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# Toy cars or dolls? The role of siblings in children's gendered play

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Children's toys come in many forms—puzzles, balls, cars, dolls, and crayons—but boys and girls continue to display distinct gendered preferences. This article examines the play of almost 13,000 2-year-olds observed in France. Do their gendered choices stem from their social class, the composition of the siblings, or parental involvement?

Games and toys are quintessential childhood objects. A central feature of children's lives, they also contribute to the historically and socially situated definition of childhood norms, showing what boys or girls are supposed to be or do, in accordance with their (supposed) preferences and abilities. They even appear to play a major role in their discovery of the social world and its hierarchies, rules, and values. Numerous studies have noted their importance in building children's early understanding of masculine and feminine norms and identities [1]. However, the way in which the gender of playmates—especially brothers and sisters—influences childhood play has rarely been analysed [2].

Girls and boys play different games from a very young age and play in different ways. Do these differences vary by birth order and by the presence of brothers or sisters? More specifically, what role do siblings play in the choice of play activities? Using data from the ELFE child cohort (see Box), this article examines how children's siblings influence the gendered component of their play.

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## Dolls and toy cars: strongly gendered play in all social categories

The composition of children's toy cupboards is already clearly gendered by their first birthday [3], and boys and girls already play differently. These differences are confirmed at age 2 by the frequency of various kinds of play. Excepting water games (bath toys, water slides, or circuits), gender differences are observed for all other types of play (Table 1). Girls more frequently play with dolls (81%), draw pictures (73%), or play with soft (stuffed) toys (63%), while boys do so much less and more frequently play with toy cars (89%), balls (76%), or stacking toys (61%).

Some forms of play are more gendered than others, such as playing with dolls and toy cars, with a 60 percentage-point difference between the share of girls and boys who play with them daily or often. While significant, the gender differences are smaller for drawing and playing with soft toys (15 and 11 points, respectively, in favour of girls) and for ballgames (19 points, in favour of boys). They are even smaller for stacking games, more frequently played by boys (7 points), and for less widely played games such as jigsaw puzzles (5 points in favour of girls).

These differences observed among young children reflect the structural opposites known to exist in adults. The typical distinction between ballgames or toy cars (for boys) and dolls or cooking (for girls) exemplifies the contrast between outdoor

and public activities (generally a masculine domain) and indoor and domestic activities (generally a feminine domain). But it especially illustrates a series of opposites that structure gender relations in the workplace [4]: boys' play tends to develop their technical and building skills, and their ability to act upon objects (toy cars, stacking games, etc.), while girls' play tends to focus on developing relational or care skills (symbolized by dolls), or physical appearance (dolls' bodies and accessories).

These gender differences are observed across all social categories, from the bottom to the top of the social scale. In fact, the amplitude of the gender difference varies little by social category (2–3 percentage points). It is highest for playing with dolls (4 points), increasing from 60 percentage points in favour of girls among upper-class families to 64 points among middle-class families (Table 1).

### Table 1. Gender differences in play by social category

| Type of play | Play choices (every day or often) (%) | | | Percentage-point difference (girls–boys) | | | |
|---|---|---|---|---|---|---|---|
| | All | Girls | Boys | All | Working classes | Middle classes | Upper classes |
| Dolls | 49 | 81 | 19 | +62 | +63 | +64 | +60 *° |
| Drawing | 65 | 73 | 58 | +15 | +13 | +17 | +15 |
| Soft toys | 57 | 63 | 52 | +11 | +12 | +10 | +12 |
| Jigsaw puzzles | 32 | 35 | 30 | +5 | +4 | +5 | +6 |
| Toy cars | 61 | 32 | 89 | –57 | –55 | –58 | –57 |
| Balls | 66 | 57 | 76 | –19 | –18 | –17 | –21 |
| Stacking games | 58 | 54 | 61 | –7 | –7 | –6 | –7 |
| Bath or water games | 85 | 84 | 86 | –2 | –1 | –1 | –2 |

***Notes:*** The children's social category was defined according to the higher of the two parents' social class which is based on their occupational status. See [5] for a precise definition.

* (respectively, °) indicates that the gender difference for this social category is significantly different (at the 1% level) from that observed for the middle- (respectively, working-) class category.

***Interpretation:*** Eighty-one per cent (81%) of girls play with dolls 'every day' or 'often' versus 19% of boys. The girl–boy difference is 62 percentage points. For the middle classes, it is 64 points.

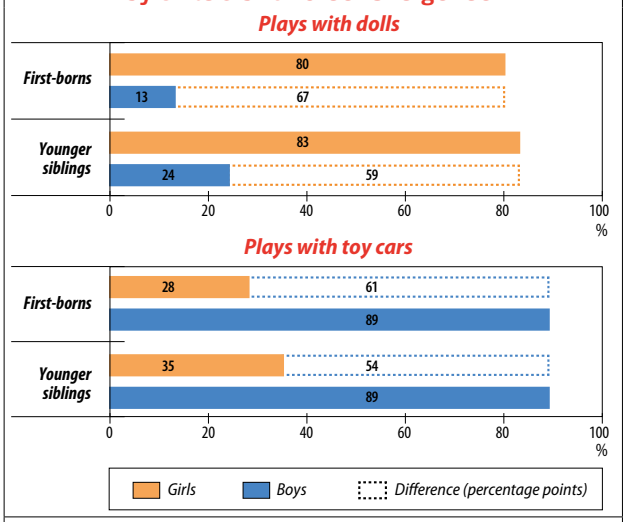
***Coverage:*** Children aged 2 years ($n$ = 12,990).

***Source:*** ELFE child cohort study, survey at 2 years, INED–INSERM, 2013–2014.

## Younger siblings' play is less gendered

While gender differences are similar across all social classes, they vary according to the number of siblings and the birth order of the 2-year-old child. Regarding the two most gendered activities—playing with dolls and toy cars–the difference between girls and boys is much greater among children with no older siblings (either first-born or only children) than among younger siblings (Figure 1). For these two activities, the gender difference is 67 and 61 points, respectively, among first-borns, versus just 59 and 54 points among younger siblings.

### Figure 1. Playing with dolls and toy cars by child's birth order and gender




A. Bourguignon, K. Diter, H. Hargis, W. Lignier, H. Oehmichen, J. Pagis, J. Vitores, *Population & Societies*, no. 630, February 2025, INED.

***Interpretation:*** Eighty per cent (80%) of first-born girls play every day or often with dolls versus 13% of first-born boys. The gender difference in favour of girls is 67 points.

***Coverage:*** Children aged 2 years ($n$ = 12,990).

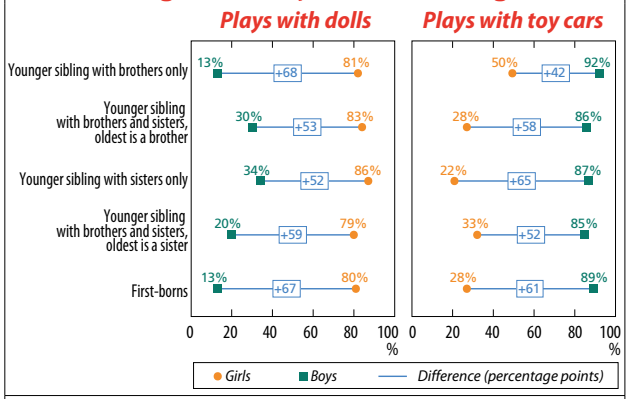
***Source:*** ELFE child cohort study, survey at 2 years, INED–INSERM, 2013–2014.

This narrowing of the gender difference by birth order is explained mainly by the fact that younger siblings have a wider range of play activities than first-borns and are more inclined to engage in games typical of the other gender. For example, younger brothers play daily or often with dolls almost twice as frequently as first-born boys (24% vs. 13%), and 35% of younger sisters play daily or often with toy cars compared with just 28% of first-born girls. Why are younger siblings more inclined to play with toys typically associated with the other gender?

The sociological literature on the atypical trajectories and gender practices of women who engage in 'masculine' activities (such as football, boxing, or engineering) identifies two explanatory processes: first, a *missing-boy effect* whereby certain girls (with no siblings or sisters only) are encouraged and supported by their fathers in these activities, and second, for girls with siblings, a process of *socialization* by their brothers. The first process is not observed statistically in our study: first-born girls and those with only older sisters rarely play with toy cars. No particular missing-boy effect is observed (Figure 2). However, 'diagonal'(1) socialization by older siblings explains the increase in gender-atypical play among younger siblings when older siblings are of a different gender. A sibling training effect of older siblings on younger siblings is observed, with the latter more often engaging in play generally associated with the opposite gender, either through imitation of their

(1) The term *diagonal* (as opposed to *horizontal*) takes account of birth-order differences between children.

**Figure 2. Playing with dolls and toy cars by child's age, birth order, and gender composition of siblings**

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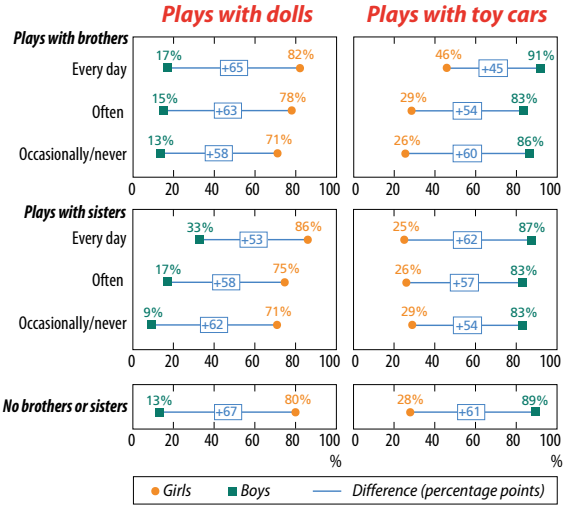
***Interpretation:*** Thirty-four per cent (34%) of younger brothers who only have older sisters play every day or often with dolls, compared with 86% of girls in the same situation. The gender difference in favour of girls is 52 points. For first-born children, by comparison, there is a 67-point difference.

***Coverage:*** Children aged 2 years ($n$ = 12,990).

***Source:*** ELFE child cohort study, survey at 2 years, INED–INSERM, 2013–2014.

**Figure 3. Playing with dolls and toy cars by child's gender, gender composition of siblings, and frequency of play with siblings**




A. Bourguignon, K. Diter, H. Hargis, W. Lignier, H. Oehmichen, J. Pagis, J. Vitores, *Population & Societies*, no. 630, February 2025, INED.

***Interpretation:*** Among girls who play every day with their brother(s), 46% play every day or often with toy cars compared with 26% among girls who do not play (or play occasionally) with their brother(s). The difference with respect to boys is 45 points in the former case and 60 points in the latter.

***Coverage:*** Children aged 2 years ($n$ = 12,990).

***Source:*** ELFE child cohort study, survey at 2 years, INED–INSERM, 2013–2014.

elders, or through direct play with them. Conversely, when older siblings are all the same gender as the younger sibling, his or her play is even more stereotypically gendered.

Hence, boys play with dolls much more frequently if they have at least one older sister, with a gender gap that narrows from 68 points for younger siblings with brothers only, to 52 points for those with sisters only. The pattern is symmetrical and similar for playing with cars. Girls play with cars more often if they have at least one older brother and much more often if they only have brothers; gender differences are smaller when there are siblings of both genders. These results show that it is the presence of an older sibling of the opposite gender (and its effect on brother–sister interaction), rather than status of younger sibling in itself, that reduces gender differences in the propensity to play with cars or dolls often or every day.

## The sibling training effect on younger siblings through play

That said, the presence of an older sibling of the opposite gender is not sufficient to cause younger siblings to engage in gender-atypical play. If this were the case, play preferences would simply reflect the availability of the older sibling's toys in the home. Older brothers and sisters need to play with their younger siblings every day or often for this sibling training effect to occur. For example, among younger sisters with at least one older brother,[2] those who play with him every day are almost twice as likely to play daily or often with toy cars as sisters who do not play with their brother, or only occasionally (46% vs. 26%, Figure 3). Likewise, younger brothers who play every day with their older sister(s) are 3.5 times more likely to play frequently with dolls than those who never play with their sister(s) (33% vs. 9%).

Thus, for boys and girls alike, only having siblings of the opposite gender and playing with them every day are major factors in the adoption of gender-atypical play. This sibling training effect exists across all social classes, and whatever the degree of parental involvement in the youngest children's activities.

## Less stereotypical play when the mother plays with the child

This does not signify, however, that parental involvement has no impact on children's play but simply that siblings exert a stronger influence. For boys, the probability of playing almost daily with dolls increases by almost 7 points if the mother plays with him every day (vs. from occasionally or never), but by 14 points when he plays every day with his sister(s) (vs. never). The fact that siblings play a greater role than parents is mirrored, in similar proportions, among girls with their brothers and fathers.

Moreover, mothers tend to motivate gender-atypical play more strongly than fathers: for girls, playing daily or often with

(2) While the ELFE survey question asks how often the child plays with all of his or her siblings, regardless of birth order, in 94% of cases, they are older siblings, given that the child is only 2 years old and generally the youngest family member.

their mother increases the likelihood of playing with toy cars by 8 points, while for boys, playing daily or often with their father has no significant effect on their playing with dolls. This difference reflects the fact that fathers tend to engage in gender-typical play with their children, while mothers favour both gender-typical and atypical play.

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Alongside parents and other adults, siblings thus have a major influence on small children's gendered play, with older siblings exerting a sibling training effect on younger siblings via their preferred toys (dolls for girls and cars for boys). This may narrow or widen gender differences in play, depending on the sibling gender composition. When younger siblings have a majority of siblings of the opposite gender, their play is more diverse and more often resembles the gender-typical play of their older brothers and sisters. Conversely, boys with only older brothers or girls with only older sisters tend to engage in play that is more typical of their own gender (and of their older siblings). The sibling training effect is stronger among younger siblings because their parents are less available, so they more often emulate their elders in play that does not require adult supervision. With no older siblings, first-borns cannot, by definition, experience this sibling training effect. However, parents spend more time, on average, playing with them [5] and tend to favour less gendered, more 'educational' games such as jigsaw puzzles, drawing, stacking games, etc.

ELFE cohort data will enable us to track how these gendered play patterns at age 2 evolve over time. The observed gender differences may be affected by changes in children' living conditions or their social environment, such as the birth of a new sibling or entry into nursery school.

## Box. Analysing ELFE survey data

The ELFE child cohort study (*Étude longitudinale française depuis l'enfance*) conducted by INED and INSERM provides extensive data to analyse the role of family configuration, birth order, and gender composition of siblings in the acquisition of gender attributes during childhood. Conducted among families recruited in maternity units in 2011, the study follows 18,300 children since birth [6]. Our study draws on data from a questionnaire completed by parents in 2013 and 2014 when the children were around 2 years old. Several questions focused on how frequently (every day, often, occasionally, never) their child engaged in different play activities: toy cars, soft toys, stacking games, water games, balls, jigsaw puzzles, drawing, or painting. Other questions asked how frequently the child played with their mother or their father (to measure parental involvement) or with any older siblings.

Among the sample of 12,990 children observed at age 2 (51% boys and 49% girls), 45% were first-borns (39% were only children and 6% had a cohabiting younger sibling), 35% had an older sibling, 15% had two siblings, and 5% had three or more. In all, 55% of the children were living with at least one older sister or brother.

Unless otherwise indicated, all findings presented in this article are statistically significant at the 1% level.

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**Abstract**

By age 2, boys and girls play differently. Gender differences are especially large for play with dolls and toy cars. While these differences exist to a similar extent across all social classes, they are smaller among younger siblings than older ones. This is due to a sibling training effect, with younger siblings emulating their elders of the opposite sex, and illustrates the key role of interaction between children in play preferences and early learning of gendered behaviours.

**Keywords**

child, sex, gender, social class, toy, play, socialization, siblings, family, ELFE survey, France

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