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# Drawing Learning Experiences of Left-Behind Children in Rural Kindergartens and the Urban-Rural Gap: Evidence from Jiangxi Province

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## Abstract

**Urban–rural differences in kindergarten drawing may intersect with parental migration and changing care arrangements. This article develops a mixed methods framework for comparing rural left-behind children, rural non-left-behind children and urban non-left-behind children in Jiangxi Province, China. It examines access, autonomy, relational support, comfort in expression and communication with caregivers. An explanatory sequential design connects caregiver questionnaires, repeated observations, teacher interviews and drawing-elicited conversations with children. Constructed counts for 360 hypothetical children demonstrate separate comparisons of within-rural migration-related differences and urban–rural differences among non-left-behind children. Hypothetical scenarios illustrate how teacher listening, peer participation and voluntary sharing could support expression and connection. A joint display specifies evidence needed to test competing explanations. Compensatory value is defined as additional educational opportunity and responsive relationships, rather than replacement of family care or treatment through art. The article contributes an operational framework and a transparent comparison strategy. Synthetic results establish neither disadvantage among left-behind children nor the magnitude of the urban–rural gap or effectiveness of compensation.**

## Keywords

**Left-behind children; drawing learning experiences; urban–rural gap; early childhood arts education; caregiving; mixed methods; Jiangxi.**

## 1. Introduction

### 1.1. Drawing experiences and changing care arrangements

Drawing in kindergarten involves choosing what to represent, handling materials, seeking assistance and receiving responses from others. Similar resources can therefore produce different experiences. A child may have abundant materials but little choice, while another may work with simple tools in a supportive conversation. Comparing settings requires attention to how children experience opportunities as well as to what institutions provide.

Parental migration may change everyday companionship and communication, but it does not establish that a child lacks care. Grandparents, relatives and communities can provide sustained support. This article consequently treats parental co-residence, caregiver interaction and educational opportunity as distinct variables. It avoids using family absence as a complete explanation for children's experiences.

A child-level subgroup analysis cannot be produced merely by relabelling an existing teacher questionnaire. Reliable migration histories and care arrangements must be linked to individual children. The present manuscript develops that additional design without claiming to have identified real left-behind children in the earlier urban–rural sample.

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### 1.2. Purpose and research questions

The study asks how rural left-behind children experience access, choice, relationships and expression in drawing; how within-rural contrasts differ from urban–rural contrasts; and how adult and peer support might relate to those experiences. Its contribution is to distinguish location from migration arrangements, include children's interpretations and make compensatory value testable. The current contribution is conceptual and methodological rather than empirical.[1]

## 2. Literature and Conceptual Framework

### 2.1. Heterogeneity within migration arrangements

The State Council's 2016 protection document defines the relevant rural left-behind population through migration of both parents, or migration of one parent when the other cannot provide guardianship, among children under sixteen [1]. Some research uses broader definitions involving either parent's migration. These definitions should not be combined without explanation. Migration of one parent while the other provides ordinary care is not automatically equivalent to the stricter policy category.

A longitudinal Guangdong preschool study distinguished different parental migration arrangements and reported differing developmental trajectories [2]. A national study of early learning opportunities found that rural children could have similar opportunities across migration arrangements, while urban and migrant comparisons showed other differences [3]. A study of teacher–child relationships also reported associations with emotional competence and resilience without identical subgroup distinctions across psychological patterns [4]. These findings address different outcomes and do not establish how children experience drawing in Jiangxi.

### 2.2. Drawing and participation

Drawing can provide a route to children's perspectives when interpretation includes their accompanying accounts [5]. It should not be used to infer distress from a colour, an empty space or an omitted figure. Children can choose not to explain and can revise an account while drawing. Meaning remains situated in an interaction rather than contained in a visual symbol alone.

Self-determination theory identifies autonomy, competence and relatedness as important psychological needs [6]. Here it organises attention to choice of materials and themes, supported attempts to solve difficulties, and being heard by adults or peers. This conceptual application does not validate a new drawing-experience scale. Material access, participation and caregiver communication remain separately observable dimensions.

### 2.3. Defining compensatory value

Compensation means increasing access to expression, responsive relationships and participation where such support is less available. It concerns opportunities rather than a presumed deficiency attached to a child's identity. A left-behind child may have strong support; a non-left-behind child may experience limited adult availability. Support must therefore be measured independently of group membership.

Three levels require separation: supplying resources, offering relational support, and producing developmental improvement. Cross-sectional research can describe resources and interactions and examine associations. It cannot establish improvement simply because drawing participation is positively associated with belonging. Arts education does not replace family care or necessary specialist assistance.

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# 3. Methods

## 3.1. Groups and sampling

The demonstration allocates 360 hypothetical children aged four to six across 24 hypothetical kindergartens. Twelve urban kindergartens contribute 120 urban non-left-behind children. Twelve rural kindergartens contribute 120 rural non-left-behind and 120 rural left-behind children. Equal group sizes facilitate presentation and do not estimate local prevalence. Actual recruitment requires a sampling frame and a sample-size assessment incorporating clustering and the intended contrasts.[2]

The main rural left-behind category would follow the parental migration and guardianship conditions in the 2016 policy, with an additional study eligibility rule that the principal arrangement had continued for at least six months. The duration is a proposed research criterion, not a quotation of the policy definition. Reasons for migration, duration, guardianship and changes in residence would be recorded. Single-parent migration with an available resident parent would be separately coded and retained for sensitivity analysis.

For a clear reference, the two non-left-behind groups would consist of children without sustained parental separation due to labour migration. Other arrangements would be documented rather than silently merged. Kindergarten location would use the official statistical classification for the study year, while child residence and household registration would be separately recorded. Exclusions of town, urban left-behind or migrant children would be explicit. Three groups do not constitute a complete location-by-migration factorial design.

## 3.2. Sources and measures

Caregiver questionnaires would document migration and care arrangements, joint drawing or discussion, contact with migrant parents, material availability and stability of care. Video-call frequency alone would not represent relationship quality. Teachers would report classroom conditions. Anonymous child identifiers would connect sources, reducing reliance on a single adult to provide both predictors and outcomes.[3]

Brief drawing-elicited conversations would invite children to describe choice, assistance and sharing. Questions would concern specific experiences rather than abstract judgments of wellbeing. Children could point, gesture, draw further, speak or skip an item. Pictorial response options would require cognitive interviewing and piloting before use; no established validity is assumed.

The illustrative follow-up plan includes eight case kindergartens, three sessions per kindergarten, sixteen teacher interviews, twenty-four caregiver interviews and conversations with thirty-six children, twelve per main group. Repeated observations would cover free and teacher-organised drawing, recording opportunities offered and taken, adult responses and peer entry. These are planned quantities, not completed fieldwork or a claim of thematic saturation.

Tool development would include specialist review, cognitive interviews, observer training and a separate pilot. Internal consistency, coding agreement and child comprehension would be reported as different forms of evidence. No coefficient or successful pilot result is invented for this manuscript.

## 3.3. Analysis and integration

Two contrasts would be specified in advance: rural left-behind minus rural non-left-behind, and urban non-left-behind minus rural non-left-behind. The first describes a migration-arrangement contrast within rural settings; the second describes location differences under a reference family arrangement. Neither automatically identifies a causal effect. Urban non-left-

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behind versus rural left-behind comparisons combine several differences and cannot isolate their sources.[4]

With actual individual records, kindergarten random-intercept models could accommodate clustering, with a classroom level considered where justified. Binary and ordinal outcomes require appropriate model families. Within-kindergarten rural comparisons may reduce differences in institutional context but cannot eliminate family selection. Covariates and multiplicity procedures should be prespecified, and parameter counts should reflect the available number of kindergartens.

Age, caregiver education, income and classroom conditions may be relevant covariates. Caregiver interaction and teacher support may also lie on explanatory pathways, so total group contrasts and conditional associations should be distinguished. A support-by-group interaction would represent heterogeneity in association, not verified compensation. Longitudinal or intervention evidence would be needed to examine changes attributable to support.

Thematic analysis would distinguish child accounts, observed sequences and adult interpretations, preserving contradictory cases [7]. Following mixed methods integration principles [8], numerical patterns would guide selection of typical and discrepant cases, and a joint display would connect interpretations with evidence requirements. Silence would not automatically indicate a negative experience, and teacher enthusiasm would not substitute for children's accounts.

### 3.4. Ethics

Fieldwork requires institutional ethics review, kindergarten permission, appropriate guardian consent and ongoing child assent. Guardianship or authorisation should be verified under applicable requirements. Group membership would not be publicly displayed, and activities would not identify children through special left-behind classes. No child would be required to draw parents or narrate separation.

Analysis, reproduction and transmission of drawings to family members require distinct permissions. Drawings would not function as psychological screening tests. If distress arises, questioning would stop and the approved protection and referral procedure would apply. Grandparents and other caregivers would be treated as participants in a support network rather than assumed inadequate substitutes.[5]

## 4. Synthetic Illustration and Integration

### 4.1. Descriptive counts

**Table 1.** Synthetic frequent opportunities and reported experiences

| Indicator | Urban non-left-behind n (%) | Rural non-left-behind n (%) | Rural left-behind n (%) |
|---|---|---|---|
| Freely accessible materials | 96 (80.0) | 72 (60.0) | 66 (55.0) |
| Choice of drawing theme | 90 (75.0) | 78 (65.0) | 72 (60.0) |
| Explanation felt heard | 84 (70.0) | 78 (65.0) | 72 (60.0) |
| Willing peer participation | 78 (65.0) | 84 (70.0) | 78 (65.0) |
| Frequent caregiver discussion | 84 (70.0) | 66 (55.0) | 48 (40.0) |

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Each group has a constructed denominator of 120 and no missing values. Rows overlap and cannot be summed. For material access, the non-left-behind urban–rural contrast is twenty percentage points, whereas the within-rural left-behind contrast is minus five. For caregiver discussion, the contrasts are fifteen and minus fifteen points. These arithmetic differences illustrate distinct questions; they do not estimate Jiangxi population patterns.

Peer participation is deliberately set higher in the rural non-left-behind group than in the urban reference group. This avoids constructing a uniform hierarchy across every dimension. There are no individual covariates, kindergarten distributions or repeated measures behind the table. Accordingly, significance tests, regression coefficients and confidence intervals are not reported.[6]

### 4.2. Hypothetical explanatory scenarios

One scenario concerns a child cared for by a grandmother who rarely purchases specialist drawing materials but often discusses gardens and markets. Kindergarten materials allow the child to represent those experiences. The example separates limited equipment from rich experience and recognises support that does not require a caregiver to teach drawing technique.

A second scenario concerns a child who declines to explain a family picture but joins peers in drawing animals. The teacher respects the boundary and supports participation. Its analytical value concerns choice and connection, not extraction of a family narrative. A third scenario presents an urban classroom with abundant supplies but compulsory copying, illustrating that resources cannot stand in for autonomy. All scenarios are authored examples rather than participant cases or quotations.

### 4.3. Joint interpretation

A joint display would connect a material-access contrast with supply records and observations; a caregiver-discussion contrast with accounts of interaction and contrary cases; and peer participation with entry opportunities and child choice. A smaller classroom-listening contrast might motivate inquiry into responsive teaching. It would not itself demonstrate compensation. Selection, measurement error and differing group composition could produce similar patterns.

## 5. Discussion

### 5.1. Distinguishing the comparisons

The framework makes the comparison itself visible. Within-rural contrasts address family arrangements more directly, while non-left-behind urban–rural contrasts address contextual opportunity under a specified reference. Both remain observational. Without urban left-behind children, the design cannot estimate the full interaction between location and migration status.

Within-group variation also matters. If stable care and adult responsiveness distinguish experiences more clearly than migration labels, discussion should emphasise those conditions. If material gaps coexist with similar relational experiences, neither dimension should be dismissed or absorbed into a single unvalidated total score.

### 5.2. Educational support rather than presumed remediation

Potentially compensatory provision includes accessible materials, repeated opportunities to try, adults who listen and peer activities children can choose to enter. Universal access with additional support based on observed need can avoid identifying children publicly. The amount of assistance should respond to actual barriers rather than group membership alone.

One exhibition, one video call or one positive-looking picture cannot demonstrate improvement. A subsequent phased longitudinal study could assess baseline experiences, document support actually received and compare follow-up change, including burden or lack of benefit. Such a study would require justified identification assumptions and appropriate ethical safeguards.[7]

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### 5.3. Practical implications and limitations

A proposed Jiangxi implementation could use brief records of choice, requests for help, responses and continued participation, developed with participating teachers and local professional-learning staff. Cross-setting exchange could compare low-cost ways of supporting expression rather than compete through polished products. These are proposals, not descriptions of existing provincial programmes.

Family communication should include the actual care network. Grandparents can listen, preserve work and share everyday topics without delivering technical instruction. Sharing with migrant parents should be optional and sensitive to child preference and family schedules. Response rates should not be used as a single measure of care, and limited connectivity should not exclude families.[8]

The decisive limitation is the lack of field evidence. Later studies must address differences between policy and broader definitions, incomplete group coverage, limited clusters and adult-report bias. Expansion to urban left-behind and migrant groups could improve comparison. Measurement equivalence and discrepancies between child accounts and observations require examination. Actual results must be analysed afresh rather than fitted into the synthetic narrative.

## 6. Conclusion

Separating rural left-behind children within an urban–rural framework can clarify the distinction between educational opportunity and care arrangements. This article operationalises drawing experiences through access, autonomy and competence, relationships, comfort in expression and caregiver communication. It treats compensation as additional educational and relational support rather than presumed repair of an identity-based deficit. Whether corresponding differences exist in Jiangxi, how support operates and whether benefits persist remain questions for real longitudinal or appropriately designed intervention research.

## 7. Declarations

No participant dataset, genuine quotations, ethics approval or completed intervention is claimed. Authors must supply verified affiliations, funding, competing-interest and contribution statements. Generative AI assisted drafting; author verification and journal-compliant disclosure are required. Synthetic evidence must be replaced before empirical submission.

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