

Drawing Gender Stereotypes: British and Argentinian Children's Graphic Representations of 'female' and 'male' occupations

Drawing Gender Stereotypes: British and Argentinian Children's Graphic Representations of 'female' and 'male' occupations
 Romina Vivaldi & Sarah Rose
 Department of Psychology, School of Life Sciences and Education, Staffordshire University



Introduction

Gender-role stereotypes develop early in childhood (Waltgram, Blair & Liben, 2010)

Previous research has predominantly used questionnaire techniques to assess children's explicit beliefs on occupations and

Method

Two-hundred and forty children of two age groups (100 6-7 year-olds and 100 10-11 year-olds) participated, half of the children were recruited from primary schools in Stoke-On-Trent, United Kingdom and half of them from primary schools in Rosario, Argentina

Results - Gender choices

Drawings were classified according to whether the human figure portrayed were female, male, someone else or both. These gender choices were confirmed by children's interview responses

Results - Justifications of...

Justifications of gender choices were classified into a mutually excluded categories:

- Real Life ("My father is a pilot")
- Gender stereotypes ("It's a boy's job")
- Equality ("Both genders can")

Results - Preferences and...

Job preferences were assessed using a 7-point Likert scale.



Conclusions and Future...

- Occupational gender-stereotypes are evident among 6-7 and 10-11 years old children, but not universally.
- In line with recent cross-cultural research on



boy, 8-7, UK
FIREFIGHTER

Romina Vivaldi & Sarah Rose

Department of Psychology, School of Life Sciences and Education, Staffordshire University



PRESENTED AT:

INTRODUCTION

Gender-role stereotypes develop **early** in childhood (Weisgram, Bibler & Liben, 2010)

Previous research has predominantly used **questionnaire techniques** to assess **children's** explicit beliefs on **occupations** and **gender** (e.g., Gettys & Cann, 1981; Levy, Sadovsky & Troseth, 2000; Miller & Budd, 1999; Shepard & Hess, 1975).

Drawing is a non-verbal approach that enables us to examine **implicit beliefs** on gender and occupations.

When drawings have been used, **only male-stereotyped occupations** have been examined (e.g., Barba, 1990; Colley et al., 2005; Chambers, 1983; Christidou, Bonoti & Kontopoulou, 2016; Samaras et al., 2012).

Moreover, both when using questionnaires and/or drawings, the **literature** is still **inconsistent** about children's occupational gender stereotypes.

Even though gender inequality in **Latin American countries** has been historically higher than in developed countries (World Economic Forum, 2018), these have been **underrepresented** in children's gendered occupational perceptions research.

Our aim was to **compare gender** and **age** differences in **Argentinian** and **British children's** **perceptions** of **female** and **male stereotyped occupations**.

METHOD

Two-hundred and forty children of two age groups (120 6-to-7 year-olds and 120 10-to-11-olds) participated, half of the children were recruited from primary schools in **Stoke-On-Trent**, United Kingdom and half of them from primary schools in **Rosario**, Argentina

1- Children were asked to draw:

- a) a **human figure** of their choice,
- b) a person whose job is to **dance**,
- c) a person whose job is **taking care of children**,
- d) a person who works **putting out fires** and,
- e) a person who **flies an aeroplane**.

While they were drawing, participants were asked to think of a **name** for each of the human figures portrayed.

2- Children were asked to complete a **semi-structure interview** where they had to indicate how much they would **like to do each job** using a scale ranging from 1 (not at all) to 7 (very much) and they were requested to explain their answer. Moreover, the child were shown and asked for each picture drawn whether they drew a **female**, a **male** or **someone else** and **why**.

RESULTS - GENDER CHOICES

Drawings were classified according to whether the human figures portrayed were **female**, **male**, **someone else** or **both**. These gender choices were confirmed by children's interview responses

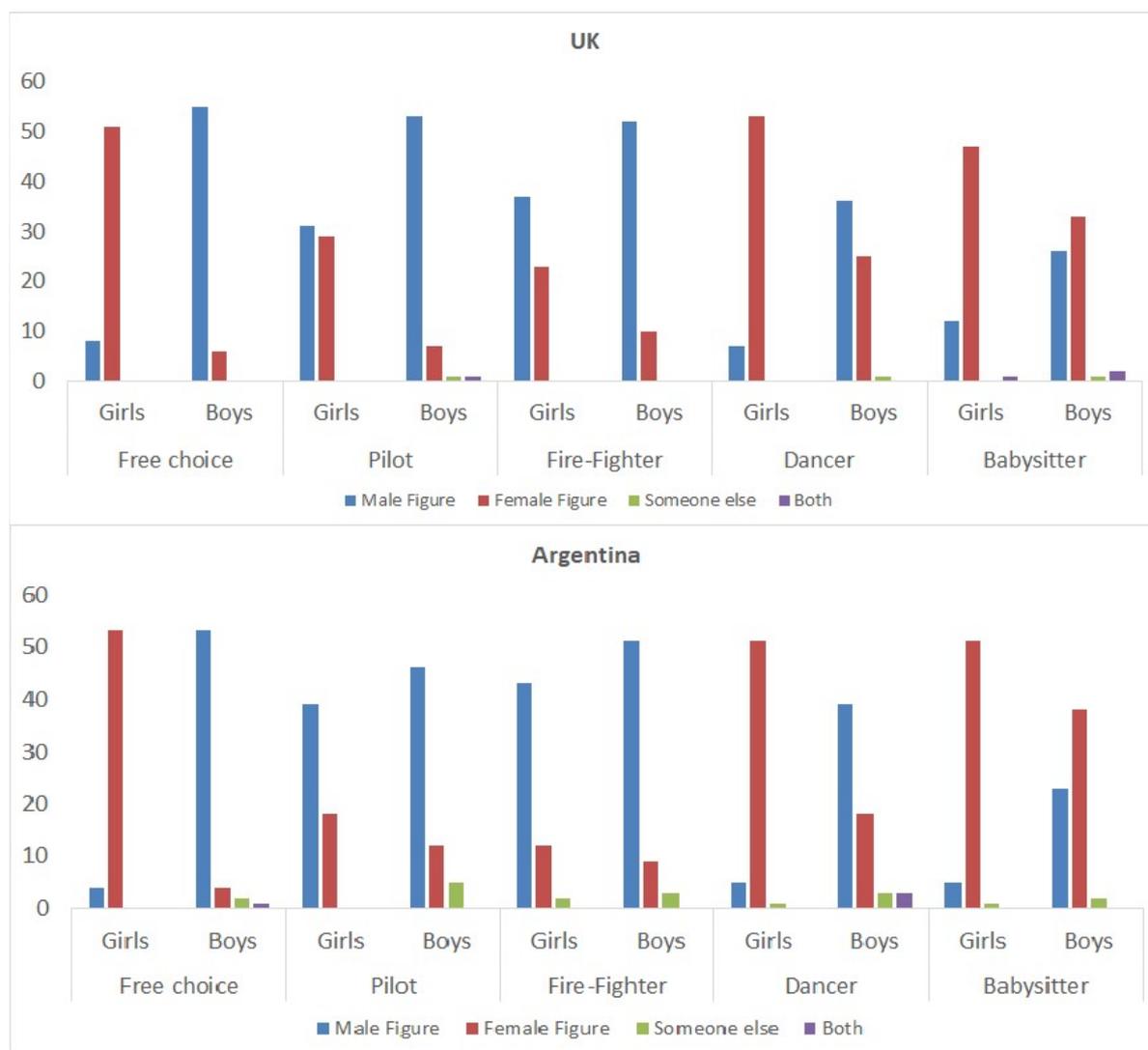


Figure 1. British and Argentinian children's gender choices for their graphic productions.

Gender choices did not vary across cultural background nor age-group.

Sex differences: While **British girls** showed more **flexibility** in their gender choices than boys for **'male' occupations**, conversely, **British boys** were **less rigid** with **'female' occupations** than girls (all $ps < .05$).

As for the **Argentinian** children, boys were more flexible with **'female occupations'** than **girls** (dancer: $p < .001$; babysitter, $p = .003$) but **both sexes** were equally likely to portray **men** conducting **'male' occupations** (all $ps > .05$).

On the contrary, most children from **both countries** portrayed figures of their **own biological sex** when asked to draw a **figure of their choice** or a **dancer** (all $ps > .05$).

A closer look a children's drawings reveals a tendency for female figures to be depicted dancing *ballet* while male figures were more likely to be *hip-hop* or *Fornite* dancers.

RESULTS - JUSTIFICATIONS OF GENDER CHOICES

Justifications of gender choices were classified in five mutually excluded categories:

- **Real Life** ("My father is a pilot")
- **Gender stereotypes** ("It's a boy's job")
- **Equality** ("Both genders can do it")
- **Drawing skills** ("I can't draw girls well")
- **Non-explanatory** ("I don't know")

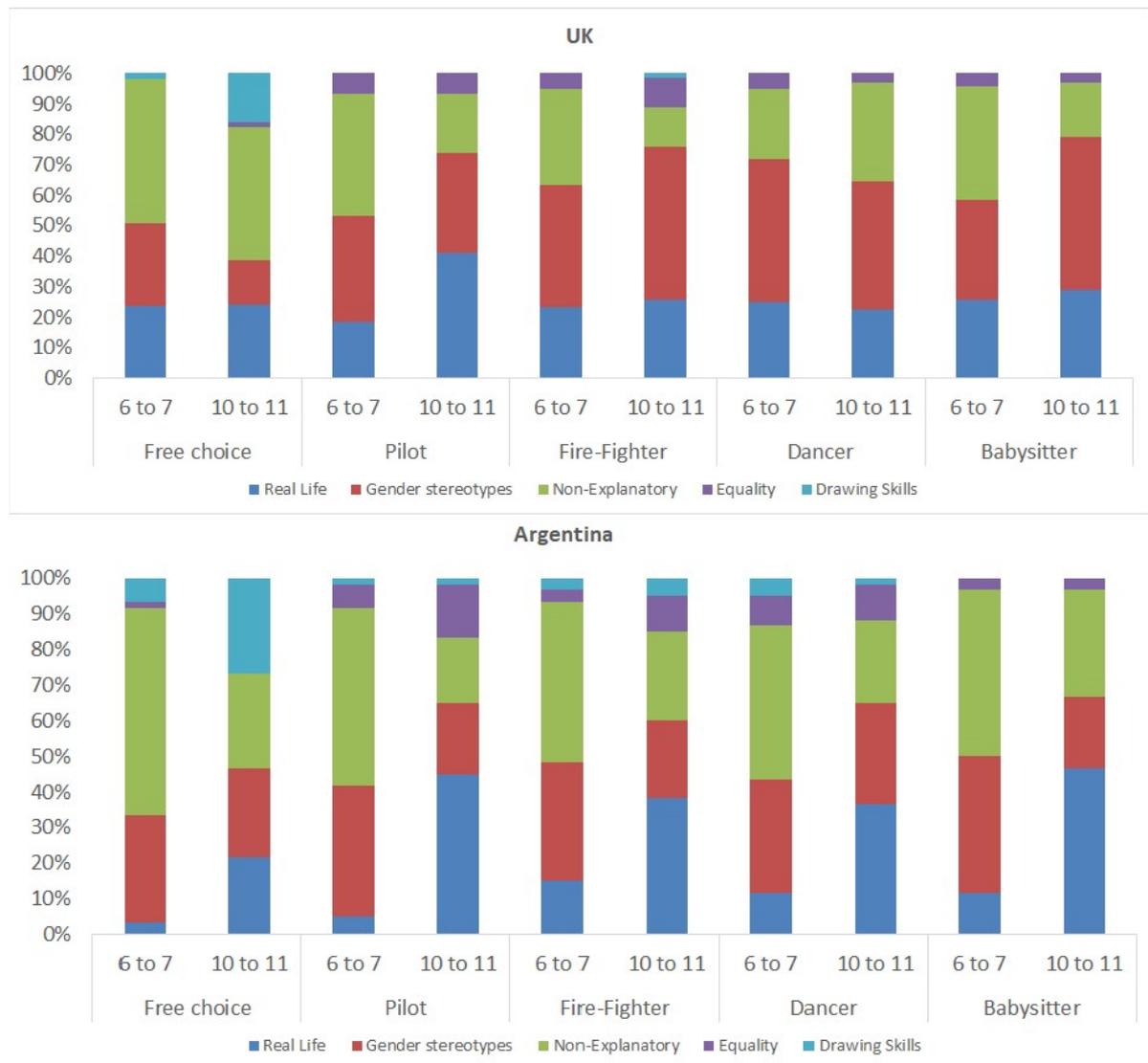


Figure 2. British and Argentinian children's justifications of gender choices.

No sex differences were observed.

Cross-cultural differences: British children gave significantly **more gender-stereotypical** but **less non-explanatory** justifications than Argentinian children for '**female**' occupations in the **younger age group** (dancer: $p = .04$; babysitter, $p = .019$), and **more gender-stereotypical** but less **real life** answers for **fire-fighter** ($p = .02$) and **babysitter** ($p = .019$) in the older age group.

Age differences: were found for **pilot** in both cultures (UK: $p = .024$; Argentina: $p < .001$) and for **fire-fighter** ($p = .010$) and **babysitter** ($p < .001$) in the Argentinian sample, due to an **increase** in **real life** answers and a **decrease** in **non-explanatory** ones.

RESULTS - PREFERENCES AND JUSTIFICATIONS

Job preferences were assessed using a 7-point Likert scale.

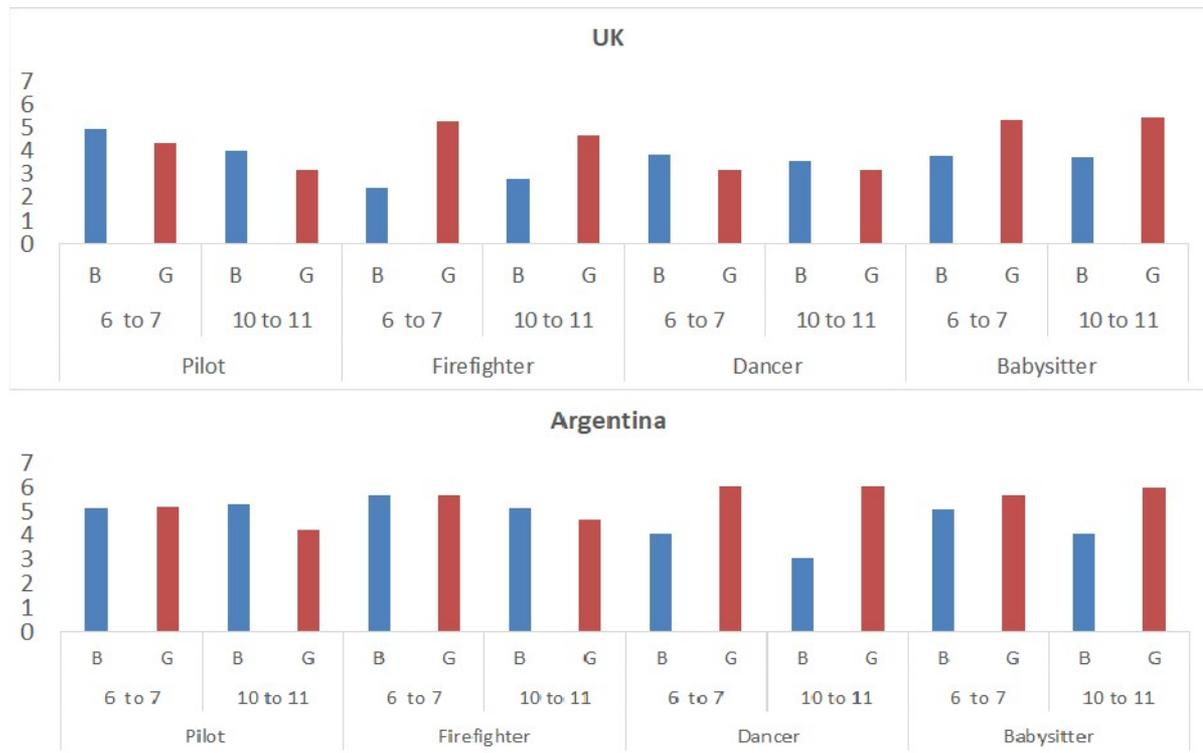


Figure 3. British and Argentinian children's preferences mean scores across occupations.

Crosscultural differences: Argentinian children were more likely to give **higher scores** for most occupations than British participants (**fire-fighter:** $p < .001$; **pilot:** $p = .003$; and **dancer:** $p = .001$).

Age differences: Scores for 'male' occupations **decreased** significantly with age, particularly in female participants (pilot, UK: $p = .014$; fire-fighter, Argentina: $p = .003$).

Sex differences: Girls from **both countries** were more likely to give higher scores for 'female' occupations than boys with one exception (6-7, babysitter, ARG: $p = .147$).

Justifications of preferences were classified in four mutually excluded categories:

- **Occupation-related** (for dancing: "I like to move my body")
- **Real Life** ("My father is a pilot")
- **Gender stereotypes** ("It's a boy's job")
- **Non-explanatory** ("I don't know")

Cross-cultural differences: Argentinian children from the younger age-group were more likely to give **non-explanatory** answers than their British counterparts (all $ps < .05$).

Age differences: Argentinian 10-11 year-olds showed an **increased** in **occupational-related** answered and a decreased in **non-explanatory** justifications.

Sex differences: Argentinian girls tended to provide **more real life** answers and **less non-explanatory** ones for **'female' occupations** than boys (for 6-7, dancer: $X^2(2, N = 60) = 15.06, p = .002$; babysitter: $X^2(2, N = 60) = 8.34, p = .015$; ; for 10-11, dancer: $X^2(2, N = 60) = 7.61, p = .022$).



CONCLUSIONS AND FUTURE DIRECTIONS

- Occupational gender-stereotypes are evident among 6-7 and 10-11 years old children, but not universally.
- In line with recent cross-cultural research on children's graphic representations of scientists (Christidou et al., 2016), gender choices did not varied across countries when both 'male' and 'female' occupations were investigated but significant sex-differences reconfirm the impact of this variable on their perceptions of occupations.
- While boys showed overall more flexibility in their gender choices for occupations commonly associated with women, they were less likely to demonstrate interest in them than girls, who gave high scores to all target occupations.
- Older children, particularly Argentinian children, increasingly justify their gender choices on their own real-life experiences suggesting that their views might change across the life span.
- Future directions include completing an analysis of the level of masculinisation and feminisation of the human figures depicted and the use of gendered colours.

DISCLOSURES

We would like to thank all participants and our research assistants: Callum Young, for assistance with coding and data analysis, and Della Appleyard and Russell Bridge, for assistance with data collection. This research was supported by a grant from the University of Great Rosario (PIC LPS-02-18), Argentina to the first author.

ABSTRACT

Objective

The aim was to compare gender and age differences in Argentinian and British children's perceptions of female and male stereotyped occupations.

Design

A persistent gender-inequality in occupational differences and evidence suggests that these gender-role stereotypes develop early in childhood. Previous research has predominantly used questionnaire techniques to assess children's explicit beliefs and where drawings have been used only male-stereotyped occupations have been examined. Therefore, this study is novel in its use of drawings and interviews to investigate implicit assumptions of male and female gender-stereotyped occupations. Furthermore, this research compares the assumptions of children from two age groups and two cultures with contrasting gender gap reports.

Method

Two hundred and forty 6-to-7-year-olds and 10-to-11-year-olds from cities in Britain and Argentina drew and named five human figures: (i) person of their choice, ii) dancer, iii) babysitter iv) firefighter and v) pilot). Each child completed a semi-structured interview in which they confirmed the gender and provided justification for their gender choices for each drawing. All drawings and interviews were coded by a rater blind to the age and country of the drawer.

Results

Children from both countries and age groups showed evidence of gender-role stereotyping, with one exception (Argentinian 10-11 year-olds' 'dancer'; p. 189). Although drawings suggested some cross-cultural differences justifications for gender choices differed across age but less so between sexes and cultures.

Conclusions

Occupational gender-stereotypes develop early, but not universally. Older children increasingly justify their gender choices on their own experiences suggesting that over time their views might alter.

REFERENCES

- Barba, R. H. (1990). Assessing children's attitudes towards computers: The Draw a Line User Test. *Computing in Childhood Education*, 2, 1 - 13. <https://doi.org/10.1080/0020739910220504>
- Chambers, D. W. (1983). Stereotypic images of the scientist: The Draw-a-Scientist Test. *Science Education*, 6, 255-265. <https://doi.org/10.1002/sce.3730670213>
- Colley, A., Berman, E., & Van Millingen, L. (2005). Age and gender differences in young people's perceptions of sport participants. *Journal of Applied Social Psychology*, 35(7), 1440-1454. <https://doi.org/10.1111/j.1559-1816.2005.tb02178.x>
- Gettys, L.D., & Cann, A. (1981). Children's perceptions of occupational sex stereotypes *Sex Roles*, 7(3), 301-308. <https://doi.org/10.1007/BF00287544>
- Levy, G., Sandovsky, A., & Troseth, G. (2000). Aspects of young children's perceptions of gender-typed occupations. *Sex Roles*, 42, 993-1006 (tel:993-1006). <https://doi.org/10.1023/A:1007084516910> (tel:1007084516910).
- Miller, L., & Budd, J. (1999). The Development of Occupational Sex-role Stereotypes, Occupational Preferences and Academic Subject Preferences in Children at Ages 8, 12 and 16. *Educational Psychology*, 19(1), 17-35. <https://doi.org/10.1080/0144341990190102>
- Samaras, G., Bonoti, F., & Chistidou, V. (2012). Exploring children's perceptions of scientists through drawings and interviews. *Procedia - Social and Behavioral Sciences*, 46, 1541-1546. <https://doi.org/10.1016/j.sbspro.2012.05.337>
- Shepard, W. O., & Hess, D. T. (1975). Attitudes in four age groups toward sex role division in adult occupations and activities. *Journal of Vocational Behavior*, 6(1), 27-39. [https://doi.org/10.1016/0001-8791\(75\)90019-6](https://doi.org/10.1016/0001-8791(75)90019-6)
- Weisgram, E. S., Bigler, R. S., & Liben, L. S. (2010). Gender, Values, and Occupational Interests Among Children, Adolescents, and Adults. *Child Development*, 81(3), 778-796. <https://doi.org/10.1111/j.1467-8624.2010.01433.x>
- World Economic Forum (2018). *The global gender gap report 2018*. Retrieve from: <https://www.weforum.org/reports/the-global-gender-gap-report-2018>