

11-2022

How Collective Childcare Arrangements are Sustained in Rural China During Socioeconomic Transformation

Xue Jiang
University of Illinois at Chicago

Follow this and additional works at: https://scholarworks.gvsu.edu/iaccp_papers



Part of the [Psychology Commons](#)

ScholarWorks Citation

Jiang, X. (2022). How collective childcare arrangements are sustained in rural China during socioeconomic transformation. In M. Klicperova-Baker & W. Friedlmeier (Eds.), *Xenophobia vs. Patriotism: Where is my Home? Proceedings from the 25th Congress of the International Association for Cross-Cultural Psychology*, 296. <https://doi.org/10.4087/TGZH4306>

This Article is brought to you for free and open access by the IACCP at ScholarWorks@GVSU. It has been accepted for inclusion in Papers from the International Association for Cross-Cultural Psychology Conferences by an authorized administrator of ScholarWorks@GVSU. For more information, please contact scholarworks@gvsu.edu.

Abstract

The ecological theory of cultural change suggests that socioeconomic development enhances individualism and weakens collectivism. Yet, collectivism in terms of childcare arrangements seems to persist in rapidly transforming China. It is possible that Confucian ideals and rural to urban migration promoted kin-based cooperation and enhanced collectivism. To explore such possibilities, forty-five caregivers of two generations from an ethnic village located in the Southwest of China were invited to share their childcare arrangements, priorities, and histories. Iterative thematic analyses revealed that improved life quality allowed caregivers the time and resources to attend to children's personal well-being, whilst socioeconomic potentials and limitations pressured caregivers to cooperate for children's developments. Emphases on psychological autonomy and relatedness, and material relatedness all increased. Further, regardless of migrant status, grandparents ($n = 24$) and parents ($n = 21$) readily agreed on childcare cooperation for supporting their children's education and future mobility. Traditional virtues, such as filial piety, endurance, and sacrifice, fostered caregivers' reciprocal and kin altruism, proposing the involvement of morality in explaining cultural orientations and changes.

Keywords: ecological theory, cultural change, collectivism, rural China, childcare arrangement, traditional virtues

How Collective Childcare Arrangements are Sustained in Rural China During Socioeconomic Transformation

The ecological theory of cultural change suggests a linear, causal relationship between socioeconomic development and cultural orientations (Greenfield, 2009; Tönnies, 1963). As the economy, technology, and formal education prevail alongside modernization, individual beliefs and practices become more individualistic worldwide, implying declining collectivism (Greenfield, 2013; Kashima et al., 2019; Santos et al., 2017). However, this theory and related observations do not seem to fully align with patterns found in multiple developed or developing countries with collectivist traditions, such as Japan, Turkey, and China (Hamamura, 2012; Hamamura et al., 2021; Kağıtçıbaşı & Ataca, 2005). For instance, while some research found Chinese people are endorsing more individualistic views (Zeng & Greenfield, 2015), others found only modest change or even an opposite trend (Hamamura et al., 2021; Santos et al., 2017). Further, living arrangement—a significant index of individualistic and collectivist practice—showed an increasing number of nuclear families and single households, as well as a persisting trend of traditional, kin-based multi-generational and cross-generational living arrangements in China (National Bureau of Statistic, NBS; 2021a; 2021b; 2021c; Chen & Liu, 2012; Peng & Hu, 2018). Patterns of cultural change are mixed. Researchers have suggested that cultural heritage such as Confucianism might help sustain collectivism in modern China, and market driven labor migration also shaped collective family structure in rural China (Chen et al., 2011; Silverstein et al., 2006; Zeng & Greenfield, 2015). The purpose of this study was to explore how these social forces might sustain rural Chinese people's collective preferences.

Cultural Models and Changes in China

Culture refers to the common beliefs and actions shared by a population (Greenfield & Bruner, 1966; Greenfield et al., 2003). Culture is dynamic in that people can modify their shared beliefs and actions during transmission (Kashima et al., 2019). Ecological conditions and individual psychology afford these processes. Two notable psychological processes involve people's dynamic preferences towards the self, known as individualism, and towards the self in relation to others, known as collectivism (Kağıtçıbaşı, 2017b; Markus & Kitayama, 1991; Harkness & Super, 1996; Wang & Li, 2003). When focusing on the self, individuals and their groups tend to emphasize autonomy and personal well-being as separate entities from others. Western, post-industrialized societies are exemplary of such preference. When focusing on the self in relation to others, individuals and their groups tend to emphasize interdependence and personal well-being as situated in interpersonal relationships and group well-being. Eastern, traditional societies are exemplary of such preference. As the world developed technologically and economically with modernization, individuals across societies became more individualistic (Greenfield, 2013; Santos et al., 2018).

Evidence from China supports this link between modernization and individualism over time. In a content analysis of hundreds of thousands of Chinese books using Google Ngram Viewer, for example, Zeng and Greenfield (2015) found that along with socioeconomic growth some individualism-associated words increased dramatically between 1970 and 2008, such as autonomy and choose. Using the same language technology but different words of interests, time period (1950-1990), and analytic approach, Hamamura and colleagues (2021) also found some personal words such as money and leisure that became increasingly associated with individualism. Similarly, Xu and Hamamura (2014) identified folk beliefs regarding individualism rising, such as rights, humaneness, and materialism.

Notwithstanding the causal relationship between individualism and modernization, mixed patterns of cultural change are notable in China. Based on longitudinal survey data that covered 78 countries' change over 51 years, Santos and colleagues (2018) noticed that over time Chinese people placed less importance on individualism associated values, namely friends (relative to families), raising independent children, and self-expression, than informants from other 39 countries. Similarly, Hamamura and colleagues (2021) found no association of modernity with individualism or collectivism during the 1950s and 1990s. They also found that individualism was more strongly associated with negative sentiments compared to collectivism, indicating people were not necessarily embracing individualism or reducing collectivism.

Amidst the mixed findings, a more consistent trend emerged from above studies—maintenance of collectivist preferences. For example, collectivism associated words, such as obedience, obliged, give, help, and sacrifice, showed only mild decrease or even slight increase (Zeng & Greenfield, 2015). Achievement and work became more associated with collectivism over time (Hamamura et al., 2021). Although achievement has been commonly associated with individualism, it is highly emphasized in the Confucian beliefs of learning (Li, 2012; Ng & Wei, 2020). The reinforcement of achievement in Chinese people's beliefs might be due to increasing individualism and strengthened tradition. Additionally, Xu and Hamamura (2014) have also identified other Confucian beliefs, such as Confucian ethics, Doctrine of Mean (a Confucian classic), increasing in texts. Collective heritage, especially Confucian philosophy, seemed to be enduring.

Taken together, individualistic preferences and collectivistic traditions are both evident during China's socioeconomic change. To reconcile the seemingly contradictory findings, developmental research has offered insights through recognizing the empirical significance of autonomy and relatedness.

Fostering an Autonomous-Relational Self in China

Researchers of human development have suggested that individuals' capacities for exercising autonomous will and seeking connections with others are universal psychological affordances for group orientations (e.g. Kağıtçıbaşı, 2005; Keller, 2018; Ryan & Deci, 2000). Different cultural, ecological, and historical living environments give rise to varied adaptive emphases on autonomy or relatedness, manifesting the dualistic notion of culture—

independence/interdependence or individualism/collectivism. These cultural abstractions are analytic heuristics of average group preferences; they are not orthogonal or dichotomous but co-regulate individuals' healthy development and define inclusive cultural assumptions.

Kağıtçıbaşı (2005; 2017a; 2017b) proposed a third form of self-construal based on combined autonomous and relational views of the self. Instead of conceptualizing the autonomous self as independent and free from external forces, some researchers argue that autonomy is self-governing based on harmoniously integrated internal and external forces. This clarification has bridged the autonomous self and relational self as integral to individual well-being (Kağıtçıbaşı; 2005; Ryan & Deci, 2000). An autonomous-relational self was synthesized to characterize individuals and their groups who are from non-Western, modernized societies with collectivist traditions (Kağıtçıbaşı; 2005). Simultaneous emphases of individualistic and collectivistic preferences are possible in such societies.

For instances, people in Japan and Turkey live in industrialized or post-industrialized landscapes, with increasing formal education and affluency (Hamamura, 2012; Kağıtçıbaşı & Ataca, 2005). Individual autonomy became less threatening to family livelihood and even become adaptive to modern industries. Whilst material interdependence reduced, traditional psychological/emotional interdependence remained stable. Caregivers in these societies raised children with both autonomous and relational goals, hence fostering an autonomous-relational self. Cultural orientations may reflect both individualistic and collectivistic preferences. Cultural changes in China might resemble this mixed model.

For example, using cross-national data from the international study of the Value of Children (VOC), Zheng & Shia (2008) compared mothers' endorsement of three categories of reasons for wanting to have children, and endorsement of individualism and collectivism given the sociodemographic differences. Compared to German mothers, who represented a more industrialized context, Turkish mothers and Chinese mothers, who represented less industrialized contexts, rated higher on emotional and familial reasons for having children. The two domains of reasons were also associated with their endorsement of collectivism. The authors further compared rural, floating (migrant), and urban Chinese mothers and found significant differences in their endorsement in individualism but not collectivism. All the Chinese mothers maintained their interdependence tradition, but urban and migrant mothers embraced more individualism, likely due to greater exposure to industrialized contexts.

Similarly, Peng (2018) explored two generations of migrant mothers' conceptions of good mothering. The author uncovered that the older generation migrant mothers endorsed economic support as a primary caregiving goal to promote their children's establishment of marriage, family, and career life, which reflected traditional rearing goals and strategies. The younger generation migrant mothers endorsed the quality of their relationships with their children as a priority. They focused on meeting children's emotional and educational needs through various means, such as intensive telecommunication, regular remittance, and explanation of migration, which reflected autonomy-oriented ideals. The generational differences implied that rural migrant caregivers' childrearing beliefs and practices were transitioning to include more individualistic preferences.

The findings of these studies support the claim that individualistic and collectivistic values have evolved and are co-shaping Chinese caregivers' worldviews and conceptions of childrearing. This pattern is also evident in rural China, where kin-based multigenerational living arrangements are common. Studying rural Chinese families and their caregiving ideals can help elucidate how and why people prioritize individualistic and collectivistic preferences during socioeconomic transformation. Although researchers have recognized possible social forces that shape those preferences in rural China, it is not clear how. The study aimed to explore these social forces, and how they related to rural Chinese caregivers' caregiving priorities and cultural change pathways.

Possible Social Forces Sustaining Collectivism in Rural China

Confucian Tradition

The Confucian ideal of filial piety promotes mutually supportive kinships and has been continuously transmitted among Eastern Asian families across generations (Cong & Silverstern, 2011; Hamamura, 2012). Confucius elaborated on filial piety when conversing with his student Zengzi (Anonymous, *Classic of Filial Piety*, c.a. 200 B.C.E.),

“夫孝，德之本也，教之所由生也。”

“身体发肤，受之父母，不敢毁伤，孝之始也。立身行道，扬名于后世，以显父母，孝之终也。夫孝，始于事亲，中于事君，终于立身。《大雅》云：‘无念尔祖，聿修厥德。’”

“Filial piety is the root of all virtues and the source of enlightenment.”

“One's body is given by their parents. Protecting it is the beginning of filial piety. One builds their foundation in the society and achieves life goals with moral conduct, then acquires lasting reputations to make their parents proud; this is the aim of filial piety. Filial piety begins with serving parents, then serving the King, and ends with building the self. In the *Book of Songs*, it is said, ‘Remember your ancestors and cultivate your virtue.’”

Accordingly, filial piety entailed children's gratitude to their caring parents, and it was the foundation of individual moral development and social responsibility. Modern-day filial piety is the moral pillar of intergenerational bonds that fosters mutual support and devotion between children, parents, and grandparents. Multiple studies of rural and urban Chinese multi-generational (three generations living in the same household) and cross-generational (two generations living in the same household, including the first-generation grandparents, the third-generation grandchildren, and skipping the middle/second generation parents) families have supported the sense of kin-based reciprocity (Chen & Liu, 2012; Cong & Silverstern, 2011; Silverstern et al., 2006; Xu & Chi, 2018). For example, in a large-scale

study, Xu and Chi (2018) focused on rural Chinese migrant, cross-generational families. They found a robust reciprocal relationship in which grandparents' support-reception was positively related to both support- provision and reception from their grandchildren in the future. While grandparents sustained their support to their grandchildren later in life, grandchildren also provide support to grandparents regardless of previous support-reception.

Social exchange commitments in the form of moral doctrines, such as filial piety, might influence how Chinese people prioritize collectivism. Additionally, filial piety is one of many crucial cultural phenomena in China. Understudied values might also play a role. Comprehensively understanding how Chinese people adopt the traditional virtue system during socioeconomic change could illuminate the social forces of cultural change.

Migration

China's unique socioeconomic pathway might also complicate the ecological prediction of cultural change, such as the sizeable internal migrant flow due to rural to urban movement (Qi et al., 2017). In macroeconomics, rural to urban migration is a socioeconomic phenomenon and termed labour migration—people tend to flock to commercial centres for better livelihood (Barbosa et al., 2018; Carling & Collins, 2018). For rural Chinese families, migration might be an adaptive household decision and practice that promotes family financial security and advancement (Fan, 2008), leading grandparents to take on childcare responsibilities when young parents are away (Song et al., 2018; Zeng & Xie, 2014). In this economic model, filial piety and family adaptive strategy might orchestrate organically and favour cooperative family arrangements.

As suggested earlier, filial piety as a social, moral norm underlies rural Chinese social commitments cross-generationally (Xue & Chi, 2018). It might motivate kin-based family adaptive decisions such as multi-generational and cross-generational living arrangements for grandparental childcare during parental migration (Chen et al., 2011). Rural Chinese grandparents' well-being can benefit from family care and resources in those family structures, such as increasing financial support from remittance and stronger emotional cohesion (Cong & Silverstern, 2011; Silversten et al., 2006). Meanwhile, grandparental care also contributes to grandchildren's socioemotional and academic well-being, implying their parent-equivalent role as socializer of childrearing goals (Song et al., 2018; Zeng & Xie, 2014).

Such reciprocal bonds and mutual benefits reflected an optimal adaption during life events through cooperative family arrangements (Moen & Wethington, 1992). Many rural non-migrant families also live multi-generationally where grandparents are involved in primary caretaking responsibilities to release young parents' workload and receive family resources and care in return, indicating the normality of collective childrearing arrangements without force from migration (Chen et al., 2011; Zeng & Xie, 2014). Exploring rural Chinese caregivers' motivations for their collective childrearing practices with or without parental migration could further clarify the role of traditional values and practices during socioeconomic change.

In the context of socioeconomic transformation, traditional belief systems and the economic conditions seem to be shaping Chinese people's adaption of individualistic and collectivistic values and practices. The social forces might be apparent in rural Chinese families where traditional virtues and family adaptive cooperation during migration enhance people's collective values and childcare arrangements. They can also shed light on the possible cultural change pathways that promote collectivism. The purpose of this study was to explore the micro cultural systems of traditional virtues and childrearing arrangements from rural Chinese caregivers' perspectives. Exploratory guiding questions included:

1. What are caregivers' perceptions of socioeconomic change?
2. What motivated their collective childcare arrangements? Are they related to traditional collective virtues?
3. How do caregivers' perceptions of socioeconomic change relate to their caregiving motivations?

Methods

Participants Recruitment and Selection

Using purposive sampling, I recruited the caregivers from a village in Guizhou—one of the provinces sending large number of migrant workers—located in the southwest of China (Guizhou Bureau of Statistics, GZBS, 2021). By serving as a volunteer teacher in the village elementary school, I built rapport with the villagers. I then recruited caregiver informants through the students by asking them to deliver the recruitment packages to their primary caregivers. Caregiver volunteers completed and returned the encompassing screening surveys and consent forms as instructed.

Table 1
Demographic Information (N = 45)

	n	Sex	Mean Age	Education	Family Monthly Income	Ethnicity
Grand-parents	24	18 Female 6 Male	62.25	16 No Education, 6 Primary School 1 Middle School 1 High School	5289 RMB (\$820)	17.8% Buyi,
Parents	21	8 Female 13 Male	38.33	3 No Education, 6 Primary School 8 Middle School 2 High School 2 Junior College		37.8% Miao, 44.4% Han

Based on the screening survey results, I selected volunteers who met the inclusion criteria, including primary caregivers from multi-generational or cross-generational families who were also categorized as migrant (had one or both parents migrated for work for more than a year) families or non-migrant families. For multi-generational families, one grandparental and one parental caregiver were invited to participate. For cross-generational families, one grandparental caregiver was invited to participate.

An ethnically diverse sample of first- and second-generation caregivers from migrant ($n = 21$) and non-migrant ($n = 4$) families volunteered. They were also from 17 multi-generational families, six cross-generational families, and two nuclear families. I included the nuclear families because they lived closely with extended family members in a traditional household structure in which each family unit connects and surrounds a shared courtyard, and the grandparents also shared childcare responsibilities. Overall, the average family size was six (see Table 1).

Procedure

To obtain locally grounded ideas and practices, I adopted an emic approach by extracting essential themes in rural Chinese caregivers' views and experiences through in-depth, open-ended interviews (Charmaz, 2014; Cobin & Strauss, 2008; Saldaña, 2016). The study was approved by the Institutional Review Board of the University of Illinois at Chicago. I translated all study materials into Chinese and used two publicly available AI translators (Baidu Translator, Youdao Dictionary) with supplemental functions for back-translation (Brislin, 1980). I conducted the study during 2020-2021, when the COVID-19 pandemic occurred. Almost all participants (96%) indicated that the pandemic did not significantly affect their lives or relationships with their children.

Upon appointment with interviewees, I met them in person at their homes. Caregivers gave official written or oral consents independently prior to the interviews. For multi-generational families, the parental and grandparental caregivers were interviewed separately. I interviewed the participants in local dialect to maximize interviewees' openness, linguistic comfort, and authenticity. Although my dialect is not identical to the villagers', they shared adequate geographic and cultural closeness. Each interview lasted 1.5 hours on average.

Interview Protocol

The interview protocol consisted of demographic and open-ended questions that tapped into caregivers' conceptions of optimal childcare, caregiving experiences, living arrangements, and life experiences. Some sample questions included: "How did your family decide on childcare arrangements?" "What do you do for a living?" "What are your expectations for yourself?" "Are there more grandparents taking care of their grandchildren than before?" "What are your expectations for your child/grandchild?" "What do you do to meet the expectations?" "What is good care?"

Data Analysis

A locally recruited research assistant and I formed a coding team to establish interrater reliability. The assisting coder was familiar with local culture and norms, fluent in the local dialect, and had worked in Chinese Education for five years. Prior to the analyses, I trained the coder on qualitative and general research principles for a month and introduced the study theory and methods. We transcribed all interviews, conducted iterative thematic analyses using NVivo 12, analysed demographic data in SPSS, and managed codebooks in Excel.

Focusing on caregivers' perceptions of socioeconomic change, caregiving motivations, especially those relevant to filial piety, other traditional virtues, and their associations, we engaged in three coding cycles (Charmaz, 2014; Saldaña, 2016; Strauss & Cobin, 1990/1998). In the first cycle, we familiarized ourselves with the transcripts by reading through each file and noting possible patterns. In the second cycle, we used open coding strategies, such as Value Coding, Emotion Coding, Concept Coding, and In Vivo Coding, to extract common, explicit ideas. In the last coding cycle, we synthesized themes by comparing and compiling codes into categories or subcategories. We used relational coding strategies, such as Theoretical Coding, Causation Coding, Evaluation Coding, to explicate the relationships between ideas and patterns. We also went back and forth between cycles when necessary to refine codes, categories, and hierarchies.

During the three coding cycles, we met online regularly to compare code generations and discuss code applications. To ensure coding consistencies and avoid cultural biases, we also constantly reflected on our coding methods, such as documenting contextual information to define In Vivo codes and local Chinese phrases to ensure their cultural meanings were clearly delivered. Overall, we reached adequate inter-rater reliability with a Cohen's kappa ranging from .85 to .96 for each code.

Results

Three Pathways of Caregivers' Perceived Socioeconomic Changes

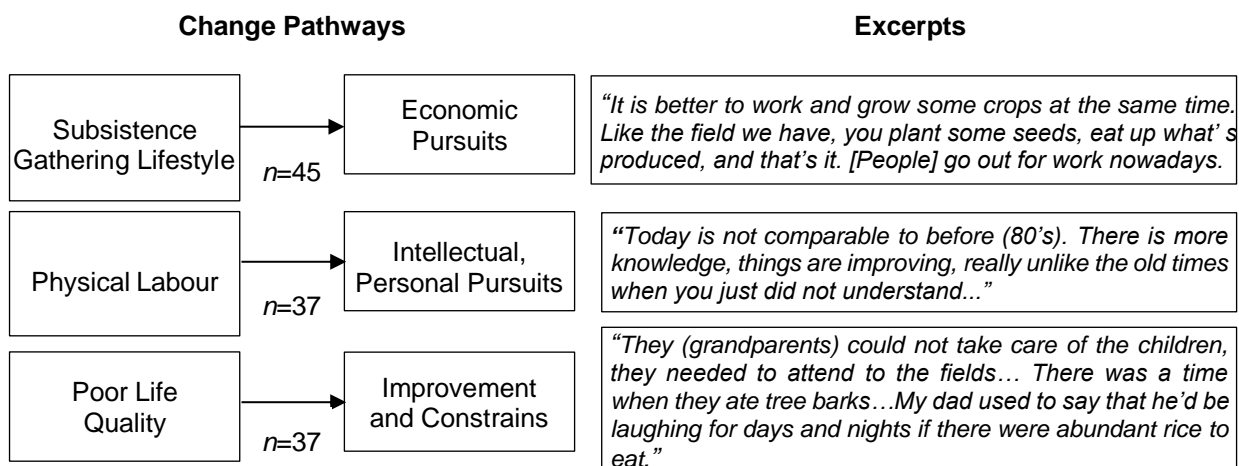
Three most apparent pathways of socioeconomic change emerged through caregivers' perceptions of differences in their past and current life experiences and their childrearing motivations. As Figure 1 shows, the pathways included a lifestyle change from complete subsistence-gathering to pursuing economic development, a working style change from physical labour to pursuing intellectual and personal advancement, and life quality change from poorly resourced to meeting most material needs but with constrains.

Collective Subsistence Gathering Lifestyle to Economic Pursuits

The first pathway entailed change from traditional subsistence gathering to economic lifestyle ($n = 45$, 100%). Caregivers reflected on their lives in the past that they entirely relied on subsistence gathering for a living ($n = 31$, 69%). However, there has been a decreasing habit of teaching children agriculture skills presently ($n = 29$, 64%). The main reasons

included placing more importance on formal education, and younger generations no longer relying on growing crops for a living ($n = 16$, 36%). This declining preference for farming was also evident when majority caregivers regarded it as not an ideal occupation, especially for their children's future ($n = 38$, 84%).

Figure 1
Emergent Socioeconomic Change Pathways ($N = 45$)



An economic mindset was also indicated through caregivers' various financial pursuits for themselves and their children. They shared personal goals of having better career through business (e.g., opening a restaurant in nearby a county, village sanitary company), earning more money through growing commercial crops, or going out to work (migrant work) ($n = 34$, 76%). Further, they placed high importance on economic support in children's development ($n = 36$, 80%), such as providing educational expenses (i.e., tutoring, extra-curriculum), buying material goods (e.g., clothes, snacks, toys). They also hoped for their children to have a decent job with stable income in the future ($n = 22$, 49%). These pursuits were formed based on the intent of economic development.

All caregivers, especially first-generation caregivers, suggested that their families still grow crops for commercial sale and family consumption ($n = 45$, 100%). Some caregivers suggested that the money earned from selling crops and saved by consuming self-grown crops could go to other living expenses ($n = 15$, 33%). This finding is consistent with patterns found in other villages in mid-west of China. For example, in a village in Hubei province, researcher identified a "half economy half subsistence" livelihood mode (Li, 2022). Similar to the research site, the first-generation caregivers sought to share the second-generation's financial pressure by selling crops and using the income for other family expenses. The converging preferences suggested a generational transition of Chinese villagers' mindsets and lifestyles—from subsistence reliance to a mixed-mode of economic priority with subsistence supplement. Financial cooperation between the two caregiving generations appeared to be crucial during socioeconomic transition, which contradicted Kağıtçıbaşı's (2005) posit of increasing material independence based on the autonomous-relational model.

Physical Labour to Intellectual, Personal Pursuits

Aligned with the villagers' lifestyle change, caregivers indicated a transitional pathway from physical labour to intellectual and personal pursuits. Caregivers portrayed the physical hardships brought by traditional agriculture labour and resource scarcity in the past ($n = 24$, 53%), such as carrying children on the back while transplanting or walking a full day to sell mined coals. Time and energy were rare resources for other life possibilities. Such reminiscence contradicted today's lifestyle in which pursuing intellectual and personal growth is critical. Intellectual pursuits reflected in caregivers' focuses of their children's education, such as grasping knowledge ($n = 24$, 53%), having good grades ($n = 22$, 49%), and going to college in the future ($n = 22$, 49%). Second-generation caregivers also specified various socially desired competencies ($n = 22$, 49%), such as being outgoing, eloquent, and knowing the outside world, which further suggested the depth of their intellectual pursuits.

Another contrast to past physical labour was caregivers valuing personal pursuits. Personal pursuits were reflected in caregivers' wishes to have personal hobbies and develop their own careers ($n = 29$, 64%). Support of such pursuits were also reflected in caregivers' focuses of children's individuality development, including fulfilling children's personal preferences ($n = 17$, 38%), encouraging psychological autonomy ($n = 12$, 27%), and granting children's personal space and choices ($n = 19$, 42%). It seemed that villagers were freed from intense subsistence reliance and could afford to care about personal well-being for themselves and their offspring nowadays. These patterns partially supported the positive association between socioeconomic development and individualism, and the autonomous-relational model's prediction of increasing emphasis on autonomy.

Poor Life Quality to Improvement and Constraints

The third pathway entailed caregivers' changing perceptions of their life qualities in the past and now. When expressing hopes for their children's future development, the caregivers often become sentimental about their past hardships, such as terrible living conditions, food scarcity, and lack of education ($n = 37$, 82%). Feeling hopeful about their children's future also elicited caregivers' perceptions of a general improvement of life qualities, such as societal openness, technological convenience, food fulfilment, and better education ($n = 27$, 60%). However, they also expressed concerns about the socioeconomic pressures undermining their families' current development, such as personal limitations related to education level, working skills, job and income instability, and rural development falling behind urban areas ($n = 38$, 84%). Although life qualities have improved significantly from the past, socioeconomic constraints exist and hampered villagers' advancement.

Overall, the three changing pathways showed an obvious transition towards socioeconomic mindset and lifestyle within the two generations of caregivers. Socioeconomic development seemed to allow more physical and psychological resources to individual pursuits, particularly to the third-generation. But socioeconomic limitations during development continued to affect caregivers' subjective well-being. Perceived development potentials and current constraints might demand family synergy and cooperation for continuous progress, which prioritize collectivism. Next, I analysed these possibilities.

Factors and Traditional Virtues that Motivated Collective Childcare Arrangements

Factors that affected the rural families' childcare arrangements emerged through caregivers' recollections and evaluations of the village's past and current arrangement trends. Table 2 shows the main factors. Most caregivers ($n = 40$, 89%) reflected individualistic childcare arrangements in the past (50s to 80s). Compared to current childcare arrangement, there was much less kin-based living arrangement or grandparental involvement in regular childcare. Three primary historical factors explained this trend: the cultural custom of 分家 (Fenjia, Family Division), short life expectancy, and nuclear family self-reliance by subsistence gathering.

Table 2

Caregivers' Estimations of Kin-Based Childcare Arrangements in the Past and Now

	Past-Few ($n = 40$)	Now-Almost All ($n = 39$)	
Fenjia $n = 23$	<i>"He [the spouse] had many brothers (lived apart). We were on our own [taking care of the children]... The grandparents did not involve in any of our family business."</i>	Migration and Collaboration for Financial Security $n = 38$	<i>"We didn't think much back then, just that they [the young parents] could go out and work, we took care of grandchildren for them. We weren't capable of anything anyways, [they could] send money back to us, that was it."</i>
Self-reliance by Subsistence Gathering $n = 23$	<i>"My older sister took care of me... My mother was so busy and tough that she was working all the time. She had no time to take care of us."</i>	Filial Piety $n = 14$	<i>"Alas, I hope my children have filial piety to us elders, that's it... So that all the hardships I endured were worthy."</i>
Short Life Expectancy $n = 16$	<i>"I've never seen my grandparents. They died early."</i>		

Fenjia, meaning family division, refers to the traditional family practice in which large families with multiple children would divide up the family property and live apart when they start to get married (Du & He, 2017; Fei, 2010; Ma, 1999; 2009). The development of Fenjia can be traced back to the Ming dynasty and has become an institutional process of family reproduction. The first-generation caregivers recalled that their parents did not help take care of their children when they were young because they had been Fenjia and lived independently ($n = 23$, 51%). When asking why they followed Fenjia custom, the caregivers suggested that it was a way to ensure fairness that each child gets an equal share of the property and the parents' favour. A few caregivers also added that Fenjia is no longer popular today, and family members would stay together ($n = 4$, 9%). Other researchers also detected a similar change of childcare arrangement culture in Hubei, where the families also no longer practice Fenjia and the grandparents would be involved in each son's family business and take care of the grandchildren (Li, 2022). This cultural change indicated a transition from individualism to collectivism in terms of family living arrangements.

Relevant to subsistence reliance lifestyle in the past, numerous first-generation caregivers recalled that most of the capable individuals, be they elders, young adults, or youth, all engaged in subsistence gathering activities because their livelihood relied on it entirely before ($n = 23$, 51%). Young children were cared for by parents, older siblings, or left home to fend for themselves ($n = 9$, 20%). Subsistence gathering consumed most family time and energy and was hardly shared with other extended family unless they were abundant enough ($n = 8$, 20%). Further, a short life expectancy also made grandparents' involvement impossible in the past. Sixteen caregivers (36%) mentioned that they had never met their grandparents because they died early. As such, individualistic nuclear family childcare structure was more prevalent when the first-generation caregivers were young (around 50s and 60s), whereas collective kin-based living arrangements were relatively rare.

Caregivers' comparative estimations of the vast number of families living in kin-based childcare arrangements today also validated the family culture shift ($n = 39$, 87%). Two explicit reasons emerged, including the traditional value of filial piety and pressure from parental migration. As predicted, caregivers expected children's filial piety in the future as mutual benefits ($n = 14$, 31%). However, it was not as heavily emphasized as expected, and was exclusively mentioned by elder caregivers. The primary reason for kin-based childcare arrangement was the impact of migration ($n = 38$, 84%). Caregivers reasoned that family cooperation warranted the young adults to go out and seek more income to share with the whole family because they are more educated and more physically capable ($n = 26$, 58%). Meanwhile, the older generation could stay home to take care of children and grow commercial crops to earn some income. Moreover, the caregivers indicated how they readily reached this arrangement without negotiations, and the commonality of this cooperative arrangement in migrant and non-migrant families ($n = 34$, 76%). Such family decision processes suggested kin-based arrangements as norm in rural China (Chen & Liu, 2018). Therefore, inconsistent with the ecological theory of cultural change, socioeconomic change seemed to prefer family collectivism over individualism in this case.

Additionally, a more implicit trend of collective childcare arrangement was noted in caregivers' kin-based intentions ($n = 41$, 91%). Some caregivers thought that parental migration was not the best choice for their children's development ($n = 13$, 29%). This concern was reflected in the new emerging pattern of returning parents ($n = 15$, 33%). Parental caregivers suggested that they worried more and more about their children's development as they placed increasing value on children's future ($n = 10$, 22%). And, with additional job opportunities being opened-up in areas nearby the village, they chose to come back from coastal regions and work at home, although short-term migration might still be needed ($n = 10$, 22%). However, for those new non-migrant families, living with grandparents remained unchanged based on demographic data. In field observations and informal conversations with villagers, I have also noted that most families had kin-based arrangements, and grandparents were the primary caretakers regardless of migrant status. As a grandmother shared, "You are a grandparent. What do you do if not taking care of the grandkids?" Kin-based childcare intentions were evident. I then sought to specify the underlying values.

As Table 3 shows, further underlying caregivers' intentions of collective childcare responsibilities were their unconditional determinations and altruistic values for supporting the third generation's optimal development. Focusing on the third-generation, especially their academic achievement, caregivers expected the third-generation to develop intellectually and go to college ($n = 37$, 82%), and have a decent, stable career and autonomous life in the future so that they would not experience the hardships the older generations had suffered ($n = 38$, 84%).

When asking how could they achieve these goals, caregivers suggested that they would “砸锅卖铁” (“Zaguo Maitie,” selling all the pots and irons, meaning exhaust the family's last resources) to support children's education ($n = 15$, 33%). And although they indicated they did not know what exact strategies were helpful to their children due to limited education, caregivers wanted to do everything they could based on their “良心” (“Liangxin,” decent heart, meaning moral conscience) ($n = 19$, 42%). This sense of altruism in raising the third-generation was also reflected in one of the caregivers' expectations for themselves—the children's future ($n = 31$, 69%).

Table 3

Childcare Values Underlying Kin-based Collective Childcare Intentions (N = 45)

Values		Excerpts
Expectations of Children	Intellectual Development & Go to College ($n = 37$)	<i>“I take care of her, cook food for her so that she can focus on learning. Going to college would be good. I expect nothing but her climbing higher grade levels and going to college.”</i>
	Decent, Stable, Autonomous Career and Life ($n = 38$)	<i>“I hope they can become a teacher like you. Teaching is a very good profession, don't be like me, [who] has no education and can only do odd jobs. Being a teacher, at least ensures stable income and its secure.”</i>
Childcare Values	Children are the Future ($n = 31$)	<i>“My expectation for myself is... Just the two kids can have a good life, better than others, have their own lives... Who doesn't want their own children to have a good life?”</i>
	Personal Effort, Sacrifice, and Endurance ($n = 35$)	<i>“My expectation for myself is to work harder, endure the hardship, not letting my children admire others no matter what, they have what others have.”</i>
	“砸锅卖铁” (Zaguo Maitie), Family Economic Devotion to Education ($n = 15$)	<i>“I care only about education. As long as she has good grades can persist, I'd 'sell all the pots and irons' to support her to go higher and higher. For example, if she needs any extra textbooks practices, we'd always satisfy her.”</i>
	“良心” , (Liangxin), Moral Conscience ($n = 19$)	<i>“My son's child is mine, too. I give everything from my heart. I had suffered, I follow my conscience.”</i>

Moreover, caregivers emphasized personal effort devoted to the third generations' future welfare and families' development ($n = 35$, 78%), especially personal sacrifice and endurance when facing hardships ($n = 24$, 53%). These values aligned with words indexing traditional virtues derived from Confucianism (Zeng & Greenfield, 2015) and collectivism (Greenfield, 2013), and they also expanded traditional virtue index, such as Liangxin, endurance. Benefiting the next generation at a personal cost reflected strong kin altruism. This finding is consistent with a study on Korean families' filial piety and found that individual commitment and sacrifice transcended the families' spiritual devotions (Sung, 1998). Morality in the form of traditional virtues played a significant role in supporting rural Chinese families to stay collective.

Relationships between Socioeconomic Changes and Kin-Based Childcare Intentions

To explore whether and how caregivers' perceived socioeconomic changes relate to their kin-based childcare intentions, I ran matrix coding to show their intersections (Miles et al., 2020). See Table 4.

Table 4

Code Matrices of the Relationships between Perceived Socioeconomic Change and Childcare Values Underlying Kin-Based Childcare Intentions (N = 45)

	Economic Pursuits	Improvement & Constraints	Individual Pursuits	Intellectual, Competent Pursuits
Childcare Values	42/26	28/20	13/11	9/6
Children are the Future	12/11	8/8	7/6	0/0
Personal effort, Endurance, Sacrifice	31/20	19/17	10/8	7/6
“良心” (Liangxin), Moral Conscience	10/9	5/4	0/0	3/3
“砸锅卖铁” (Zaguo Maitie), Family Economic Devotion	14/10	4/4	1/1	4/3
Expectations of Children	34/22	21/17	13/11	29/23
Intellectual Development & Go to College	25/20	15/13	8/7	26/21
Decent, Stable, Autonomous Career and Life	26/20	15/14	9/8	12/11

Note. The two numbers divided by a slash sign in each cell refer to the counts of overlapped references on the left and counts of participants on the right.

To decide the meaningfulness of each cell, I referred to Bernard's (2011) suggestion that ten informants can provide knowledgeable consensus on shared patterns. I then analysed the content of cells with at least 10 participants coded and summarized the relationships caregivers established. See Table 5.

Table 5

Summaries of the Main Relationships between Perceived Socioeconomic Change and Childcare Values

	Summaries of the Relationships	Excepts
Economic Pursuits with		
Personal effort, Endurance, Sacrifice	Earn money through personal effort, endurance, or sacrifice to support children's development.	<i>"Once they can take care of themselves, we would be relieved. I'm 50 now, still working hard. I started earning money when I was young, I have had a successful business, bought dozens of cars."</i>
"砸锅卖铁", (Zaguo Maitie), Family Economic Devotion	Provide economic support to children's development. Exhaust family savings for children's education if needed.	<i>"I will support her spiritually and financially, like tuitions. As long as she can make it (to college), I will do my best, no matter how hard it is, to support her."</i>
Intellectual Development & Go to College	Receiving education helps children to go to college and find a job with satisfactory income.	<i>"I hope he can become teacher or policeman (considered as stable professions). I hope he gets more education, improves, goes to college, and earns money."</i>
Decent, Stable, Autonomous Career and Life	Education ensures children to have a better career that brings more earnings and comfortable life.	<i>"If you don't study hard and go to college, you might live in a lower-class life. Once you have a stable job, you won't need to be in the sun or rain. [I] don't want much, just that they are at least not worried about food and cloth."</i>
Improvement & Constraints with		
Personal effort, Endurance, Sacrifice	In the face of difficulties, keep supporting children's development through personal effort, endurance, or sacrifice.	<i>"We were very poor. We built this house with our own hands. Our sons and daughters weren't by our side. We pinched and scraped and saved money to give to my grandchild."</i>
Intellectual Development & Go to College	Experienced personal sufferings due to lack of education and poor conditions. Hope children can learn more and not repeat the same experience with improved conditions.	<i>"I said to her, don't spend too much time playing around. Study hard. Today is not like the old times. We didn't have the environment to learn, passing the failing line was enough. Now life quality has become better, and we don't suffer hunger anymore, you can study harder with your heart and preserver."</i>

Table 5 continued

Decent, Stable, Autonomous Career and Life	Personal educational limitations and limited economic conditions prevented a better career and life. Hope children to learn more and have a better career and life with improved conditions.	<i>"I'm illiterate, I think he should have more knowledge than me... [So that] he can go out. You see the front and behind the house, only mountains. I want him to go out of those mountains."</i>
Intellectual, Competent Pursuits with Intellectual Development & Go to College Decent, Stable, Autonomous Career and Life	Possessing knowledge and competencies through higher education empowers a person. Possessing knowledge and competencies ensures a better future career and independent life.	<i>"Learning the more the better. No matter from what aspects, like going to live in the cities, interacting with other people, knowing things are good for yourself and your future."</i> <i>"Like us, if you don't know anything... If you are good at school, have good grades, you will find it easy, have an easier job (compared to physical ones) and have more income when you go to like factory..."</i>

To summarize, the caregivers were forward-looking about their children's development in that they prioritized children's educational achievement now so that it would ensure their socioeconomic mobility in the future. They believed education and knowledge could empower the next generation and help them achieve a better life than their own. However, although the caregivers saw better life opportunities and environments for their children, personal educational and economic limitations carried over from the past led them to downplay their own needs and expectations and place their hopes and resources on their children. These limitations also demanded caregivers to exert more individual contributions and to collaborate intergenerationally. Kin altruism expressed in the forms of traditional virtues supported caregivers' individual devotion and families' collective childcare in the face of socioeconomic difficulties.

Discussion

The relationship between socioeconomic changes and individualism is not always linear. Collectivist practices can be sustained and even promoted during socioeconomic transformations. Situating in a Chinese village, we revealed local caregivers' perceptions of socioeconomic changes and identified cultural factors that affected their collectivist childrearing arrangement and the intentions and values behind. Although parental migration was the catalyst of rural families' collective practices, Confucian ideal of intergenerational filial piety and kin-based altruism in the forms of traditional virtues readily afforded caregivers' collaborations for their children's development. Socioeconomic transformations not only promoted caregivers' autonomous ideals about children's development, but also fostered their relational strategies for advancing their children and families' future development. As

such, we found individualistic and collective practices were both adaptive for the rural Chinese families.

Socioeconomic changes were evident in the rural Chinese caregivers' perceptions, reflected in their positive evaluations of overall life quality improvement and transformative life pursuits in personal, economic, and educational developments. On the one hand, these patterns aligned with Zeng and Greenfield's (2018) findings that Chinese people endorse more individualistic values with modernization and supported the ecological prediction of the positive association between socioeconomic development and individualism. On the other hand, the patterns contrasted Santos and colleagues' (2017) conclusion that individualism decreased in China based on the World Values Survey (WVS) data. The caregivers in this study valued raising independent children and their individuality. And the findings showed generational differences with young parents emphasizing and specifying more aspects of individual development, which implied an increasing trend of valuing independence across generations.

Such a discrepancy might be due to the dichotomous measure used in the WVS to operate culture orientations, such as associating raising independent children with individualism and obedience with collectivism. It forced participants to make extreme choices when these cultural constructs are not dualistic but simultaneously stressed. After all, autonomy and relatedness are both human capacities (Kağıtçıbaşı, 2017; Ryan & Deci, 2001). Without including the opportunity for participants to inform the other choices, the results could be biased and generate inconsistent results. Likewise, computing values of friendship against family to dichotomize individualism and collectivism and applying self-expression defined based on one political history to another might oversimplify their meanings in each context and perhaps lose internal, external validity and reliability. This study used an emic approach which offered a more inclusive account of rural Chinese caregivers' experiences and offered grounded cultural ideas for further investigation. Future attempts to understand nuanced cultural mechanisms may benefit from using measurement tools that operate culture dimensions more comprehensively or conducting qualitative exploration.

Inconsistent with the positive relationship between socioeconomic development and individualism, the rural Chinese caregivers revealed a reversed trend. Compared to now, there were much fewer cross- and multi- generational families during the 50s to early 80s when people exclusively relied on subsistence gathering for a living and had a shorter life expectancy. Survival needs seemed to exceed the cost of kin support. Evolutionary theory has suggested that kin altruism is afforded by the evolutionary logic of inclusive fitness—offering resources to offspring to ensure genetic transfer (Foster et al., 2006; Hamilton, 1964). When the combined effects of benefit and relatedness outweigh the cost, the actor is then likely to exert altruistic actions towards the recipient.

Deducing from the caregivers' ages and timelines, it is possible that the historical event of the Great Leap Forward, which caused tremendous social hazards and famine, threatened people's survival during the 50s to 80s. The cost would be too high for altruistic actions. Caregivers' recollection about earning 工分 (Gongfen, work points) at that time might support this possibility ($n = 17, 38\%$). Gongfen was a unit of measurement of personal

agriculture production developed based on rural agriculture cooperation production policy (Baidu Baike, n.d.). People sustained their livelihood based on the number of Gongfen they earned as a group during the Great Leap Forward, which caused a half-decade of famine and health decline (Li & Yang, 2005; Song, 2012). It might be reasonable to deduce that the caregivers back then could not afford to be involved in collective childcare arrangements at the cost of their livelihood. These complex social, historical factors also warrant future inquiry to understand their effects on collective and individualistic preferences.

Once China opened the market and started the economic transformation in the late 70s, socioeconomic conditions developed rapidly, and large-scale internal migration started. These movements might lead to the abandonment of the individualistic cultural tradition of Fenjia and embraced living together and collaborating for financial security and childcare as normative regardless of migrant status. Close family ties and co-living practices seemed to be revived and strengthened when socioeconomic advancement is possible.

Seemingly, migration necessitated grandparental involvement for financial reasons. And grandparents' expectations for filial piety also motivated them to take on childcare responsibilities, but it was not as heavily emphasized as expected. It is possible that caregivers did not want to show their self-oriented intention because of their collective preferences to hide personal desires and show other-oriented intentions. But the normative intergenerational collaboration in non-migrant families indicated another collective intention—family cooperation for supporting the next generation's educational achievement and future social mobility.

Caregivers' sentimental reminiscence about past hardships and current limitations and the desires to change their life courses in the next generation came through as the motivations behind their collective childrearing intentions. The emotional, motivational processes aligned with research on morality, suggesting that reciprocal altruism is relatively weak compared to the prevalence of "other-regarding preferences" (Fehr & Schmidt, 2006). Especially evident was caregivers' adaption to the perceived socioeconomic constraints through moral conscience, personal sacrifice, and endurance. These other-oriented traditional virtues fostered caregivers' emotional connections to act on supporting their offspring even when they might not see the benefits soon. Such pattern seemed to match the empathy mechanism of kin altruism (de Waal, 2008), pointing to the role of morality in explaining the caregivers' collective intentions.

Furthermore, partially compatible with the autonomous-relational-self cultural model (Kağıtçıbaşı, 2005; 2017a; 2017b), the caregivers' psychological/emotional ties with children were sustained, or even strengthened, when family members sought economic advancement through cooperation during socioeconomic transformation. Caregivers' emphases of children's intellectual and career development also aligned with the prediction of increasing autonomy. Yet, inconsistent with the autonomous-relational model, the rural families' material resources were more collectively shared than independently controlled. Central in these patterns were caregivers' determination to support the next generation's optimal development. The caregivers seemed to be adapting their autonomous or relational preferences based on children's best interests. The areas of life in which caregivers chose to be more individualistic or collectivists were more sophisticated than Kağıtçıbaşı's

differentiation of material independence and psychology/emotion interdependence, warranting future investigations.

Notably, the cultural patterns found in this study were extracted from a small sample of caregivers from a small village located in the Southwest of China. Regional differences exist within China, and such results may not be generalized to other Chinese rural regions (Talhelm et al., 2014). For instance, sociologists have differentiated types of Fenjia motives in northern, southern, and central China (Du & He, 2017). Varied Fenjia motives led to varied living arrangements and cultural orientations. In addition to investigating the empirical possibilities mentioned above with larger samples, utilizing large dataset, diligent fieldwork across societies would also be valuable to enrich the knowledge about cultural change.

Keeping these limitations in mind, the research findings suggest that the relationships between culture models and socioeconomic changes is not linear. Individualistic and collectivist values and practices could both be adaptive during socioeconomic change. Improving socioeconomic conditions indeed gave rise to individualistic pursuits desirable for further socioeconomic development, but it also increased economic needs. When developing socioeconomic conditions have yet to meet the needs, family cooperation can help gather the resources and be passed down to the next generation. Especially in a culture with kin-based traditions and virtue-oriented adaptive values, collectivism can be highly functional during stage-like socioeconomic transformation. It might be useful to examine how levels of socioeconomic development relate to people's collective and individualistic intentions in the future.

References

- Anonymous. (2020). *孝经 [Classics of Filial Piety]* (Hu., P. S., Ed. & Trans.). 中华书局 [Zhonghua Book Company]. (Original work published ca. 200 B.C.E.)
- Baidu Baike. (n.d.). Gongfen. In Baidu Baike. Retrieved March 12, 2022, from <https://baike.baidu.com/item/工分>
- Barbosa, H., Barthelemy, M., Ghoshal, G., James, C. R., Lenormand, M., Louail, T., ... & Tomasini, M. (2018). Human mobility: Models and applications. *Physics Reports, 734*, 1-74. <https://doi.org/10.1016/j.physrep.2018.01.001>
- Bernard, H. R. (2017). *Research methods in anthropology: Qualitative and quantitative approaches*. Rowman & Littlefield.
- Brislin, R.W. (1980). Translation and content analysis of oral and written material. In: Triandis, H.C. and Berry, J. W., Eds., *Handbook of Cross-Cultural Psychology: Methodology*, Allyn and Bacon, Boston, 389-444.
- Carling, J., & Collins, F. (2018). Aspiration, desire and drivers of migration. *Journal of Ethnic and Migration Studies, 44*(6), 909-926. <https://doi.org/10.1080/1369183X.2017.1384134>
- Charmaz, K. (2014). *Constructing grounded theory*. London: SAGE Publications Ltd.

- Corbin, J., & Strauss, A. (2008). *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory* (3rd ed.). Thousand Oaks, CA: Sage. <https://doi.org/10.4135/9781452230153>
- Chao, R., & Tseng, V. (2002). Parenting of Asians. In M. Borstein (Ed.), *Handbook of parenting*, (2 ed., Vol. 4, pp. 59-93). New Jersey: Lawrence Erlbaum Associates, Inc.
- Chen, X., Cen, G., Li, D., & He, Y. (2005). Social functioning and adjustment in Chinese children: The imprint of historical time. *Child Development*, 76, 182–195. <https://doi.org/10.1111/j.1467-8624.2005.00838.x>
- Chen, F., Liu, G., & Mair, C. A. (2011). Intergenerational Ties in Context: Grandparents Caring for Grandchildren in China. *Social Forces*, 90(2), 571-594. <https://doi.org/10.1093/sf/sor012>
- Cong, Z., & Silverstein, M. (2011). Intergenerational exchange between parents and migrant and non-migrant sons in rural China. *Journal of Marriage and Family*, 73(1), 93-104. <https://doi.org/10.1111/j.1741-3737.2010.00791.x>
- Deci, E. L., & Ryan, R. M. (2008). Self-determination theory: A macrotheory of human motivation, development, and health. *Canadian Psychology/Psychologie Canadienne*, 49(3), 182-185. <https://doi.org/10.1037/a0012801>
- de Waal, F. B. M. (2008). Putting the altruism back into altruism: The evolution of empathy. *Annual Review of Psychology*, 59, 279-300. <https://doi.org/10.1146/annurev.psych.59.103006.093625>
- Du, P., & He, X. F. (2017). 论中国农村分家模式的区域差异[Regional differences of Rural China's Fenjia models]. *Social Science Research*, 3, 86-96.
- Fan, C. C. (2008). *China on the move: Migration, the state, and the household*. Routledge. <https://doi.org/10.4324/9780203937372>
- Fehr, E. & Schmidt, K. M. (2006). The economics of fairness, reciprocity and altruism: Experimental evidence and new theories. In: Kolm S. C. & Ythie J. M., Eds., *Handbook of the economics of giving, altruism and reciprocity*. Elsevier. [https://doi.org/10.1016/S1574-0714\(06\)01008-6](https://doi.org/10.1016/S1574-0714(06)01008-6)
- Fei, X. T. (2010). *乡土中国生育制度[Rural China and Birth System]*. Beijing University Press.
- Foster, K. R., Wenseleers, T., & Ratti, F. L. (2006). Kin selection is the key to altruism. *Trends in ecology & evolution*, 21(2), 57-60. <https://doi.org/10.1007/s10826-018-1086-4>
- Guizhou Bureau of Statistics, GZBS, 2021. 贵州省人口迁移流动状况分析[Guizhou population movement analysis]. http://stjj.guizhou.gov.cn/tjsj_35719/tjfx_35729/202109/t20210930_70689379.html
- Greenfield, P. M., & Bruner, J. S. (1966). Culture and cognitive growth. *International Journal of Psychology*, 1(2), 89-107.
- Greenfield, P. M. (2009). Linking social change and developmental change: Shifting pathways of human development. *Developmental Psychology*, 45, 401–418. <https://doi.org/10.1037/a0014726>
- Greenfield, P. M. (2013). The changing psychology of culture from 1800 through 2000. *Psychological Science*, 24, 1722–1731. <https://doi.org/10.1177/0956797613479387>

- Hamamura, T. (2012). Are Cultures Becoming Individualistic? A cross-temporal comparison of Individualism–Collectivism in the United States and Japan. *Personality and Social Psychology Review*, 16(1), 3–24. <https://doi.org/10.1177/1088868311411587>
- Hamilton, W. D. (1964). The genetical evolution of social behaviour. II. *Journal of theoretical biology*, 7(1), 17-52. [https://doi.org/10.1016/0022-5193\(64\)90039-6](https://doi.org/10.1016/0022-5193(64)90039-6)
- Harkness S, & Super C. (1996). Parents' Cultural Belief Systems. Their Origins, Expressions and Consequences. New York: Guilford.
- Kashima, Y., Bain, P. G., & Perfors, A. (2019). The psychology of cultural dynamics: What is it, what do we know, and what is yet to be known? *Annual Review of Psychology*, 70, 499-529. <https://doi.org/10.1146/annurev-psych-010418-103112>
- Kağıtçıbaşı, Ç. (2005). Autonomy and relatedness in cultural context. Implications for self and family. *Journal of Cross-Cultural Psychology*, 36, 403–422. <https://doi.org/10.1177/0022022105275959>
- Kağıtçıbaşı, Ç. & Ataca, B. (2005). Value of children and family change: A three-decade portrait from Turkey. *Applied Psychology*, 54(3), 317–337. <https://doi.org/10.1111/j.1464-0597.2005.00213.x>
- Kağıtçıbaşı, Ç. (2017a). Doing psychology with a cultural lens: A half-century journey. *Perspectives on Psychological Science*, 12(5), 824-832. <https://doi.org/10.1177/1745691617700932>
- Kağıtçıbaşı, Ç. (2017b). *Classical edition of family, self and human development across cultures: Theory and applications*. New York, NY: Taylor & Francis. <https://doi.org/10.4324/9781315205281>
- Keller, H., Lamm, B., Abels, M., Yovsi, R., Borke, J., Jensen, H., ... Chaudhary, N. (2006). Cultural models, socialization goals, and parenting ethnotheories: A multicultural analysis. *Journal of Cross-Cultural Psychology*, 37(2), 155–172. <https://doi.org/10.1177/0022022105284494>
- Keller, H. (2018). Parenting and socioemotional development in infancy and early childhood. *Developmental Review*, 50, 31–41. <https://doi.org/10.1016/j.dr.2018.03.001>
- Li, J. (2012). *Cultural foundations of learning: East and West*. Cambridge University Press. <https://doi.org/10.1017/CBO9781139028400>
- Li, Y. M. (2022). 流变的家庭：转型期中国农民家庭秩序的多重面孔[The changing family: Multiple facets of the Chinese peasant family in transition period] (He, X. F., & Shen, S., Eds.). Guilin: Guangxi Normal University Press.
- Li, W., & Yang, D. T. (2005). The great leap forward: Anatomy of a central planning disaster. *Journal of Political Economy*, 113(4), 840-877. <https://doi.org/10.1086/430804>
- Ma, G. Q. (2009). 永远的家 [Forever home]. Beijing University Press.
- Ma, G. Q. (1999). 分家：分中有继也有合——中国分家制度研究 [Fenjia: The inheritance and share—A Study of China's Fenjia Institution]. *Social Sciences in China*, 1.
- Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, 98, 224–253. <https://doi.org/10.1037/0033-295X.98.2.224>
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2020). *Qualitative data analysis: A methods sourcebook* (4th. Ed.). Sage.

- Moen, P., & Wethington, E. (1992). The concept of family adaptive strategies. *Annual review of sociology*, 18(1), 233-251. <https://doi.org/10.1146/annurev.so.18.080192.001313>
- National Bureau of Statistics of China. (2021a). *Average Size per Household during the Latest 10 Years* [Data set]. <https://data.stats.gov.cn/english/easyquery.htm?cn=C01>
- National Bureau of Statistics of China. (2021b). *Major figures on 2020 population census of China*. <http://www.stats.gov.cn/tjsj/pcsj/rkpc/d7c/202111/P020211126523667366751.pdf>
- National Bureau of Statistics of China. (2021c). *China Statistic Yearbooks 1999-2021* [Data set]. <http://www.stats.gov.cn/tjsj./ndsj/>
- Ng, & Wei, J. (2020). Delving into the minds of Chinese parents: What beliefs motivate their learning-related practices? *Child Development Perspectives*, 14(1), 61–67. <https://doi.org/10.1111/cdep.12358>
- Peng, Y. (2018). Migrant Mothering in Transition: A qualitative study of the maternal narratives and practices of two generations of rural-urban migrant mothers in southern China. *Sex Roles*, 79(1–2), 16–35. <https://doi.org/10.1007/s11199-017-0855-7>
- Peng, X. Z. & Hu, Z. (2018, November 11). 改革开放四十年来中国家庭的变迁 [Forty Years of Changes of Chinese Families since Market Reformation]. <https://www.thepaper.cn/newsDetailforward2629572>
- Qi, W., Abel, G. J., Muttarak, R., & Liu, S. (2017). Circular visualization of China's internal migration flows 2010–2015. *Environment and Planning A: Economy and Space*, 49(11), 2432–2436. <https://doi.org/10.1177/0308518X17718375>
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68–78. <https://doi.org/10.1037/0003-066X.55.1.68>
- Saldaña, J. (2016). *The coding manual for qualitative researchers*. Sage.
- Santos, H. C., Varnum, M. E. W., & Grossmann, I. (2017). Global Increases in Individualism. *Psychological Science*, 28(9), 1228–1239. <https://doi.org/10.1177/0956797617700622>
- Silverstein, M., Cong, Z., & Li, S. (2006). Intergenerational transfers and living arrangements of older people in rural China: Consequences for psychological well-being. *The Journals of Gerontology: Series B*, 61(5), 256–266. <http://dx.doi.org/10.1093/geronb/61.5.S256>
- Song, S. (2012). Does famine influence sex ratio at birth? Evidence from the 1959–1961 Great Leap Forward Famine in China. *Proceedings of the Royal Society B: Biological Sciences*, 279(1739), 2883-2890. <https://doi.org/10.1098/rspb.2012.0320>
- Song, J., Ma, C., Gu, C., & Zuo, B. (2018). What matters most to the left-behind children's life satisfaction and school engagement: Parent or grandparent? *Journal of Child and Family Studies*, 27(8), 2481-2490. <https://doi.org/10.1007/s10826-018-1086-4>
- Sung, K. T. (1998). An exploration of actions of filial piety. *Journal of Aging Studies*, 12(4), 369-386. [https://doi.org/10.1016/S0890-4065\(98\)90025-1](https://doi.org/10.1016/S0890-4065(98)90025-1)
- Talhelm, T., Zhang, X., Oishi, S., Shimin, C., Duan, D., Lan, X., & Kitayama, S. (2014). Large-scale psychological differences within China explained by rice versus wheat agriculture. *Science*, 344(6184), 603-608. <https://doi.org/10.1126/science.1246850>

- Tönnies, F. (1957). *Community and society* (C. P. Loomis, Ed.& Trans.). East Lansing: Michigan State University Press. (Original work published 1887)
- Wang, Q., & Li, J. (2003). Chinese children's self-concepts in the domains of learning and social relations. *Psychology in the Schools, 40*(1), 85-101. <https://doi.org/10.1002/pits.10071>
- Xu, L., & Chi, I. (2018). Determinants of Support Exchange Between Grandparents and Grandchildren in Rural China: The Roles of Grandparent Caregiving, Patrilineal Heritage, and Emotional Bonds. *Journal of Family Issues, 39*(3), 579-601. <https://doi.org/10.1177/0192513X16662102>
- Xu, Y. & Hamamura, T. (2014). Folk beliefs of cultural changes in China. *Frontiers in Psychology, 5*, 1066-1066. <https://doi.org/10.3389/fpsyg.2014.01066>
- Zeng, R., & Greenfield, P. M. (2015). Cultural evolution over the last 40 years in China: Using the Google Ngram Viewer to study implications of social and political change for cultural values. *International Journal of Psychology, 50*, 47-55. <https://doi.org/10.1002/ijop.12125>
- Zeng, Z., & Xie, Y. (2014). The effects of grandparents on children's schooling: Evidence from rural China. *Demography, 51*(2), 599-617. <http://doi.org/10.1007/s13524-013-0275-4>
- Zheng, G., & Shia, S. (2008). Intercultural and intracultural differences in the value of children: Comparisons between four countries and the urban, rural, and floating populations in China. In G. Zheng, K. Leung, & J. G. Adair (Eds.), *Perspectives and progress in contemporary cross-cultural psychology: Proceedings from the 17th International Congress of the International Association for Cross-Cultural Psychology*. <https://scholarworks.gvsu.edu/iaccppapers/17/>