

**Creativity Study
Total Markets¹
September 2021**

Introduction

The purpose of this study is to better understand whether and how “creativity” is gendered. This study investigates how parents of children perceive creativity and whether creativity takes on different meanings depending on whether their child is a boy or girl. Additionally, we investigate how children perceive creativity. This study also examines prevailing notions of creatives and creativity in media.

To address these questions we apply two methodologies. First, we analyze parents’ and children’s perceptions of creativity with a survey across seven markets (US, UK, Czech Republic, China, Japan, Russia, Poland). Second, we analyze messages about creativity that people are receiving in publications aimed at parents and the broader population with a content analysis of UK media. In short, we want to know what people believe about gender and creativity and how these beliefs are shaped and reinforced by the media they consume.

Executive Summary

Survey Analysis

- Parents express that they are more limited in the types of creative activities they can encourage their sons to do, compared to their daughters.
- Children, especially boys, prefer creative activities that conform to traditional gender roles.
- Implicit reactions find parents encourage daughters to engage in activities that are performative, artistic, and domestic or related to the dramatic arts; these findings persist across markets.
- Implicit reactions find parents encourage sons to engage in activities that are related to STEM, physicality, and activities that engage exploration and curiosity; these findings persist across markets.
- Parents imagine a man in the vast majority of creative professions, regardless of whether there is a daughter or son in their household; children share these impressions.
- Parents recommend incorporating more gender neutral marketing for creative products.

¹ UK, US, China, Japan, Czech Republic, Russia, and Poland.

Content Analysis

- Female creatives are more likely than male creatives to be featured in Parenting Blogs (61% compared to 35%), but male creatives are more likely than female creatives to be featured in Public Discourse (53% compared to 47%).
- Female creatives are more likely than male creatives to be visually prominent in Parenting Blogs (39% compared to 14%) and Public Discourse (57% compared to 44%); but male creatives are more likely than female creatives to be mentioned in headlines in Parenting Blogs (17% compared to 10%) and Public Discourse (33% compared to 27%).
- Parenting Blogs and Public Discourse do not cover creatives in overwhelmingly gendered terms, however, women are more likely to be described with feminine terms in Parenting Blogs (20% compared to 8%) and Public Discourse (17% compared to 5%), and men are more likely to be described with masculine terms in Parenting Blogs (13% compared to 1%) and Public Discourse (8% compared to 6%), reinforcing gender stereotypes.
- Creative professions featured in Parenting Blogs and Public Discourse vary, but female creatives featured are more likely to hold traditionally feminine creative-type roles.

Full Report

Introduction

The purpose of this study is to better understand how “creativity” is gendered. The first question driving this study is whether parents think of “creativity” in gendered terms, and if so, how. We also want to know whether children perceive creativity in gendered ways. Lastly, we want to know whether creativity is discussed in gendered ways in media aimed at parents and in media aimed at the general public.

Literature Review

Men and women alike rate men as more creative. More specifically, studies find that creativity is more associated with “masculine” traits, like independence and being bold and daring, and less associated with “feminine” traits, like collaboration.² Because of this, many people believe that men are more creative than women.³ For example, when asked to evaluate the same house design, both men and women rated designs higher when they were told the architect was a man versus when they were told the architect was a woman. Also, in experimental settings, bosses rated female executives as less creative in their thinking than male executives, and the male executives were seen as more deserving of compensation and professional awards.⁴ Therefore, women’s creative abilities tend to be underestimated and undervalued.

Another explanation for why men’s creative endeavors are valued more than women’s creative endeavors is that a prevailing understanding of creativity is a masculine one, and therefore women are seen as less congruent with a masculine archetype of creativity. A masculine archetype of creative thinking is an independent risk-taker who blazes their own path.⁵ These are attributes associated with agency, and not associated with communion. Agency and communion are conceptual labels from social psychology that organize two broad aspects of human behavior and traits.⁶ Agentic behaviors and traits include “competitive” and “outgoing,” and communal behaviors and traits include “caring” and “patient.”⁷ Studies find agentic traits are more easily attributed to men compared to women, and that communal traits are more accessible than agentic traits when respondents are evaluating women.⁸ In sum, insofar as creativity/creative thinking and agency are intertwined, the perceived connection between women and creativity will be weak.

However, whether masculine and agentic notions of creativity/creative thinking persist in news media publications or blogs that cater to today’s parents is an open question. Moreover, the degree to which a masculine or agentic archetype of creativity is held or endorsed by parents of young children today has

²Diekmann, A. B., Clark, E. K., Johnston, A. M., Brown, E. R., & Steinberg, M. (2011). Malleability in communal goals and beliefs influences attraction to STEM careers. *Journal of Personality and Social Psychology*, 101, 902–918.

³ Proudfoot, D. A.C. Kay, & C.Z. Koval (2015). “A Gender Bias in the Attribution of Creativity: Archival and Experimental Evidence for the Perceived Association Between Masculinity and Creative Thinking.” *Psychological Science*, 26(11): 1751-1761.

⁴ Adams, K. (2015). Even Women Think Men are More Creative. *Harvard Business Review*, December.

⁵ Proudfoot, D. A.C. Kay, & C.Z. Koval (2015). “A Gender Bias in the Attribution of Creativity: Archival and Experimental Evidence for the Perceived Association Between Masculinity and Creative Thinking.” *Psychological Science*, 26(11): 1751-1761.

⁶ Trapnell, P. D., and D. L. Paulhus. (2012). “Agentic and Communal Values: Their Scope and Measurement.” *Journal of Personality Assessment* 94 (1): 39–52.

⁷ Trapnell, P. D., and D. L. Paulhus. (2012). “Agentic and Communal Values: Their Scope and Measurement.” *Journal of Personality Assessment* 94 (1): 39–52.

⁸ Scott, K. A. and D. J. Douglas. (2006). “Female First, Leader Second? Gender Bias in the Encoding of Leadership Behavior.” *Organizational Behavior and Human Decision Processes*. 101 (2): 230-242.

yet to be fully explored. Although an existing archetype of creative thinking is that of the risk-taking, independent genius, other creative archetypes exist. This study will help us understand dominant portrayals and perceptions of creativity, and how they do and do not map onto gender identities, and shed light on these questions.

Methodology

We will employ two methodologies to answer our primary questions: a survey and a content analysis.

Survey Analysis

We used online opt-in surveys in seven countries to assess whether creativity is seen as gendered for parents and their kids. We conducted national surveys in the US, UK, Czech Republic, China, and Japan from April 21 through May 4, 2021, and in Russia and Poland July 19 through July 28, 2021 to understand how parents and children think about creativity as it relates to gender. We also assess implicit bias in how parents define “creativity” for their sons and their daughters.

Parents of children ages 6 - 14 years old completed the first half of the survey, then gave consent for their son, daughter, or gender non-conforming child to complete the second half (no children identified as gender non-conforming in any of the countries surveyed, so our analysis is based on daughters and sons, only). The breakdown of survey respondents overall is shown in Table 1.

Table 1. Survey Respondent Overview by Country

		Total Markets	US	UK	Czech Republic	China	Japan	Russia	Poland
	Total Parents	3422	495	512	485	478	445	504	503
<i>Gender of child who completed the survey</i>	Sons	1775	240	258	268	272	233	250	254
	Daughters	1647	255	254	217	206	212	254	249

In studies of multiple countries, it is common for findings to be driven by cultural norms of survey response rather than substantive differences, and therefore findings should not necessarily be compared between countries. Given this, we report overall findings in most cases, rather than a country-by-country comparison. However, country-level findings are available in the Appendix for measures reported here.

Content Analysis

To assess prevailing ideas about creativity and whether male and female creatives are portrayed in gendered ways, we assess depictions of creativity in popular publications and parenting blogs in the UK. We generated two datasets for this analysis; the first dataset consisting of a hybrid sample of the top 15 general media publications and the top 15 lifestyle publications in the UK based on readership, and the second dataset consisting of the top 30 most popular parenting blogs in the UK based on readership. The

purpose of the Parenting Blog Dataset⁹ is to assess what messages parents are receiving about creativity that might be gendered. The Public Discourse Dataset¹⁰ gives us a sense of the messages the general public and those who read lifestyle publications are receiving about gender and creativity.

We generated the Parenting Blog Dataset and Public Discourse dataset by searching within these publications for all of 2020 for the following terms: “creative,” “creativity,” and “creator.” A total of 1,187 articles for the Parenting Blog Dataset and 7,699 articles for the Public Discourse dataset met our inclusion criterion. Expert human coders carried out analysis on a representative sample of articles from each category.¹¹

Findings

-Survey Findings

In this section, we report on four major themes:

1. Parent and child perceptions of creativity,
2. which creative activities parents encourage their daughters and sons to do,
3. gendered perceptions of creative professions, and
4. recommendations from parents about marketing and gender.

For context, 40% percent of parents say their children become aware of gender norms and/or stereotypes between the ages of 1 to 5, while 31% say they become aware between the ages of 6 to 10.¹² This makes these years crucial for developing creativity in inclusive and gender equitable ways.

1. Perceptions of Creativity

We begin this section with an overview of what parents think about creativity as it pertains to their children alongside a look at how children think about creativity. The question driving this analysis is whether parents and children think about creativity in gendered ways. We find that adults *and* children think of creativity in considerably gendered ways.

We first measure parents’ perceptions of their child’s creativity by asking parents to rate their child’s creativity on a scale of 1 to 10. Parents rate their daughters as slightly more creative than their son on average, across markets (Table 2). While academic literature would expect sons to be rated higher than daughters across markets, we do not see a large difference.

⁹Absolutely Magazines, Families, First News, Junior Magazine, The Week Junior, Mother & Baby, Primary Times, Made for Mums, DadsNet, MumsNet, Mum in the Madhouse, DIY Daddy, KiddyCharts Blog, Five Little Doves, Mudpie Fridays Blog, Dad Blog UK, Sparkles & Stretchmarks, The Green Parent, Motherhood: The Real Deal, Honest Mum, Midwife and the Life, Tots 100 UK Parents Blog, Rainy Day Mum, Slummy Single Mummy, My Baba Parenting Blog, Mummy Fever, Emma and 3, Boo Roo and Tigger Too, Not a Fictional Mum, Mother Distracted.

¹⁰Metro, Guardian, Independent.co.uk, Daily Mail, The Sun, The Daily Mirror, FT, Daily Telegraph, Daily Express, London Evening Standard, Daily Star, Sunday Telegraph, Sun on Sunday, Sunday Mail, Daily Record, Hello!, Good Housekeeping, Vogue, Cosmopolitan, Stylist, ELLE, Grazia, BuzzFeed, Unilad, Esquire, GQ, Men’s Health, National Geographic Traveller, Country Living, Marie Claire

¹¹We identify a representative sample from the full population using academic standards of 95 percent confidence and a +/-3 margin of error.

¹² This is for parents in US, UK, Czech Republic, China and Japan; this question was not asked of parents in Russia or Poland.

Table 2. Parent Opinion - How Creative Their Son/Daughter Is

Question wording - “On the scale below, mark how creative you consider your [son/daughter], with ‘1’ being not creative at all, and ‘10’ being extremely creative.”

	Son	Daughter	Difference
All Markets	7.3	7.6	-0.3
US	8	8.1	-0.1
UK	7.2	7.8	-0.6
Czech Republic	6.9	7.4	-0.5
China	7.4	7.5	-0.1
Japan	6.2	6.5	-0.3
Russia	7.4	7.6	-0.2
Poland	7.8	8.3	-0.5

When asked to rate their own creativity on a scale of 1 to 10, boys and girls rate their own creativity at similar levels, with girls rating themselves slightly higher than boys across total markets.

Table 3. Child Opinion - How Creative Are You?

Question wording - “On the scale below, mark how creative you consider yourself, with ‘1’ being not creative at all, and ‘10’ being extremely creative.”

	Boy	Girl	Difference
All Markets	7.3	7.5	-0.2
US	7.9	8.1	-0.2
UK	7.3	7.6	-0.3
Czech Republic	6.9	7.5	-0.6
China	7.9	7.8	0.1
Japan	5.9	6.2	-0.3
Russia	7.6	7.5	0.1
Poland	7.7	7.8	-0.1

Next, we measure parents’ perceptions of their child’s creativity by asking how they best describe their child’s creativity. We included measures of creative tasks (e.g., artistic endeavors like arts and crafts, making or building things, playing with toys) as well as creative ways of thinking (e.g., has a vivid

imagination, is constantly exploring new things, and applies creative logic to solve problems). For a complete list of questions about creativity, see Table 4 below. For country level differences see Appendix A.

Table 4. Parent Opinion - How Child Displays Creativity, by Gender

Question wording - “Which of the following, if any, best describes how your [son/daughter] is creative?”

Question	Total Markets		
	Son	Daughter	Difference
Is artistic/likes artistic things (art, crafts)	33%	60%	-27%
Has a vivid imagination	58%	63%	-5%
Has a unique sense of humor	39%	42%	-3%
Makes/builds things with his/her hands	48%	53%	-5%
Has a unique perspective/viewpoint of things	39%	42%	-3%
Is curious about things he/she doesn't know	48%	47%	1%
Questions the norm	20%	20%	0%
Creates new games on his/her own	43%	41%	2%
Approaches things differently than would be expected	29%	29%	0%
Constantly exploring new things	41%	41%	0%
Plays with toys not in the way they were intended	29%	24%	5%
Feels comfortable with the unknown	26%	25%	1%
Applies logic to solve problems his/her own way	39%	37%	2%

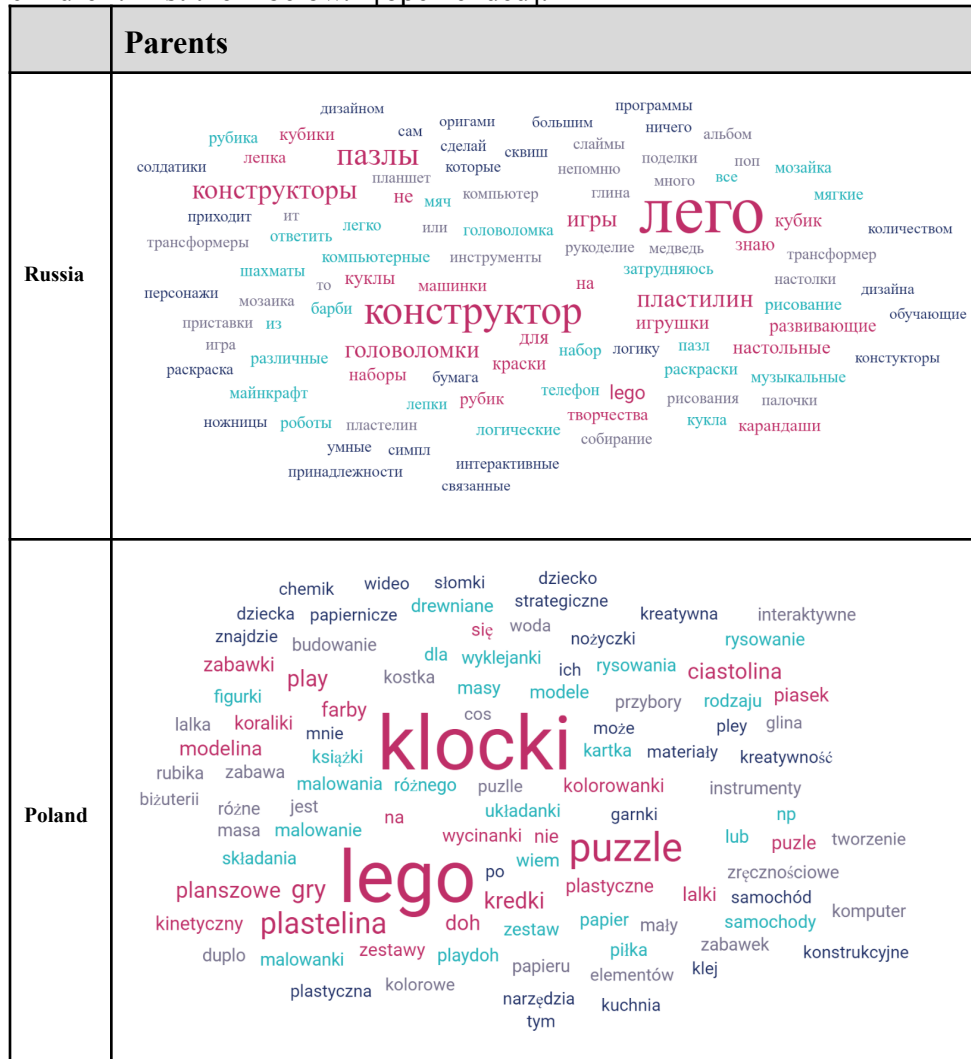
As displayed in Table 4, parents report gender differences in the following areas of creativity:

- Parents believe daughters are more likely than sons to engage and like artistic things, such as arts and crafts (60% compared to 33%, a difference of 27%).
- Parents believe daughters are more likely than sons to build/make things with their hands (53% compared with 48%, a difference of 5%), and more likely to have a vivid imagination (63% compared to 58%, a 5% difference).
- Parents believe sons are more likely than daughters to use toys in ways they were not intended (29% compared with 24%, a difference of 5%).

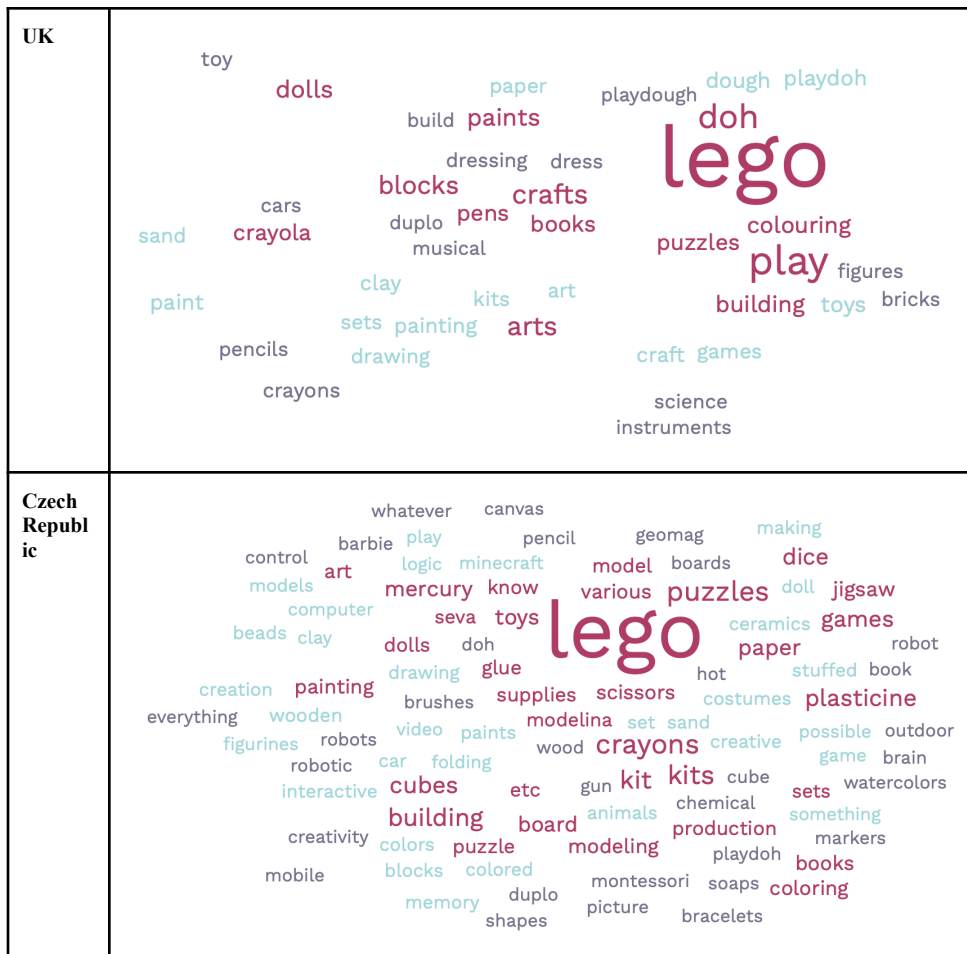
When parents are asked what toys first come to mind when they think about creativity, LEGO is top of mind, across markets. Chart 1 displays open-ended reactions from parents across markets when they are asked, “what comes to mind when you think about creativity for children.”

Chart 1. Parent Opinion - Toys That Promote Creativity (Russia and Poland)

Question wording for parents - "Which toys first come to mind when you think about creativity for children? List them below." [open ended].



Japan	
China	
US	



Note: Translated to English for all countries but Russia and Poland.

We also asked parents and boys/girls about video games and creativity. The vast majority of parents agree that “children develop creativity more offline with physical objects/activities than online/digitally” (81%), and 51% agree that “video games are not a way for children to develop creativity or be creative.” And while 73% of children agreed with the statement, “I am more creative offline with real physical objects/activities than online/digitally,” the vast majority of children (82%) agree with the statement, “I feel creative when playing video games.” Therefore, there is arguably a disconnect between parents’ view about creativity and video games and children’s view. For country level differences, see Appendix B.

When it comes to the activities children say make them feel creative, we find some gender differences on a few activities we polled, but not many (Appendix C reports the country-level differences):

- Boys feel more creative than girls when they’re playing video games (88% compared with 72%).
- Boys feel more creative than girls when they’re at school than when they are at home (54% compared to 49%).

Table 5. Children Opinions - Boys’ and Girls’ Feelings about Creativity

Question wording - “How much do you agree or disagree with the following statements?” Cells report percent who say they “strongly agree” or “somewhat agree.”

Question	Total Markets
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	Son	Daughter	Difference
I feel most creative when I'm imagining stories or pretending to be someone else	76%	80%	-4%
I feel most creative when I'm by myself or playing by myself	64%	66%	-2%
I feel more creative when at school than when at home	54%	49%	5%
I feel most creative when I'm solving problems like puzzles, riddles or mysteries	76%	74%	2%
I feel most creative when exploring and discovering the world around me	86%	84%	2%
I feel most creative when I'm with friends or playing with friends	83%	80%	3%
I feel most creative when experimenting or creating stuff with different ingredients	83%	82%	1%
I feel most creative when I am silly and just let loose	80%	78%	2%
I feel creative when playing video games	88%	72%	16%

However, we find significant differences in how girls and boys see gender roles when it comes to creativity, and we also find that parents' opinions on these statements about gender norms are very similar to their children's opinions (Table 6; see Appendix D for country-level differences). Boys are more likely to agree with traditional gender roles than girls:

- 74% of boys and 62% of girls agree with the statement, "some activities are just meant for girls to do, while others are meant for boys to do."
- 78% of boys and 73% of girls agree with the statement, "it's ok to teach boys to be boys and girls to be girls."

It is worth noting that the majority of both boys and girls agree with this statement, which reflects the power of gender norms in society.

Although these findings suggest that gender norms are powerful, the vast majority of boys and girls also agree with the statement, "it's ok if girls want to play football and boys want to do ballet (71% of boys and 82% of girls agree); 84% of parents also agree with this statement.

Table 6. Parents' and Children's Beliefs about Gender and Play/Activities

	Total Markets		
%Agree	Boys	Girls	Parents
It's ok to teach boys to be boys and girls to be girls	78%	73%	79%

Some activities are just meant for girls to do, while other activities are meant for boys to do.	74%	62%	76%
It's ok if girls want to play football and boys want to do ballet.	71%	82%	84%

When it comes to play, girls are much less likely to worry about being judged or made fun of for playing with toys that are gendered (Table 7; see Appendix E for country-level differences):

- Just 42% of girls, but 71% of boys say they worry about being made fun of if they play with a toy that is meant for the other sex/gender, a 29% difference.

This means that boys feel more pressure to conform to gender norms than girls when it comes to creative activities, with most boys being worried about engaging with toys or activities typically associated with girls.

Table 7. Children Opinions - Gender Differences in Gender Non-Conforming Play and Activities

	Total Markets		
%Agree	Boys	Girls	Difference
I worry I might be made fun of if I play with a toy that boys/girls typically play with.	71%	42%	29%

These attitudes about toys and activities meant for boys/girls are shared by parents. 54% of parents worry that their sons will be made fun of if they play with toys associated with girls. However, only 26% of parents worry their daughters will be made fun of if they play with toys associated with boys. (Table 8; see Appendix F for country-level differences). Moreover, 73% of parents say they encourage their daughters to play with toys that are typically considered for boys, but just 44% of parents actively encourage their sons to play with toys typically considered for girls.

Table 8. Parents' Opinions - Gender Non-Conforming Play and Activities

% Agree	Total Markets
"I worry my son might be made fun of if he plays with toys that girls typically play with."	54%
"I worry my daughter might be made fun of if she plays with toys that boys typically play with."	26%
"I actively encourage my son to also play with toys that are typically considered for girls."	44%
"I actively encourage my daughter to also play with toys that are typically considered for boys."	73%

In sum, boys appear more limited when it comes to imagining the creative activities they can engage in without judgment than girls. Parents' responses also suggest greater restraint when considering their sons' creativity relative to daughters'.

2. Encouraging Creativity

When it comes to which creative activities parents encourage their daughters and sons to engage in, we find stark gender differences (Table 9; see Appendix F for country-level differences). Most notably, parents encourage their daughters to engage in activities that are more cognitive, artistic, and related to performing compared to their sons. Parents especially encourage daughters to engage in the following activities more than sons:

- Dressing up (54% compared with 19%, a difference of 35%)
- Dancing (42% compared with 16%, a difference of 26%)
- Coloring/painting (72% compared with 48%, a difference of 24%)
- Singing (47% compared with 24%, a difference of 23%)
- Arts and crafts (63% compared with 42%, a difference of 21%)
- Cooking/baking (53% compared with 33%, a difference of 20%)

Parents encourage their sons to engage in STEM activities (digital, science, building, tools) and activities that are more physical at a higher rate than daughters. In particular, parents encourage sons more than daughters with the following creative activities:

- Playing fighting/ shooting (33% compared with 13%, a 20% difference)
- Video games (52% compared with 36%, a difference of 16%)
- Learning household tools (36% compared to 20%, a difference of 16%)
- Building models/woodwork (33% compared with 19%, a difference of 13%).

Table 9. Activities Parents Introduce Their Sons/Daughters To

Question wording - "Listed below are activities your son/daughter may or may not do. Select the below activities you have introduced to your son/daughter or encouraged your son/daughter to do."

	Question	Total Markets		
		Son	Daughter	Difference
	Playing fighting, shooting	33%	13%	20%
	Learning household tools (hammers, nails)	36%	20%	16%
	Video games/Console games (e.g., PlayStation, Xbox)	52%	36%	16%
	Building/creating models/woodwork	33%	19%	14%
	Building with building bricks/blocks (e.g., LEGO bricks, Megabloks)	59%	48%	11%
	Mobile apps games (e.g., Animal Crossing, Among Us)	36%	34%	2%
	Play a sport/physical activity	56%	51%	5%
	Program/create mobile/computer games (e.g.,	29%	22%	7%
More sons				

	Roblox, Minecraft)			
No difference between sons and daughters	Exploring the world around	44%	41%	3%
	Science experiments/projects, experimenting or creating with different ingredients	30%	29%	1%
	Playing an instrument	25%	33%	-8%
	Puzzles	52%	54%	-2%
	Playing with coding toys	16%	14%	2%
	Learning a language	33%	39%	-6%
	Digital art (draw/illustrate using apps/computer)(e.g., Doodle apps, Crayola Create and Play, Photoshop)	22%	26%	-4%
	Just “run around”	36%	38%	-2%
	Magic	14%	15%	-1%
	Board games	49%	51%	-2%
	Building a house/ hideout/ den/ stage for play	34%	37%	-3%
	Playing playground games with others	49%	50%	-1%
	Writing (stories, poems, journal, etc.)	23%	37%	-14%
	Making silly faces, noises, postures, tricks, pranks to make others laugh	33%	36%	-3%
	“Make believe”/Pretend play	33%	40%	-7%
More daughters	Reading	52%	60%	-8%
	Acting/Performing/Playing pretend characters	20%	30%	-10%
	Taking pictures/Photography	27%	40%	-13%
	Cooking/baking	33%	53%	-20%
	Knitting/sewing/crocheting	5%	21%	-16%
	Sculpting/molding (e.g., Play-Doh)	34%	46%	-12%
	Playing with character toys, plush toys, dolls or figures	32%	49%	-17%
	Singing	24%	47%	-23%
	Dressing up	19%	54%	-35%
	Arts and Crafts (scissors/glue/materials activities)	42%	63%	-21%
	Coloring/Painting/Drawing	48%	72%	-24%

	Dancing	16%	42%	-26%
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Implicit Bias Test

Differences between what parents introduce their sons and daughters to are more pronounced when parents are forced to decide whether to encourage an activity to a son or a daughter with a version of an implicit bias assessment. This implicit association test assesses the association between creative activities and a child's gender. We find that when parents are forced to choose between encouraging their daughters or their sons to engage in activities, parents encourage daughters to engage in activities that are performance-like or related to the dramatic arts (dancing, singing, acting, dress up, playing an instrument, writing), artistic (coloring, knitting, crafting), and domestic (cooking) (see Chart 2), while parents encourage sons to engage in activities that are related to STEM (digital, science, building/engineering), physicality (sports, running around, play fighting) (see Chart 3). These reactions reflect stereotypical gender roles (see Appendix H for country level differences).

Chart 2. Activities Associated with Daughters

Question wording - "For each activity, indicate if you would encourage it more to a daughter or more to a son, or to both equally. We understand you may not have a son or daughter but imagine if you did. For this exercise, we're interested in your gut reaction, so select the answer that first comes to you without putting too much time into making your choice. [follow up question for activities where parents selected "both equally"] - "And if you had to pick encouraging the below activity more to a daughter or more to a son, which would you pick?"

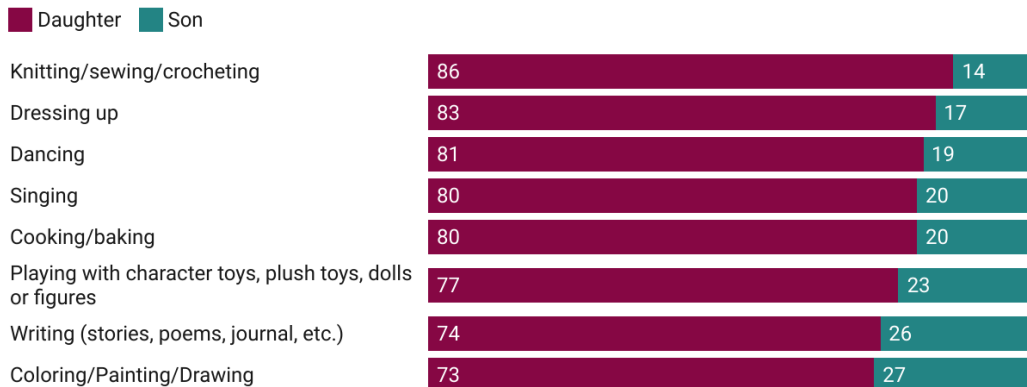
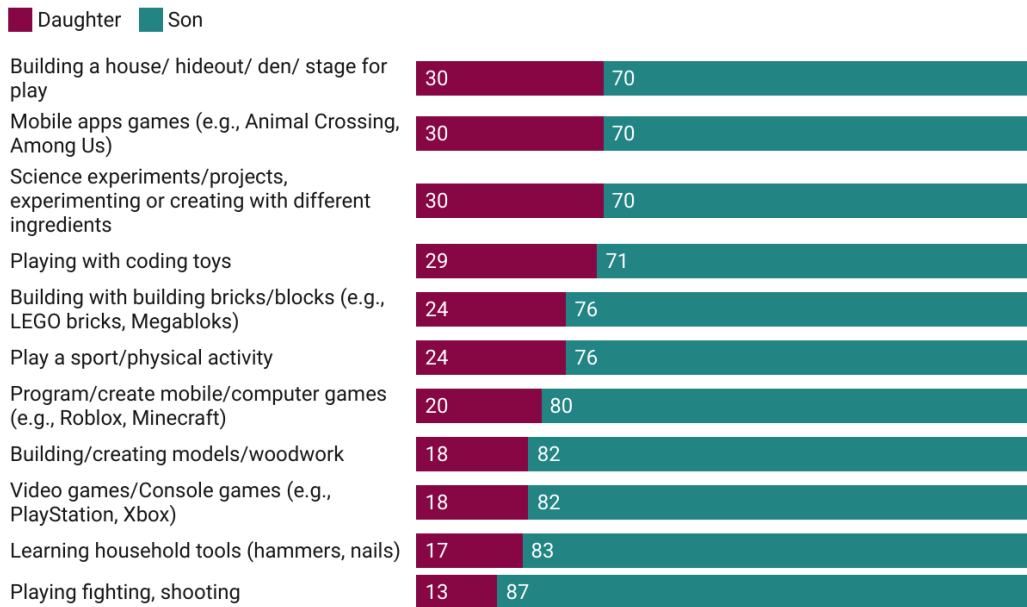


Chart 3. Activities Associated with Sons

Question wording - "For each activity, indicate if you would encourage it more to a daughter or more to a son, or to both equally. We understand you may not have a son or daughter but imagine if you did. For this exercise, we're interested in your gut reaction, so select the answer that first comes to you without putting too much time into making your choice. [follow up question for activities where parents selected "both equally"] - "And if you had to pick encouraging the below activity more to a daughter or more to a son, which would you pick?"



Children's Perceptions

We asked children what activities they like and wish to do, and their responses are gendered in ways that map onto what their parents encourage. This finding suggests that parents have a great deal of influence when it comes to shaping creativity in gendered ways for their daughters and sons. Most notably, we find that girls like the following activities significantly more than boys.

- Dancing (47% compared with 11%)
- Singing (38% compared with 11%)
- Dressing up (36% compared with 9%)
- Coloring, drawing, painting (53% compared with 27%)
- Cooking (41% compared with 19%)

Boys say they are more interested than girls in the following activities:

- Playing fighting/shooting (36% compared with 11%)
- Video games/console games (54% compared with 33%)
- Learning household tools (27% compared with 12%)
- Building/creating models/woodwork (27% compared with 13%)

The Total Markets for all questions/activities and country level analysis is in Appendix I.

3. Perceptions of Creative Professions

When it comes to perceptions of creative professions, we find significant gender bias. For most creative professions, parents overwhelmingly imagine a man, regardless of whether they have a son, daughter, or both. The careers that are associated with women are stereotypically feminine (e.g., design, teaching) or involve a performance component (e.g., dancers, singers) (see Chart 4).

As shown in Chart 5 below, boys and girls express similar levels of gender bias as parents in their perceptions of different creative occupations. Boys and girls envision a man for most creative professions, but girls are more likely than boys to associate women with multiple professions and consider a wider range of professions to be for both women and men. In other words, while most survey respondents see creative professions as being for men, regardless of age or gender, girls are more likely than boys, or parents to see professions as being gender inclusive. Country level analysis is presented in Appendix J, as well as differences between fathers' and mothers' responses.

Chart 4. Gendered Perceptions of Creative Professions - Parent Responses

Question wording - "For each word that appears on the screen, tell us if the first image that pops into your head is of a woman or a man. We're interested in your gut reaction, so select the answer that first comes to you without putting too much time into making your choice. Again, there are no right or wrong answers."

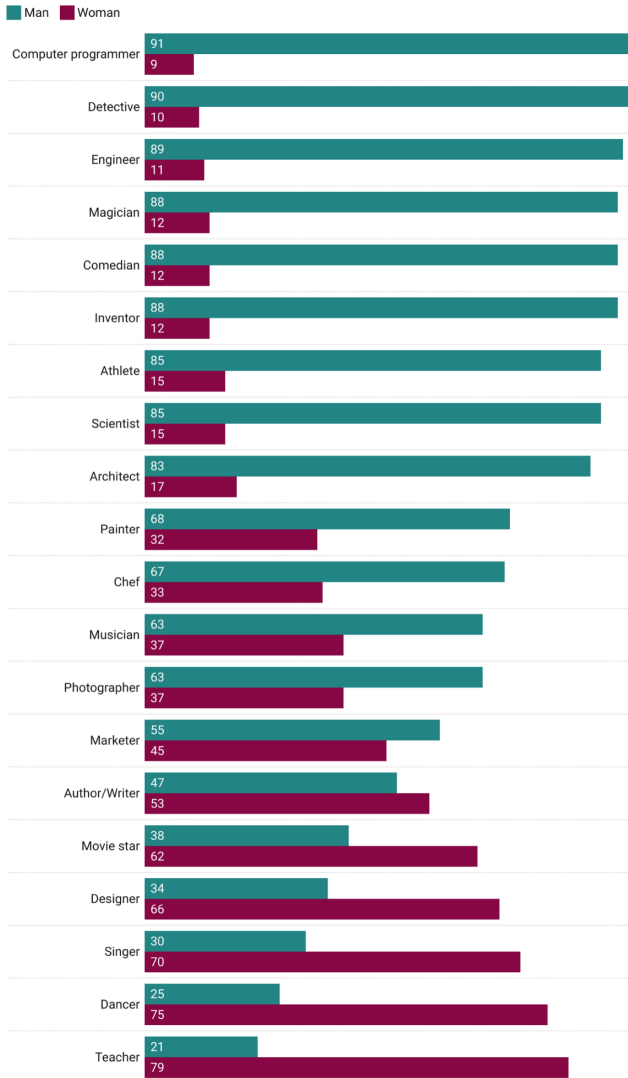
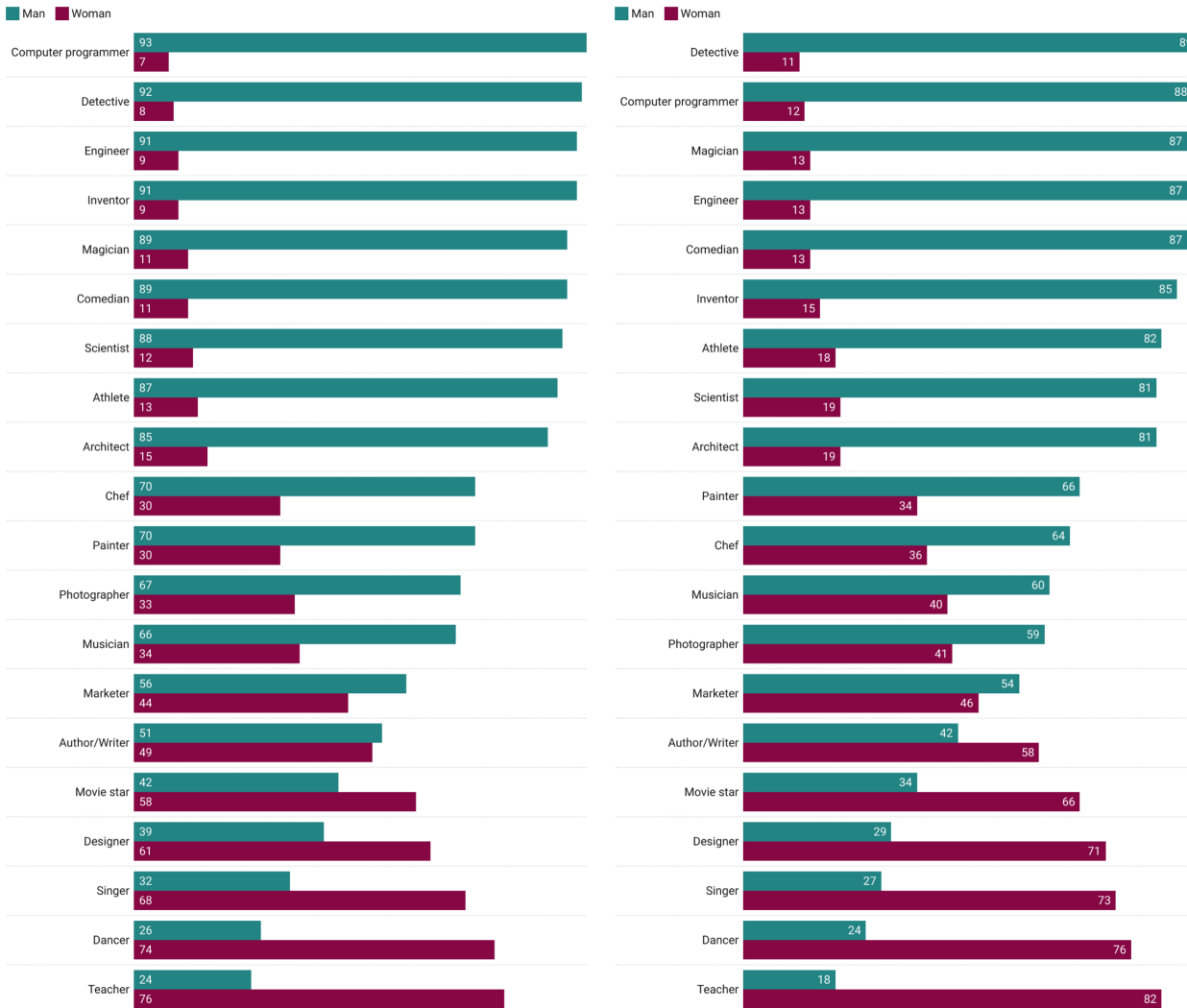


Chart 5. Boys' and Girls' Gendered Perceptions of Creative Professions

Question wording - "For each word that appears on the screen, tell us if the first image that pops into your head is of a woman or a man. We're interested in your gut reaction, so select the answer that first comes to you without putting too much time into making your choice. Again, there are no right or wrong answers."



4. Recommendations from Parents

We asked parents¹³ for ideas about how to make the toy industry more gender inclusive. The following recommendations came up multiple times:

- Stop defining toys for specific genders;
- create toy lines with both girl and boy characters in the same set;
- market toys to all children;
- limit the use of gender stereotypes in marketing; and
- use more neutral colors for the toys, packaging, and marketing.

Many parents mentioned Lego as a good example of a toy brand that is inclusive of all genders because they have many product lines that offer something to both girls and boys, as well as products that are gender neutral.

¹³ This question was asked of parents in the US, UK, Czech Republic, China and Japan; parents in Russia and Poland were not asked this question.

Many parents reported that their sons are missing out due to gender norms and stereotypes. For example, it is much more accepted for daughters to play with toys or do activities that are typically meant “for boys,” while parents and sons are more worried about how it would be perceived if a boy were to play with a girl toy (because being feminine is seen as a negative in every nation surveyed). Parents pointed out that there has been a lot of focus on opening up toys, interests, and entertainments to girls/daughters, but there has been less of a focus on shifting gender norms for sons to plan in expansively creative ways. Parents see toy companies as playing a vital role in challenging traditional gender norms and stereotypes that limit boys.

Recommendations

Children’s environments are saturated with messages and visual cues that girls and boys enjoy different creative activities. And academic studies show that parents (even egalitarian parents) steer their children toward gender stereotypical activities¹⁴, especially boys¹⁵. However, according to our survey, when asked what makes them feel creative, boys’ and girls’ responses are broadly similar across markets, with the exception of video games, which boys favor. This suggests that boys and girls enjoy doing a lot of the same creative things (see Table 5).

However, the findings from the survey also suggest that once gender norms are invoked, girls across markets are less compelled to uphold them, than boys. In short, girls want to do activities associated with boys and are less worried about being made fun of if they do. The same is not true for boys, who express reservations about rejecting gender norms and are fearful of being made fun of if they engage in activities associated with girls (a fear shared by their parents).

This is possibly a result of at least two contributing factors:

- Girls have been empowered (by parents, media etc.) to take on activities and behaviors associated with boys and men.
- Activities and behaviors associated with men are valued more highly, socially.

How can LEGO Brand cultivate creativity in boys and girls, and encourage parents to introduce both their sons and daughters to creating with LEGO, and also mitigate the social stigma that leads boys to express their creativity in more limited fashion?

- If toys are explicitly marketed to boys or girls, these toys can challenge gender norms. For example, create play narratives of fashion/beauty, or nurturing/caregiving in bright colored LEGO sets (as opposed to pink or purple LEGO sets). Create play narratives of heroism and expertise in pink and purple LEGO sets (e.g. Super Hero Girls High School).
- In marketing materials, show girls using sets that are more associated with boys, and show boys using sets that are more associated with girls. Include parents’ encouragement, as well.

¹⁴ Weisgram, E. S., & Bruun, S. T. (2018). Predictors of gender-typed toy purchases by prospective parents and mothers: The roles of childhood experiences and gender attitudes. *Sex Roles*, 79, 342–357.

¹⁵ Halpern, H. P., & Perry-Jenkins, M. (2016). Parents’ gender ideology and gendered behavior as predictors of children’s gender-role attitudes: A longitudinal exploration. *Sex Roles*, 74, 527–542.

- Include female figurines as the main character in LEGO sets associated with boys, and include male figurines as the main character in LEGO sets associated with girls.

While gender neutral toys are one way to broaden the appeal of LEGO sets to parents and boys and girls, LEGO sets that are gendered can also be marketed more broadly to boys and girls, and in ways that eliminate a hierarchy of creative expression -- nurturing/caregiving and expertise/heroism are both valuable behaviors that boys *and* girls should be encouraged to emulate.

Content Analysis Findings

We now turn to an assessment of the content analysis findings.

Public Discourse Dataset

Female creatives are nearly as likely to be featured as male creatives in Public Discourse articles from 2020, but men do outnumber women -- 47 percent of creatives featured are women while 53 percent are men. Men are also more likely to be mentioned first in articles that feature more than one creative individual (54 percent compared to 45 percent¹⁶).

Table 10 breaks down age representation by gender. Female creatives are most likely to be between the ages of 20 and 49 (58%); 16% are over 50 years old and 6% are under 20 years old. Male creatives are also most likely to be between the ages of 20 and 49 (49%), but more male creatives than female creatives are over 50 years old (30%); just 2% are under 20 years old.

Creatives featured in Public Discourse are overwhelmingly white (65 percent), but gender differences emerge -- 59% of female creatives are white compared to 72% of male creatives in news articles about creativity. The race and/or ethnicity of female creatives is less likely to be specified than male creatives.

Table 10. Who's "Creative" In News Articles?

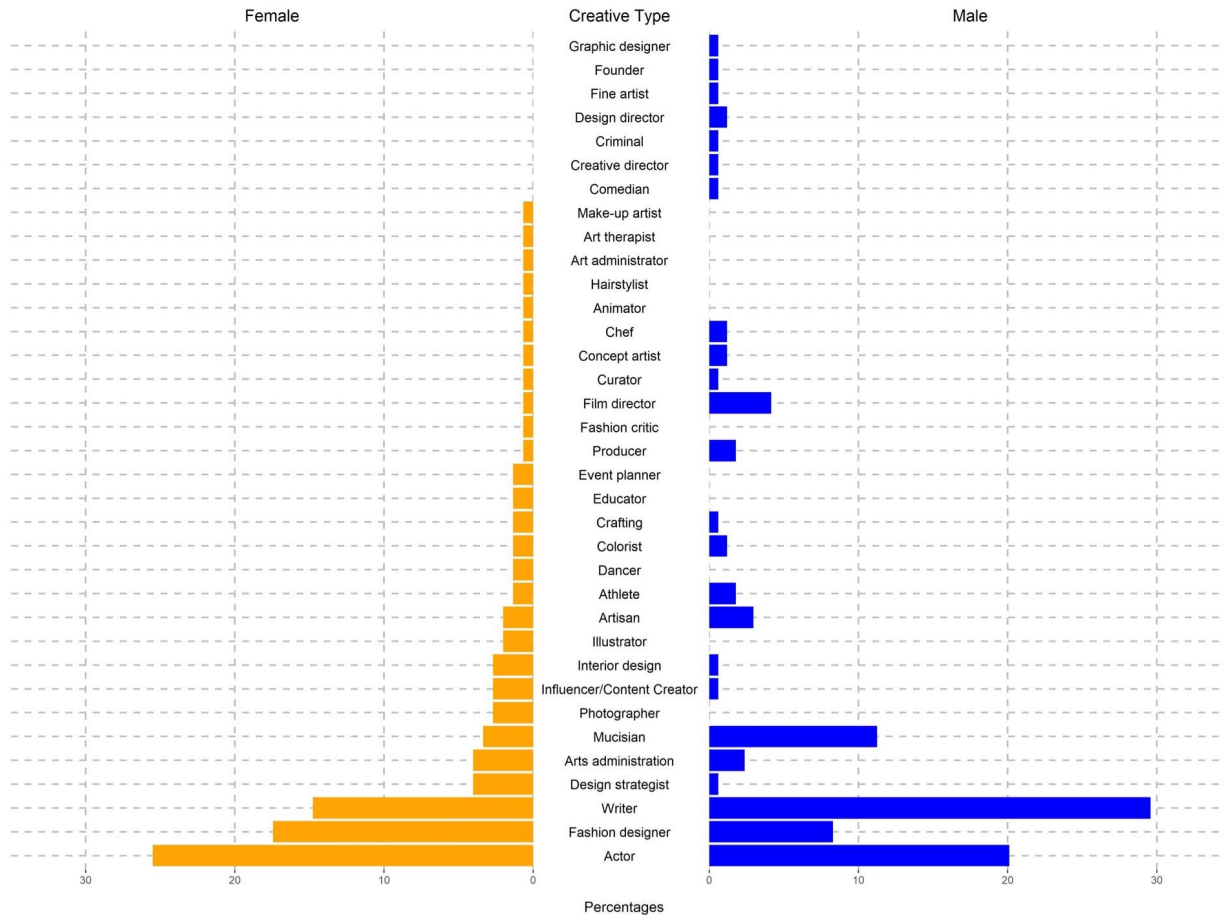
	Female Creatives	Male Creatives
Total	47%	53%
Age		
Under 20	6%	2%
20-49	58%	49%
50+	16%	30%
Age Unspecified	20%	19%
Race/Ethnicity		
White	59%	72%
Black	11%	11%
Asian	7%	4%
Unspecified	20%	11%
Other*	3%	2%

*Other includes Latin, Indian, Middle Eastern, and Native/Indigenous or Pacific Islander.

¹⁶ One percent of creatives' gender was not identifiable.

A variety of creative types are covered in Public Discourse about creativity and creative endeavors. However, some gender differences do emerge.

Chart 6. Creative Endeavors in News Articles



As shown in Chart 6, male creatives featured in Public Discourse are more likely to be writers (30% compared to 15%), musicians (11% compared to 3%), and film directors (5% compared to 1%), than women. Female creatives are more likely to be fashion designers (17% compared to 8%), actors (26% compared to 20%) and design strategists (4% compared to 1%).

Public Discourse also occasionally includes images of the creatives being featured. According to our analysis, female creatives are more likely to be featured visually in Public Discourse than male creatives -- 57 percent of female creatives were visually shown compared to 44 percent of male creatives. While this elevates female creatives and gives readers an opportunity to envision women in creative roles, it could reinforce that women are more valued for their physical appearance (Table 11).

We note this caveat, given that male creatives are more likely to be mentioned in headlines compared to female creatives; twenty-seven percent of female creatives featured in Public Discourse are mentioned in headlines compared to 33 percent of male creatives featured in Public Discourse (Table 11).

Table 11. Visual Prominence of Male and Female Creatives in News Articles

	Female Creatives	Male Creatives	Difference
Visual Prominence	57%	44%	+13%
Headline Mentioned	27%	33%	-6%

How does Public Discourse portray creatives? Media can describe creatives in a number of ways, and as reviewed above these descriptions can reinforce stereotypes about men's and women's creativity and contribute to notions that box men and women in. We consider coverage of creatives through the agency and communion framework, as it is a relevant framework for understanding occupations, leadership and gender. A creative described as agentic is self-directed, self-reliant, risk-taking and generally independent. A creative described as communal is socially sensitive, affectionate, altruistic, and works with others.

In Public Discourse about creatives, 79 percent of women are described as agentic, and 79 percent of men are described as agentic. Therefore, agency descriptions are applied similarly to male and female creatives. On communion, 80 percent of women are described as communal compared to 76 percent of men. These differences are not statistically significant, and suggest that Public Discourse portrayals of male and female creatives are similar on these dimensions in news media, and that creatives are portrayed as multifaceted. Moreover, agentic and communal depictions are similar in number -- in other words, portrayals of creatives in Public Discourse, regardless of gender, do not favor agency over communion, which is a positive finding for broadening ideas about creativity and creative thinking (Table 12).

Table 12. Agentic and Communal Descriptions of Creatives

	Female Creatives	Male Creatives	Difference
Agentic	79%	79%	0%
Communal	80%	76%	+4%

More specifically, what are the words used in Public Discourse to describe male and female creatives? As displayed in Table 13, both male and female creatives are most likely to be described in gender neutral terms (87% compared to 77%). However, 17 percent of words used to describe female creatives were feminine, compared to just 5 percent of words used to describe male creatives. Six percent of words used to describe female creatives were masculine compared to 8 percent of words used to describe male creatives. Although most words used to describe women are not feminine terms, women are more likely to be described as feminine than men (17% compared to 5%). Chart 7 presents the full list of descriptions of male and female creatives in news articles. Blue terms are more commonly used to describe men, while yellow terms are more commonly used to describe women; gray terms are used to describe men and women in equal numbers.

	Female Creatives	Male Creatives	Difference
Feminine	17%	5%	+12%
Masculine	6%	8%	-2%
Neutral	87%	77%	+10%

As shown in Chart 7, the most common words used to describe the creatives featured in Public Discourse are “creator” and “creative.” However, men are labeled as “creator” while women are labeled as “creative.” While both are positive terms, “creator” implies greater agency, and therefore potentially reinforces the idea that men are creators (leaders) and women are creative. Additional agentic words displayed in Chart 7 associated with male creatives include “genius,” “founder,” “(super)star,” and “director.” Communal words associated with female creatives include “helpful,” “loving,” and “mother.” Taken together, the terms and traits used to describe male and female creatives in Public Discourse do reflect gender stereotypes, and agency and communion dimensions of creativity.

(super)star helpful Danish stunning personal comedian impressive stealing the show passionate key chic Award-winning loving gazing actress/actor inspired influential director founder designer genius co-creator professional healthy writer favorite sweet savvy apologizing hero threat joy wielding British cool artist lucky cheeky owner mother iconic revered headliner skilled innovative talented frustrated friend rapper 27-year-old

Parenting Blog Dataset

Female creatives are much more likely to be featured than male creatives in Parenting Blog articles -- 61 percent of creatives featured are women while 35 percent of featured creatives are men.¹⁷ Women are also more likely to be mentioned first in articles that feature more than one creative individual (68 percent of creatives mentioned first are women compared to 29 percent who are men¹⁸).

Table 14. Who's a "Creative" In Parenting Blogs

	Female Creatives	Male Creatives
Total	61%	35%
Age		
Under 20	18%	11%
20-49	47%	29%
50+	10%	34%
Age Unspecified	25%	26%
Race/Ethnicity		
White	66%	66%
Black	3%	3%
Asian	2%	0%
Unspecified	23%	31%
Other*	6%	0%

*Other includes Latinx, Indian, Middle Eastern, and Native/Indigenous or Pacific Islander.

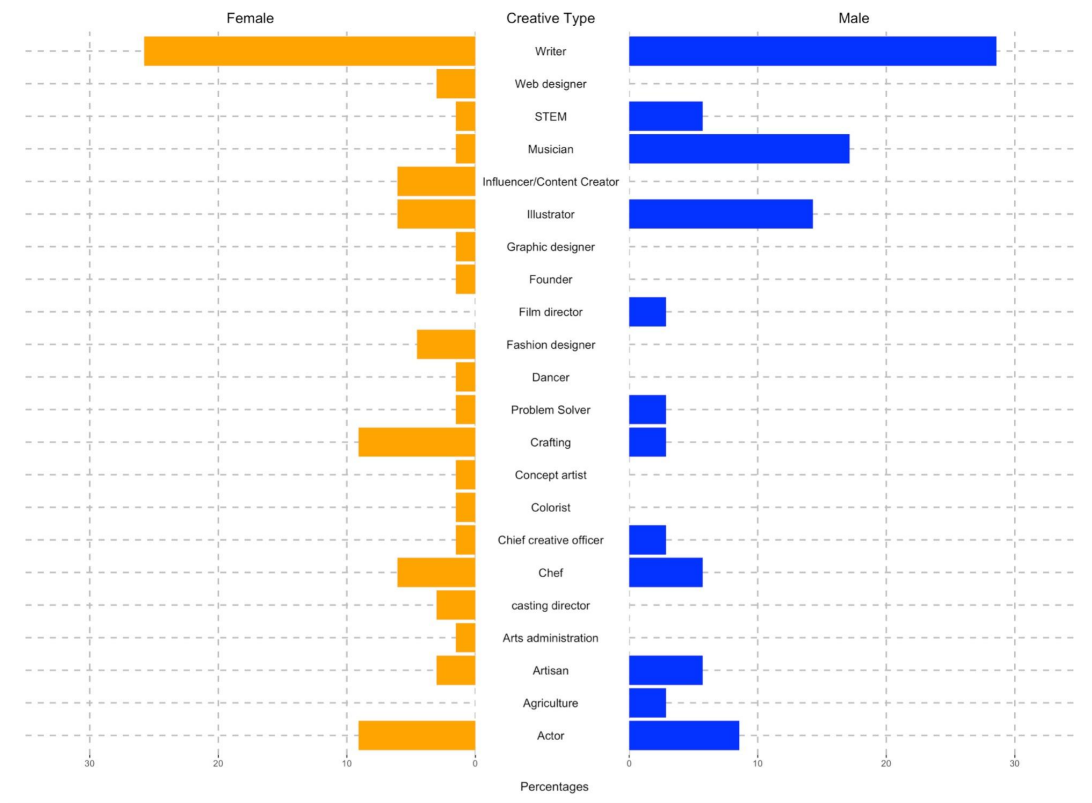
Broadly, parenting blogs are more likely to feature younger creatives than Public Discourse. Sixteen percent of the creatives featured on Parenting Blogs were children or teens (compared to just 3 percent of all creatives in Public Discourse). Thirty-nine percent of creatives featured on Parenting Blogs were aged 20 to 49, and 18 percent were aged 50 and older (26 percent of creatives' ages was undetermined). Looking at gender differences, men under 20 are more commonly featured than women under 20 in Parenting Blogs about creativity. However, men over 50 are much more likely to be featured in Parenting Blogs compared to women over 50 (34% compared to 10%). Among female creatives, the most common are women ages 20 to 49 (47% of all female creatives featured).

Female and male creatives featured in Parenting Blogs are overwhelmingly white (66%). Female creatives are slightly more racially diverse, but largely the race/ethnicity of female and male creatives in Parenting Blogs are similar.

¹⁷ Four percent of creatives' gender was not identifiable.

¹⁸ One percent of creatives' gender was not identifiable.

Chart 8. Creative Endeavors in Parenting Blogs



As shown in Chart 8, male creatives featured in Parenting Blogs are more likely to be illustrators (14% compared to 6%), musicians (17% compared to 1%), and in STEM fields (6% compared to 1%), than female creatives. Female creatives are more likely to be crafters (10% compared to 3%), fashion designers (4% compared to 0%) and social media “influencers” (6% compared to 0%).

Who is shown in Parenting Blogs about creatives? Female creatives are more than twice as likely to be featured visually in Parenting Blogs than male creatives -- 39 percent of female creatives were visually shown compared to just 14 percent of male creatives (Table 15).

Table 15. Visual Prominence of Male and Female Creatives in Parenting Blogs

	Female Creatives	Male Creatives	Difference
Visual Prominence	39%	14%	+25%
Headline Mentioned	10%	17%	-7%

But male creatives are more likely to be mentioned in Parenting Blog headlines compared to female creatives; ten percent of female creatives featured in Parenting Blogs are mentioned in headlines compared to 17 percent of male creatives featured in Parenting Blogs. So, while Parenting Blogs feature

more women overall and women are visually more prominent, when men are featured they are more likely to appear in headlines (Table 15).

How do Parenting Blogs portray creatives? Seventy-nine percent of women are described as agentic, compared to 74 percent of men, a small difference that is statistically significant. Eighty-four percent of female creatives are described as communal compared to 71 percent of men are described as communal, a difference that is statistically significant. Thus, on Parenting Blogs female creatives are portrayed as more agentic and also more communal than male creatives. *Prima facie*, this finding seems contradictory (how can one be both agentic and communal?). Nevertheless, in our sample, women in parenting blogs were often agentic (e.g., creating crafts and inventing games on their own), while also being communal--as the purpose of their agency (creations) was almost always directed at their children, their family, or to help other parents. Therefore, our finding that women were both agentic and communal is not at all puzzling, rather it is consistent with the content of the majority of our parenting blogs in our sample. Furthermore, this finding shows that the terms agency and communal are not necessarily mutually exclusive. As such, parents and the media need not have to choose between agentic or communal when describing a toy or parent--for one can have agency (be an inventor) while also having a communal purpose (e.g., inventing a toy to make their family life more exciting).

Table 16. Agentic and Communal Descriptions of Creatives

	Female Creatives	Male Creatives	Difference
Agentic	79%	74%	+5%
Communal	84%	71%	+13%

What words do Parenting Blogs use to describe male and female creatives? As displayed in Table 17, in Parenting Blogs, both male and female creatives are most likely to be described in gender neutral terms (79% compared to 78%). However, 20 percent of words used to describe female creatives were feminine, compared to 8 percent of words used to describe male creatives. Only 2 percent of words used to describe female creatives were masculine compared to 13 percent of words used to describe male creatives. Although most words used to describe women are not feminine terms, women are more likely to be described as feminine than men (20% compared to 8%), and much less likely to be described with masculine words (2% compared to 13%). Chart 9 presents the full list of descriptions of male and female creatives in parenting blogs.

Table 17. Gendered Descriptions of Creatives

	Female Creatives	Male Creatives	Difference
Feminine	20%	8%	+12%
Masculine	2%	13%	-9%
Neutral	78%	79%	-1%

Notes: Chart displays percent of words used to describe male and female creatives that fall within these categories.

As shown in Chart 9, common terms used to describe male creatives are agentic - “(super)star,” and “genius.” Terms used to describe female creatives in Parenting Blogs are communal and relational - “mother,” “sister,” and “twin.”

Chart 9. Descriptions of Female and Male Creatives in Parenting Blogs



Note: Blue words are more likely to be used to describe men; yellow words are more likely to be used to describe women. Gray words are used to describe men and women in equal numbers.

Creatives in Media

Public Discourse is more likely than Parenting Blogs to feature creative professionals from a broad set of backgrounds and fields. And while women and men are both depicted as agentic and communal in Public Discourse, the specific adjectives and descriptors applied to male and female creatives do reflect gender norms, with women being described as more feminine (loving, charming, helpful), and men described as more masculine (genius, ambitious, innovative). Moreover, men’s depiction as “creator” and women’s depictions as “creative” stand out as a major discrepancy in media coverage. Although Parenting Blogs feature fewer creative professionals, when they do feature creatives, they are more likely to feature women compared to men. That said, in Parenting Blogs, women’s descriptions are relational -- mother, sister -- while men are super stars and geniuses. Taken together, female creatives are visible in media coverage about creatives, but this coverage likely reinforces existing notions of creative thinking as a male and masculine pursuit.

Appendix A.

Parent Response - How Child Displays Creativity, by Gender - Country Level

Question wording - “Which of the following, if any, best describes how your [son/daughter] is creative?”

	US			UK		
	Son	Daughter	Difference	Son	Daughter	Difference
Is artistic/likes artistic things (art, crafts)	48%	84%	-36%	41%	69%	-28%
Makes/builds things with his/her hands	59%	58%	1%	52%	50%	2%
Has a vivid imagination	65%	65%	0%	54%	64%	-11%
Approaches things differently than would be expected	33%	33%	0%	29%	27%	1%
Has a unique perspective/viewpoint of things	49%	49%	1%	36%	43%	-7%
Plays with toys not in the way they were intended	27%	25%	2%	22%	24%	-2%
Creates new games on his/her own	42%	42%	0%	42%	40%	2%
Constantly exploring new things	50%	55%	-5%	42%	42%	0%
Is curious about things he/she doesn't know	61%	64%	-4%	57%	58%	-1%
Questions the norm	32%	35%	-4%	31%	35%	-4%
Has a unique sense of humor	53%	52%	1%	51%	50%	1%

Applies logic to solve problems his/her own way	44%	46%	-2%	37%	39%	-2%
Feels comfortable with the unknown	28%	27%	1%	24%	26%	-3%

	Czech Republic			China		
	Son	Daughter	Difference	Son	Daughter	Difference
Is artistic/likes artistic things (art, crafts)	33%	64%	-31%	25%	42%	-18%
Makes/builds things with his/her hands	40%	66%	-26%	55%	52%	3%
Has a vivid imagination	62%	60%	2%	63%	58%	4%
Approaches things differently than would be expected	26%	27%	-1%	28%	28%	0%
Has a unique perspective/viewpoint of things	41%	41%	0%	43%	46%	-3%
Plays with toys not in the way they were intended	26%	23%	3%	51%	38%	14%
Creates new games on his/her own	43%	45%	-2%	34%	31%	3%
Constantly exploring new things	37%	38%	-2%	50%	49%	1%
Is curious about things he/she doesn't know	40%	34%	6%	44%	48%	-4%
Questions the norm	17%	12%	5%	18%	17%	2%

Has a unique sense of humor	31%	27%	3%	19%	19%	0%
Applies logic to solve problems his/her own way	57%	46%	11%	34%	33%	1%
Feels comfortable with the unknown	31%	32%	-1%	20%	18%	1%

	Japan		
	Son	Daughter	Difference
Is artistic/likes artistic things (art, crafts)	30%	42%	-13%
Makes/builds things with his/her hands	28%	39%	-11%
Has a vivid imagination	36%	41%	-5%
Approaches things differently than would be expected	19%	19%	0%
Has a unique perspective/viewpoint of things	33%	33%	0%
Plays with toys not in the way they were intended	24%	18%	5%
Creates new games on his/her own	19%	12%	7%
Constantly exploring new things	9%	8%	1%
Is curious about things he/she doesn't know	33%	27%	7%
Questions the norm	13%	16%	-2%
Has a unique sense of humor	33%	32%	1%
Applies logic to solve problems his/her own way	13%	10%	3%
Feels comfortable with the unknown	9%	7%	3%

Question	Russia			Poland		
	Son	Daughter	Difference	Son	Daughter	Difference
Is artistic/likes artistic things (art, crafts)	27%	51%	-24%	32%	66%	-34%
Has a vivid imagination	61%	76%	-15%	66%	71%	-5%
Has a unique sense of humor	22%	27%	-5%	38%	34%	4%
Makes/builds things with his/her hands	45%	50%	-5%	53%	53%	0%
Has a unique perspective/viewpoint of things	36%	41%	-5%	36%	39%	-3%
Is curious about things he/she doesn't know	53%	56%	-3%	48%	40%	8%
Questions the norm	13%	11%	2%	16%	12%	4%
Creates new games on his/her own	54%	51%	3%	66%	63%	3%
Approaches things differently than would be expected	41%	37%	4%	28%	32%	-4%
Constantly exploring new things	50%	46%	4%	45%	44%	1%
Plays with toys not in the way they were intended	24%	19%	5%	28%	24%	4%
Feels comfortable with the unknown	31%	26%	5%	39%	36%	3%
Applies logic to solve problems his/her own way	46%	39%	7%	42%	44%	-2%

Appendix B.

Parents' and Children's Ideas About Creativity (Online/Offline) - Country Level

Parents

Question wording - "Children develop creativity more offline with physical objects/activities than online/digitally."

	Total Markets	US	UK	Czech Republic	China	Japan	Russia	Poland
Strongly Agree	32%	31%	32%	34%	37%	23%	38%	30%
Somewhat Agree	49%	46%	49%	50%	53%	57%	47%	43%
Don't Really Agree	16%	20%	18%	14%	9%	20%	13%	22%
Don't Agree At All	2%	4%	1%	1%	1%	1%	2%	4%

Question wording - "Video games are not a way for children to develop creativity or be creative."

	Total Markets	US	UK	Czech Republic	China	Japan	Russia	Poland
Strongly Agree	15%	16%	15%	14%	15%	9%	16%	17%
Somewhat Agree	36%	28%	34%	46%	33%	41%	38%	35%
Don't Really Agree	39%	39%	41%	33%	44%	44%	34%	39%
Don't Agree At All	10%	18%	9%	7%	9%	7%	12%	8%

Children

Question wording - "I am more creative offline with real physical objects/activities than online/digitally."

	Total Markets	US	UK	Czech Republic	China	Japan	Russia	Poland
Strongly Agree	27%	29%	26%	25%	27%	18%	32%	29%
Somewhat Agree	46%	43%	44%	46%	60%	54%	37%	44%
Don't Really Agree	23%	24%	26%	25%	12%	25%	24%	22%
Don't Agree At All	4%	5%	4%	5%	1%	3%	8%	6%

Question wording - "I feel creative playing video games."

	Total Markets	US	UK	Czech Republic	China	Japan	Russia	Poland
Strongly Agree	38%	43%	40%	39%	40%	28%	48%	28%
Somewhat Agree	44%	41%	43%	40%	53%	46%	36%	53%
Don't Really Agree	15%	13%	14%	18%	8%	22%	12%	16%
Don't Agree At All	3%	3%	2%	3%	0%	4%	4%	4%

Appendix C.

Boys' and Girls' Feelings about Creativity - Country-Level

Question wording - "How much do you agree or disagree with the following statements?" Cells report percent who say they "strongly agree."

US	Boys	Girls	Difference
I am more creative offline with real physical objects/activities than online/digitally	31	26	5
I feel creative when playing video games	53	30	23
I feel more creative when at school than when at home	17	10	7
I feel most creative when I'm with friends or playing with friends	31	27	4
I feel most creative when I'm by myself or playing by myself	26	23	3
I feel most creative when I'm solving problems like puzzles, riddles or mysteries	25	21	4
I feel most creative when exploring and discovering the world around me	43	35	8
I feel most creative when experimenting or creating stuff with different ingredients	43	36	7
I feel most creative when I'm imagining stories or pretending to be someone else	28	34	-6
I feel most creative when I am silly and just let loose	37	36	1

UK	Boys	Girls	Difference
I am more creative offline with real physical objects/activities than online/digitally	25	27	-2
I feel creative when playing video games	45	30	15
I feel more creative when at school than when at home	19	23	-4
I feel most creative when I'm with friends or playing with friends	33	32	1
I feel most creative when I'm by myself or playing by myself	25	23	2
I feel most creative when I'm solving problems like puzzles, riddles or mysteries	22	23	-1
I feel most creative when exploring and discovering the world around me	31	33	-2
I feel most creative when experimenting or creating stuff with different ingredients	31	40	-9
I feel most creative when I'm imagining stories or pretending to be someone else	29	34	-5
I feel most creative when I am silly and just let loose	30	32	-2

Czech Republic	Boys	Girls	Difference
I am more creative offline with real physical objects/activities than online/digitally	25	25	0
I feel creative when playing video games	47	20	27
I feel more creative when at school than when at home	18	12	6
I feel most creative when I'm with friends or playing with friends	38	25	13
I feel most creative when I'm by myself or playing by myself	24	24	0
I feel most creative when I'm solving problems like puzzles, riddles or mysteries	24	17	7
I feel most creative when exploring and discovering the world around me	26	19	7
I feel most creative when experimenting or creating stuff with different ingredients	25	29	-4
I feel most creative when I'm imagining stories or pretending to be someone else	28	30	-2
I feel most creative when I am silly and just let loose	35	34	1

China	Boys	Girls	Difference
I am more creative offline with real physical objects/activities than online/digitally	29	24	5
I feel creative when playing video games	43	32	11
I feel more creative when at school than when at home	22	21	1
I feel most creative when I'm with friends or playing with friends	36	34	2
I feel most creative when I'm by myself or playing by myself	18	18	0
I feel most creative when I'm solving problems like puzzles, riddles or mysteries	30	28	2
I feel most creative when exploring and discovering the world around me	43	32	11
I feel most creative when experimenting or creating stuff with different ingredients	32	22	10
I feel most creative when I'm imagining stories or pretending to be someone else	29	32	-3
I feel most creative when I am silly and just let loose	47	44	3

Japan	Boys	Girls	Difference
I am more creative offline with real physical objects/activities than online/digitally	18	19	-1
I feel creative when playing video games	38	16	22
I feel more creative when at school than when at home	12	14	-2
I feel most creative when I'm with friends or playing with friends	22	20	2
I feel most creative when I'm by myself or playing by myself	23	19	4
I feel most creative when I'm solving problems like puzzles, riddles or mysteries	17	16	1
I feel most creative when exploring and discovering the world around me	15	12	3
I feel most creative when experimenting or creating stuff with different ingredients	24	21	3
I feel most creative when I'm imagining stories or pretending to be someone else	16	19	-3
I feel most creative when I am silly and just let loose	21	16	5

Question	Russia			Poland		
	Son	Daughter	Difference	Son	Daughter	Difference
I feel most creative when I'm imagining stories or pretending to be someone else	75%	80%	-5%	78%	80%	-2%
I feel most creative when I'm by myself or playing by myself	60%	62%	-2%	50%	57%	-7%
I feel more creative when at school than when at home	49%	50%	-1%	53%	43%	10%
I feel most creative when I'm solving problems like puzzles, riddles or mysteries	81%	81%	0%	85%	79%	6%
I feel most creative when exploring and discovering the world around me	84%	84%	0%	90%	88%	2%
I feel most creative when I'm with friends or playing with friends	90%	88%	2%	86%	82%	4%
I feel most creative when experimenting or creating stuff with different ingredients	88%	86%	2%	82%	76%	6%
I feel most creative when I am silly and just let loose	60%	56%	4%	89%	89%	0%
I feel creative when playing video games	89%	71%	18%	88%	67%	21%

Appendix D.

Gender Differences in Gender Non-Conforming Play and Activities Among Children - County Level

Question wording - “It’s ok to teach boys to be boys and girls to be girls.”

	Total Markets		US		UK		Czech Republic		China		Japan		Russia		Poland	
	boys	girls	boys	girls	boys	girls	boys	girls	boys	girls	boys	girls	boys	girls	boys	girls
Strongly Agree	36%	29%	45%	30%	27%	25%	40%	31%	24%	16%	9%	13%	70%	60%	38%	23%
Somewhat Agree	42%	44%	36%	50%	46%	39%	41%	45%	53%	51%	55%	53%	22%	28%	45%	45%
Don't Really Agree	16%	19%	12%	15%	21%	27%	12%	17%	20%	24%	29%	26%	6%	8%	13%	21%
Don't Agree At All	6%	7%	7%	5%	6%	9%	7%	7%	4%	9%	7%	7%	3%	4%	5%	11%

Question wording - “Some activities are just meant for girls to do, while other activities are meant for boys to do.”

	Total Markets		US		UK		Czech Republic		China		Japan		Russia		Poland	
	boys	girls	boys	girls	boys	girls	boys	girls	boys	girls	boys	girls	boys	girls	boys	girls
Strongly Agree	26%	18%	29%	13%	19%	16%	44%	26%	17%	9%	23%	26%	49%	32%	31%	17%
Somewhat Agree	46%	43%	41%	39%	44%	32%	36%	44%	54%	45%	58%	60%	34%	38%	44%	43%
Don't Really Agree	20%	26%	23%	30%	23%	29%	14%	20%	23%	36%	15%	13%	12%	20%	20%	23%
Don't Agree At All	7%	13%	7%	18%	14%	22%	6%	10%	6%	10%	3%	2%	6%	10%	6%	17%

Question wording - “It’s ok if girls want to play football and boys want to do ballet.”

	Total Markets		US		UK		Czech Republic		China		Japan		Russia		Poland	
	boys	girls	boys	girls	boys	girls	boys	girls	boys	girls	boys	girls	boys	girls	boys	girls
Strongly Agree	31%	47%	34%	51%	42%	65%	17%	38%	20%	21%	41%	45%	31%	51%	31%	54%
Somewhat Agree	40%	35%	37%	36%	36%	25%	38%	33%	53%	55%	46%	38%	29%	28%	43%	36%
Don't Really Agree	20%	14%	19%	11%	18%	8%	31%	21%	21%	20%	11%	13%	23%	16%	18%	8%
Don't Agree At All	9%	4%	10%	2%	4%	2%	14%	8%	6%	3%	2%	4%	18%	5%	8%	2%

Appendix E.

Fear of Judgment for Gender Non-Conforming Play and Activities Among Boys/Girls - County Level

Children

Question wording - "I worry I might be made fun of if I play with a toy that boys/girls typically play with."

	Total Markets		US		UK		Czech Republic		China		Japan		Russia		Poland	
	boys	girls	boys	girls	boys	girls	boys	girls	boys	girls	boys	girls	boys	girls	boys	girls
Strongly Agree	31%	13%	28%	10%	32%	15%	38%	9%	23%	12%	23%	10%	44%	18%	33%	14%
Somewhat Agree	40%	29%	39%	23%	40%	27%	43%	31%	41%	28%	48%	39%	30%	28%	42%	29%
Don't Really Agree	21%	33%	21%	30%	21%	37%	14%	30%	29%	37%	24%	36%	17%	29%	18%	31%
Don't Agree At All	8%	26%	13%	37%	8%	21%	5%	29%	7%	24%	5%	15%	9%	26%	7%	26%

Appendix F.

Fear of Judgment for Gender Non-Conforming Play and Activities Among Parents - County Level

Question wording - “I worry my **daughter** might be made fun of if she plays with toys that boys typically play with.”

	Total Markets	US	UK	Czech Republic	China	Japan	Russia	Poland
Strongly Agree	6%	7%	6%	4%	7%	5%	7%	7%
Somewhat Agree	20%	11%	22%	18%	18%	28%	27%	15%
Don't Really Agree	42%	39%	43%	42%	47%	43%	40%	39%
Don't Agree At All	32%	43%	29%	36%	27%	23%	26%	39%

Question wording - “I worry my **son** might be made fun of if he plays with toys that girls typically play with.”

	Total Markets	US	UK	Czech Republic	China	Japan	Russia	Poland
Strongly Agree	15%	19%	16%	8%	12%	9%	29%	13%
Somewhat Agree	39%	32%	44%	42%	34%	43%	36%	44%
Don't Really Agree	33%	33%	27%	39%	41%	36%	25%	31%
Don't Agree At All	12%	16%	13%	11%	12%	11%	10%	12%

Question wording - “I actively encourage my **son** to play with toys that are typically considered for girls.”

	Total Markets	US	UK	Czech Republic	China	Japan	Russia	Poland
Strongly Agree	11%	23%	21%	6%	23%	7%	9%	11%
Somewhat Agree	33%	32%	46%	34%	48%	40%	21%	30%
Don't Really Agree	40%	32%	27%	47%	27%	46%	39%	42%
Don't Agree At All	15%	13%	6%	13%	3%	7%	31%	18%

Question wording - “I actively encourage my **daughter** to play with toys that are typically considered for boys.”

	Total Markets	US	UK	Czech Republic	China	Japan	Russia	Poland
Strongly Agree	24%	33%	36%	18%	22%	12%	16%	20%
Somewhat Agree	49%	50%	44%	45%	66%	45%	37%	50%
Don't Really Agree	23%	15%	18%	31%	11%	38%	35%	26%
Don't Agree At All	4%	2%	2%	6%	1%	5%	12%	4%

Appendix G.

Activities Parents Encourage Their Sons/Daughters To Do

Question wording - “Listed below are activities your son/daughter may or may not do. Select the below activities you have introduced to your son/daughter or encouraged your son/daughter to do.”

	US			UK		
	Sons	Daughters	Difference	Sons	Daughters	Difference
Writing (stories, poems, journal, etc.)	33%	48%	-15%	34%	51%	-17%
Reading	64%	65%	-1%	58%	68%	-10%
“Make believe”/Pretend play	41%	53%	-12%	37%	48%	-11%
Taking pictures/Photography	34%	44%	-10%	33%	50%	-17%
Playing an instrument	31%	37%	-6%	24%	34%	-10%
Singing	33%	53%	-20%	25%	56%	-31%
Coloring/Painting/Drawing	59%	77%	-18%	54%	67%	-13%
Dancing	28%	57%	-29%	27%	61%	-34%
Sculpting/molding (e.g., Play-Doh, clay)	38%	50%	-12%	28%	48%	-20%
Arts and Crafts (scissors/glue/materials activities)	48%	80%	-32%	48%	66%	-18%
Digital art (draw/illustrate using apps/computer)(e.g., Doodle apps, Crayola Create and Play, Photoshop)	28%	37%	-9%	27%	34%	-7%
Acting/Performing/Playing pretend characters	27%	38%	-11%	25%	40%	-15%
Playing with character toys, plush toys, dolls or figures	40%	50%	-10%	36%	45%	-9%
Program/create mobile/computer games (e.g., Roblox, Minecraft)	42%	36%	6%	41%	33%	8%
Science experiments/projects, experimenting or creating with different ingredients	49%	45%	4%	37%	37%	0%
Building with building bricks/blocks (e.g., LEGO bricks, Megabloks)	65%	50%	15%	58%	49%	9%
Building/creating models/woodwork	35%	21%	14%	36%	26%	10%

Learning household tools (hammers, nails)	39%	31%	8%	31%	27%	4%
Play a sport/physical activity	55%	46%	9%	51%	47%	4%
Just “run around”	45%	47%	-2%	49%	41%	8%
Knitting/sewing/crocheting	6%	24%	-18%	5%	25%	-20%
Cooking/baking	44%	66%	-22%	49%	66%	-17%
Video games/Console games (e.g., PlayStation, Xbox)	67%	48%	19%	65%	48%	17%
Mobile apps games (e.g., Animal Crossing, Among Us)	45%	47%	-2%	43%	51%	-8%
Puzzles	57%	58%	-1%	52%	56%	-4%
Board games	55%	65%	-10%	57%	56%	1%
Magic	18%	19%	-1%	17%	20%	-3%
Learning a language	22%	29%	-7%	25%	34%	-9%
Playing with coding toys	19%	15%	4%	11%	13%	-2%
Exploring the world around	43%	49%	-6%	46%	42%	4%
Building a house/ hideout/ den/ stage for play	33%	38%	-5%	35%	45%	-10%
Making silly faces, noises, postures, tricks, pranks to make others laugh	43%	49%	-6%	39%	46%	-7%
Dressing up	17%	41%	-24%	23%	50%	-27%
Playing fighting, shooting	36%	15%	21%	40%	25%	15%
Playing playground games with others	50%	48%	2%	43%	44%	-1%

	Czech Republic			China		
	Sons	Daughters	Difference	Sons	Daughters	Difference
Writing (stories, poems, journal, etc.)	15%	27%	-12%	26%	38%	-12%
Reading	58%	62%	-4%	38%	46%	-8%
“Make believe”/Pretend play	42%	45%	-3%	20%	22%	-2%
Taking pictures/Photography	31%	46%	-15%	16%	26%	-10%

Playing an instrument	27%	34%	-7%	21%	27%	-6%
Singing	22%	49%	-27%	26%	44%	-18%
Coloring/Painting/Drawing	54%	77%	-23%	41%	63%	-22%
Dancing	23%	65%	-42%	10%	37%	-27%
Sculpting/molding (e.g., Play-Doh, clay)	29%	51%	-22%	43%	37%	6%
Arts and Crafts (scissors/glue/materials activities)	50%	69%	-19%	41%	52%	-11%
Digital art (draw/illustrate using apps/computer)(e.g., Doodle apps, Crayola Create and Play, Photoshop)	20%	18%	2%	24%	16%	8%
Acting/Performing/Playing pretend characters	18%	29%	-11%	23%	29%	-6%
Playing with character toys, plush toys, dolls or figures	36%	64%	-28%	32%	47%	-15%
Program/create mobile/computer games (e.g., Roblox, Minecraft)	30%	19%	11%	19%	12%	7%
Science experiments/projects, experimenting or creating with different ingredients	25%	24%	1%	25%	25%	0%
Building with building bricks/blocks (e.g., LEGO bricks, Megabloks)	67%	58%	9%	58%	46%	12%
Building/creating models/woodwork	36%	16%	20%	37%	30%	7%
Learning household tools (hammers, nails)	44%	21%	23%	33%	20%	13%
Play a sport/physical activity	65%	64%	1%	42%	40%	2%
Just “run around”	39%	47%	-8%	6%	6%	0%
Knitting/sewing/crocheting	6%	22%	-16%	4%	13%	-9%
Cooking/baking	39%	64%	-25%	11%	23%	-12%
Video games/Console games (e.g., PlayStation, Xbox)	51%	34%	17%	29%	15%	14%
Mobile apps games (e.g., Animal Crossing, Among Us)	43%	31%	12%	17%	10%	7%

Puzzles	55%	53%	2%	52%	51%	1%
Board games	62%	73%	-11%	34%	20%	14%
Magic	19%	22%	-3%	10%	8%	2%
Learning a language	41%	44%	-3%	38%	39%	-1%
Playing with coding toys	31%	20%	11%	18%	12%	6%
Exploring the world around	50%	45%	5%	41%	39%	2%
Building a house/ hideout/ den/ stage for play	55%	46%	9%	25%	28%	-3%
Making silly faces, noises, postures, tricks, pranks to make others laugh	39%	38%	1%	22%	20%	2%
Dressing up	22%	44%	-22%	10%	30%	-20%
Playing fighting, shooting	41%	5%	36%	16%	5%	11%
Playing playground games with others	65%	66%	-1%	31%	31%	0%

	Japan		
	Sons	Daughters	Difference
Writing (stories, poems, journal, etc.)	23%	38%	-15%
Reading	56%	64%	-8%
"Make believe"/Pretend play	44%	58%	-14%
Taking pictures/Photography	28%	40%	-12%
Playing an instrument	32%	48%	-16%
Singing	35%	52%	-17%
Coloring/Painting/Drawing	53%	74%	-21%
Dancing	12%	39%	-27%
Sculpting/molding (e.g., Play-Doh, clay)	50%	57%	-7%
Arts and Crafts (scissors/glue/materials activities)	58%	64%	-6%
Digital art (draw/illustrate using apps/computer)(e.g., Doodle apps, Crayola Create and Play, Photoshop)	9%	18%	-9%
Acting/Performing/Playing pretend characters	9%	14%	-5%
Playing with character toys, plush toys, dolls or figures	38%	60%	-22%

Program/create mobile/computer games (e.g., Roblox, Minecraft)	23%	23%	0%
Science experiments/projects, experimenting or creating with different ingredients	21%	22%	-1%
Building with building bricks/blocks (e.g., LEGO bricks, Megabloks)	66%	52%	14%
Building/creating models/woodwork	33%	12%	21%
Learning household tools (hammers, nails)	24%	14%	10%
Play a sport/physical activity	64%	58%	6%
Just “run around”	41%	41%	0%
Knitting/sewing/crocheting	6%	29%	-23%
Cooking/baking	36%	66%	-30%
Video games/Console games (e.g., PlayStation, Xbox)	52%	45%	7%
Mobile apps games (e.g., Animal Crossing, Among Us)	30%	40%	-10%
Puzzles	51%	59%	-8%
Board games	37%	39%	-2%
Magic	19%	17%	2%
Learning a language	24%	33%	-9%
Playing with coding toys	3%	9%	-6%
Exploring the world around	23%	23%	0%
Building a house/ hideout/ den/ stage for play	25%	29%	-4%
Making silly faces, noises, postures, tricks, pranks to make others laugh	39%	36%	3%
Dressing up	4%	46%	-42%
Playing fighting, shooting	29%	20%	9%
Playing playground games with others	51%	56%	-5%

	Poland			Russia		
	Son	Daughter	Difference	Son	Daughter	Difference
Writing (stories, poems, journal, etc.)	18%	40%	-22%	11%	15%	-4%
Reading	53%	68%	-16%	38%	46%	-9%
“Make believe”/Pretend play	34%	38%	-4%	13%	19%	-6%
Taking pictures/Photography	27%	37%	-9%	22%	34%	-11%

Playing an instrument	22%	35%	-13%	16%	16%	0%
Singing	16%	44%	-28%	11%	36%	-24%
Coloring/Painting/Drawing	44%	70%	-26%	34%	73%	-39%
Dancing	23%	62%	-39%	13%	57%	-44%
Sculpting/molding (e.g., Play-Doh, clay)	24%	38%	-14%	30%	46%	-16%
Arts and Crafts (scissors/glue/materials activities)	34%	56%	-22%	16%	51%	-35%
Digital art (draw/illustrate using apps/computer)(e.g., Doodle apps, Crayola Create and Play, Photoshop)	20%	33%	-12%	23%	25%	-2%
Acting/Performing/Playing pretend characters	19%	31%	-12%	19%	27%	-8%
Playing with character toys, plush toys, dolls or figures	29%	41%	-11%	15%	37%	-21%
Program/create mobile/computer games (e.g., Roblox, Minecraft)	31%	18%	13%	19%	10%	9%
Science experiments/projects, experimenting or creating with different ingredients	31%	32%	-1%	20%	18%	2%
Building with building bricks/blocks (e.g., LEGO bricks, Megabloks)	61%	55%	6%	40%	30%	10%
Building/creating models/woodwork	35%	21%	13%	20%	7%	14%
Learning household tools (hammers, nails)	44%	17%	27%	36%	10%	26%
Play a sport/physical activity	67%	62%	6%	51%	42%	9%
Just “run around”	51%	57%	-7%	22%	24%	-1%
Knitting/sewing/crocheting	4%	17%	-13%	2%	17%	-16%
Cooking/baking	36%	53%	-17%	20%	34%	-14%
Video games/Console games (e.g., PlayStation, Xbox)	46%	30%	16%	52%	28%	24%
Mobile apps games (e.g., Animal Crossing, Among Us)	33%	23%	10%	40%	30%	10%
Puzzles	52%	58%	-6%	45%	45%	0%
Board games	61%	64%	-3%	37%	39%	-2%

Magic	11%	16%	-5%	2%	4%	-1%
Learning a language	48%	55%	-8%	34%	36%	-2%
Playing with coding toys	22%	20%	1%	6%	6%	0%
Exploring the world around	54%	47%	7%	47%	43%	4%
Building a house/ hideout/ den/ stage for play	39%	42%	-3%	25%	28%	-3%
Making silly faces, noises, postures, tricks, pranks to make others laugh	30%	34%	-4%	22%	27%	-5%
Dressing up	19%	44%	-25%	14%	39%	-26%
Playing fighting, shooting	31%	7%	24%	41%	10%	31%
Playing playground games with others	54%	57%	-3%	48%	51%	-3%

Appendix H.

Implicit Association Test - Creative Activities and Son/Daughter Encouragement (Parent Responses)

For the Implicit Association Test, parents were first asked whether they would encourage the activity to a son, daughter or both. These responses are reported first (First Round). Then parents who selected “both” were forced to select either a son or daughter. These responses are reported second (Second Round).

Question wording, First Round - “Would you encourage this activity more to a daughter, more to a son, or to both?”

Question wording, Second Round - “And if you had to pick encouraging the below activity more to a daughter or more to a son, which would you pick?”

US	First Round			Second Round		
	daughter	son	difference	daughter	son	difference
Writing (stories, poems, journal, etc.)	16%	6%	10%	75%	25%	50%
Reading	6%	5%	1%	58%	42%	16%
“Make believe”/Pretend play	14%	5%	9%	68%	32%	36%
Taking pictures/Photography	10%	6%	4%	65%	35%	30%
Playing an instrument	6%	6%	0%	53%	47%	6%
Singing	15%	3%	12%	81%	19%	62%
Coloring/Painting/Drawing	11%	3%	8%	72%	28%	44%
Dancing	31%	2%	29%	83%	17%	66%
Sculpting/molding (e.g., Play-Doh, clay)	6%	6%	0%	57%	43%	14%
Arts and Crafts (scissors/glue/materials activities)	12%	3%	9%	75%	25%	50%
Digital art (draw/illustrate using apps/computer)(e.g., Doodle apps, Crayola Create and Play, Photoshop)	5%	8%	-3%	58%	42%	16%
Acting/Performing/Playing pretend characters	11%	4%	7%	72%	28%	44%
Playing with character toys, plush toys, dolls or figures	24%	4%	20%	77%	23%	54%
Program/create mobile/computer games (e.g., Roblox, Minecraft)	2%	12%	-10%	30%	70%	-40%
Science experiments/projects, experimenting or creating with different ingredients	3%	10%	-7%	40%	60%	-20%

Building with building bricks/blocks (e.g., LEGO bricks, Megabloks)	2%	16%	-14%	29%	71%	-42%
Building/creating models/woodwork	1%	19%	-18%	25%	75%	-50%
Learning household tools (hammers, nails)	1%	22%	-21%	29%	71%	-42%
Play a sport/physical activity	1%	13%	-12%	28%	72%	-44%
Just “run around”	3%	6%	-3%	36%	64%	-28%
Knitting/sewing/crocheting	42%	4%	38%	83%	17%	66%
Cooking/baking	20%	3%	17%	79%	21%	58%
Video games/Console games (e.g., PlayStation, Xbox)	1%	17%	-16%	26%	74%	-48%
Mobile apps games (e.g., Animal Crossing, Among Us)	2%	7%	-5%	40%	60%	-20%
Puzzles	3%	3%	0%	57%	43%	14%
Board games	2%	3%	-1%	49%	51%	-2%
Magic	3%	13%	-10%	31%	69%	-38%
Learning a language	3%	4%	-1%	63%	37%	26%
Playing with coding toys	3%	11%	-8%	35%	65%	-30%
Exploring the world around	1%	4%	-3%	44%	56%	-12%
Building a house/ hideout/ den/ stage for play	3%	12%	-9%	40%	60%	-20%
Making silly faces, noises, postures, tricks, pranks to make others laugh	5%	7%	-2%	46%	54%	-8%
Dressing up	44%	3%	41%	86%	14%	72%
Playing fighting, shooting	1%	39%	-38%	19%	81%	-62%
Playing playground games with others	2%	7%	-5%	42%	58%	-16%

UK	First Round			Second Round		
	daughter	son	difference	daughter	son	difference
Writing (stories, poems, journal, etc.)	20%	8%	12%	75%	25%	50%
Reading	10%	8%	2%	58%	42%	16%
“Make believe”/Pretend play	12%	9%	3%	62%	38%	24%
Taking pictures/Photography	9%	7%	2%	53%	47%	6%
Playing an instrument	8%	7%	1%	53%	47%	6%

Singing	19%	4%	15%	78%	22%	56%
Coloring/Painting/Drawing	8%	5%	3%	65%	35%	30%
Dancing	27%	4%	23%	75%	25%	50%
Sculpting/molding (e.g., Play-Doh, clay)	7%	7%	0%	51%	49%	2%
Arts and Crafts (scissors/glue/materials activities)	11%	5%	6%	70%	30%	40%
Digital art (draw/illustrate using apps/computer)(e.g., Doodle apps, Crayola Create and Play, Photoshop)	7%	9%	-2%	53%	47%	6%
Acting/Performing/Playing pretend characters	11%	5%	6%	69%	31%	38%
Playing with character toys, plush toys, dolls or figures	17%	7%	10%	65%	35%	30%
Program/create mobile/computer games (e.g., Roblox, Minecraft)	4%	16%	-12%	23%	77%	-54%
Science experiments/projects, experimenting or creating with different ingredients	5%	12%	-7%	35%	65%	-30%
Building with building bricks/blocks (e.g., LEGO bricks, Megabloks)	4%	17%	-13%	25%	75%	-50%
Building/creating models/woodwork	3%	19%	-16%	24%	76%	-52%
Learning household tools (hammers, nails)	5%	26%	-21%	25%	75%	-50%
Play a sport/physical activity	3%	13%	-10%	26%	74%	-48%
Just "run around"	3%	11%	-8%	28%	72%	-44%
Knitting/sewing/crocheting	40%	3%	37%	80%	20%	60%
Cooking/baking	18%	6%	12%	73%	27%	46%
Video games/Console games (e.g., PlayStation, Xbox)	3%	18%	-15%	21%	79%	-58%
Mobile apps games (e.g., Animal Crossing, Among Us)	4%	8%	-4%	36%	64%	-28%
Puzzles	4%	5%	-1%	50%	50%	0%
Board games	4%	6%	-2%	47%	53%	-6%

Magic	2%	14%	-12%	26%	74%	-48%
Learning a language	5%	5%	0%	59%	41%	18%
Playing with coding toys	6%	14%	-8%	30%	70%	-40%
Exploring the world around	4%	6%	-2%	40%	60%	-20%
Building a house/ hideout/ den/ stage for play	4%	13%	-9%	33%	67%	-34%
Making silly faces, noises, postures, tricks, pranks to make others laugh	3%	12%	-9%	37%	63%	-26%
Dressing up	29%	4%	25%	80%	20%	60%
Playing fighting, shooting	3%	36%	-33%	18%	82%	-64%
Playing playground games with others	3%	6%	-3%	41%	59%	-18%

Czech Republic	First Round			Second Round		
	daughter	son	difference	daughter	son	difference
Writing (stories, poems, journal, etc.)	55%	8%	47%	85%	15%	70%
Reading	20%	12%	8%	66%	34%	32%
"Make believe"/Pretend play	13%	13%	0%	52%	48%	4%
Taking pictures/Photography	18%	15%	3%	54%	46%	8%
Playing an instrument	27%	11%	16%	73%	27%	46%
Singing	46%	4%	42%	89%	11%	78%
Coloring/Painting/Drawing	31%	5%	26%	83%	17%	66%
Dancing	58%	4%	54%	89%	11%	78%
Sculpting/molding (e.g., Play-Doh, clay)	39%	6%	33%	82%	18%	64%
Arts and Crafts (scissors/glue/materials activities)	27%	7%	20%	79%	21%	58%
Digital art (draw/illustrate using apps/computer)(e.g., Doodle apps, Crayola Create and Play, Photoshop)	13%	22%	-9%	37%	63%	-26%
Acting/Performing/Playing pretend	18%	11%	7%	67%	33%	34%

characters						
Playing with character toys, plush toys, dolls or figures	52%	5%	47%	88%	12%	76%
Program/create mobile/computer games (e.g., Roblox, Minecraft)	4%	50%	-46%	11%	89%	-78%
Science experiments/projects, experimenting or creating with different ingredients	7%	28%	-21%	23%	77%	-54%
Building with building bricks/blocks (e.g., LEGO bricks, Megabloks)	4%	25%	-21%	18%	82%	-64%
Building/creating models/woodwork	4%	57%	-53%	9%	91%	-82%
Learning household tools (hammers, nails)	4%	68%	-64%	7%	93%	-86%
Play a sport/physical activity	4%	16%	-12%	21%	79%	-58%
Just “run around”	6%	9%	-3%	47%	53%	-6%
Knitting/sewing/crocheting	83%	3%	80%	93%	7%	86%
Cooking/baking	51%	4%	47%	88%	12%	76%
Video games/Console games (e.g., PlayStation, Xbox)	3%	38%	-35%	10%	90%	-80%
Mobile apps games (e.g., Animal Crossing, Among Us)	4%	29%	-25%	15%	85%	-70%
Puzzles	7%	13%	-6%	37%	63%	-26%
Board games	6%	5%	1%	56%	44%	12%
Magic	7%	22%	-15%	32%	68%	-36%
Learning a language	8%	7%	1%	63%	37%	26%
Playing with coding toys	3%	53%	-50%	7%	93%	-86%
Exploring the world around	6%	10%	-4%	36%	64%	-28%
Building a house/ hideout/ den/ stage for play	5%	39%	-34%	12%	88%	-76%
Making silly faces, noises, postures, tricks, pranks to make others laugh	11%	11%	0%	53%	47%	6%
Dressing up	45%	6%	39%	85%	15%	70%
Playing fighting, shooting	3%	78%	-75%	6%	94%	-88%
Playing playground games with	5%	7%	-2%	39%	61%	-22%

others						
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China	First Round			Second Round		
	daughter	son	difference	daughter	son	difference
Writing (stories, poems, journal, etc.)	32%	25%	7%	63%	37%	26%
Reading	22%	22%	0%	53%	47%	6%
"Make believe"/Pretend play	22%	32%	-10%	41%	59%	-18%
Taking pictures/Photography	24%	28%	-4%	43%	57%	-14%
Playing an instrument	38%	16%	22%	68%	32%	36%
Singing	32%	15%	17%	70%	30%	40%
Coloring/Painting/Drawing	24%	16%	8%	64%	36%	28%
Dancing	60%	13%	47%	81%	19%	62%
Sculpting/molding (e.g., Play-Doh, clay)	15%	22%	-7%	43%	57%	-14%
Arts and Crafts (scissors/glue/materials activities)	22%	18%	4%	60%	40%	20%
Digital art (draw/illustrate using apps/computer)(e.g., Doodle apps, Crayola Create and Play, Photoshop)	12%	26%	-14%	30%	70%	-40%
Acting/Performing/Playing pretend characters	22%	18%	4%	57%	43%	14%
Playing with character toys, plush toys, dolls or figures	45%	16%	29%	73%	27%	46%
Program/create mobile/computer games (e.g., Roblox, Minecraft)	9%	42%	-33%	17%	83%	-66%
Science experiments/projects, experimenting or creating with different ingredients	9%	30%	-21%	22%	78%	-56%
Building with building bricks/blocks (e.g., LEGO bricks, Megabloks)	10%	23%	-13%	29%	71%	-42%

Building/creating models/woodwork	11%	36%	-25%	24%	76%	-52%
Learning household tools (hammers, nails)	7%	55%	-48%	15%	85%	-70%
Play a sport/physical activity	8%	33%	-25%	17%	83%	-66%
Just “run around”	9%	28%	-19%	25%	75%	-50%
Knitting/sewing/crocheting	63%	13%	50%	82%	18%	64%
Cooking/baking	38%	14%	24%	73%	27%	46%
Video games/Console games (e.g., PlayStation, Xbox)	7%	45%	-38%	14%	86%	-72%
Mobile apps games (e.g., Animal Crossing, Among Us)	9%	39%	-30%	20%	80%	-60%
Puzzles	14%	17%	-3%	48%	52%	-4%
Board games	10%	35%	-25%	23%	77%	-54%
Magic	9%	36%	-27%	20%	80%	-60%
Learning a language	11%	16%	-5%	51%	49%	2%
Playing with coding toys	10%	38%	-28%	22%	78%	-56%
Exploring the world around	8%	23%	-15%	27%	73%	-46%
Building a house/ hideout/ den/ stage for play	23%	23%	0%	46%	54%	-8%
Making silly faces, noises, postures, tricks, pranks to make others laugh	20%	26%	-6%	48%	52%	-4%
Dressing up	49%	14%	35%	75%	25%	50%
Playing fighting, shooting	7%	68%	-61%	11%	89%	-78%
Playing playground games with others	9%	27%	-18%	23%	77%	-54%

Japan	First Round			Second Round		
	daughter	son	difference	daughter	son	difference
Writing (stories, poems, journal, etc.)	36%	13%	23%	70%	30%	40%
Reading	23%	13%	10%	59%	41%	18%

"Make believe"/Pretend play	31%	15%	16%	64%	36%	28%
Taking pictures/Photography	16%	12%	4%	48%	52%	-4%
Playing an instrument	25%	8%	17%	69%	31%	38%
Singing	16%	6%	10%	75%	25%	50%
Coloring/Painting/Drawing	17%	7%	10%	75%	25%	50%
Dancing	23%	6%	17%	70%	30%	40%
Sculpting/molding (e.g., Play-Doh, clay)	8%	11%	-3%	43%	57%	-14%
Arts and Crafts (scissors/glue/materials activities)	7%	15%	-8%	27%	73%	-46%
Digital art (draw/illustrate using apps/computer)(e.g., Doodle apps, Crayola Create and Play, Photoshop)	11%	13%	-2%	45%	55%	-10%
Acting/Performing/Playing pretend characters	13%	6%	7%	68%	32%	36%
Playing with character toys, plush toys, dolls or figures	34%	9%	25%	77%	23%	54%
Program/create mobile/computer games (e.g., Roblox, Minecraft)	7%	25%	-18%	21%	79%	-58%
Science experiments/projects, experimenting or creating with different ingredients	7%	21%	-14%	19%	81%	-62%
Building with building bricks/blocks (e.g., LEGO bricks, Megabloks)	7%	21%	-14%	21%	79%	-58%
Building/creating models/woodwork	5%	43%	-38%	12%	88%	-76%
Learning household tools (hammers, nails)	5%	37%	-32%	16%	84%	-68%
Play a sport/physical activity	6%	16%	-10%	19%	81%	-62%
Just "run around"	7%	21%	-14%	18%	82%	-64%
Knitting/sewing/crocheting	56%	7%	49%	86%	14%	72%
Cooking/baking	38%	6%	32%	81%	19%	62%

Video games/Console games (e.g., PlayStation, Xbox)	7%	19%	-12%	18%	82%	-64%
Mobile apps games (e.g., Animal Crossing, Among Us)	11%	8%	3%	52%	48%	4%
Puzzles	7%	9%	-2%	38%	62%	-24%
Board games	6%	12%	-6%	25%	75%	-50%
Magic	7%	15%	-8%	25%	75%	-50%
Learning a language	9%	6%	3%	50%	50%	0%
Playing with coding toys	11%	11%	0%	47%	53%	-6%
Exploring the world around	8%	9%	-1%	37%	63%	-26%
Building a house/ hideout/ den/ stage for play	9%	17%	-8%	29%	71%	-42%
Making silly faces, noises, postures, tricks, pranks to make others laugh	7%	28%	-21%	20%	80%	-60%
Dressing up	55%	5%	50%	87%	13%	74%
Playing fighting, shooting	5%	45%	-40%	10%	90%	-80%
Playing playground games with others	8%	12%	-4%	27%	73%	-46%

Russia	First Round			Second Round		
	daughter	son	difference	daughter	son	difference
Writing (stories, poems, journal, etc.)	35%	15%	20%	70%	30%	40%
Reading	21%	17%	5%	53%	47%	6%
"Make believe"/Pretend play	27%	17%	10%	61%	39%	21%
Taking pictures/Photography	21%	25%	-3%	47%	53%	-6%
Playing an instrument	26%	21%	5%	54%	46%	8%
Singing	47%	7%	40%	86%	14%	72%
Coloring/Painting/Drawing	37%	9%	28%	81%	19%	61%
Dancing	60%	6%	54%	89%	11%	77%
Sculpting/molding (e.g., Play-Doh, clay)	22%	16%	5%	60%	40%	19%

Arts and Crafts (scissors/glue/materials activities)	55%	9%	46%	83%	17%	66%
Digital art (draw/illustrate using apps/computer)(e.g., Doodle apps, Crayola Create and Play, Photoshop)	20%	25%	-5%	42%	58%	-17%
Acting/Performing/Playing pretend characters	32%	11%	21%	72%	28%	43%
Playing with character toys, plush toys, dolls or figures	57%	10%	47%	83%	17%	65%
Program/create mobile/computer games (e.g., Roblox, Minecraft)	8%	45%	-37%	18%	82%	-65%
Science experiments/projects, experimenting or creating with different ingredients	12%	29%	-17%	30%	70%	-40%
Building with building bricks/blocks (e.g., LEGO bricks, Megabloks)	11%	35%	-24%	22%	78%	-56%
Building/creating models/woodwork	9%	64%	-55%	14%	86%	-71%
Learning household tools (hammers, nails)	7%	70%	-63%	11%	89%	-77%
Play a sport/physical activity	10%	23%	-13%	23%	77%	-53%
Just “run around”	12%	29%	-17%	27%	73%	-45%
Knitting/sewing/crocheting	78%	7%	71%	90%	10%	81%
Cooking/baking	64%	7%	57%	90%	10%	80%
Video games/Console games (e.g., PlayStation, Xbox)	10%	44%	-34%	18%	82%	-65%
Mobile apps games (e.g., Animal Crossing, Among Us)	11%	32%	-21%	24%	76%	-51%
Puzzles	14%	19%	-5%	42%	58%	-15%
Board games	12%	20%	-8%	39%	61%	-22%
Magic	34%	15%	20%	69%	31%	37%
Learning a language	17%	11%	6%	58%	42%	16%
Playing with coding toys	14%	28%	-14%	33%	67%	-34%
Exploring the world around	13%	13%	0%	42%	58%	-17%

Building a house/ hideout/ den/ stage for play	15%	36%	-20%	26%	74%	-47%
Making silly faces, noises, postures, tricks, pranks to make others laugh	21%	24%	-3%	44%	56%	-12%
Dressing up	71%	7%	64%	89%	11%	79%
Playing fighting, shooting	8%	70%	-62%	12%	88%	-75%
Playing playground games with others	17%	14%	3%	47%	53%	-7%

Poland	First Round			Second Round		
	daughter	son	difference	daughter	son	difference
Writing (stories, poems, journal, etc.)	49%	16%	49%	79%	21%	58%
Reading	19%	18%	19%	54%	46%	7%
"Make believe"/Pretend play	18%	16%	18%	55%	45%	9%
Taking pictures/Photography	19%	19%	19%	50%	50%	-1%
Playing an instrument	25%	12%	25%	64%	36%	28%
Singing	39%	7%	39%	82%	18%	64%
Coloring/Painting/Drawing	26%	8%	26%	73%	27%	46%
Dancing	39%	7%	39%	79%	21%	59%
Sculpting/molding (e.g., Play-Doh, clay)	18%	13%	18%	57%	43%	13%
Arts and Crafts (scissors/glue/materials activities)	29%	11%	29%	69%	31%	38%
Digital art (draw/illustrate using apps/computer)(e.g., Doodle apps, Crayola Create and Play, Photoshop)	16%	18%	16%	44%	56%	-11%
Acting/Performing/Playing pretend characters	16%	11%	16%	59%	41%	18%
Playing with character toys, plush toys, dolls or figures	31%	9%	31%	73%	27%	47%

Program/create mobile/computer games (e.g., Roblox, Minecraft)	8%	40%	8%	22%	78%	-57%
Science experiments/projects, experimenting or creating with different ingredients	10%	20%	10%	36%	64%	-28%
Building with building bricks/blocks (e.g., LEGO bricks, Megabloks)	8%	24%	8%	24%	76%	-52%
Building/creating models/woodwork	7%	41%	7%	19%	81%	-62%
Learning household tools (hammers, nails)	6%	54%	6%	15%	85%	-70%
Play a sport/physical activity	6%	15%	6%	30%	70%	-41%
Just “run around”	9%	9%	9%	49%	51%	-2%
Knitting/sewing/crocheting	62%	6%	62%	86%	14%	72%
Cooking/baking	29%	8%	29%	74%	26%	49%
Video games/Console games (e.g., PlayStation, Xbox)	6%	30%	6%	20%	80%	-61%
Mobile apps games (e.g., Animal Crossing, Among Us)	7%	27%	7%	24%	76%	-52%
Puzzles	12%	11%	12%	55%	45%	9%
Board games	6%	10%	6%	47%	53%	-6%
Magic	13%	15%	13%	46%	54%	-8%
Learning a language	10%	9%	10%	57%	43%	14%
Playing with coding toys	9%	26%	9%	28%	72%	-43%
Exploring the world around	9%	11%	9%	46%	54%	-8%
Building a house/ hideout/ den/ stage for play	9%	27%	9%	26%	74%	-48%
Making silly faces, noises, postures, tricks, pranks to make others laugh	12%	14%	12%	52%	48%	3%
Dressing up	49%	7%	49%	79%	21%	59%
Playing fighting, shooting	6%	66%	6%	13%	87%	-74%
Playing playground games with	8%	11%	8%	51%	49%	2%

others						
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Appendix I.

Children's Creative Activity Preference

Question wording - "Select the activities you like to do and wish you could do, even if you don't regularly do them or your parents don't allow you to."

	Total Markets		US		UK		Czech Republic	
	boys	girls	boys	girls	boys	girls	boys	girls
Writing (stories, poems, journal, etc.)	9%	24%	15%	39%	14%	37%	9%	24%
Reading	23%	35%	34%	44%	27%	47%	22%	33%
"Make believe"/Pretend play	19%	26%	27%	38%	23%	34%	22%	26%
Taking pictures/Photography	19%	32%	28%	45%	21%	39%	24%	41%
Playing an instrument	15%	26%	27%	34%	22%	33%	13%	28%
Singing	11%	38%	21%	47%	15%	48%	7%	36%
Coloring/Painting/Drawin g	27%	53%	42%	70%	34%	58%	23%	52%
Dancing	11%	47%	19%	48%	14%	56%	11%	54%
Sculpting/molding (e.g., Play-Doh, clay)	22%	31%	31%	38%	27%	36%	15%	35%
Arts and Crafts (scissors/glue/materials activities)	21%	41%	33%	62%	34%	54%	22%	45%
Digital art (draw/illustrate using apps/computer)(e.g., Doodle apps, Crayola Create and Play, Photoshop)	21%	23%	30%	41%	23%	32%	23%	17%
Acting/Performing/Playin g pretend characters	13%	26%	19%	33%	17%	36%	13%	26%
Playing with character toys, plush toys, dolls or figures	17%	32%	24%	34%	25%	30%	18%	36%
Program/create mobile/computer games (e.g., Roblox, Minecraft)	34%	22%	47%	32%	40%	34%	45%	22%
Science experiments/projects, experimenting or creating	28%	23%	42%	37%	34%	33%	29%	25%

with different ingredients								
Building with building bricks/blocks (e.g., LEGO bricks, Megabloks)	46%	34%	58%	36%	50%	37%	48%	39%
Building/creating models/woodwork	27%	13%	34%	18%	34%	21%	29%	12%
Learning household tools (hammers, nails)	27%	12%	30%	18%	26%	21%	31%	11%
Play a sport/physical activity	41%	29%	47%	36%	41%	30%	47%	35%
Just “run around”	28%	27%	43%	38%	40%	33%	24%	23%
Knitting/sewing/crochetin g	4%	18%	5%	23%	6%	22%	4%	14%
Cooking/baking	19%	41%	32%	59%	29%	56%	23%	47%
Video games/Console games (e.g., PlayStation, Xbox)	54%	33%	65%	43%	63%	39%	58%	34%
Mobile apps games (e.g., Animal Crossing, Among Us)	37%	32%	48%	39%	37%	42%	40%	34%
Puzzles	30%	35%	36%	41%	29%	35%	26%	25%
Board games	31%	33%	41%	41%	38%	42%	33%	42%
Magic	17%	18%	29%	18%	22%	24%	19%	20%
Learning a language	16%	24%	15%	29%	13%	24%	17%	24%
Playing with coding toys	19%	11%	27%	12%	18%	15%	35%	13%
Exploring the world around	32%	31%	42%	43%	34%	32%	35%	30%
Building a house/ hideout/ den/ stage for play	30%	25%	34%	32%	37%	33%	39%	29%
Making silly faces, noises, postures, tricks, pranks to make others laugh	23%	27%	37%	37%	32%	34%	20%	31%
Dressing up	9%	36%	8%	41%	14%	37%	13%	36%
Playing fighting, shooting	36%	11%	48%	15%	39%	14%	36%	8%
Playing playground games with others	36%	37%	40%	42%	36%	35%	46%	45%

	China		Japan		Russia		Poland	
	boys	girls	boys	girls	boys	girls	boys	girls
Writing (stories, poems, journal, etc.)	8%	16%	6%	7%	6%	13%	8%	28%
Reading	23%	29%	7%	14%	18%	33%	30%	42%
"Make believe"/Pretend play	16%	20%	9%	17%	14%	20%	19%	28%
Taking pictures/Photography	13%	13%	8%	15%	20%	36%	21%	34%
Playing an instrument	13%	20%	8%	17%	13%	16%	12%	31%
Singing	9%	32%	6%	17%	10%	40%	10%	43%
Coloring/Painting/Drawin g	30%	46%	8%	23%	24%	63%	29%	56%
Dancing	5%	31%	4%	14%	8%	61%	14%	57%
Sculpting/molding (e.g., Play-Doh, clay)	32%	29%	8%	15%	23%	34%	18%	26%
Arts and Crafts (scissors/glue/materials activities)	20%	35%	17%	15%	10%	38%	13%	34%
Digital art (draw/illustrate using apps/computer)(e.g., Doodle apps, Crayola Create and Play, Photoshop)	20%	10%	7%	12%	26%	21%	16%	23%
Acting/Performing/Playin g pretend characters	14%	28%	2%	7%	12%	25%	15%	23%
Playing with character toys, plush toys, dolls or figures	16%	38%	7%	13%	9%	33%	21%	35%
Program/create mobile/computer games (e.g., Roblox, Minecraft)	25%	15%	15%	10%	27%	17%	40%	20%
Science experiments/projects, experimenting or creating with different ingredients	25%	14%	12%	10%	27%	16%	30%	26%

Building with building bricks/blocks (e.g., LEGO bricks, Megabloks)	50%	47%	14%	12%	44%	26%	58%	40%
Building/creating models/woodwork	27%	18%	12%	4%	23%	4%	30%	15%
Learning household tools (hammers, nails)	26%	11%	13%	5%	31%	4%	34%	17%
Play a sport/physical activity	30%	20%	21%	11%	45%	31%	55%	39%
Just “run around”	11%	9%	11%	10%	31%	30%	39%	41%
Knitting/sewing/crochetin g	4%	9%	3%	18%	2%	20%	3%	17%
Cooking/baking	9%	16%	9%	30%	11%	35%	22%	42%
Video games/Console games (e.g., PlayStation, Xbox)	34%	19%	36%	30%	56%	26%	61%	36%
Mobile apps games (e.g., Animal Crossing, Among Us)	26%	18%	26%	25%	43%	33%	40%	29%
Puzzles	38%	41%	6%	12%	30%	38%	40%	49%
Board games	20%	13%	9%	10%	30%	30%	45%	49%
Magic	15%	11%	8%	7%	5%	18%	19%	26%
Learning a language	16%	18%	4%	7%	22%	28%	24%	32%
Playing with coding toys	23%	11%	2%	4%	13%	5%	17%	14%
Exploring the world around	35%	29%	6%	4%	37%	33%	35%	37%
Building a house/ hideout/ den/ stage for play	22%	23%	14%	14%	28%	19%	34%	28%
Making silly faces, noises, postures, tricks, pranks to make others laugh	13%	15%	14%	12%	21%	27%	26%	29%
Dressing up	7%	32%	2%	19%	5%	35%	14%	47%
Playing fighting, shooting	25%	9%	13%	8%	52%	13%	39%	10%
Playing playground games with others	28%	30%	12%	14%	41%	44%	44%	45%

Appendix J.

Gendered Perceptions of Creative Professions - Parent Responses - Country Level

Question wording - “For each word that appears on the screen, tell us if the first image that pops into your head is of a woman or a man. We’re interested in your gut reaction, so select the answer that first comes to you without putting too much time into making your choice. Again, there are no right or wrong answers.”

US	parent			son			daughter		
	woman	man	difference	woman	man	difference	woman	man	difference
Painter	38%	62%	-24%	36%	64%	-28%	40%	60%	-20%
Musician	41%	59%	-18%	34%	66%	-32%	46%	54%	-8%
Singer	87%	13%	74%	84%	16%	68%	89%	11%	78%
Movie star	65%	35%	30%	60%	40%	20%	70%	30%	40%
Teacher	89%	11%	78%	85%	15%	70%	93%	7%	86%
Author/Writer	66%	34%	32%	61%	39%	22%	71%	29%	42%
Dancer	92%	8%	84%	89%	11%	78%	94%	6%	88%
Photographer	58%	42%	16%	49%	51%	-2%	66%	34%	32%
Athlete	16%	84%	-68%	12%	88%	-76%	21%	79%	-58%
Magician	12%	88%	-76%	10%	90%	-80%	13%	87%	-74%
Comedian	19%	81%	-62%	17%	83%	-66%	20%	80%	-60%
Designer	80%	20%	60%	73%	27%	46%	86%	14%	72%
Computer programmer	16%	84%	-68%	11%	89%	-78%	21%	79%	-58%
Scientist	26%	74%	-48%	21%	79%	-58%	31%	69%	-38%
Detective	15%	85%	-70%	14%	86%	-72%	16%	84%	-68%
Architect	17%	83%	-66%	16%	84%	-68%	17%	83%	-66%
Engineer	15%	85%	-70%	13%	87%	-74%	16%	84%	-68%
Inventor	18%	82%	-64%	15%	85%	-70%	22%	78%	-56%
Chef	37%	63%	-26%	30%	70%	-40%	43%	57%	-14%
Marketer	37%	63%	-26%	35%	65%	-30%	39%	61%	-22%

UK	parent			son			daughter		
	woman	man	difference	woman	man	difference	woman	man	difference
Painter	22%	78%	-56%	20%	80%	-60%	24%	76%	-52%
Musician	42%	58%	-16%	40%	60%	-20%	44%	56%	-12%
Singer	84%	16%	68%	82%	18%	64%	87%	13%	74%
Movie star	54%	46%	8%	49%	51%	-2%	58%	42%	16%
Teacher	82%	18%	64%	77%	23%	54%	88%	12%	76%
Author/Writer	66%	34%	32%	62%	38%	24%	71%	29%	42%
Dancer	90%	10%	80%	88%	12%	76%	92%	8%	84%
Photographer	39%	61%	-22%	35%	65%	-30%	44%	56%	-12%
Athlete	26%	74%	-48%	23%	77%	-54%	30%	70%	-40%
Magician	8%	92%	-84%	8%	92%	-84%	8%	92%	-84%
Comedian	14%	86%	-72%	12%	88%	-76%	15%	85%	-70%
Designer	66%	34%	32%	66%	34%	32%	65%	35%	30%
Computer programmer	11%	89%	-78%	7%	93%	-86%	15%	85%	-70%
Scientist	17%	83%	-66%	13%	87%	-74%	22%	78%	-56%
Detective	15%	85%	-70%	11%	89%	-78%	20%	80%	-60%
Architect	16%	84%	-68%	14%	86%	-72%	18%	82%	-64%
Engineer	11%	89%	-78%	7%	93%	-86%	15%	85%	-70%
Inventor	15%	85%	-70%	13%	87%	-74%	18%	82%	-64%
Chef	20%	80%	-60%	17%	83%	-66%	23%	77%	-54%
Marketer	31%	69%	-38%	28%	72%	-44%	34%	66%	-32%

Czech Republic	parent			son			daughter		
	woman	man	difference	woman	man	difference	woman	man	difference

Painter	50%	50%	0%	50%	50%	0%	51%	49%	2%
Musician	42%	58%	-16%	41%	59%	-18%	44%	56%	-12%
Singer	80%	20%	60%	79%	21%	58%	81%	19%	62%
Movie star	69%	31%	38%	66%	34%	32%	73%	27%	46%
Teacher	89%	11%	78%	87%	13%	74%	93%	7%	86%
Author/Writer	71%	29%	42%	68%	32%	36%	74%	26%	48%
Dancer	89%	11%	78%	87%	13%	74%	91%	9%	82%
Photographer	54%	46%	8%	53%	47%	6%	55%	45%	10%
Athlete	21%	79%	-58%	22%	78%	-56%	21%	79%	-58%
Magician	13%	87%	-74%	12%	88%	-76%	13%	87%	-74%
Comedian	8%	92%	-84%	8%	92%	-84%	9%	91%	-82%
Designer	85%	15%	70%	84%	16%	68%	86%	14%	72%
Computer programmer	10%	90%	-80%	10%	90%	-80%	9%	91%	-82%
Scientist	18%	82%	-64%	16%	84%	-68%	20%	80%	-60%
Detective	6%	94%	-88%	4%	96%	-92%	7%	93%	-86%
Architect	27%	73%	-46%	26%	74%	-48%	27%	73%	-46%
Engineer	21%	79%	-58%	18%	82%	-64%	24%	76%	-52%
Inventor	13%	87%	-74%	12%	88%	-76%	13%	87%	-74%
Chef	64%	36%	28%	60%	40%	20%	69%	31%	38%
Marketer	28%	72%	-44%	27%	73%	-46%	29%	71%	-42%

China	parent			son			daughter		
	woman	man	difference	woman	man	difference	woman	man	difference
Painter	45%	55%	-10%	39%	61%	-22%	52%	48%	4%
Musician	55%	45%	10%	49%	51%	-2%	62%	38%	24%
Singer	73%	27%	46%	68%	32%	36%	78%	22%	56%

Movie star	69%	31%	38%	66%	34%	32%	73%	27%	46%
Teacher	83%	17%	66%	79%	21%	58%	88%	12%	76%
Author/Writer	59%	41%	18%	54%	46%	8%	65%	35%	30%
Dancer	89%	11%	78%	90%	10%	80%	89%	11%	78%
Photographer	21%	79%	-58%	17%	83%	-66%	27%	73%	-46%
Athlete	9%	91%	-82%	6%	94%	-88%	14%	86%	-72%
Magician	8%	92%	-84%	5%	95%	-90%	12%	88%	-76%
Comedian	22%	78%	-56%	20%	80%	-60%	25%	75%	-50%
Designer	39%	61%	-22%	30%	70%	-40%	51%	49%	2%
Computer programmer	11%	89%	-78%	8%	92%	-84%	15%	85%	-70%
Scientist	12%	88%	-76%	8%	92%	-84%	17%	83%	-66%
Detective	7%	93%	-86%	4%	96%	-92%	9%	91%	-82%
Architect	8%	92%	-84%	5%	95%	-90%	13%	87%	-74%
Engineer	7%	93%	-86%	3%	97%	-94%	11%	89%	-78%
Inventor	10%	90%	-80%	5%	95%	-90%	17%	83%	-66%
Chef	15%	85%	-70%	14%	86%	-72%	16%	84%	-68%
Marketer	53%	47%	6%	53%	47%	6%	54%	46%	8%

Japan	parent			son			daughter		
	woman	man	difference	woman	man	difference	woman	man	difference
Painter	14%	86%	-72%	11%	89%	-78%	16%	84%	-68%
Musician	21%	79%	-58%	21%	79%	-58%	21%	79%	-58%
Singer	70%	30%	40%	71%	29%	42%	69%	31%	38%
Movie star	11%	89%	-78%	9%	91%	-82%	14%	86%	-72%
Teacher	44%	56%	-12%	46%	54%	-8%	42%	58%	-16%
Author/Writer	28%	72%	-44%	24%	76%	-52%	32%	68%	-36%
Dancer	53%	47%	6%	52%	48%	4%	54%	46%	8%
Photographer	13%	87%	-74%	10%	90%	-80%	16%	84%	-68%

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Athlete	11%	89%	-78%	10%	90%	-80%	13%	87%	-74%
Magician	6%	94%	-88%	5%	95%	-90%	7%	93%	-86%
Comedian	6%	94%	-88%	5%	95%	-90%	7%	93%	-86%
Designer	61%	39%	22%	55%	45%	10%	67%	33%	34%
Computer programmer	6%	94%	-88%	5%	95%	-90%	7%	93%	-86%
Scientist	5%	95%	-90%	5%	95%	-90%	6%	94%	-88%
Detective	6%	94%	-88%	6%	94%	-88%	6%	94%	-88%
Architect	7%	93%	-86%	5%	95%	-90%	8%	92%	-84%
Engineer	5%	95%	-90%	3%	97%	-94%	8%	92%	-84%
Inventor	5%	95%	-90%	4%	96%	-92%	7%	93%	-86%
Chef	9%	91%	-82%	7%	93%	-86%	10%	90%	-80%
Marketer	20%	80%	-60%	18%	82%	-64%	21%	79%	-58%

Russia	parent			son			daughter		
	woman	man	difference	woman	man	difference	woman	man	difference
Painter	31%	69%	-38%	29%	71%	-42%	43%	57%	-14%
Musician	27%	73%	-46%	25%	75%	-50%	35%	65%	-31%
Singer	40%	60%	-19%	36%	64%	-28%	53%	47%	5%
Movie star	80%	20%	59%	63%	37%	26%	82%	18%	64%
Teacher	85%	15%	70%	79%	21%	57%	83%	17%	66%
Author/Writer	39%	61%	-22%	30%	70%	-41%	49%	51%	-3%
Dancer	52%	48%	4%	52%	48%	4%	60%	40%	20%
Photographer	34%	66%	-32%	27%	73%	-46%	43%	57%	-14%
Athlete	6%	94%	-87%	6%	94%	-89%	21%	79%	-58%
Magician	24%	76%	-53%	22%	78%	-56%	37%	63%	-26%
Comedian	9%	91%	-82%	7%	93%	-86%	14%	86%	-72%
Designer	83%	17%	65%	62%	38%	24%	74%	26%	49%

Computer programmer	5%	95%	-90%	1%	99%	-98%	13%	87%	-74%
Scientist	10%	90%	-81%	4%	96%	-91%	14%	86%	-72%
Detective	9%	91%	-83%	6%	94%	-87%	13%	87%	-74%
Architect	15%	85%	-70%	11%	89%	-77%	19%	81%	-61%
Engineer	7%	93%	-86%	5%	95%	-91%	9%	91%	-83%
Inventor	4%	96%	-91%	4%	96%	-92%	14%	86%	-71%
Chef	61%	39%	22%	59%	41%	18%	65%	35%	30%
	66%	34%	31%	45%	55%	-9%	58%	42%	16%

Poland	parent			son			daughter		
	woman	man	difference	woman	man	difference	woman	man	difference
Painter	21%	79%	-59%	20%	80%	-61%	25%	75%	-51%
Musician	30%	70%	-40%	29%	71%	-41%	44%	56%	-12%
Singer	56%	44%	12%	51%	49%	2%	61%	39%	21%
Movie star	80%	20%	60%	62%	38%	23%	83%	17%	67%
Teacher	74%	26%	49%	68%	32%	37%	72%	28%	45%
Author/Writer	42%	58%	-15%	35%	65%	-30%	52%	48%	4%
Dancer	60%	40%	19%	60%	40%	20%	61%	39%	23%
Photographer	35%	65%	-29%	24%	76%	-53%	45%	55%	-10%
Athlete	14%	86%	-71%	9%	91%	-83%	24%	76%	-52%
Magician	12%	88%	-76%	12%	88%	-76%	18%	82%	-63%
Comedian	7%	93%	-85%	12%	88%	-76%	13%	87%	-74%
Designer	48%	52%	-5%	31%	69%	-38%	55%	45%	10%
Computer programmer	8%	92%	-84%	6%	94%	-88%	13%	87%	-75%

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Scientist	19%	81%	-63%	14%	86%	-71%	30%	70%	-41%
Detective	10%	90%	-80%	6%	94%	-89%	16%	84%	-68%
Architect	29%	71%	-42%	16%	84%	-69%	34%	66%	-32%
Engineer	9%	91%	-82%	8%	92%	-85%	14%	86%	-71%
Inventor	15%	85%	-71%	7%	93%	-85%	21%	79%	-59%
Chef	23%	77%	-54%	27%	73%	-46%	39%	61%	-22%
	75%	25%	50%	70%	30%	40%	72%	28%	43%

Differences Between Fathers and Mothers

Question wording - “For each word that appears on the screen, tell us if the first image that pops into your head is of a woman or a man. We’re interested in your gut reaction, so select the answer that first comes to you without putting too much time into making your choice. Again, there are no right or wrong answers.”

	Total Markets				US			
	fathers		mothers		fathers		mothers	
	woman	man	woman	man	woman	man	woman	man
Painter	29%	71%	34%	66%	29%	71%	44%	56%
Musician	38%	62%	36%	64%	35%	65%	44%	56%
Singer	68%	32%	72%	28%	83%	17%	89%	11%
Movie star	53%	47%	68%	32%	49%	51%	76%	24%
Teacher	76%	24%	81%	19%	83%	17%	94%	6%
Author/Wri ter	47%	53%	58%	42%	54%	46%	74%	26%
Dancer	76%	24%	75%	25%	87%	13%	95%	5%
Photograph er	31%	69%	41%	59%	45%	55%	67%	33%
Athlete	13%	87%	17%	83%	14%	86%	18%	82%
Magician	13%	87%	11%	89%	11%	89%	12%	88%
Comedian	11%	89%	13%	87%	14%	86%	22%	78%
Designer	62%	38%	69%	31%	74%	26%	83%	17%
Computer programme r	8%	92%	10%	90%	14%	86%	17%	83%
Scientist	14%	86%	16%	84%	20%	80%	30%	70%

Detective	8%	92%	11%	89%	11%	89%	17%	83%
Architect	16%	84%	18%	82%	14%	86%	19%	81%
Engineer	9%	91%	12%	88%	13%	87%	16%	84%
Inventor	10%	90%	12%	88%	13%	87%	22%	78%
Chef	32%	68%	34%	66%	37%	63%	37%	63%
Marketer	46%	54%	44%	56%	36%	64%	39%	61%

	UK				Czech Republic			
	fathers		mothers		fathers		mothers	
	woman	man	woman	man	woman	man	woman	man
Painter	25%	75%	20%	80%	49%	51%	52%	48%
Musician	43%	57%	41%	59%	42%	58%	43%	57%
Singer	76%	24%	90%	10%	79%	21%	81%	19%
Movie star	36%	64%	65%	35%	65%	35%	72%	28%
Teacher	76%	24%	87%	13%	84%	16%	93%	7%
Author/Writer	59%	41%	70%	30%	68%	32%	72%	28%
Dancer	87%	13%	93%	7%	89%	11%	89%	11%
Photographer	33%	67%	44%	56%	48%	52%	58%	42%
Athlete	22%	78%	29%	71%	20%	80%	22%	78%
Magician	10%	90%	7%	93%	17%	83%	10%	90%
Comedian	13%	87%	14%	86%	10%	90%	8%	92%
Designer	59%	41%	70%	30%	83%	17%	85%	15%
Computer programmer	8%	92%	13%	87%	10%	90%	10%	90%
Scientist	17%	83%	18%	82%	22%	78%	15%	85%
Detective	12%	88%	17%	83%	7%	93%	4%	96%
Architect	18%	82%	14%	86%	25%	75%	28%	72%
Engineer	14%	86%	9%	91%	17%	83%	24%	76%
Inventor	17%	83%	14%	86%	17%	83%	10%	90%
Chef	23%	77%	18%	82%	56%	44%	69%	31%
Marketer	36%	64%	27%	73%	36%	64%	22%	78%

	China				Japan			
	fathers		mothers		fathers		mothers	
	woman	man	woman	man	woman	man	woman	man
Painter	42%	58%	46%	54%	10%	90%	16%	84%
Musician	55%	45%	54%	46%	25%	75%	19%	81%
Singer	70%	30%	74%	26%	71%	29%	70%	30%
Movie star	63%	38%	73%	27%	8%	92%	13%	87%
Teacher	81%	19%	85%	15%	47%	53%	41%	59%
Author/ Writer	51%	49%	64%	36%	23%	77%	31%	69%
Dancer	91%	9%	88%	12%	57%	43%	50%	50%
Photograph er	15%	85%	26%	74%	12%	88%	13%	87%
Athlete	5%	95%	12%	88%	9%	91%	13%	87%
Magician	7%	93%	9%	91%	8%	92%	4%	96%
Comedian	18%	82%	25%	75%	5%	95%	6%	94%
Designer	36%	64%	41%	59%	53%	47%	66%	34%
Computer programme r	8%	92%	13%	87%	6%	94%	6%	94%
Scientist	9%	91%	14%	86%	5%	95%	6%	94%
Detective	6%	94%	7%	93%	5%	95%	6%	94%
Architect	6%	94%	9%	91%	7%	93%	6%	94%
Engineer	4%	96%	9%	91%	3%	97%	7%	93%
Inventor	9%	91%	11%	89%	5%	95%	6%	94%
Chef	14%	86%	15%	85%	11%	89%	7%	93%
Marketer	54%	46%	53%	47%	20%	80%	19%	81%