting/grandparenting behaviours.

As the local community traditionally valued literacy learning, the children in the current study also benefited from their grandmothers and neighbours' joint efforts to provide literacy learning activities. The children also demonstrated that they acquired literacy and that their caregivers had paid special attention to it since they were toddlers (see *Part Literacy Learning*). The grandmothers and neighbours shared stories, experiences and learning resources on the children's literacy learning when they were together. For example, the grandmothers of all the child participants and the caregivers of the child participants' peers crowded together to share children's songs for literacy learning and discussed how to teach

the children these songs and words when they children were in free play activities (see Part *Being a 'Good Grandparent'*). The literacy competence of the children in the current study might be challenged if they were compared to urban children according to a standard test developed based on urban children in some parts of China (e.g. F. Lu, 2004; F. Lu & Chen, 2007) because they would not share the lived experiences, sociocultural background and dialects the test is based on. However, the children were competent in literacy when speaking local dialects within their local community. In agreement with previous researchers' discussions of psychological assessments for children (Michael & Surbeck, 2017), the current study suggests that the living environment and sociocultural setting experienced by children significantly impact their learning and results in evaluations of literacy competence. Contextual factors should thus be considered in measurements of children's ability.

Joining their grandparents in domestic work helps children develop functional skills (Yuan, 2020). For example, Henk, who did not participate in house chores, was less competent in functional, fine motor and social skills than Cora, who was the same age and helped her grandmother in taking care of her younger brother. He appeared less competent than Grace, who was younger and joined her grandmother in laying the table, and Quinn, who was older and joined her grandmother and mother in doing house chores. This comparison between the three girls and Henk indicates that joint domestic work with family members can support development. It also reveals that caregivers have higher expectation for girls to join in domestic work than for boys, which is suggested to be a common opinion among Chinese families in rural areas (S. Lu et al., 2016).

Having a Sense of Belonging. Other benefits of living and growing in intergenerational communities include having a sense of belonging and inheriting local

culture, history and traditional values, which are protective factors against the identity loss and emptiness of children faced with the trends of urbanisation and isolation in society (Sykes, 2018; Yuan, 2020). Although identity loss and emptiness are adverse circumstances experienced by middle school students, the young children in the current study showed that they had protective factors toward them. For example, Quinn not only introduced her family unions, showing her belongingness to her extended family, but also introduced the wedding banquet to the researcher. Furthermore, she showed her table manners of ‘eating without talking’, indicating her knowledge of local culture and social norms.

Domestic work with caregivers is another activity that strengthens the bonds between family members (Yuan, 2020). The three girls in the current study showed a greater level of participation in domestic work with their grandmothers compared with Henk. Joint domestic work with family members has a positive influence on children’s sense of belongingness to the family and is associated with better cognitive and functional skills. For example, Cora was confident and proud when demonstrating her competence in helping her grandmother take care of her younger brother; and Quinn introduced with a happy smile that she washed dishes with her mother and grandmother as joint activity with family members. Previous research has suggested that one of the negative impacts of living with grandparents is the burden of house chores (e.g. Ding et al., 2019; S. Lu et al., 2016; Tao et al., 2014). In particular, it was reported that girls reared by grandparents shared significantly longer hours of house chores than boys, which could negatively impact their wellbeing and schoolwork when they were overwhelmed by house chores (S. Lu et al., 2016). Although the children in the current study were much younger than those from previous research, the three girl participants involved themselves more in joint domestic work than Henk, the boy. However, contrary to the disadvantages of longer hours of house chores suggested in previous research,

the children's discourse on house chores in the current study indicated that house chores with family members were beneficial to closeness with family members. In conclusion, an overload of house chores might negatively impact children's well-being, but house chores as joint activities among family members are important for children in building relationships and staying close with family members.

Preschool and the Community

The mixed-age, intergenerational and naturalistic context of the families and communities of the children in the current study benefited their development and well-being. The influences and effects of different contextual systems interact with one another to jointly influence the focal individual, the child in the current study (Bronfenbrenner & Morris, 2006). In particular, the characteristics of the exosystems, such as the arrangement of the preschool and the learning environment of the community, and the mesosystem, such as the daily lives in the children's family and the community, interact to decrease the benefits of community-based learning and development and lead to standardised lessons for cognitive and social skills training in the preschool setting.

Mixed-age learning environments and community-based learning provide natural and traditional learning contexts and resources for children, and they are suggested to be beneficial for children's development and mental health (Sykes, 2018; Teszenyi, 2018). The findings of the current study, drawn from evidence of the children's lived experience, support this. However, such learning contexts and resources are not commonly available for children living in urban areas and some other villages in China (Yuan, 2020), nor in many western societies (Teszenyi, 2018). The family and community context as the meso- and exosystems of the children's lived experiences and development in the current study were supportive and

beneficial to the children's development but may not be common among all LBYC, especially those in communities where urbanisation has a stronger influence (Yuan, 2020).

When the children in the current study entered preschool, they took standardised lessons on cognitive and social skills, which included training in language skills, obedience and so on. This is now very common in villages in China as part of the goal of building the 'New Socialist Countryside' (The State Council, 2006). However, the all-day arrangement of preschools from Monday to Friday pulled the children out of the community for more than half of their time. This decreased their time and opportunities to learn local culture and values from the neighbourhood and their grandparents and instead provided them with standardised courses related to primary school lessons in a single-age classroom (Yuan, 2020). For the younger children, such as Grace and Henk, they were forced to separate from their role models, that is, their older peers (Cora and the boys in Henk's neighbourhood, respectively) for five days a week because their elder peers had to go to school. The younger ones then spent more time playing with adult neighbours. Thus, to both the younger children and the older children, the separation resulting from the preschool arrangement worked against the beneficial mixed-age peer-group and naturalistic learning in the community (Teszenyi, 2018; Yuan, 2020).

Social and Peer Relationships

The children in the current study demonstrated not only had they developed social and cognitive skills within their family and community contexts but also that their well-developed social and cognitive skills supported their interactions with peers and neighbours. 'Good' children (see Part *Being a 'Good Child'*) who are able to manage emotional expression, remain 'neutral' and so on, would gain popularity among neighbours, receive

complements from grandparents and establish friendships with peers. Children in the current study had met the standard of ‘good children’ in China (see the first part in Part *Community Life* in *Themes from the Across-case Analysis* Chapter). It was shown that the children’s well-developed social and cognitive skills were associated with their well-adjusted social and peer relationships, which were an effective resource and positive demand supporting the proximal process of relationship building in the microsystem of family, peers and neighbours (Bronfenbrenner & Morris, 2006; Darling, 2007).

However, Li et al. (2014) found that only one-fourth of the LBC who participated in their research had good social adaptation to school life, suggesting that some LBC were at risk of maladjustment when attending school. Psychologists have suggested children who show problematic behaviours in toddlerhood will continue to have them at pre-adolescent age, while most other children will learn to control their aggression and impulsive behaviours when they are still young (Cote et al., 2006). Henk, the boy who showed constant aggressive behaviour and enjoyed mischievous behaviour, may be at risk based on the results and standards of the literature. Indeed, he was not accepted as playmate by his peers in free play activity, although he was popular among the neighbours and praised by his grandmother. Psychological research on LBC also suggests that boys are more likely to demonstrate problematic, impulsive or aggressive behaviours (Cote et al., 2006; Z. Li et al., 2014). Thus, Henk’s appropriate and socially adjusted behaviours as viewed by his grandmother and the neighbours, who had good relationships with him, can be seen as problematic according to the perspectives of psychology and education literature. This contrast in interpretations suggests that the differences between the norms and perspectives of different context systems, including the community, the family and school, result in different opinions on the focal child’s behaviours within the literature.

Overall, the children's social and cognitive skill were well-developed and socially adjusted and showed a positive association with their social and peer relationships. However, the interpretations of children's behaviours and development have been adaptive to the contextual system in which the children are positioned and the perspectives applied by researchers.

A Comprehensive Picture of the Children's Lived Experience

Through a systematic exploration underpinned by the PPCT model of children's lived experiences and using a lens of children's perspectives, the current study summarised the lived experiences and emotion regulation development of four children in response to the two research questions: (1) What are the children's perspectives on their lived experiences? (2) What is the dynamic relationship between the children's emotion regulation development and their lived experiences?

Firstly, the LBYC raised by their grandparents showed that secure attachment with their grandparents, parents, siblings, aunts and uncles was part of the microsystem of their lived experience and supported them in feeling secure even though they were not living with their parents. Additionally, in the proximal processes of their lives and development, playing was their main activity, for which they had supportive resources, including friends, peers and neighbours, to play with. Furthermore, they had more opportunities to play outside than their peers in urban or other rural areas. Age-appropriate toys were also provided mainly by the children's parents.

Secondly, with the help of the supportive and naturalistic contextual factors of the mixed-age and intergenerational community of the exosystems and the extended family of the mesosystem, the children developed emotion regulation and motor and cognitive skills

appropriate for their age and related to their community context. Their socially-adjusted and well-developed social and cognitive skills rewarded them with good social and peer relationships.

Because the current study used mixed methods but a mainly qualitative analysis approach, its findings are discussed and explored with details of children's lived experiences from their perspectives and exploration of their family and community. Previous research discussed in the literature review and didn't necessarily provide a comprehensive picture or exploration of LBYC's lives (e.g. Mo et al., 2015; Tao et al., 2014). This research also mostly collected any qualitative data from caregivers' perspectives (Yue et al, 2017). Thus the findings and discussion of the current study, based on information mainly collected from children's perspectives, provides new knowledge on LBYC's lived experiences.

Overall, the findings revealed a comprehensive picture of the children's lived experiences regarding their daily activities, social relationships and social development, especially with regard to their emotion regulation development. The lived experiences of LBYC raised by grandparents as explored in the current study seem to be positive in their impact on the children's general well-being, emotional, cognitive, and motor development. The children seem to have secure attachments and supportive social relationships and no indication was found of mental health problems because of parent-child separation. The next chapter will outline the conclusions of the study based on the findings and discussions of the resulting implications of the chosen methodology as well as the study's contributions to the broader literature.

Conclusions and Implications

This chapter reflects on the research design, process and findings. Then, it discusses and draws conclusions based on the limitations of the methodology and data collection processes, outlines the implications of the methodology and presents the contributions of the current study to the research on and understanding of 'left-behind young children' (LBYC).

It is an important part of the research process and data analyses to engage in critical reflection on the research methods and the exploration process. The current study employed a phenomenological approach, which assumes that research is not only about making conclusions from collected data (Van Manen, 1997). The study of a phenomenon is instead a process of exploring meaning from participants' perspectives and reflection on the exploration processes, including the research design, fieldwork processes and data analyses (Van Manen, 2014). Reflection is also one of the required components when interpreting children's perspectives according to the Mosaic approach (Clark, 2011), which was the main data resource for the current study. It is also important for thematic analysis (Braun & Clarke, 2019), which was applied as an approach throughout the entire data analysis process. In the previous three chapters (*Four Child Cases: Within-case Analysis*, *Themes from the Across-case Analysis* and *Findings and Discussion*), the researcher reflected on the data collected and the processes of analysing and discussing the data when generating the themes and findings in *Four Child Cases: Within-case Analysis*, *Themes from the Across-case Analysis* and *Findings and Discussion* Chapters. In the current chapter, she reflects holistically on the study overall, including the findings, fieldwork process and methodology.

This chapter begins with a discussion of the limitations of the study, including the methodological issues. These included the lack of ability to evaluate, infer causal

relationships and make generalisations regarding the research findings and conclusions; the use of repeated tasks; the use of a single coder for coding the naturalistic observations; and the unpredictable situations caused by the COVID-19 pandemic. The chapter continues with discussion of the implications of the methodology and the findings, which were the significance of being flexible in research tasks and arrangements, involving the children's perspectives and employing a systematic approach. Finally, the two main contributions of the current study to the understanding of and research on 'left-behind young children's' lived experiences are summarised. The chapter ends with a conclusion to the study as a whole.

Limitations

A review of the methodology of the current study and the fieldwork experience of the researcher revealed several limitations and challenges that warrant discussion. With respect to the methodology, the current study shares the general limitations of qualitative research, including a lack of ability to generate causality, generalise the research findings and evaluate the phenomenon. The repeated research tasks in two rounds also led to missing data as children lost interest in some of the repeated activities. Furthermore, the coding of the children's emotion regulation did not provide Cohen's kappa to ensure inter-rater reliability (J. Gottman et al., 1995, pp. 282–283) as there was only one coder (the researcher).

Unpredictable events during the fieldwork experience, such as the COVID-19 pandemic and the changeable schedules of the participants posed several challenges to the researcher. For example, restrictions on preschool entrance led to the cancellation of free-play tasks in preschool during the second round of data collection and to the cancellation of the teacher's questionnaire on children's emotion regulation for both rounds. The changeable and

busy daily schedules of the participants also posed a challenge for the researcher to keep children's full attention on the research tasks.

Methodological Limitations

The methodology of the current study, including the research design and the qualitative and phenomenological approach, led to some limitations. The following section begins with discussion of limitations related to the employment of a qualitative analysis approach, thematic analyses, and case studies. This is followed by a discussion of the limitations resulting from the research design, including the repetition of tasks over two rounds of data collection and the coding process, which included naturalistic observations of the children's emotion regulation. These led to the cancelation of research tasks and a lack of inter-rater reliability, respectively.

The Tendency to Evaluation. As the researcher reflected on, critically analysed and organised the information on the children's lived experiences in terms of the themes and results, she became aware of her tendency to evaluate the behaviours of the children, their peers, family members and the community from the perspectives of developmental science. This was not in accordance with the suggestions of the phenomenological approach, which assumes that lived experiences are constructed by one's own understanding and perspectives (Van Manen, 2014). Here, the researcher should not take a single perspective that did not account for the contextual factors and regarded the phenomenon holistically (Michael & Surbeck, 2017).

In developmental science, children's development is often perceived as qualitative in nature and measured and studied as separated and standardised components defined according to existing literature (Michael F. & Surbeck, 2017, pp. 3–22). Even though

researchers have paid attention to contextual and age differences when deciding on the standard for evaluating the components' development qualities, it remains a challenge to create accurate standards when the cultural background and context of the children and families change (Michael & Surbeck, 2017, pp. 21–22). However, accuracy is not a single fact depending on a standard provided by the researcher or adults. As discussed in the *Methodology* Chapter, young children's lived experiences are constructed by their own understanding of and perspective on their lives (Van Manen, 2014). Changes in point of view would result in different evaluations by researchers and caregivers of the same behaviours of the child. 'Accurate' descriptions and conclusion or a 'holistic' and 'comprehensive' description regarding children's lived experiences must include the children's perspectives and the opinions of caregivers (i.e. grandparents and parents) and, if possible, those of other significant people in the microsystem, proximal process, chronological systems in the children's PPCT model. When considering the PPCT model, the contextual factors would also be included. Thus, the current study showed the lived experiences of the children as they were, following the epistemology of phenomenological practice (Van Manen, 2014), and remained cautious when it came to evaluating the children's behaviours and development.

To deal with the tendency to make evaluations, the researcher took a step back and reconsidered the statements of the study with children's expressions and illustrations of their lived experiences, comparing them with the results of previous research based on caregiver discourse or developmental measurements. The discussions of children's lived experiences and behaviours that involved comparison with the literature were undertaken with caution. Conclusions or judgements were made based on multiple perspectives, which were clearly stated (see the examples in Part *Children Development in Community with Mixed-aged Peers and Intergenerational Neighbours*). Additionally, when a necessary discussion involved

evaluations or references of the children's behaviours, the researcher stated her perspective and compared it with background information to avoid simplifying or minimising the complexity and richness of the children's lived experiences (see example in Part *Traditional Toys and Outdoor Activities*).

Caution in Inferring Causality. The current study explored 'left-behind young children's' perspectives on their lived experiences being reared by grandparents using the Mosaic approach mixed with a variety of other methods, including a questionnaire, interviews and naturalistic observations. Through the variety of methods other than the Mosaic approach, the study further explored children's lived experiences from the perspectives of the caregivers and children's emotion regulation development (see Parts *Children's Perspectives* and *A Mixed Methods Research Design*, respectively). The Mosaic approach, which was the main data resource in the current study, was used to obtain and interpret the children's perspectives of their lived experiences (Clark, 2011, p. 55). Furthermore, thematic analyses were applied as the final step in reviewing and discussing the themes demonstrated the children's lived experiences. The themes generated from the data were explorative and reflective and were created to investigate the meanings of the phenomenon beyond the surface of the data (Braun & Clarke, 2006). Both the research approach and the data analyses were of an explorative, reflective and interpretive style and led to a comprehensive understanding of the children's lived experiences. Thus, the purpose of the methodology was not to identify causal relationships among the factors. Additionally, the four cases considered in the study were not sufficient to indicate causality among the factors of the children's lived experiences or of the children's developmental outcomes. Based on the in-depth exploration of the four cases, the themes and findings of the current study provided insight into the nature of the children's lived experiences and how they were

interpreted by the children. Further studies considering large numbers of cases based on a longitudinal design would enable an exploration and analysis of causal relationships.

Caution in Generalisation. The current study explored the lived experience of ‘left-behind young children’ raised by their grandparents through the study of four in-depth cases that included the perspectives of the children, their grandparents and parents as well as the social and culture factors among the community and the children’s emotion regulation strategies. The findings present a comprehensive picture of the children’s lived experiences, filling the gap in the literature regarding the fact that children’s perspectives have seldom been included or thoroughly interpreted (Wei, 2017). Although the information and data were abundant and included multiple perspectives, the limited number of cases means that the sample is not representative of the population. Thus, the results of the current study cannot be generalised to all ‘left-behind young children’ raised by their grandparents.

When examining the themes regarding the children’s lives, the results on their emotion regulation and the findings concluded from the themes and results, one should be cautious about making generalisations. That is, it is suggested that they be interpreted with respect to the context. In future studies, further knowledge on the population of ‘left-behind young children’ could be gained from comparison with children with other rearing patterns or in different community contexts and by including more cases.

Repeated Tasks. The current study repeated the research activities in two rounds of data collection and employed a mixed-method approach to explore multiple aspects of the children’s lived experiences based on multiple perspectives of participants, the time of year and the children’s development. This was introduced in detail in the *Methodology* Chapter (see Parts *A Mixed Methods Research Design* and *Research Methods and Tools*). The child

participants generally stated that they remembered the research tasks from the first round and refused some of them because they were not interested in doing them a second time. These included the room tour in the second round of data collection for Quinn and the role play in the second round for Cora, as introduced in research procedure of each case in *Four Child Cases: Within-case Analysis* Chapter. As the research tasks were repeated to explore changes in the children's lived experiences and their perspectives on their lives, the cancellation of tasks in the second round may indicate that no changes occurred but may also be missing data on the changes that occurred in their lives and opinions on their lived experiences. Considering the importance of repetition on such an exploration, future studies could design a different task using the Mosaic approach to explore the same aspects of children's perspectives on their lived experiences during the second round of data collection so as to avoid a loss of interest and refusals to repeat certain research tasks.

Using a Single Coder in the Coding Process. The naturalistic observations of the children's emotion regulation behaviours were coded by the researcher according to the emotion regulation coding scheme she designed (see Part *Developmental Factors in Lived Experience: Measuring Emotion Regulation Strategies*). It was suggested by one of the coding schemes that the emotion regulation coding scheme the current study was based on, namely, the Specific Affect Coding System (SPAFF, J. Gottman et al., 1995; Shapiro & Gottman, 2013), that inter-rater reliability should be reported with the Cohen's kappa of two coders when the sequence of the codes matters for data interpretations (J. Gottman et al., 1995). As the researcher was the only coder for the naturalistic observations, no inter-rater reliability was reported. In future studies, the researcher suggests that videos of the naturalistic observations be coded by two independent trained researchers and that the

reliability of the coding be reported with the Cohen's kappa of the two coders (J. Gottman et al., 1995).

Challenges During Fieldwork Posed by COVID-19 Pandemic

Restricted entry for preschool visitors during the COVID-19 pandemic caused cancellation of some research activities, which were challenges during fieldwork. These challenges to data collection were also unpredictable. Although suggestions to deal with the challenges are given in the following paragraphs, these setbacks did not have a significant influence on the adequacy of the research data due to the flexibility of the research tasks and arrangements, as introduced in the next part of the current chapter.

As the two rounds of fieldwork in the current study were conducted during the COVID-19 pandemic, restrictions affected the data collection in preschools. According to the research plan, the teachers' perspectives of the children's emotion regulation skills and understanding of emotion and emotion regulation were to be sourced through a questionnaire and open-ended questions (see Part *Developmental Factors in Lived Experience: Measuring Emotion Regulation Strategies*). However, due to changes in the children's teachers, the teachers' busy schedules and the restrictions on preschool entrance during the COVID-19 pandemic, the researcher was unable to meet with the teachers face-to-face at the arranged time to provide them the questionnaire. As the preschool entrance restriction was still in place after the second round of data collection was completed, the researcher was unable to collect any teacher responses as planned. The current study also planned for a free-play activity in the preschool as one of the naturalistic observation exploring the children's emotion regulation. The free-play observation during the second round of data collection was also cancelled due to school entrance restrictions.

Because the teachers' perspectives of the children's emotion regulation development and the children's free-play activity in preschool was important information for interpreting the children's lived experiences, the fact that the teachers did not complete the emotion regulation questionnaire and that the second round of free play was cancelled due to COVID-19 pandemic are limitations of the current study. It has been suggested that the school environment is part of a child's exosystem (Rosa & Tudge, 2013). Teacher's perspectives are thus part of the exosystem of the PPCT model regarding the lived experience of the focal children (see Part *Conclusion: A Bioecological Model of Children Lived Experiences*). The naturalistic observations in the school setting also provides information on the children's emotion regulation strategies and behaviour patterns when being with peers, which are proximal processes in the preschool context. Future studies should plan alternative ways of collecting teacher's perspectives, such as through phone interviews and asking consent from more than one teacher to overcome unpredictable situations, such as school entrance restrictions during COVID-19 periods and teacher changes. If it is applicable in a future study, observing children's free play with peers in preschool would provide further insight into their emotion regulation strategies.

Implications

The current study has demonstrated how flexibility in research tasks and arrangement supports data collection processes under unpredictable situations. It also indicates the significance of children's perspectives and systematic explorations based on the data and findings. The use of mixed-methods based on a phenomenological approach to data collection and analysis provided rich data that enabled the study to build a holistic picture of the lived experience of four LBYC. Additionally, the findings of the current study indicate

that children's literacy development and family philosophy should be explored as part of children's lived experiences.

Firstly, the discussion on the flexibility of the research tasks and arrangement in the current study shows how the flexibility of the research design created opportunities for the collection of background and contextual information in unpredictable situations, some of which were challenges to data collection. The unpredictable situations included the restrictions during COVID-19 pandemic, the changeable schedules of the participants and the presence of neighbours during the research activities at home.

Secondly, in the discussion of the significance of the children's perspectives, the information and stories collected from children's perspectives were compared with those collected from adults' perspectives. While the caregivers depended on social norms to perceive and interpret the behaviours of the children, the children expressed the actual lived experiences and social relationships they had lived through and learnt from, a component that is often missed in research on young children in China. This is one of the research gaps the study aimed to address, as discussed in the *Background and Literature Review* Chapter.

Thirdly, in the discussion of the necessity of a systematic exploration, the current study reflected on the employed PPCT model and mixed-method approach, the collected data and information and literatures on research gaps. By systematically exploring the children's development and lived experience and interpreting the collected data, the researcher provided a vivid and comprehensive picture of the findings and holistic interpretations of the children and the research topics. This is the aim of the current study and a common gap in developmental research (Darling, 2007; Rosa & Tudge, 2013; Tudge et al., 2016).

Fourthly, the current study reduces risk of researcher's bias by employing a mixed-method approach with multiple perspectives and building trustful, respectful, and friendly relationship with the participants and the community. The data from multiple perspectives, mainly the children's, collected through the Mosaic Approach, interviews, naturalistic observations, and questionnaire were analysed and interpreted with the support of knowledge and information learned from the participants and the community (Geertz, 1973).

Fifthly, by reflecting on the research findings, it was found that literacy was highly valued by the children's caregivers and in the local culture in the current study. Thus, future studies could also explore children's literacy development comprehensively as part of children's lived experiences that interacts with the other factors in their lived experience and development. Furthermore, family philosophy seemed to be related to family lifestyle. The current study also suggests that the association between family philosophy and lifestyle be explored.

Overall, the current study suggested that the perspectives of children and a systematic approach to exploration are significant for obtaining a comprehensive understanding of children's lived experience and development. The methodology and research design of the current study provides a tool set for researchers and social workers who would like to study children's perspectives using a systematic approach. The flexibility of the research tasks and arrangements supported the ability to make use of unpredictable situations during fieldwork to collect background information.

The Flexibility of Research Tasks and Arrangements

The current study employed an ethnographic approach in the fieldwork and a mixed-method approach in the research design, which enabled flexibility in the research tasks and

design arrangements. In research conducted in rural areas, which are assumed to have community cultures that are different from urban lives and have busy and changeable daily schedules, researchers have emphasised flexibility in research design and conduction in order to deal with the changeable and busy schedules of rural residents and unanticipated situations in rural life (Cao, 2019; McCarthy, 2021).

The current study was flexible in the arrangement of the research tasks, allowing the researcher to change the order of the tasks and to stop and continue a research task when the situation required it. For example, the mealtime and free play observations were arranged in different orders for different child participants to adapt to their families' schedules (see Figure 7 in *Child Cases: Within-case Analysis* Chapter).

Unanticipated situations, such as the presence of neighbours without notice, were also accepted as part of the exploration and meaning-generation process (Van Manen, 2014). The Mosaic approach was flexible and adaptive for children to express themselves in their preferred ways (Clark, 2011). Thus, when caregivers, neighbours or friends were present when the children were doing the research tasks or when the children performed tasks in a way that was not in accordance with the research design, the researcher still engaged in the tasks with the children and adapted them to the situation (Clark, 2005). The information provided was recorded, analysed and reflected upon to interpret the children's perspectives as expressed through the tasks. For example, Henk took the researcher to play outdoors when he was asked to tell a story about playing outside (see Part *Procedure of Research Activities* in *Case Three*), and Quinn's friend was also present when she undertook some of the research activities (see Part *Procedure of Research Activities* in *Case One*). The situation and information revealed were recorded as contextual factors to provide background information

on the children's lived experiences (Bronfenbrenner & Morris, 2006). As another example, in Grace's case, she always had visitors at home during breakfast time (see *Case Four*), and her neighbours' presence was recorded and analysed as a contextual factor of Grace's daily life. Information from dialogues among Grace's neighbours and grandparents were recorded in the research notes to provide important background information.

The tasks repeated over two rounds of data collection and those exploring the same topic from different perspectives in one round of data collection allowed for flexibility in the current study, making it possible to deal with the cancelation of some research tasks due to unpredictable situations. For example, the grandparents' reports on their children's emotion regulation strategies in the questionnaire (see Part *Developmental Factors in Lived Experience: Measuring Emotion Regulation Strategies*) compensated for the cancelation of the teacher's responses to the same questionnaire questions caused by the COVID-19 pandemic and to changes in teacher. The multiple tasks in the Mosaic approach also served as back-ups for each other when the children refused to take part (see the research procedures outlined in *Four Child Cases: Within-case Analysis* Chapter).

The Significance of Children's Perspectives

The significance of young children's perspectives was addressed in the literature review as one of the gaps the current study aimed to address. By reflecting on the theme of children having different perspectives from adults (Part *Having Different Perspectives from the Adults*), the significance of children's perspectives was supported. The children in the current study showed that they had their own ways of perceiving, describing and reacting to their lives, which were sometimes different from the perspectives of the grandparents, parents and cultural norms among the community.

For example, Quinn's mother followed social norms and asked Quinn to call her youngest aunt 'aunt three', referring to the fact that she was the third daughter of her grandmother, while Quinn insisted on calling her youngest aunt 'my little aunt', showing her personal connection with her aunt. Additionally, Cora's and Grace's grandmothers suggested that the two children were friends as they met and played with each other almost every day, but the two girls suggested they were close peers and not friends, showing the different definitions and understandings of friendship between the caregivers and the children.

Cora's and Henk's grandmothers also had understandings and evaluations of the children's behaviours that differed from the children's actual reactions in the described situations (see Parts of *Emotion Regulation and Lived Experience in Cases Two and Three*). Henk's grandmother suggested Henk did not vent his emotions as he did not shout or yell when he was in fights with other children. However, she did not suggest that Henk pushing other children or the things of other children was a way of expressing his emotions. This was also the understanding among the neighbours, who suggested 'children were playful' (see Henk's vignettes regarding 'neutral' emotions in Part *Being a 'Good Child'*). Cora's grandmother believed Cora was too young to manage her emotions, making a judgement based on Cora's age and the stereotype that emotion regulation is controlling negative emotional expressions. However, Cora's grandmother told a story of how Cora managed emotions of the two of them by speaking out Cora's feelings and wishes. The grandmothers' perspectives of the children's emotion regulation development and behaviours showed the social norms and community culture, while the children's behaviours showed what they learnt and acquired from their interactions with grandparents, peers and neighbours as well as how they adjusted to being part of the community.

The fact that children have different perspectives from adults also suggests the significance of valuing and exploring children's perspectives on their lived experiences and comparing them with the perspectives of adults or the society. Children's perspectives are significant in research on children as children are competent observers, interpreters and describers of the world, as established in the literature review. It was not suggesting that there was an accurate perception or understanding of children's lived experience but was because children's lived experiences were perceived and constructed by themselves that the current study discussed the differences in perceptions and understanding between the caregivers and children (Van Manen, 2014). The differences in perspectives and the fact that the children had their own unique perspectives supports the significance of using/incorporating children's perspectives in research on children. The current study thus concludes that research on or about children needs to include children's perspectives.

The Significance of a Systematic Approach

The significance of systematic explorations is discussed in the literature review (see Part *Ecological Perspectives on Grandparents Raising Grandchildren*), and was another research gap addressed by the current study. By reviewing and discussing the theoretical foundation of systematic theories, the literature advocating systematic explorations and the supporting evidence from the current study, the benefits and necessity of a systematic exploration when studying children's lived experiences and development were confirmed. The current study employed the PPCT model proposed by Bronfenbrenner (1994) and the dynamic system theory (M. D. Lewis et al., 1999; Thelen & Smith, 2007) to build the theoretical framework, which guided the study's research design and the structuring of the discussion of the themes and results. The systematic approaches employed in the current

study supported the generation of a vivid and comprehensive picture and interpretation of young children's lived experiences across multiple factors.

Bronfenbrenner and colleagues position the individual as a focal person, ('the left-behind young child' in the current study) while mapping the contextual and chronological systems and processes that surrounded the person to emphasise the interrelationships among the systems and the focal individual (Bronfenbrenner, 1994; Rosa & Tudge, 2013). It is significant to bear in mind that, although researchers measure and collect data on the systems surrounding the focal person, the aim of exploring the intercorrelated systems (or 'nested' systems according to bioecology) (Bronfenbrenner, 1986) is to understand and interpret the focal person's active participation, effects and influences in their interactions with the systems and not to simplify the person's development from a phenomenon to numbers and statistics based on standardised measurements from single factors (Darling, 2007).

As underpinned by the PPCT model (Bronfenbrenner, 1994; Rosa & Tudge, 2013), the current study explored children's perspectives and concluded findings on their lived experiences from the children's point of view, suggesting the children mainly played during the day, had secure attachments with family members and developed social skills adjusted to the context of their family and community. The first two findings relate to the children's proximal process in the microsystem, are directly associated with their development and compose their lived experiences. The third finding moves to the outer circle that relates to the meso- and exosystems and the meso- and macro-time systems that interact with children's lives and development indirectly through the influences of culture and the beliefs of caregivers or peers.

As the children took on an active role in deciding the content and manner of the introduction of their lived experiences, they showed their daily lives according to their own perceptions and indicated their efforts and involvement in their personal, family and community lives. The active participation of children in the exploration was emphasised by the bioecological model and contributed valuable data on their relationships and interactions with the systems in the current study. The children's central position in the model and the exploration of their lived experiences followed the dynamic system approach (Fogel et al., 2007, pp. 235–253). On the one hand, this values an anthropological approach that explores a comprehensive picture of the phenomenon and includes the information from the exploration process and the researcher. On the other hand, it works against oversimplifying the phenomenon by measuring only a few indices and representing the participants according to average numbers and statistics. The emphasis on exploring the children's lived experiences holistically and employing an ethnographic approach is in accordance with the dynamic system theory (see Parts *The Researcher's Position* and *Phenomenological Approach*). It also provided significant data, especially regarding background information on the participants and the community for the interpretation of the within and across case themes (see *Four Child Cases: Within-case Analysis* and *Themes from the Across-case Analysis* Chapters) and then the findings (see *Findings and Discussion* Chapter) of the study.

Potential Advantages and Disadvantages of Qualitative Approaches

The current study employed a mixed method research design to explore children's lived experience, but analysed and discussed the data with a mainly qualitative approach. The quality of data analysis might be affected by researcher's bias, as the researcher - an educated urban woman - was an outsider to the participants' community (as discussed in *The Researcher's Position* in the *Methodology* Chapter). However, the multiple perspectives in

data collected and the researcher's effort in learning the local culture and building supportive researcher-participant relationship before and during the field work reduced researcher's bias. The multiple perspectives and researcher-participant relationship helped the researcher record rich information from the participants and community, thus the researcher interpreted and constructed meaning from what the children in the current study showed and told in respect of the context of the community (Geertz, 1973, pp. 3-30).

The researcher did not speak the local dialect and was not familiar with the tradition values and local practice of the community. Thus there was potential risk of difficulties in communicating and building relationship with the participants and misunderstanding of the information collected. To deal with these risks, the researcher learned about the traditional values and local practices of the community from the gatekeepers before recruiting participants (see Part *The Researcher's Position in Methodology* Chapter). She also learned the local dialect from the gatekeepers and participants to make sure that she understood the participants' words and was able to communicate her questions to participants correctly. Being aware of her position as an outsider, the researcher always respected local practices and values of the participants and the community. Her attitude and actions with respect to the participants was rewarded with much help from them, including teaching her local dialect when she asked, translating words for her and the young children, being welcomed during her visits, and sharing their local practices and daily routines with her. Employing approaches that are respectful to the community and participants, she has built close and trustful relationships with the participants and got help from the local people. It reduced the potential for inaccuracy of data and data analysis that might have otherwise been caused by unfamiliarity with the community (Lagunas, 2019).

The potential inaccuracy that might be caused by data collection and analysis relying on one researcher was reduced by the mixed method design. By employing multiple perspectives through both qualitative and quantitative methodologies, the findings of the current study were summarised and concluded from analysis of the utterances of participants as well as from a standard questionnaire and coding processes. While the mixed methods reduced inaccuracy in data and data analysis, the qualitative research methods collected rich data and information for a comprehensive interpretation of children's lived experience. The mainly qualitative research methods based on phenomenological approaches provided further and deeper discussion on the lived experiences of the children without oversimplifying of the data or over generalising the young children's lived experience (Van Manen, 2014).

Other Implications Suggested by the Research Findings

Two topics for future study were identified through a reflection on the findings of the current study. Firstly, the findings showed that literacy development was highly valued by the caregivers of the child participants and the community culture. It was part of the daily activities of the children in the current study and also related to children's emotion regulation skills and interpersonal interactions, including those with grandparents, as discussed in data analysis and discussions of the study (see Parts *Observing Others* and *Children Development in Community with Mixed-aged Peers and Intergenerational Neighbours*). However, the current study did not design and plan a specific research task to explore the children's literacy development within the Mosaic approach or with any psychological measurement, although the children demonstrated their literacy skills when participating in the research tasks of the study. In future studies, children's literacy development should be explored comprehensively to support a further interpretation of the relationship between children's literacy development and their lived experience.

The second topic identified from the reflection on the research findings is the association between family philosophy and lifestyle. As discussed in Part *Children's Family Members*, the children and families in the study showed differences in caregiving arrangements and family philosophy while also showing differences in lifestyle, such as in Henk's case. There may be associations between family philosophy and lifestyle, as is suggested by other media and literature (e.g. Johansson, Seva & Oun, 2015; Sharon Aschaiek, 2012). The current study suggests that future studies explore the association between the two factors as part of the context within the micro-system, that is, within the family context that directly influences children's lived experience. Additionally, future studies should explore the culture factors on the meso- and macro-time frames, that is, over months or years (or even across generations), according to the PPCT model (see Part *Conclusion: A Bioecological Model of Children Lived Experiences*).

Contributions

The current study contributes further knowledge and methodology to research on 'left-behind young children' in rural China. It reveals children's perspectives of their lived experiences and interpretations of them. Furthermore, it provides a methodology to access young children's perspectives on their lived experiences, enabling researchers to generate a comprehensive picture of left-behind young children's lived experiences from the data.

Expanding the Knowledge on Left-behind Young Children

The current study explored 'left-behind young children's' lived experiences mainly from the children's perspectives, providing readers interested in the phenomenon a perspective that has been to some extent neglected by scholars (Mu et al., 2016; Wei, 2017). Social workers who work with 'left-behind young children' and their families and

communities can also learn from the comprehensive interpretation of children's perspectives on their daily lives. Using the knowledge of children's perceptions of their lived experiences underpinned by the contextual information, interventions and supportive services to children could change from services based on the perceptions of caregivers and the literature on a few components or factors of children's development to child-centred services responding to children's interests and needs from their point of view and that of the community culture. Furthermore, positive examples of 'left-behind children' who share similarities in social context could potentially help researchers or social workers seeking effective interventions to problematic 'left-behind children' to design programs adapted to the serviced families' sociocultural contexts and practical for the families to imbed into their daily lives.

Methodology for Exploring Children's Perspectives

Chinese researchers working with left-behind children in rural China have suggested the need for a methodology that explores the children's lived experiences from their own perspectives, especially for young children, and considers contextual factors (e.g. Tao et al., 2014; Wei, 2017). The current study provides a mixed-method design for a case study underpinned by the PPCT model (Bronfenbrenner & Morris, 2006) and employs a phenomenological approach to explore 'left-behind young children's' lived experience of being reared by grandparents.

The mixed-method design, which combined the Mosaic approach, interviews, questionnaires and naturalistic observations, systematically explored children's perspectives on their lived experiences. The PPCT model and phenomenological approach can provide methodological support and inspiration for researchers attempting to study and interpret young children's points of view. The research design also supports and respects equality for

young children in allowing them to express themselves and have their voices heard through a viable research design and child-friendly research activities (UNICEF, 1989). A comprehensive interpretation of children's lived experience was generated from the data and information collected through multiple data analyses, including a thematic analysis, the State Space Grid analysis and descriptive statistics (see details in Part *Data Analysis*).

Conclusions of the Study

This chapter has outlined the limitations resulting from methodological issues and challenges during data collection, the implications of the methodology, topics for future study and contributions to knowledge regarding 'left-behind young children' and research methods, through reviewing the research design, process and findings. In summary, the main limitations of the current study were related to its qualitative and phenomenological approach. Accordingly, evaluations of the children's lived experiences, investigation of the causal relationships among factors and generalisations of the research findings to the population were not applicable. Another methodological issue was the lack of inter-rater reliability for the coding from the naturalistic observations. Additionally, the design including repetition of the research activities over two rounds was identified as an issue, and the unpredictable restrictions during COVID-19 pandemic caused cancelations of some research activities. While the methodology posed limitations to the current study, it also ensures that rich data and information are collected to provide a comprehensive interpretation on the lived experience of 'left-behind young children'. Besides, it has implications for future studies, indicating the significance of flexibility in research design and process, the importance of children's perspectives in research on children and the benefits of employing of a systematic approach in studying children's lived experiences.

Another implication of the current study was summarised based on the comprehensive findings on the children's lived experiences, suggesting two topics for future study: literacy development among children as part of their lived experiences and the association between family philosophy and lifestyle. Apart from these two topics for future study, the current study also contributes to the understanding of 'left-behind young children' by providing a comprehensive and systematic picture of children's lived experiences generated from the children's perspectives and interpretations from multiple viewpoints as well as a methodology by which to inquire and interpret young children's lived experiences. Although the current study recommends caution in inferring causality and making generalisations from the research findings, the findings still provide insight into the lived experiences of 'left-behind young children' reared by their grandparents in rural China.

In conclusion, for the left-behind young children in the current study, playing was their main and most significant daily activity. They had secure attachments with family members, protecting them from the mental adversity researchers believe is associated with the absence of parents. Additionally, their development and socialisation were well supported in the mixed-age and intergenerational community through close and positive relationships with peers and neighbours. The three main findings do not imply that these left-behind young children's lived experiences show difficulties that require help, in contrast to the findings of many previous studies. By exploring the contextual factors in the rural community, such as the daily activities of the children and the neighbourhood, grandparents' and neighbours' opinions on the children, the living conditions of the families, and family relationships, the current study has provided rich details and information of the lived experience of the children and a more comprehensive understanding their lives than shown in previous research.

Overall, the lived experience of the left-behind young children in the current study are mainly positive as their living conditions - such as social and family relationships, material support, and education - are adequate for their needs for early development and no worse than the living conditions of their neighbourhood peers . This study's findings align with the suggestion that children can still have positive developmental outcomes and satisfactory lived experience when they are raised by grandparents, if contextual factors that relate to children's development and well-being are positive (Ge & Adesman, 2017). It explains the different outcomes of the studies on children and grandparents of grandparents raising grandchildren among different countries, communities, and families and proves the importance of including contextual factors in research on grandparents raising grandchildren, such as research on 'left-behind children' raised by grandparents. Contextual factors provide scope for further interpretations of children and their families' lived experience and the children's developmental outcomes. The exploration of contextual factors can also help researchers to understand differences among countries, areas, and communities.

Further implications of the current study for the direction of future studies on 'left-behind young children' relate to its methodology and research focus. Regarding research methodology, children's perspectives and a systematic approach were found to be significant to research on children, and a mixed-method research design served as an example of how both children's perspectives and a systematic approach can be employed in research on young children. Additionally, a flexible research design was found to be helpful in meeting the challenges and changes in data collections caused by unpredictable and impedimentary situations, such as those caused by the COVIC-19 pandemic. Another suggestion for future studies is to include additional cases considering children in multiple communities, as this would provide further understanding of the lived experiences of 'left-behind young children'

raised by grandparents by allowing for generalisation on the phenomenon and investigation of the causal relationships among factors. Children's literacy development and the association between family philosophy and lifestyle are also topics worth studying to gain further insight on the lived experiences of left-behind young children in the study area or those with similar sociocultural contexts.

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Appendix A

Ethics Approval Letter by the University of Sydney Human Research Ethics Committee (HREC) [2019/815]



Research Integrity & Ethics Administration
HUMAN RESEARCH ETHICS COMMITTEE

Monday, 7 September 2020

Dr Amanda Niland
School of Education and Social Work Research Operations; Faculty of Arts and Social Sciences
Email: amanda.niland@sydney.edu.au

Dear Amanda,

The University of Sydney Human Research Ethics Committee (HREC) has considered your application.

I am pleased to inform you that after consideration of your response, your project has been approved.

Details of the approval are as follows:

Project No.: 2019/815
Project Title: Children's Lived Experience of Being Reared by Grandparents and its Interrelationship with Emotion Regulation Development: A Study Based on "Left-behind Preschool Children" in Rural China
Authorised Personnel: Niland Amanda; Little Cathy; Liang Kaixin;
Approval Period: 04/09/2020 to 04/09/2024
First Annual Report Due: 04/09/2021

Documents Approved:

Date Uploaded	Version Number	Document Name
02/09/2020	Version 5	Email_Preschool_05
02/09/2020	Version 5	Email_Teacher_05
02/09/2020	Version 3	Flyer Parent Grandparent Guardian_05
02/09/2020	Version 5	Flyer_Teacher_05
02/09/2020	Version 5	PCF_Child_05
02/09/2020	Version 5	PIS_Grandparent_05
02/09/2020	Version 5	PIS_Parent_05
02/09/2020	Version 5	Message_Parent_05
02/09/2020	Version 5	PIS_ASIS_Parent_05
02/09/2020	Version 5	PIS_Teacher_05
04/07/2020	Version 3	PCF_GRANDPARENT_as a PARTICIPANT
04/07/2020	Version 4	Phone Scripts 04
04/07/2020	Version 3	PCF_PARENT CARER_consent for child
04/07/2020	Version 4	PCF_Parent_as a PARTICIPANT 04
28/05/2020	Version 3	PCF_TEACHER_PARTICIPANT
28/05/2020	Version 3	Initial Contact List_Uni and NGO
28/05/2020	Version 3	INSTRUMENT_Observation Tool Sheets
28/05/2020	Version 3	INTERVIEW_Conversation with Children
28/05/2020	Version 3	INTERVIEW_Interviews for Grandparent
28/05/2020	Version 3	QUES_Grandparents and Teacher
28/05/2020	Version 3	Email_NGO and Rs



28/05/2020	Version 3	Email_Preschool
28/05/2020	Version 3	Email_Teacher
28/05/2020	Version 3	Message_Parent
28/05/2020	Version 3	Itinerary
28/05/2020	Version 3	Phone Scripts
28/05/2020	Version 3	Safety Protocol
28/05/2020	Version 3	PCF_ASIS-CARER-consent for asis-child
28/05/2020	Version 3	Flyer_Parent Grandparent Guardian
28/05/2020	Version 3	Flyer_Teacher
28/05/2020	Version 3	PIS_ASIS-PARENT
28/05/2020	Version 3	PIS_GRANDPARENT

Condition/s of Approval

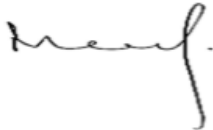
- Research must be conducted according to the approved proposal.
- An annual progress report must be submitted to the Ethics Office on or before the anniversary of approval and on completion of the project.
- You must report as soon as practicable anything that might warrant review of ethical approval of the project including:
 - Serious or unexpected adverse events (which should be reported within 72 hours).
 - Unforeseen events that might affect continued ethical acceptability of the project.
- Any changes to the proposal must be approved prior to their implementation (except where an amendment is undertaken to eliminate *immediate* risk to participants).
- Personnel working on this project must be sufficiently qualified by education, training and experience for their role, or adequately supervised. Changes to personnel must be reported and approved.
- Personnel must disclose any actual or potential conflicts of interest, including any financial or other interest or affiliation, as relevant to this project.
- Data and primary materials must be retained and stored in accordance with the relevant legislation and University guidelines.
- Ethics approval is dependent upon ongoing compliance of the research with the *National Statement on Ethical Conduct in Human Research*, the *Australian Code for the Responsible Conduct of Research*, applicable legal requirements, and with University policies, procedures and governance requirements.
- The Ethics Office may conduct audits on approved projects.
- The Chief Investigator has ultimate responsibility for the conduct of the research and is responsible for ensuring all others involved will conduct the research in accordance with the above.

This letter constitutes ethical approval only.



Please contact the Ethics Office should you require further information or clarification.

Sincerely,



Associate Professor Mark Arnold
Chair, Human Research Ethics Committee (HREC 2)

The University of Sydney of Sydney HRECs are constituted and operate in accordance with the National Health and Medical Research Council's (NHMRC) [National Statement on Ethical Conduct in Human Research \(2018\)](#) and the NHMRC's [Australian Code for the Responsible Conduct of Research \(2018\)](#)

Appendix B

Consent/Assent Forms



ABN 15 211 513 464

CHIEF INVESTIGATOR (SUPERVISOR)
Dr. Amanda Niland

Discipline of Education
Sydney School of Education and Social Work
Faculty of Art and Social Science

Room 543, Building A35, Camperdown Campus

The University of Sydney
 NSW 2006 AUSTRALIA

Telephone: +61 2 9351 6361

Email: amanda.niland@sydney.edu.au

Web: http://sydney.edu.au/education_social_work/about/staff/profiles/amanda.niland.php

Project of Children's Lived Experience of Being Taken Care of by Grandparents

Assent Form Questionnaire (CHILD)

If you are happy to be in the study, please

- **write** your **name** in the space below
- **sign** your **name** at the bottom of the next page
- put the **date** at the bottom of the next page.

You should only say 'yes' to being in the study if you know what it is about and you want to be in it. If you don't want to be in the study, don't sign the form.

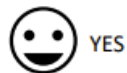
I,[PRINT NAME], am happy to be in this research study.

In saying yes to being in the study, I am saying that:

- I know what the study is about.
- I know what I will be asked to do.
- Someone has talked to me about the study.
- My questions have been answered.
- I know that I don't have to be in the study if I don't want to.
- I know that I can pull out of the study at any time if I don't want to do it anymore.
- I know that I don't have to answer any questions that I don't want to answer.

- I know that the researchers won't tell anyone what I say when we talk to each other, unless I talk about being hurt by someone or hurting myself or someone else.
- After the study is finished, I will give you the feedback of the study. It will be a lay summary of the study's overall conclusions in a book I will give to your grandparents after the study is finished. The lay summary of conclusions and the art crafts you made when we talk together will be in this book.

Do you agree with the above statements? Please circle 'YES', the happy face, or 'NO', the other face, to tell us.







YES







NO

Now we are going to ask you if you are happy to do a few other things in the study. Please circle 'Yes', the happy face, or 'No', the other face, to tell us what you would like.

Are you happy for us to take **photos** of you?  YES  NO

Are you happy for us to make **videos** of you?  YES  NO

Are you happy for us to **tape record** your voice?  YES  NO

Do you want us to tell you what we **learnt** in the study?  YES  NO

.....
Signature

.....
Date



ABN 15 211 513 464

**CHIEF INVESTIGATOR
(SUPERVISOR)**
Dr. Amanda Niland

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Project of Children's Lived Experience of Being Taken Care of by Grandparents

PARTICIPANT CONSENT FORM (GRANDPARENT)

I, [PRINT NAME], agree to take part in this research study.

In giving my consent I state that:

- I understand the purpose of the study, what I will be asked to do, and any risks/benefits involved.
- I have read the Participant Information Statement and have been able to discuss my involvement in the study with the researchers if I wished to do so.
- The researchers have answered any questions that I had about the study and I am happy with the answers.
- I understand that being in this study is completely voluntary and I do not have to take part. My decision whether to be in the study will not affect my relationship with the researchers, the teachers, or anyone else at the University of Sydney and the preschool my grandchild attends now or in the future.
- I understand that I can withdraw from the study at any time.
- I understand that I may stop the interview at any time if I do not wish to continue, and that unless I indicate otherwise any recordings will then be erased and the information provided will not be included in the study. I also understand that I may refuse to answer any questions I don't wish to answer.
- I understand that personal information about me that is collected over the course of this project will be stored securely and will only be used for purposes that I have agreed to. I understand that information about me will only be told to others with my permission, except as required by law. For example, the researcher is obligated to report child protection concerns such as child abuse to the Children Affairs Director, who is responsible for child care and protection issues, in local villagers' committee.

I consent to:

• **Audio-recording** YES NO

• **Video-recording** YES NO

I would like to review my interview transcripts YES NO

I would like to receive feedback about the overall results of this study YES NO

If you answered **YES**, please indicate your preferred form of feedback and address:

Postal: _____

Email: _____

WeChat or QQ: _____

.....
Signature

.....
PRINT name

.....
Date



ABN 15 211 513 464

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**Project of Children's Lived Experience of Being Taken Care of by Grandparents
PARENT CONSENT FORM for parent's participation**

I, [ENTER NAME], agree to take part in this research study.

PART ONE:

Please choose AGREE or DISAGREE according to your understanding.

In giving my CONSENT TO MY PARTICIPATION I state that:

- I understand the purpose of the study, what I will be asked to do, and any risks/benefits involved.
 AGREE
 DISAGREE
- I have read the Participant Information Statement and have been able to discuss my involvement in the study with the researchers if I wished to do so.
 AGREE
 DISAGREE
- The researchers have answered any questions that I had about the study and I am happy with the answers.
 AGREE
 DISAGREE
- Being in this study is completely voluntary and I do not have to take part.
 AGREE
 DISAGREE
- My decision whether to be in the study will not affect my relationship with the researchers, the teachers, or anyone else at the University of Sydney and the preschool my child attends now or in the future.
 AGREE
 DISAGREE

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Date 22/06/2020

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- I understand that I can withdraw from the study at any time.
 AGREE
 DISAGREE
- I may stop the interview at any time if I do not wish to continue.
 AGREE
 DISAGREE
- If I withdraw from the study, unless I indicate otherwise any recordings will be erased and the information provided will not be included in the study.
 AGREE
 DISAGREE
- I do not have to answer any questions that I don't wish to answer.
 AGREE
 DISAGREE
- Personal information about me that is collected over the course of this project will be stored securely and will only be used for purposes that I have agreed to.
 AGREE
 DISAGREE
- Information about me will only be told to others with my permission, except as required by law. For example, the researcher is obligated to report child protection concerns such as child abuse to the Children Affairs Director, who is responsible for child care and protection issues, in local villagers' committee.
 AGREE
 DISAGREE

PART TWO:

Please choose YES or NO according to your willingness.

I consent to be:

- **Audio-recording** YES NO

PART THREE:

Please choose YES or NO according to your willingness.

- I would like to review my interview transcripts** YES NO

PART FOUR:

I would like to receive feedback about the overall results of this study YES NO

If you answered **YES**, please indicate your preferred form of feedback and address:

Postal: _____

Children's Lived Experience

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Date 22/06/2020

 Email: _____

WeChat or QQ: _____

Please enter your NAME AND THE DATE YOU FINISH THE FORM.

.....
name

.....
Date

THE END OF PARENT CONSENT FORM for parent's participation.
THE NEXT IS PARENTAL CONSENT FORM for the child's participation.



ABN 15 211 513 464

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Project of Children's Lived Experience of Being Taken Care of by Grandparents

PARENTAL CONSENT FORM for the child's participation

I, [ENTER PARENT'S NAME], consent to my child
 [ENTER THE CHILD'S NAME] participating in this research
 study.

PART ONE:

Please choose AGREE or DISAGREE according to your understanding to the Participation Information Sheet.

In giving my CONSENT TO MY CHILD'S PARTICIPATION I state that:

- I understand the purpose of the study, what my child will be asked to do, and any risks/benefits involved.
 AGREE
 DISAGREE
- I have read the Information Statement and have been able to discuss my child involvement in the study with the researchers if I wished to do so.
 AGREE
 DISAGREE
- The researchers have answered any questions that I had about the study and I am happy with the answers.
 AGREE
 DISAGREE
- My child does not have to take part.
 AGREE
 DISAGREE

- Being in this study is completely voluntary. My decision whether to let them take part in the study will not affect our relationship with the preschool my child attends, the researchers or anyone else at the University of Sydney now or in the future.
 AGREE
 DISAGREE
- Even though I have given consent for my child's participation, he/she can withdraw from the study if he/she wants to.
 AGREE
 DISAGREE
- My child may stop the interview at any time if they do not wish to continue. Also, my child may refuse to stay in the scene of observation when they do not want to.
 AGREE
 DISAGREE
- If my child withdraws from the study, stop the interview, or refuse to stay in the scene of observation, unless I indicate otherwise any recordings will then be erased and the information provided will not be included in the study.
 AGREE
 DISAGREE
- My child may refuse to answer any questions they don't wish to answer.
 AGREE
 DISAGREE
- Personal information about my child that is collected over the course of this project will be stored securely and will only be used for purposes that I have agreed to.
 AGREE
 DISAGREE
- Information about my child will only be told to others with my permission, except as required by law. For example, the researcher is obligated to report child protection concerns such as child abuse to the Children Affairs Director, who is responsible for childcare and protection issues, in local villagers' committee.
 AGREE
 DISAGREE

PART TWO:

Please choose YES or NO according to your willingness.

I consent to:

- | | | |
|--------------------------------------|------------------------------|-----------------------------|
| ● Audio-recording of my child | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| ● Video-recording of my child | YES <input type="checkbox"/> | NO <input type="checkbox"/> |
| ● Photographs of my child | YES <input type="checkbox"/> | NO <input type="checkbox"/> |

I would like to receive feedback about the overall results of this study YES NO

If you answered **YES**, please indicate your preferred form of feedback and address:

Postal: _____

Email: _____

WeChat or QQ: _____

PART THREE:

Please enter your **NAME AND THE DATE YOU FINISH THE FORM** if you consent for your child's participation.

.....
Printed Name (Parent)

.....
Printed Date

THE END OF THE CONSENT FORMS (online):

PLEASE DOWNLOAD AND KEEP THESE FORMS THROUGH THE LINK: _____.



THE UNIVERSITY OF
SYDNEY

ABN 15 211 513 464

CHIEF INVESTIGATOR (SUPERVISOR)
Dr. Amanda Niland

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Project of Children's Lived Experience of Being Taken Care of by Grandparents

PARENTAL CONSENT FORM (PEER)

I, [PRINT PARENT'S/GUARDIAN'S NAME], consent to my child [PRINT CHILD'S NAME] participating in this research study.

In giving my consent I state that:

- I understand the purpose of the study, what my child will be asked to do, and any risks/benefits involved.
- I have read the Information Statement and have been able to discuss my child's involvement in the study with the researchers if I wished to do so.
- The researchers have answered any questions that I had about the study and I am happy with the answers.
- I understand that being in this study is completely voluntary and my child does not have to take part. My decision whether to let them take part in the study will not affect our relationship with the preschool my child attends, the researchers or anyone else at the University of Sydney now or in the future.
- I understand that my child can withdraw from the study at any time.
- I understand that my child may withdraw from the observation at any time if they do not wish to continue, and that unless I indicate otherwise any recordings will then be erased. I also understand that my child may refuse to stay in the scene of observation when they do not want to.
- I understand that personal information about my child that is collected over the course of this project will be stored securely and will only be used for purposes that I have agreed to. I understand that information about my child will only be told to others with my permission, except as required by law.

I consent to:

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• Video-recording of my child YES NO

Would you like to receive feedback about the overall results of this study?

YES NO

If you answered YES, please indicate your preferred form of feedback and address:

Postal: _____

Email: _____

WeChat or QQ: _____

Parent's/Guardian's signature:

.....
Signature

.....
PRINT name

.....
Date



THE UNIVERSITY OF
SYDNEY

**Discipline of Education
Sydney School of Education and Social Work
Faculty of Art and Social Science**

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Project of Children's Lived Experience of Being Taken Care of by Grandparents

PARTICIPANT CONSENT FORM (TEACHER)

I, [PRINT NAME], agree to take part in this research study.

In giving my consent I state that:

- I understand the purpose of the study, what I will be asked to do, and any risks/benefits involved.
- I have read the Participant Information Statement and have been able to discuss my involvement in the study with the researchers if I wished to do so.
- The researchers have answered any questions that I had about the study and I am happy with the answers.
- I understand that being in this study is completely voluntary and I do not have to take part. My decision whether to be in the study will not affect my relationship with my students and their carers and the researchers or anyone else at the University of Sydney now or in the future.
- I understand that I can withdraw from the study at any time.
- I understand that my questionnaire responses cannot be withdrawn once they are submitted, as they are anonymous and therefore the researchers will not be able to tell which one is mine.
- I understand that personal information about me that is collected over the course of this project will be stored securely and will only be used for purposes that I have agreed to. I understand that information about me will only be told to others with my permission, except as required by law.

I consent to:

- **Video-recording in the free play episode in classroom** YES NO

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Page 1 of 2

I would like to receive feedback about the overall results of this study YES NO

If you answered **YES**, please indicate your preferred form of feedback and address:

Postal: _____

Email: _____

WeChat or QQ: _____

.....
Signature

.....
Date

Appendix C

Participant Information Statements



Discipline of Education
Sydney School of Education and Social Work
Faculty of Art and Social Science

ABN 15 211 513 464

CHIEF INVESTIGATOR

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Project of Children's Lived Experience of Being Taken Care of by Grandparents

GRANDPARENTAL INFORMATION STATEMENT

(1) What is this study about?

You and your grandchild are invited to take part in a research study about understanding the daily family lives of preschool children and their grandparents in households where grandparents are the main caregivers of their grandchildren from multiple perspectives, especially the grandchildren's.

Your grandchild has been invited to participate in this study because he/she is of preschool age, and lives with and taken care of by his/her grandparents in their home village when their parents are working in cities. You are invited to participate in this study as their grandparents. This Participant Information Statement tells you about the research study. Knowing what is involved will help you decide if you want to take part in the research. Please read this sheet carefully and ask questions about anything that you don't understand or want to know more about.

Participation in this research study is voluntary.

By giving your consent you are telling us that you:

- ✓ Understand what you have read.
- ✓ Agree for you to take part in the research study as outlined below.
- ✓ Agree to the use of your personal information as described.

You will be given a copy of this Parental Information Statement to keep.

(2) Who is running the study?

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Date 01/08/2020

The study is being carried out by the following researchers:

- Dr. Amanda, Niland
Lecturer in Early Childhood, Academic Co-ordinator, EC Professional Experience

The School of Education and Social Work, The University of Sydney
- Ms. Kaixin Liang
PhD Candidate

The Sydney School of Education and Social Work, The University of Sydney

Ms. Kaixin Liang is conducting this study as the basis for the degree of Doctor of Philosophy (Education) at The University of Sydney. This will take place under the supervision of Dr. Amanda Niland.

This study is being funded by the Postgraduate Research Support Scheme of the University of Sydney and the Faculty of Arts and Social Science Doctoral Research Travel Grant Scheme.

(3) What will the study involve?

The study has two rounds of visits to participants. Four tasks will be repeated in each round of study. The second round of tasks will be conducted one preschool semester after the first round.

Four Tasks

Conversation with your grandchild

I would like to invite your grandchild to talk about his/her daily life and opinion on living with and being reared by you through talking, taking pictures, playing and drawings. I will talk with your grandchild in your house with permission from you, your grandchild and his/her parents. I will involve your grandchild in three activities – taking pictures of places your grandchild likes, making an artwork of

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Version 05

Date 01/08/2020

family pictures (a family map), and playing a role play game (making stories about daily events with family members and friends) – and will talk to your grandchild during these activities. These activities are designed for your grandchild to think about and illustrate their opinions and experience of daily life with grandparents, in an enjoyable, child-friendly way.

✧ Interviews with your grandchild's parents and with you

I would like to talk to you about what life is like taking care of your grandchild and how you perform your role of main caregiver and grandparent of your grandchild. I will also ask your ideas about what opinions your grandchild would have on this rearing pattern.

I would like to talk to your grandchild's parents about their opinions on your grandchild's daily life of living with you and their daily interaction with your grandchild.

✧ Questionnaire for teacher and you as grandparents

I would like to have you and your grandchild's preschool teacher report on your grandchild's strategies and behaviours for controlling his/her feeling/affects/emotions. This information will be gathered through choosing the most appropriate descriptions for your grandchild in a questionnaire about children's self-control strategies. There are six open-ended questions attached to the end of the questionnaire inquire opinions on "emotion regulation" and the child. The questionnaire and the attached open-ended questions will take your grandchild's teacher and you about 30 minutes to finish by yourselves. If you prefer to do the questionnaire with face-to-face assistance, I will ask you the questions in the questionnaire and help you finish it. That will take about 45 minutes with the face-to-face assistance. We are interested in how your grandchild's skills of controlling his/her affects will interact with his/her experience of daily life.

✧ Observation of your grandchild's interactions with you and with peers

I would like to observe the interaction between your grandchild and peers when they are playing together at school and between your grandchild and you when you are having a normal meal at home. Both observations will be video-taped for 15 minutes. We are interested in things that happens around your grandchild, between your grandchild and peers, and between your grandchild and you during the interactions as the background that influence your grandchild's behaviours. We are also interested in details of facial expressions, body gestures, and what you say during the interactions, which is why I would like to video-tape the

interactions, so that I can code them for analysis, using a well-designed coding scheme according to some research-based emotion theories. These details will help us to understand your grandchild's strategies for controlling their emotions in social interactions in different circumstances.

What will the study involve for my grandchild?

If you agree, I, Ms. Kaixin Liang will visit your grandchild in preschool and at home. I will explain in simple terms the study and research tasks to your grandchild and ask his/her assent to his/her participation.

- **The home visit:**

Conversation with your grandchild. You can be with your grandchild during these activities if your grandchild would like you to, or if you and your grandchild's parents would like you to.

Observation of your grandchild's interaction with you. I will not have the meal at your house and will not stay in the same room during the meal. I will start the video before your grandchild comes for the meal and stop the recording and collect the video after you and your grandchild have finished your meal. Only the part of you and grandchild having the meal will be saved and looked at. I will cut the video recording and save the first 15 minutes if the mealtime is more than 15 minutes.

- **The preschool visit:**

Observation of your grandchild's interaction with peers. I will be in the classroom when they are playing. Your grandchild's teacher will be there as well. Both your grandchild's teacher and I will not interact with your grandchild unless he/she say he/she wants to.

What will the study involve for me?

If you agree to participate in this study:

- **Interview.** I will visit you at your house or another public place that is convenient to you and have a one-hour conversation to ask you the interview questions. You can choose the place and the time that are most

convenient for you. I will also ask you if it's OK to audio-record the interview conversation.

- **Questionnaire.** You can choose the place and the time that are most convenient for you to finish the questionnaire and the six attached questions.
- **Mealtime observation.** See "Observation of your grandchild's interaction with you" in section above: "what will the study involve for my grandchild?".

(4) How much time will the study take?

- **For your grandchild,** in general, the home visit will involve your grandchild about two and a half hours participation, and the preschool visit will involve your grandchild about 15 minutes participation.
- **For you,** in general, the interview will last for about an hour; and the questionnaire will take you half an hour to finish by yourself (or 45 minutes with assistance from me). You can do the interview in one go or do it for more than one time to finish the talk. The same is for the questionnaire. The observation of your grandchild's interaction with you would be 15 minutes. You can choose to do these three things in one day or separately within one week.

(5) Who can take part in the study?

The study involves preschool children who live with and taken care of by grandparents, when parents of the child work in places far away, and thus are not able to live with and take care of the child by themselves. The child is the essential and elemental participant of this study. His/her grandparent, and his/her teacher are also elemental participants to reveal the lived experience of the child. The parent of the child will be invited to participate in the study as a necessary addition participant of the case of the child.

(6) Does my grandchild have to be in the study? Can they withdraw from the study once they've started?

Being in this study is completely voluntary. Your grandchild does not have to take part. Your grandchild's participation or non-participation will not affect his/her

relationship with the preschool and other education or social welfare service organisations in the community, the researchers, or anyone else at the University of Sydney, now or in the future. Your grandchild's participation requires consent from his/her parent, and assent from your grandchild.

If your grandchild's parents decide to let your grandchild take part in the study and then change their mind later (or your grandchild no longer wish to take part), you and your grandchild are free to withdraw from the study at any time. Once your grandchild withdraws from the study, unless your grandchild's parent say that you want us to keep the data has been collected, any recordings will be erased and the information your grandchild has provided will not be included in the study results.

The consent to your grandchild's participation can be for the first or the second round of the study, or for both. The consent can also go to part of the tasks or activities, or with any additional conditions, such as your being present. If the consent is given and your grandchild agrees, audio/video-record will be used in some task, but audio/video recording is not essential.

Your grandchild can say no if they do not want to participate the study even if his/her parent give permission to his/her participation. Your grandchild can also say no to part of the research tasks but still participate some of them. In this case, they will be treated as a participant, but they will not be involved in tasks or activities if they do not want to. Your grandchild may also refuse to answer any questions that they do not wish to answer during the interview and may stop the conversation with him/her to take a rest.

(7) Do I have to be in the study? Can I withdraw from the study once I've started?

Being in this study is completely voluntary and you do not have to take part. Your decision whether to participate will not affect your and your grandchild's current or future relationship with your grandchild's teacher, the researchers or anyone else at the preschool and the University of Sydney.

If you decide to take part in the study and then change your mind later, you are free to withdraw at any time. You can inform me, Ms. Kaixin Liang your decision to withdraw through a phone call, WeChat message, email, or face-to-face conversation. My contact details are attached at the end of this information statement. Once you withdraw from the study, unless you say that you want us to keep the data has been collected, any recordings will be erased and the information your grandchild has provided will not be included in the study results.

You are free to stop the interview or the home observation at any time. Also, submitting your completed questionnaire is an indication of your consent to participate in the study. You can withdraw your responses any time before and after you have submitted the questionnaire. Unless you say that you want us to keep them, any recordings will be erased and the information you have provided will not be included in the study results. You may also refuse to answer any questions that you do not wish to answer during the interview.

(8) Are there any risks or costs associated with being in the study?

Aside from giving up your time, there is a small risk that you or your grandchild may incur some social distress due to the sensitivity of the subject. The support of the *Maple Women's Psychological Counselling Centre, Beijing* (TEL: +86 010 68333388 ; <http://www.maple.org.cn/index.php/Content/view/navno/22.html>) is available to you as support for both you and your grandchild. This is a national publicly accessible services available from 9.00 to 17.00 every day.

If maltreatment to your grandchild from any family members are found during this study, I, Ms. Kaixin Liang will contact the Children Affairs Director in your local villagers' committee to provide help to your grandchild and deal with any issues. This is required by Rural "Left-behind Children" Caring and Protection Instruction issued by the State Council of China in 2016 and Instruction on Improving Caring and Protection System for Rural "Left-behind Children" and Children have Difficulties issued by multiple ministries in 2019.

The Maple Women's Psychological Counselling Centre would also be available to you and your grandchild to provide help. To avoid personal information of your grandchild and any other members in your family including you from being revealed, pseudonyms will be used when referring to people and location involved.

(9) Are there any benefits associated with being in the study?

You will receive a thank you card as a small gift to thank you for your participation in the project. Your grandchild will receive a small toy he/she plays with in role play game. A collection of pictures and art crafts he/she make during the home visit in the format of a book will be given to you as a thank you gift for your family. The toy will be given to your grandchild and the book will be given to you after the study is finished. We cannot guarantee further potential benefits in the future for you or others from being in the study.

(10) What will happen to information that is collected during the study?

By providing your consent, you are agreeing to us collecting your personal information for the purposes of this research study. Their personal information will only be used for the purposes outlined in this Participant Information Statement, unless you consent otherwise. Information of you, your grandchild and his/her parents will be stored securely, and the identity/information will only be disclosed with your permission, except as required by the Law of the People's Republic of China on the Protection of the Minors. Study findings may be published, you, your grandchild and their parents will not be identified in these publications.

We will keep the information we collect for this study, and we may use it in future projects. By providing your consent you are allowing us to use your information in future projects. We don't know at this stage what these other projects will involve. We will seek ethical approval before using the information in these future projects.

Your grandchild's pictures, art pieces and digital images from the tasks may be used in the thesis. Personal information in them will be completely anonymized so that your grandchild, your family, and the preschool will not be identified. All information and records collected will be anonymized and will be not identify through descriptions in the thesis or journal articles written by the research team using the information. Electronic files art pieces and records will be kept anonymous in school secured cloud space for 25 years.

(11) Can I tell other people about the study?

Yes, you are welcome to tell other people about the study.

(12) What if we would like further information about the study?

When you have read this information, I, Ms. Kaixin Liang will be available to discuss it with you further and answer any questions you may have. If you or your grandchild's parents would like to know more at any stage during the study, please feel free to contact me, Ms. Kaixin Liang (PhD. Candidate; +61 02 9351 6225/+86 15812453910, cle_zbyyet@hotmail.com, WeChat account: cle_zbyy2020).

(13) Will we be told the results of the study?

You have a right to receive feedback about the overall results of this study. If you wish to receive further feedback, you can tell us that by ticking the relevant box on the consent form. This feedback will be in the form of a lay summary of the overall research conclusions. You will receive this feedback after the study is finished.

(14) What if we have a complaint or any concerns about the study?

Research involving humans in Australian universities is reviewed by an independent group of people called a Human Research Ethics Committee (HREC). The ethical aspects of this study have been approved by the HREC of the University of Sydney (project number: 2019/815). As part of this process, we have agreed to carry out the study according to the *National Statement on Ethical Conduct in Human Research (2007)*. This statement has been developed to protect people who agree to take part in research studies.

If you (or your grandchild's parents) are concerned about the way this study is being conducted or wish to make a complaint to someone independent from the study, please contact the university using the details outlined below. Please quote the study title and protocol number.

(In English) The Manager, Ethics Administration, the University of Sydney:

- **Telephone:** +61 2 8627 8176
- **Email:** human.ethics@sydney.edu.au
- **Fax:** +61 2 8627 8177 (Facsimile)

(In Chinese) Dr. Xiaoning Wnag, Education Researcher in China:

National Institute of Education Sciences

- **Telephone:** +86 15120049861
- **Email:** wwworker@126.com

This information sheet is for you to keep



Discipline of Education
Sydney School of Education and Social Work
Faculty of Art and Social Science

ABN 15 211 513 464

CHIEF INVESTIGATOR

Dr. Amanda Niland

Room 543, Building A35, Camperdown Campus

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NSW 2006 AUSTRALIA

Telephone: +61 2 9351 6361

Email: amanda.niland@sydney.edu.au

Web: http://sydney.edu.au/education_social_work/about/staff/profiles/amanda.niland.php

Children's Lived Experience

Version 05

Date 01/08/2020

Project of Children's Lived Experience of Being Taken Care of by Grandparents

PARENTAL INFORMATION STATEMENT

(15) What is this study about?

Your child is invited to take part in a research study about understanding the daily family lives of preschool children and their grandparents in households where grandparents are the main caregivers of their grandchildren from multiple perspectives, especially the children's.

Your child has been invited to participate in this study because he/she is of preschool age, and lives with and is taken care of by his/her grandparents in your home village when you are working in cities. You are invited to participate in this study as their parents. This Participant Information Statement tells you about the research study. Knowing what is involved will help you decide if you want to let your child take part in the research. Please read this sheet carefully and ask questions about anything that you don't understand or want to know more about.

Participation in this research study is voluntary.

By giving your consent you are telling us that you:

- ✓ Understand what you have read.
- ✓ Agree for your child to take part in the research study as outlined below.
- ✓ Agree for yourself to take part in the research study as outlined below.
- ✓ Agree to the use of your child's personal information as described.
- ✓ Agree to the use of your personal information as described.

You will be given a copy of this Parental Information Statement to keep.

(16) Who is running the study?

The study is being carried out by the following researchers:

Children's Lived Experience

Version 05

Date 01/08/2020

-
- Dr. Amanda, Niland
Lecturer in Early Childhood, PhD supervisor

The School of Education and Social Work, The University of Sydney
 - Ms. Kaixin Liang
PhD Candidate

The Sydney School of Education and Social Work, The University of Sydney

Ms. Kaixin Liang is conducting this study as the basis for the degree of Doctor of Philosophy (Education) at The University of Sydney. This will take place under the supervision of Dr. Amanda Niland.

This study is being funded by the Postgraduate Research Support Scheme of the University of Sydney and the Faculty of Arts and Social Science Doctoral Research Travel Grant Scheme.

(17) What will the study involve?

The study has two rounds of visits to participants. Four tasks will be repeated in each round of study. The second round of tasks will be conducted one preschool semester after the first round.

Four Tasks

Conversation with your child

I would like to invite your child to talk about his/her daily life and opinion on living with and being reared by his/her grandparents, through talking, taking pictures, playing and drawings. I would talk with your child in your child's grandparents' house with permissions from you, your child's grandparents, and your child. I will involve your child in three activities – taking pictures of places your child likes, making an artwork of family pictures (a family map), and playing a role play game (making stories about daily events with family members and friends) - and will talk to your child during these activities. These activities are designed for your child to think about and illustrate their opinions and experience of daily life with grandparents in an enjoyable, child-friendly way.

Interviews with your child's grandparents and with you

I would like to talk to your child's grandparents about what life is like taking care of your child and how they perform their role of main caregiver and grandparent of your child. I would also ask their ideas about what opinions your child would have on this rearing pattern.

I would like to talk to you about your opinions on your child's daily life of living with his/her grandparents and your daily interaction with your child.

✧ Questionnaire for teacher and your child's grandparents

I would like to have your child's grandparents and your child's preschool teacher report on your child's strategies and behaviours for controlling his/her feeling/affects/emotions. This information will be gathered through choosing the most appropriate descriptions for your child in a questionnaire about children's self-control strategies. The questionnaire will take your child's teacher and your child's grandparents about 30 minutes to finish by themselves. If your child's grandparents prefer to do the questionnaire with face-to-face assistance, I will ask them the questions in the questionnaire and help them finish it. That will take about 45 minutes with the face-to-face assistance. We are interested in how your child's skills of controlling his/her affects will interact with his/her experience of daily life.

✧ Observation of your child's interactions with grandparents and with peers

I would like to observe the interaction between your child and peers when they are playing together at school and between your child and your child's grandparents when they are having a normal meal at home. The observation will include watching and taking notes of the interactions and video-taping each of the interactions for 15 minutes. We are interested in things that happens around them and between them during the interactions as the background that influence your child's behaviours, so that I may take notes during the interactions. We are also interested in details of facial expressions, body gestures, and what they say during the interactions, so I would like to video-tape the interactions and code interactions using a well-designed coding scheme according to some research-based emotion theories. These details will help us to understand your child's strategies for controlling their emotions in social interactions in different circumstances.

What will the study involve for my child?

If you agree, I, Ms. Kaixin Liang will visit your child in preschool and at home. I will explain in simple terms the study and research tasks to your child and ask and ask his/her assent for participation.

- **The home visit:**

Conversation with your child. Grandparents could be with your child during these activities if your child would like to, or if you and your child's grandparents would like to.

Observation of your child's interaction with your child's grandparent(s). I will not have the meal with your child in the house and will not stay in the same room during the meal. I would start the video before your child comes for the meal and stop the recording and collect the video after they have finished the meal. Only the part that they are having the meal will be saved and looked at. I will cut the video recording and save the first 15 minutes if the mealtime is more than 15 minutes.

- **The preschool visit:**

Observation of your child's interaction with peers. I will be in the classroom when they are playing. Your child's teacher will be there as well. Both your child's teacher and I will not interact with your child unless he/she say he/she wants to.

What will the study involve for me?

Interviews with you. If you agree to participate in this study, I will call you through WeChat audio call, QQ audio call, or telephone call to have a half-hour interview with you. You could choose the way and the time that are most convenient for you. I will also ask you if it's OK to tape-record the interview conversation.

(18) How much time will the study take?

- **For your child**, in general, the home visit will involve your child about two and a half hours participation, and the preschool visit will involve your child about 15 minutes participation.
- **For you**, in general, the conversation would last for about half an hour. You could also choose to do the half-an-hour talk in one-go or to do it for more than one time to finish the talk.

(19) Who can take part in the study?

The study involves preschool children who live with grandparents and taken care of by grandparent. Parents of the child work in places far away from the child, thus are not able to live with and take care of the child by themselves. The child is the essential participant of this study. His/her grandparent, and his/her teacher are also elemental participants to reveal the lived experience of the child. The parent of the child will also be invited to participate in the study as a necessary addition participant of the case of the child.

(20) Does my child and I have to be in the study? Can my child and I withdraw from the study once it has started?

Being in this study is completely voluntary and your child or you do not have to take part. Your child's participation requires consent from you and your child. These will be consulted separately. Neither your decision whether to let your child participate nor your decision whether to participate will affect your child's and your relationship with the preschool and other education or social welfare service organisations in the community, the researchers, or anyone else at the University of Sydney, now or in the future. Your permission for your child's participation does not necessarily you have to participate.

If you decide to let your child take part in the study and then change your mind later (or your child no longer wishes to take part), your child is free to withdraw from the study at any time. If you decide to take part in the study and then change your mind later, you are free to withdraw at any time. You can inform me, Ms. Kaixin Liang, of your decision to participate or to withdraw through phone call, WeChat message, email, or face-to-face conversation. My contact details are attached at the end of the information statement. Once your child or you withdraw from the study, unless you say that you want us to keep the data has been collected, any recordings will be erased and the information your child or you have provided will not be included in the study results.

You can consent to your child's participation in the first or the second round of study, or in both. You can also consent to part of the tasks or activities, or with any additional conditions, such as your child's grandparents being present. If you consent for your child's participation and your child agrees, audio/video-record will be used, but audio/video recording is not essential.

Your child can say no if they do not want to participate the study even if you give permission to his/her participation. Your child can also say no to part of the research tasks but still participate some of them. In this case, they will be treated as a participant, but they will not be involved in tasks or activities if they do not want to. Your child may also refuse to answer any questions that they do not wish to answer during the interview and may stop the conversation with him/her to take a rest.

You are free to stop your interview at any time. You may also refuse to answer any questions that you do not wish to answer during your interview.

(21) Are there any risks or costs associated with being in the study?

Aside from giving up your time, there is a small risk that you or your child may incur some social distress due to the sensitivity of the subject. The support of the *Maple Women's Psychological Counselling Centre, Beijing* (TEL : +86 010 68333388 ; <http://www.maple.org.cn/index.php/Content/view/navno/22.html>) is available to you as support for both you and your child. This is a national publicly accessible services available from 9.00 to 17.00 every day.

If maltreatment to your child from any family members are found during this study, I, Ms. Kaixin Liang will contact the Children Affairs Director in your local villagers' committee to provide help to your child and deal with any issues. This is required by Rural "Left-behind Children" Caring and

Protection Instruction issued by the State Council of China in 2016 and Instruction on Improving Caring and Protection System for Rural “Left-behind Children” and Children with Difficulties issued by multiple ministries in 2019.

The Maple Women’s Psychological Counselling Centre would also be available to you and your child to provide help. To avoid personal information of your child and any other members in your family including you from being revealed, pseudonyms will be used when referring to people and location involved.

(22) Are there any benefits associated with being in the study?

You will receive a thank you card as a small gift to thank you for your participation in the project. Your child will receive a small toy he/she plays with in role play game. A collection of pictures and art crafts he/she make during the home visit in the format of a book will be given to your child’s grandparents as a thank you gift for your family. The toy will be given to your child directly and the book will be given to your parents after the study is finished. We cannot guarantee further potential benefits in the future for you or others from being in the study.

(23) What will happen to information that is collected during the study?

By providing your consent, you are agreeing to us collecting personal information about your child for the purposes of this research study. Their personal information will only be used for the purposes outlined in this Participant Information Statement, unless you consent otherwise. Information of you, your parents, and your child will be stored securely, and the identity/information will only be disclosed with your permission, except as required by the Law of the People’s Republic of China on the Protection of the Minors. Study findings may be published, you, your parents, and your child will not be identified in these publications.

We will keep the information we collect for this study, and we may use it in future projects. By providing your consent you are allowing us to use your information in future projects. We don’t know at this stage what these other projects will involve. We will seek ethical approval before using the information in these future projects.

Your child's pictures, art pieces, and digital images from the tasks may be used in the thesis. Personal information in them will be completely anonymized so that your child, your family, and the preschool will not be identified. All information and records collected will be anonymized and will be not identify through descriptions in the thesis or journal articles written by the research team using the information. Electronic files art pieces and records will be kept anonymous in school secured cloud space for 25 years.

(24) Can I or my child tell other people about the study?

Yes, you are welcome to tell other people about the study.

(25) What if we would like further information about the study?

When you have read this information, I, Ms. Kaixin Liang will be available to discuss it with you further and answer any questions you may have. If you or your child would like to know more at any stage during the study, please feel free to contact me, Ms. Kaixin Liang (PhD. Candidate; +61 02 9351 6225/+86 15812453910, cle_zbyy@hotmai.com, WeChat id: cle_zbyy2020)

(26) Will we be told the results of the study?

You have a right to receive feedback about the overall results of this study. If you wish to receive further feedback, you can tell us that by ticking the relevant box on the consent form. This feedback will be in the form of a lay summary of the overall research conclusions. You will receive this feedback after the study is finished.

(27) What if we have a complaint or any concerns about the study?

Research involving humans in Australian universities is reviewed by an independent group of people called a Human Research Ethics Committee (HREC). The ethical aspects of this study have been approved by the HREC of the University of Sydney (project number: 2019/815). As part of this process, we have agreed to carry out the study according to the *National Statement on Ethical Conduct in Human Research (2007)*. This statement has been developed to protect people who agree to take part in research studies.

If you (or your child's grandparents) are concerned about the way this study is being conducted or wish to make a complaint to someone independent from the study, please contact the university using the details outlined below. Please quote the study title and protocol number.

(In English) The Manager, Ethics Administration, University of Sydney:

- **Telephone:** +61 2 8627 8176
- **Email:** human.ethics@sydney.edu.au
- **Fax:** +61 2 8627 8177 (Facsimile)

(In Chinese) Dr. Xiaoning Wnag, Education Researcher in China:

National Institute of Education Sciences

- **Telephone:** +86 15120049861
- **Email:** wwwworker@126.com

This information sheet is for you to keep

I have read and understand the information in the above Participation Information Sheet "PARENTAL INFORMATION STATEMENT".



Discipline of Education
Sydney School of Education and Social Work
Faculty of Art and Social Science

ABN 15 211 513 464

CHIEF INVESTIGATOR

Dr. Amanda Niland

Room 543, Building A35, Camperdown Campus

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NSW 2006 AUSTRALIA

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Email: amanda.niland@sydney.edu.au

Web: [http://sydney.edu.au/education_social_work/
about/staff/profiles/amanda.niland.php](http://sydney.edu.au/education_social_work/about/staff/profiles/amanda.niland.php)

Children's Lived Experience

Version 05

Date 01/08/2020

Project of Children's Lived Experience of Being Taken Care of by Grandparents

PARENTAL INFORMATION STATEMENT (PEERS)

(28) What is this study about?

Your child, as the classmate of children who are taken care of by grandparents, is invited to take part in a research study about understanding the daily family lives of preschool children and their grandparents in households where grandparents are the main caregivers of their grandchildren, from multiple perspectives, especially the children's.

Your child has been invited to participate in this study because his/her classmate, who is the main participant of this study, will be observed to see how they regulate their emotion in their interactions with peers, including your child. This Participant Information Statement tells you about the research study. Knowing what is involved will help you decide if you want to let your child take part in the research. Please read this sheet carefully and ask questions about anything that you don't understand or want to know more about.

Participation in this research study is voluntary.

By giving your consent you are telling us that you:

- ✓ Understand what you have read.
- ✓ Agree for your child to take part in the research study as outlined below.
- ✓ Agree to the use of your child's personal information as described.

You will be given a copy of this Parental Information Statement to keep.

(29) Who is running the study?

Children's Lived Experience

Version 05

Date 01/08/2020

The study is being carried out by the following researchers:

- Dr. Amanda, Niland
Lecturer in Early Childhood, Academic Co-ordinator, EC Professional Experience

The School of Education and Social Work, The University of Sydney
- Ms. Kaixin Liang
PhD Candidate

The Sydney School of Education and Social Work, The University of Sydney

Ms. Kaixin Liang is conducting this study as the basis for the degree of Doctor of Philosophy (Education) at The University of Sydney. This will take place under the supervision of Dr. Amanda Niland.

This study is being funded by the Postgraduate Research Support Scheme of the University of Sydney and the Faculty of Arts and Social Science Doctoral Research Travel Grant Scheme.

(30) What will the study involve?

The study has two rounds of visits to participants. The second round of tasks will be conducted one preschool semester after the first round. Your child is invited to participate in an activity in both rounds as a supportive participant.

If you agree, I, Ms. Kaixin Liang will invite your child to play freely in the same room with his/her classmate, who is the main participant of this study, while I observe and video-tape this play interaction.

The observation will include watching and taking notes, and video-taping the children's free play for 15 minutes. We are interested in things that happen around and between children when they are playing together, including details of facial expressions, body gestures, and what children say. These details will help us to understand the child's strategies for controlling affects in social interactions in different circumstance.

Even if you agree to your child being observed and video-taped, your child can also choose not to participate, and to follow the assistant teacher/caregiver to play in another classroom.

(31) How much time will the study take?

In general, the study will involve your child in about 15 minutes' free play time after class in school.

(32) Who can take part in the study?

Your child, as the classmate of the main participating child, is an important supporter of the study in the free play observation.

The study's main participants are preschool children who live with grandparents and taken care of by grandparent. Parents of the child work in places far away from, and are thus not able to live with and take care of the child by themselves. The child, his/her grandparents, and his/her teacher are elemental participants in this study. The parent of the child is a necessary additional participant in the case.

(33) Does my child have to be in the study? Can they withdraw from the study once they've started?

Being in this study is completely voluntary and your child does not have to take part. Your decision whether to let them participate will not affect your/their relationship with the preschool and other education or social welfare service organisations in the community, the researchers, or anyone else at the University of Sydney, now or in the future.

If you decide to let your child take part in the study and then change your mind later (or they no longer wish to take part), they are free to withdraw from the study at any time. You can inform me, Ms. Kaixin Liang your decision to withdraw through a phone call, WeChat message, email, or face-to-face conversation. My contact details are attached at the end of this information statement.

You can agree to your child's participation in the first round of study but not the second. You can also agree to your child's participation in the second round but not the first. If you decide to let your child withdraw from the study, you can stop their participation at any time. This means stopping participation in current and upcoming activities of the study. But the video and note records of your child from current or finished observation would not be "withdrawn" because they are part of the records of all children and cannot be deleted. Also, we might not be able to tell which one is your child by just reviewing these records because they are anonymised. Your child may also choose to play in another classroom with the assistant teacher/caregiver of his/her class and refuse to stay in the same room with the main participating child and be observed and video-taped if he/she would like to. The assistant teacher/caregiver will prepare regular free play time activities for children who stays with him/her in another classroom.

(34) Are there any risks or costs associated with being in the study?

Aside from giving up their time, we do not expect that there will be any risks or costs associated with taking part in this study for your child and you.

(35) Are there any benefits associated with being in the study?

You will receive a thank you card as a small gift to thank your child and you for your child's participation in the project. We cannot guarantee further potential benefits in the future for you or others from being in the study.

(36) What will happen to information that is collected during the study?

By providing your consent, you are agreeing to us observing your child in their after class free play time in school. This video and observation record will only be used for the purposes outlined in this Participant Information Statement, unless you consent otherwise.

We will keep the information we collect for this study, and we may use it in future projects. By providing your consent you are allowing us to use the information in future projects. We don't know at this stage what these other projects will involve. We will seek ethical approval before using the information in these future projects.

All information and records collected will be anonymised and will be not identify through descriptions in the thesis or journal articles written by the research team using the information. Recordings will be kept anonymous in school secured cloud space for 25 years.

(37) Can I or my child tell other people about the study?

Yes, you are welcome to tell other people about the study.

(38) What if we would like further information about the study?

When you have read this information, Ms. Kaixin Liang will be available to discuss it with you further and answer any questions you may have. If you or your child would like to know more at any stage during the study, please feel free to contact

Ms. Kaixin Liang (PhD. Candidate; +61 02 9351 6225/+86 15812458910, cle_zbyy@hotmai.com, WeChat: cle_zbyy2020)

(39) Will we be told the results of the study?

You and your child have a right to receive feedback about the overall results of this study. If you wish to receive further feedback, you can tell us that by ticking the relevant box on the consent form. This feedback will be in the form of a lay summary of the overall research conclusion. You will receive this feedback after the study is finished.

(40) What if we have a complaint or any concerns about the study?

Research involving humans in Australia is reviewed by an independent group of people called a Human Research Ethics Committee (HREC). The ethical aspects of this study have been approved by the HREC of the University of Sydney (project number: 2019/815). As part of this process, we have agreed to carry out the study according to the *National Statement on Ethical Conduct in Human Research (2007)*. This statement has been developed to protect people who agree to take part in research studies.

If you (or your child) are concerned about the way this study is being conducted or wish to make a complaint to someone independent from the study, please contact the university using the details outlined below. Please quote the study title and protocol number.

(In English) The Manager, Ethics Administration, University of Sydney:

- **Telephone:** +61 2 8627 8176
- **Email:** human.ethics@sydney.edu.au
- **Fax:** +61 2 8627 8177 (Facsimile)

(In Chinese) Dr. Xiaoning Wnag, Education Researcher in China:

National Institute of Education Sciences

Children's Lived Experience

Version 05

Date 01/08/2020

-
- **Telephone:** +86 15120049861
 - **Email:** wwwworker@126.com

This information sheet is for you to keep

Children's Lived Experience

Version 05

Date 01/08/2020



Discipline of Education
Sydney School of Education and Social Work
Faculty of Art and Social Science

ABN 15 211 513 464

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Web: http://sydney.edu.au/education_social_work/about/staff/profiles/amanda.niland.php

Project of Children's Lived Experience of Being Taken Care of by Grandparents

PARTICIPANT INFORMATION STATEMENT (TEACHER)

(41) What is this study about?

You are invited to take part in a research study about understanding the daily family lives of preschool children and their grandparents in households where grandparents are the main caregivers of their grandchildren from multiple perspectives, especially the children's.

You have been invited to participate in this study because you are the teacher of a potential child participant. This Participant Information Statement tells you about the research study. Knowing what is involved will help you decide if you want to take part in the research. Please read this sheet carefully and ask questions about anything that you don't understand or want to know more about.

Participation in this research study is voluntary.

By giving your consent to take part in this study you are telling us that you:

- ✓ Understand what you have read.
- ✓ Agree to take part in the research study as outlined below.
- ✓ Agree to the use of your personal information as described.

You will be given a copy of this Participant Information Statement to keep.

(42) Who is running the study?

The study is being carried out by the following researchers:

Children's Lived Experience

Version 05

Date 01/08/2020

Page 336 of 359

-
- Dr. Amanda Niland
Lecturer in Early Childhood, Academic Co-ordinator, EC Professional Experience

The School of Education and Social Work, The University of Sydney

- Ms. Kaixin Liang
PhD Candidate

The Sydney School of Education and Social Work, The University of Sydney

Ms. Kaixin Liang is conducting this study as the basis for the degree of Doctor of Philosophy (Education) at The University of Sydney. This will take place under the supervision of Dr. Amanda Niland.

This study is being funded by the Postgraduate Research Support Scheme of the University of Sydney and the Faculty of Arts and Social Science Doctoral Research Travel Grant Scheme.

(43) What will the study involve for me?

If you agree, Ms. Kaixin Liang will give a flyer of the project and send you a message that introduces the project, for you to introduce the project to grandparents and parents of children in your class. The flyer can be put on the bulletin board of your class. The message is to be forwarded to parents of the children.

Also, the study has two rounds of visits to participants. The second round of tasks will be conducted one preschool semester after the first round. If you agree, Ms. Kaixin Liang will ask you to complete a questionnaire about preschool children's strategies and behaviours of controlling his/her feeling/affects/emotion. In the questionnaire you will be asked to choose the most appropriate description for your student who is involved in this study when he/she is in given situations. You will also be invited to answer six open-ended questions attached to the questionnaire. We are interested in how your student's skills of controlling his/her affects will interact with his/her experience of daily life.

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Your personal information will not be part of the questionnaire. You will be identified as your student's (a participants of this study) teacher and non-identifiable in any report or publication of this study.

Last but not least, if you agree, Ms. Kaixin Liang will observe and videotape 15-minutes of peer interaction between main participating children and their peers in free play time after class in your classroom. Your permission is needed to set up a camera in the classroom to video-tape the peer interactions. You are not required to be part of these interaction but will be invited to stay nearby to keep them safe. Thus, you might be in the video if the children require your help. Besides, for peers who will not participate in this activity, Ms. Kaixin Liang may ask you to organize free play time for them in another room, accompanied by an assistant teacher from your class.

(44) How much of my time will the study take?

The questionnaire will take you about 30 minutes to finish by yourself in your spare time. Ms. Kaixin Liang will give you the printed questionnaire and you will be offered two days to finish it. Ms. Kaixin Liang will meet you after school one day after you are given the questionnaire to collect the completed questionnaire. If you need more time to finish the questionnaire, you can contact Ms. Kaixin Liang through face-to-face communication, phone call, WeChat, or e-mail to set up a later time to collect the completed questionnaire.

The 15-minute's observation of peer interaction will take you 15 minutes to be in the classroom with children being observed and video-taped. It might take you some more time to organise the free play for children who are not participating in the free-play observation.

Before the questionnaire and the 15-minute observation, I will visit you to ask your opinion on introducing the project to grandparents and parents and to organize the observation of peer interactions. This will take you around half an

hour, or more if you would like to ask Ms. Kaixin Liang any questions about the project.

(45) Who can take part in the study?

The study involves preschool children who live with and are taken care of by grandparents, because the child's parents work in places far away, and are thus not able to live with and take care of the child by themselves. The child, his/her grandparents, and you, his/her teacher, are elemental participants in this study. A parent of the child is a necessary additional participant. Peers of the child (classmates of the child) are supportive participants in the observation of peer interactions in free play after class.

(46) Do I have to be in the study? Can I withdraw from the study once I've started?

Being in this study is completely voluntary and you do not have to take part. Your decision whether to participate will not affect your current or future relationship with the preschool, your students, parents and grandparents of your students, or researchers or anyone else at the University of Sydney.

If you decide to take part in the study and then change your mind later, you are free to withdraw at any time. You can inform Ms. Kaixin Liang of your decision to withdraw through a phone call, WeChat message, email, or face-to-face conversation. Her contact details are attached at the end of this information statement.

(47) Are there any risks or costs associated with being in the study?

Aside from giving up your time, we do not expect that there will be any risks or costs associated with taking part in this study.

If maltreatment to your student from any family members are found during this study, I, Ms. Kaixin Liang will reveal these behaviours to the Children Affairs Director in the local villagers' committee as required by Instructions issued by the State Council and several ministries and the Law of the People's Republic of China on the Protection of the Minors.

I will also provide your student's family the contact of supportive resource and social worker, *the Maple Women's Psychological Counselling Centre, Beijing* (TEL : +86 010 68333388 ; <http://www.maple.org.cn/index.php/Content/view/navno/22.html>) for support and advice. To avoid personal information of participants from being revealed, pseudonyms will be used when referring to people and location involved.

(48) Are there any benefits associated with being in the study?

You will receive a thank you card as a small gift to thank you for your participation in the project. We cannot guarantee further potential benefits in the future for you or others from being in the study.

(49) What will happen to information about me that is collected during the study?

By providing your consent, you are agreeing to us collecting personal information about you for the purposes of this research study. Your information will only be used for the purposes outlined in this Participant Information Statement, unless you consent otherwise.

Your information will be stored securely, and your identity/information will be kept strictly confidential, except as required by the Law of the People's Republic of China on the Protection of the Minors. Study findings may be published, but you will not be individually identifiable in these publications.

We will keep the information we collect for this study, and we may use it in future projects. By providing your consent you are allowing us to use your information in future projects. We don't know at this stage what these other projects will involve. We will seek ethical approval before using the information in these future projects.

(50) Can I tell other people about the study?

Yes, you are welcome to tell other people about the study.

(51) What if I would like further information about the study?

When you have read this information, Ms. Kaixin Liang will be available to discuss it with you further and answer any questions you may have. If you would like to know more at any stage during the study, please feel free to contact Ms. Kaixin Liang (PhD. Candidate; +61 02 9351 6225/+86 15812453910, cle_zbyy@hotmail.com, WeChat id: cle_zbyy2020).

(52) Will I be told the results of the study?

You have a right to receive feedback about the overall results of this study. If you wish to receive further feedback, you can tell us that by ticking the relevant box on the consent form. This feedback will be in the form of a lay summary of the overall research conclusions. You will receive this feedback after the study is finished.

(53) What if I have a complaint or any concerns about the study?

Research involving humans in Australia is reviewed by an independent group of people called a Human Research Ethics Committee (HREC). The ethical aspects of this study have been approved by the HREC of the University of Sydney (project

number: 2019/815). As part of this process, we have agreed to carry out the study according to the *National Statement on Ethical Conduct in Human Research (2007)*. This statement has been developed to protect people who agree to take part in research studies.

If you are concerned about the way this study is being conducted or wish to make a complaint to someone independent from the study, please contact the university using the details outlined below. Please quote the study title and protocol number.

(in English) The Manager, Ethics Administration, University of Sydney:

- **Telephone:** +61 2 8627 8176
- **Email:** human.ethics@sydney.edu.au
- **Fax:** +61 2 8627 8177 (Facsimile)

(In Chinese) Dr. Xiaoning Wnag, Education Researcher in China:

National Institute of Education Sciences

- **Telephone:** +86 15120049861
- **Email:** wwworker@126.com

This information sheet is for you to keep

Appendix D

Questionnaire for Grandparents and Teachers

The Questionnaire

The questionnaire for grandparents and teachers to investigate children's emotion regulation strategies (Table 6) includes the Children's Emotional Regulation Strategies Questionnaire (ERSQ) (Lu, 2004; Lu & Chen, 2007) and the open-end questions of interviewees' understanding of emotion regulations. ERSQ is designed based on description of emotion regulation strategies from previous research and researcher's observation of Chinese children's emotion regulation behaviours (Lu, 2004). The definition of emotion regulation in ERSQ is summarized from the appraisal model, functional model, and the process model of emotion regulation as individual's process of managing and changing the emotion of oneself and other people with the individual's conscious strategies and automatic mechanism (Lu, 2004, p.6). In this process, individual's interoceptions, expressions, subjective feeling, and cognitive evaluation may be changed (Lu, 2004, p.6). Cronbach's alpha of ERSQ was .68 (Lu & Chen, 2007). The translation of ERSQ from Chinese to English is done by the researcher of the proposed research, who is a native speaker of Chinese.

Table 6*Content of the Questionnaire*

Role of Participant: Grandparent / Teacher						
Participant code: _____						
Questionnaire section	Content (“___” stands for the name of the child)					
ERSQ (Lu, 2004)	<p>Please read the following descriptions and questions and assume that your student/grandchild were in the following situations. What will he/she do? Choose the level of how often will he/she perform in these ways: 1 – Never, 2 – Rarely; 3 – Occasionally; 4 – Frequently; 5 – Very frequently. (From 1 to 5, the frequency of the behaviour increases.) Please choose an appropriate number for each description and tick it at each description.</p>	1	2	3	4	5
	<p>1. When _____ is playing with another child, the child bumped against him/her. He/she hurts. He/she would:</p> <ol style="list-style-type: none"> 1) Think it does not matter: The child bumped against me by accident. He/she did not do that on purpose. 2) Push the child as well at once. 3) Withdraw to other places and keep away from and avoid that child. 4) Say to the child: Why you hit me? You hurt me! 5) Although not feel very happy, he/she could continue his/her own game soon. <p>2. When _____ is building blocks, his/her peer knocked down his/her work on purpose. On your participation, he/she would:</p> <ol style="list-style-type: none"> 6) Insist to request the peer to apologise or to build it again for him/her; Or warn the peer: If you do that again, I 					

Role of Participant: Grandparent / Teacher	
Participant code: _____	
Questionnaire section	Content (“___” stands for the name of the child)
	<p>will hit you or tell the teacher/my mum!</p> <p>7) Freeze for quite a while and do nothing; Or keep away from that peer and not be with him/her.</p> <p>8) Go to play with other toys or do some other activities.</p> <p>9) Push that peer with hands or kick that peer with feet.</p> <p>3. When _____ wants to watch his/her favourite cartoon, you said, “you have watch TV for a long time today. You mustn’t watch TV anymore today.” Then he/she would:</p> <p>10) Turn to other toys or games he/she likes soon; Or do other things.</p> <p>11) Cry, scream, and even throw things; Take a long time to calm down.</p> <p>12) Find all kinds of excuse and try all means to ask to watch TV; Or bargain, for example, “Why you can watch TV, but I must not?” Or “I did not watch yesterday, so I should watch today.”</p> <p>13) Be able to think in another way. For example, “then I can watch a more interesting cartoon tomorrow.” Or “it is still good not to watch. Then it will not make me near-sighted.”</p> <p>14) Feel that he/she can do nothing and just stare at the television; Or stare blankly for a long time and not know what to do.</p> <p>15) Say: “ You don’t let me watch? I don’t even want to!”</p> <p>4. Due to temporary emergencies, you have to suddenly cancel a trip, which _____ look forward to for the whole time. After you have explained the reasons for the cancelation, he/she would:</p>

Role of Participant: Grandparent / Teacher	
Participant code: _____	
Questionnaire section	Content (“___” stands for the name of the child)
	<p>16) Still cry and scream to insist on you bring him/her to the trip and not give up.</p> <p>17) Be kind of unhappy but shift his/her attention to other things soon.</p> <p>18) Bargain and negotiate with you in some way. For example, “then you promise me a time that you will bring to the trip.”</p> <p>19) Say to himself/herself, “it is okay not to go. I am a sweet child.”</p> <p>20) Be discouraged and upset and have no interest to play for a long time.</p> <p>21) Understand and accept your reasons and stop being angry.</p> <p>5. _____ tries doing one thing with effort. For example, he/she attempts to finish doing a difficult puzzle but does not succeed after trying for a few times. He/she would:</p> <p>22) Stare blankly at the puzzle for a long time and have no interest in doing other things.</p> <p>23) Think and analyze, “what mistakes have I made?” Then he/she tries again.</p> <p>24) Comfort himself/herself, “it is okay to do badly. Nobody would laugh at me.”</p> <p>25) Be angry and simply push the whole puzzle away.</p> <p>26) Put aside the puzzle and begin to play with other toys or play other games.</p> <p>6. When _____ came across something scary, for example, the terrifying ghosts or monsters on TV. He/she would:</p> <p>27) Initiative find someone else to watch TV together; Or change the channel or turn off the TV.</p>

Role of Participant: Grandparent / Teacher	
Participant code: _____	
Questionnaire section	Content (“___” stands for the name of the child)
	<p>28) Think that all the ghosts and monsters on TV are pseudo. They are made up by people and not scary.</p> <p>29) Say to himself/herself: I am not afraid. I am not afraid. I am a big kid. Or hold his/her favourite toy tightly.</p> <p>30) Look away from the TV screen; Or talk to other people on purpose and shift attention.</p> <p>7. When _____ ask other children to play a group game together, and the other children ignore him/her. He/she would:</p> <p>31) Think about the reasons why peers do not want to play the game, understand them, and accept it</p> <p>32) Feel embarrassed, stare blankly for a long time, and be dispirited.</p> <p>33) Not be affected and go to play other games.</p> <p>34) Continue to work hard on convincing peers: Why you are not playing with me? The game is very interesting.</p> <p>8. When _____ is meeting with a strange adult who talks to him and wants to play with him, if he/she disliked this stranger very much, he/she would:</p> <p>35) Feel nervous, rub hands, or fidget about; Or keep touching the toy in his/her hand.</p> <p>36) Avoid eye contact with the stranger or withdraw from the stranger.</p>
Open-end question	Thanks for answering the questions above. The following is the second part of the questions. Please answer these questions with examples according to your understanding. There is no correct answer to these questions.

Role of Participant: Grandparent / Teacher	
Participant code: _____	
Questionnaire section	Content (“___” stands for the name of the child)
	<p>9. What activities or behaviours will come to your mind when you read the word “emotion”?</p> <p>10. What activities or behaviours will come to your mind when you read the word “emotion regulation”?</p> <p>11. What will ___ do when he/she is upset?</p> <p>12. How do you feel about ___’s behaviours when he/she is upset?</p> <p>13. What will ___ do when he/she is happy?</p> <p>14. How do you feel about ___’s behaviours when he/she is happy? 15. Which term will you use to name the behaviours we just talk about in this part of the questions?</p>

Appendix E

Interviews for Grandparents/Parents

Interviews Questions

Table 7

Questions for Interview(s) of Grandparents (and Parents)

Questions (“_____” stands for the child’s name)	Question for Time 1 or Time 2	Interviewee(s)
How long have you been taking care of _____?	Time 1	Grandparents
How long have _____’s parents/you left to work?	Time 1	Grandparents/Parents
How long have _____’s parents/you have been with _____ since last interview?	Time 2	Grandparents/Parents
What do you see your role for _____?	Both	Grandparents/Parents
What do you usually do with _____?	Both	Grandparents/Parents
What do _____ usually ask you to do for him/her?	Both	Grandparents/Parents
What do _____ usually do with his/her grandparents?	Both	Parents
What do _____ usually do with his/her parents?	Both	Grandparents
What is _____’s favourite activities?	Both	Grandparents/Parents

Appendix F

Observation and Question Sheets for Naturalistic Observation

Running Record Template

Table 8 is the templet of running record for naturalistic observation. The running record of free play in school will be done by observing the children in the classroom/playground while they are playing, while the one of mealtime at home will be done by watching video record. The contents to put in each column will be:

- “Date and Time”: record the date (dd/mm/yy) and time (00:00:00-00:00:00) of observation.
- “Num. of Child”: the id number representing the child participant in the proposed research.
- “Circumstance”: the circumstance that the child is in when the present piece of running record happened.
- “The Child’s General Wellbeing”: the general wellbeing of the child participant during the observation, referring to how the child is feeling at the time.
- “Running Record”: things happen, including activities and interactions the child involves and the actions of the child.

- “Facial Expression”: the child’s facial expressions during the observation.
- “Language Tone”: the tone of the child when he/she speaks or making a sound to communicate.
- “Physical Interaction”: physical interactions the child has with other people.
- “Interacting Peers/Family Member”: the id number representing the peers and family members interacts with the child during the observation, for example, the first peer to play with child “1” will be represented as “1-1” and grandfather of child “1” feed child “1” during mealtime will be represented as “1-gf”.

Table 8

Running Records in Naturalistic Observation

Date and Time:	Num. of Child:	Circumstance: __ free play (school) __ mealtime (home)	The Child's General Wellbeing (during the observation): __ Energetic __ General __ Other (e.g. running nose, cough, yawning, thirsty, hungry)						
Interacting Peers/Family Member	Running Record		Facial Expression		Language Tone		Physical Interaction		Comments
			smile		talking		No contact		
			neutral		whispering		Hitting/pushing		
			upset		shouting		grabbing		
			sad				gentle		
			angry				Watching/eye contacting only		

Questions for Casual Conversations with children

Table 9 is the sample questions and recording sheet for children's reflections on episodes observed in two circumstances of naturalistic observation. The researcher would choose some episodes in need of further explanation from children and invite children to give reflections. The reflections will be collected as soon as the observing situation ends by having a casual conversation with the children at their willingness.

Table 9

Questions and Answers Sheet of Children's Reflection on Two Observation Activities

Sample Questions for Children	reflection of the child		
<ul style="list-style-type: none"> • PLAY TIME (in Preschool) What games did you play? How was the games and your playmates? • MEALTIME (at home) How do you like the dishes today? What conversations do your grandparents and you have during the mealtime? 	Episodes observed in each circumstance	description	
		reactions	
		feelings	
	other episodes the child remembers	description	
		reactions	
		feelings	

Coding Scheme of Emotion Regulation

A 15-minute peer-child interaction in free play time in school and a 15-minute grandparent-child interaction in mealtime at home will be video-taped. Two trained researchers will code the interactions with the coding scheme of emotion regulation designed from the attachment behaviour of children described by Bowlby (1969) and indicators of emotions from the Specific Affect Coding System (SPAFF, Gottman, McCoy, Coan, & Collier, 1995; Shapiro & Gottman, 2013). Codes of specific facial expressions, language content, languages tones and emotional states are adjusted from description to the expressions of emotions. The coding scheme of emotion regulation in this study will include emotion expressions in facial expressions, language content, languages tones and emotional states of the participants. Every beginning and ending of these expressions in participants will be marked in the timeline. The sequence, frequency, and duration of emotion expressions of both participants in the interactions will be recorded with a coding sheet in excel file (see sample in Figure 30). The definitions of the codes were introduced in Table 3.

Reliability and Validity

The inter-rater reliability will be checked by Cohen's kappa of two trained coders of this study. The Cohen's kappa of previous research using SPAFF indicates that SPAFF, which is one of the sources of the coding scheme of this study, is reliable with trained coders. The definitions and coding process will be part of the coding training to the coders by Kaixin Liang.

Appendix G

Interview Conversation with Children in Tasks for Children

Tasks, Interview Questions, and Purpose

Table 10

Questions for Conversation with Children in Tasks of the Mosaic Approach

Task	Initial question in interview conversations with children	Potential expanding points	Addressing point(s)
Photograph and room tour (With a mobile phone for the project)	What do you usually do when you wake up (in recent days)?	The space where these things usually happen; Caregiving behaviour of grandparents and parents; Favourite food for breakfast; Activities in the morning	Daily routines; Interaction with grandparents and parents
	What do you usually have for lunch when you do not go to school (in recent days)?	The space where these things usually happen; Favourite dish at home. Caregiving activities	
	What do you usually do after lunch (in recent days)?	The space where these things usually happen; Caregiving behaviours of grandparents and parents; Activities in the afternoon	
	What do you usually have for dinner (in recent days)?	The space where these things usually happen; Favourite dish at home; Caregiving activities	
	What do you usually do after dinner (in recent days)?	The space where these things usually happen;	

Task	Initial question in interview conversations with children	Potential expanding points	Addressing point(s)
		Caregiving behaviours of grandparents and parents; Activities in the evening	
	What would you usually do if you do not want to sleep at bedtime (in recent days)?	The space where these things usually happen; Caregiving behaviours of grandparents and parents	Interaction with grandparents and parents; Perspective of grandparents and parents
Mapping (With pictures of family members, colour pens, and pieces of A3 paper)	Would you introduce your family members to me?	The order of being mentioned by the child; Tone, expression, and time spent when introducing each family member	Perspectives of grandparents and parents; Other significant person to the child
	These are three circles on the paper. Could you put your family members on the paper and make a family map? The circle in the middle is your place. You can put whoever you like in the paper and you could them on any place in you like on the paper. You can also draw lines to join them together.	Attachment relationship ranking	Perspectives of grandparents and parents; Interaction with grandparents, parents, and some

Task	Initial question in interview conversations with children	Potential expanding points	Addressing point(s)
	Would you tell me why you put them (e.g. grandparents and parents) in these places?	Attachment relationship; Perspectives of family relationship as context	other family members; Contextual factors of the family
	Would you tell me why you draw the line between ____ and ____ on the paper?		
	Would you tell me some stories between the people you have linked them together?		
Roleplay (With a set of toy dolls that could represent family members and a picture of local playground and a playground with recreation facilities)	It is sunny. Let's go to ____ (a local place mentioned by the child in warm-up). Who would you like to bring with you?	Attachment relationship; Caregiving behaviours and activities; Interaction patterns	Perspectives of grandparents and parents; Interaction with grandparents and parents
	What would you do in the playground?		
	It's time to home now. What would happen then?		

Methodological Basis

The tasks are mainly adjusted from the Mosaic Approach. The Mosaic Approach is a “framework of listening”, investigating children’s lived experience in multiple methods suitable for children (Clark, 2011, p. 7). In Clark’s work, the Mosaic Approach is originally designed for school environment. I adjusted three activities in the Mosaic Approach (Clark, 2011) – tours and taking photos (pp.28-30), mapping (pp. 31-32), and roleplay (pp. 32-33), to be adaptive for home environment and investigating children’s perspectives of grandparent-child interactions.

“Photograph and Room Tour” task is adjusted from an activity of taking photos of the environment while touring around the school/classroom. In the original activity, children would talk and express their lived experience in their daily life in their school environment in their own “language” of photos and words (Clark, 2011). In the adjusted task in this research, children are invited to talk and express their daily life at home in the same creative way with questions about daily activities in chronological order to remind them.

Clark (2011) uses mapping activity, which is to make maps using photos they take in the tour activity, to investigate children’s perspective of physical locations and people and activities that happen in these locations, in school environment. The aim of the interview conversation with children in this research is to investigate children’s perspectives of relationships and interpersonal interactions with grandparents. The “Mapping” task in this research is adjusted to achieve this aim by applying attachment theory (Bowlby, 1969) and genogram (Barker, 2013, pp. 75-78) to design questions and each steps of the task.

In “Roleplay” task, I adjust the situation of interacting with peers or teachers in school in the Clark’s work (2011) to the situation of interacting with grandparents and other family members when going out together. The role play activity in the Mosaic Approach allows children to tell stories of their daily life in school (Clark, 2011, p.33). Thus, the adjusted task in this research may reveal children’s perspectives of grandparents, parents, and their interactions in their own narratives.