

Gender Differences in Caregivers' Attitudes to Risky Child Play in Britain: A Cross-Sectional Study

Andrea D. Smith,¹ Helen F. Dodd,² Luiza Ricardo,¹ and Esther van Sluijs¹

¹MRC Epidemiology Unit, Institute of Metabolic Science, University of Cambridge School of Clinical Medicine, Cambridge, United Kingdom;

²College of Medicine and Health, University of Exeter, Exeter, United Kingdom

Background: This study examines gender differences in parental attitudes toward risky play for 5- to 11-year-old boys and girls in Britain. **Methods:** Analyses use data from the cross-sectional, nationally representative British Child Play Survey. Survey respondents were caregivers of primary-school-aged children living in Britain. Parent self-reported their risk tolerance in play via the Tolerance for Risk in Play Scale (TRiPS) and the Risk Engagement and Protection Survey (REPS). The REPS includes subscales that assess caregiver attitudes around "Protection from Injury" (PFI) and "Engagement with Risk" (EWR) in relation to children's play. Multiple linear regression compared caregiver gender differences in TRiPS, REPS-PFI, and REPS-EWR at the item level, and overall. Associations between child gender and these scales were also examined. **Results:** Among 1919 caregivers, no significant gender differences emerged in mean TRiPS ($P = .72$), REPS-EWR ($P = .58$), and REPS-PFI ($P = .34$) scores. Activity-specific differences were evident in caregivers' tolerance for individual risky play activities (15/31 activities). Parents of boys exhibited higher risk tolerance ($B = -4.48$, $P < .01$) and willingness for their child to engage in risky play ($B = -0.63$, $P < .01$) than parents of girls. **Conclusions:** While there was no difference between male and female caregivers overall attitudes, gender differences were prominent for specific play activities and attitudes, with male caregivers demonstrating higher tolerance for the riskiest activities. Parents of boys expressed more permissive attitudes toward engagement in risky play. Further work is needed to identify why there is gender-related variation in these attitudes and should be considered in interventions that support parents in enabling adventurous play opportunities for children.

Keywords: pediatrics, risk-taking, parents

Risky play is a natural and important aspect of children's development, involving fun movement for children, exposure to thrilling emotions, and uncertainty.^{1,2} It also comes with a risk of physical injury. Risky play provides children with opportunities to test their limits, explore boundaries, develop skills in risk management, and may motivate children to be physically active.³⁻⁵ Opportunities for fun yet healthy movement behaviors yield physical and psychological benefits for children across all levels of deprivation, ethnicity, or weight.⁶ This is important because in 2022/2023, 36.6% of 10- to 11-year-olds in England were living with overweight or obesity with prevalence increasing with age.⁷ Physical activity levels in primary-school aged children also are suboptimal in the United Kingdom, with just under half of all children and young people (47.2%) meeting the recommended average daily 60 minutes of moderate to vigorous physical activity.⁸ Regular engagement in risky play may help promote an active lifestyle, reducing the risk of obesity and mental health problems.^{6,9}

Benefits extend beyond the individual, with risky play being linked to greater social competency and quality of family dynamics.^{6,10,11}

Parental attitudes toward risk in play have an impact on children's physical activity. A recent study of 645 Australian parents reported significant positive associations between parental risk tolerance and children's adherence to the physical activity guidelines.⁵ Children with parents who were more accepting of risk in play were nearly 3 times more likely to meet the recommendations. Despite individual differences in appetite for risk, children enjoy risky play and are universally drawn to it.¹ Yet evidence suggests that participation in risky play has fallen. For example, 70% of US mothers report playing outdoors as children but only 31% indicate their children do so.¹² A comparable, successive intergenerational decline has been documented across western cultures (eg, Canada, New Zealand, Finland).¹³⁻¹⁷ This decline may have also been accelerated during the COVID-19 pandemic as it caused upheaval to family routines and abrupt withdrawal from school and outdoor activities and contributed to a subsequent "culture of fear."¹⁸ A complex interplay of sociodemographic and psychological factors interacts to affect children's opportunities for (risky) play. The British Children's Play Survey (BCPS) showed that child age, sex, and disability status, and caregiver disability status, employment status, and age were all associated with children's time spent playing with risk. In addition, parent tolerance of risk and engagement with risk in play were significantly associated with children's risky play, demonstrating the important role that parents play as gatekeepers to this type of play.¹⁵

Efforts to change adult perceptions of the value of risk in play have centered on "risk-reframing" with recent trials demonstrating the effectiveness of online interventions in increasing tolerance for

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Dodd  <https://orcid.org/0000-0003-1446-5338>

Ricardo  <https://orcid.org/0000-0002-1244-4501>

van Sluijs  <https://orcid.org/0000-0001-9141-9082>

Smith (Andrea.smith@mrc-epid.cam.ac.uk) is corresponding author,  <https://orcid.org/0000-0002-6925-6667>

risky play in mothers and early childhood education carers.^{19,20} However, fathers are often not represented in these programs. Parental attitudes toward risky play may also be influenced by the gender of their child, with existing literature suggesting inconsistencies and a potential inclination for parents to discourage risk-taking behaviors more in girls than boys, influenced by societal expectations.²¹ One study found that mothers may exhibit more protectiveness toward their daughters in terms of injury prevention.²² Fathers showed a more consistent approach to risk for both sons and daughters, viewing risk-taking as part of their caregiving identity.²³ The influence of child gender on parent attitudes toward risky play varies across cultures and parenting styles, contributing to mixed findings, with additional inconsistencies potentially arising from a focus on summary scores rather than examining gender differences in individual items on psychometric scales. This highlights the need for further understanding of gender-specific differences in attitudes toward risky play to determine whether intervention components should be tailored to child or adult characteristics.^{24,25} Most studies that support risk-reframing having focused on changing adult attitudes not behavior, with there being a need evidence for actual behavior change in risky play practices.

This study, therefore, uses data from a nationally representative sample of caregivers living in Britain to explore caregiver and child gender differences in tolerance of specific risky play activities and related attitudes with a view to providing insights that support the further development of risk-reframing interventions. We hypothesized that caregiver sex and child sex will be associated with variations in the perception of and attitudes toward risky play, such that male caregivers are more tolerant of the highest risk activities and that caregivers in general display higher tolerance for boys to engage in risky play.

Methods

Study Design and Participants

The British Children's Play Survey (BCPS) was conducted in 2020 with a nationally representative sample of caregivers of children aged 5–11 years old in Britain. For simplicity, the term "parent" is used to refer to any person with whom the child lives who provides daily care, and who acts as the child's "parent" whether they are biological parents or not. A small proportion of participants included in the sample (<6.5%) were not the biological mother or father of the child, that is, they were the stepparent or grandparent. In this case, their self-reported sex was used to classify them as a male or female parent and included as such. Within the BCPS, participants completed measures focused on children's play, independent mobility, physical health, and COVID-19-related matters.

Recruitment of participants was via YouGov, an established UK public opinion research company.²⁶ YouGov recruits from a range of sources to ensure diversity in their participants' pool. For the present study, they created a nationally representative sample of parents by drawing on a subsample of the national panel that is representative of UK adults and inviting them to complete the survey. Participants received YouGov points in compensation for their time, which can be redeemed for cash or vouchers once a threshold has been reached. The final data set was weighted to the national profile of all adults (>18 y), including those without internet access. To ensure data integrity and filter out bots, respondents are restricted to answering each survey only once through unique usernames and passwords. Data were collected over a 3-week time window in April 2020. A UK-wide lockdown

due to COVID-19 began on March 26, 2020, meaning that all data were collected during this period. Participants were prompted to answer the questions thinking about life before COVID-19 pandemic-imposed lockdown. Survey completion required approximately 20 minutes. Ethical approval was obtained from the University of Reading School of Psychology and Clinical Language Sciences Ethics Committee (#2020-003-HD). Results are reported in accordance with STrengthening the Reporting of OBservational studies in Epidemiology.²⁷

Measures

Outcome Variables

Tolerance of Risk in Play Scale. The Tolerance of Risk in Play Scale (TRiPS) is self-report measure that assesses the degree to which parents or caregivers allow their children to participate in 31 different risky play activities,²⁸ across 6 categories of risky play (play at great heights, playing at high speed, play with harmful tools, play near dangerous elements, rough-and-tumble play, and play where the children can "get lost"). Participants are then asked to indicate if they would allow their child to participate in the individual activities ("Yes" or "No"). "No" is scored as 0, whereas "Yes" is scored from 1 to 12 based on the level of risk acceptability of that activity determined in the original validation study.²⁸ The less acceptable (ie, higher risk) an activity, the higher the score. TRiPS is not continuous and not all values possible. TRiPS has been shown to accurately capture parental tolerance of risk during children's play in 3- to 13-year-old children.²⁸ The tool has a high person reliability index (0.87), an indicator of reliably differentiating between high and low scorers on the scale, and good internal consistency (acceptable mean-square fit statistics indicative of unidimensionality in the data).²⁸ A total sum score is derived (range: 0–184) and divided into 4 categories based on cut points²⁹: "risk averse" (≤61), "somewhat risk averse" (62–95), "somewhat risk tolerant" (96–122), and "risk tolerant" (>123). Dichotomous "yes/no" scoring in TRiPS was used for item-level analyses.

Risk Engagement and Protection Survey. The Risk Engagement and Protection Survey (REPS) is a validated 14-item questionnaire which assesses caregiver attitudes about keeping their child safe while also letting them take risks.³⁰ Participants indicate how much they agree with 14 statements using a 7-point Likert scale anchored by "I agree" to "I don't agree" (scoring 1–7). Two items from the original questionnaire are expressed differently and were removed from the analyses as has been done previously.²⁹ The remaining 12 items contribute to 2 subscale scores: "Protection from Injury (PFI)" and "Engagement with Risk (EWR)." Each subscale consists of 6 items (scoring 6–42), with higher scores meaning parents hold greater attitudes that permit their child to engage with risk in play (REPS-EWR) and that protect their child from potential injury (REPS-PFI).

Sociodemographic Characteristics. Standard sociodemographic questions were linked to data provided by YouGov, collected when participants joined the survey panel (eg, ethnicity, self-reported neighborhood [urban, town/fringe, and rural]). Participants reported their own age, sex, marital status, and relation to the child, their child's age, sex, and birth order at time of completion of the survey. Family social class was categorized based on the occupation of the head of the family. This was used by YouGov to assign different grades, which were collapsed into a binary socioeconomic status variable grouping participants into "middle class

(high/medium socioeconomic status)” or “working class (low socioeconomic status).”³¹

Statistical Analyses

Multiple linear regression models examined cross-sectional associations between parent gender and child gender (independent variables) and TRiPS (total sum score) and REPS (subscales; dependent variables). Linear regressions were also fitted to test the association between parent gender and child gender with scores for each of the 12 items of the REPS. Similarly, a series of logistic regression models were used to model cross-sectional associations between parent gender and child gender with individual TRiPS items (31 items).

All models were adjusted for parent sex, child sex, child age, ethnicity, family social class, birth order, and rural–urban home location. For all models, confounder selection was based on both an empirical and theoretical approach. Confounders were adjusted for if they previously were shown to be associated with the outcome and/or if theory and literature suggest the covariate may be confounding the true association. This approach has previously shown to be more accurate estimating exposure–outcome associations.³² We included an interaction term of parent and child genders to model possible variation in observed associations. Interaction terms were dropped from models if not statistically significant at $P < .05$.

All analyses were performed using Stata (version 16.1, StataCorp), and adjustment for population weighting of the BCPS was applied via survey weights (svy prefix in Stata). Statistical significance was set at $P < .05$. Due to the exploratory nature of the analyses, P values have not been corrected for multiple-hypothesis testing.³³ Instead, 95% confidence intervals (95% CIs) are provided to support interpretation.

Results

The analysis includes 1919 caregivers of 5- to 11-year-old children. Table 1 shows that the weighted sample consisted of a slightly larger proportion of female caregivers (53.7%) than male. Aligned with the population of Britain, the majority were middle class (56.1%), White British (85.1%), and living in England (86.3%). Included children were on average 8.48 (95% CI, 8.39 to 8.57) years old, a slightly larger proportion were male (51.2%), and most were the first-born child in the participating family (63.8%).

Total TRiPS and REPS Scores and Interactions With Parent and Child Genders

Descriptive statistics for the TRiPS and REPS scales are shown in Table 2 along with comparisons between parent and child genders. Mean total TRiPS scale was 83.4 (SD = 35.8), with scores ranging between 0 and 184 (the full range). TRiPS scale scores did not differ between male and female caregivers (Table 2). The largest proportion of parents were considered “Somewhat risk averse” (34.0%), with the least considered “Risk tolerant” (15.7%). This did not differ between male and female parents ($P = .21$) but did differ depending on the sex of the child ($P = .03$); parents of boys were, on average, more tolerant on the TRiPS than parents of girls.

Mean REPS-PFI was 26.2 (SD = 5.1) and 30.8 (SD = 4.8) for REPS-EWR scale, with scores ranging from 6 to 42 for both scales (Table 2). Mean REPS-EWR ($P = .58$) and REPS-PFI ($P = .34$) scores did not differ between male and female parents. However,

Table 1 Demographic Characteristics of Full BCPS Sample (N = 1919)

	Sample (N = 1919)	
	n	% ^a
Parent		
Sex		
Male	881	46.3
Female	1038	53.7
Social class ^b		
Middle class	1086	56.1
Working class	851	43.9
Ethnicity		
White British	1334	85.1
White other	81	5.1
Black	24	1.6
Asian	63	3.4
Multiethnic	41	2.5
Other	13	0.9
Relationship to child		
Mother	990	51.2
Father	805	42.3
Stepparent (female)	21	1.1
Stepparent (male)	53	2.8
Grandparent (female)	17	0.9
Grandparent (male)	15	0.8
Other	18	0.9
Country		
England	1659	86.3
Wales	86	4.7
Scotland	174	9.0
Location (self-reported)		
Urban	1521	79.2
Town/fringe	206	10.8
Rural	192	10.0
Child		
Age (mean, 95% CI), y	8.48	8.39 to 8.57
Sex		
Male	982	51.2
Female	937	48.8
Birth order		
First-born	1227	63.8
Second-born	441	23.0
≥Third-born	249	13.2

Abbreviations: BCPS, British Children’s Play Survey; CI, confidence interval.

^aPopulation weights applied to approximate the national profile of all UK adults (>18 y), including those without internet access. ^bThe Market Research Society uses a demographic classification of social grade, which classifies families based on the occupation of the head of the household. Social grade is used as a binary variable that categorizes families as being either “middle class” or “working class” in the British context. This categorization should be considered with relevant caveats in mind.

parents of boys on average reported higher willingness to engage with risk in play compared with parents of girls ($P = .02$), but no differences were seen for child-sex specific perceived attitude to protect their child from injury ($P = .87$).

Table 2 Mean Caregiver Attitudes Toward Risky Play in the BCPS, by Parent Gender

Caregiver attitudes	Overall	Male	Female	<i>P</i> ^a	Boy child	Girl child	<i>P</i> ^a
	Mean (SD)	Mean (SD)	Mean (SD)		Mean (SD)	Mean (SD)	
REPS-PFI	26.2 (5.2)	26.2 (5.1)	26.0 (5.3)	.34	26.1 (5.1)	26.1 (5.3)	.87
REPS-EWR	30.8 (4.8)	30.8 (4.7)	30.9 (4.8)	.58	31.1 (4.8)	30.6 (4.7)	.02
TRiPS-total	83.4 (35.8)	83.7 (37.4)	83.1 (34.4)	.72	85.3 (36.5)	81.4 (35.2)	.02
TRiPS categories ^b	Overall	Male	Female		Boy child	Girl child	
	N (%)	n (%)	n (%)		n (%)	n (%)	
Risk averse	542 (28.4)	253 (28.9)	289 (27.9)	.21	270 (27.2)	280 (29.6)	.03
Somewhat risk averse	647 (34.0)	282 (32.3)	365 (35.5)		318 (32.0)	340 (36.0)	
Somewhat risk tolerant	427 (22.0)	192 (21.6)	235 (22.4)		239 (24.1)	187 (19.8)	
Risk tolerant	303 (15.7)	154 (17.3)	149 (14.2)		166 (16.7)	138 (14.6)	

Abbreviations: BCPS, British Children's Play Survey; EWR, Engagement with Risk; PFI, Protection from Injury; REPS, Risk Engagement and Protection Survey; TRiPS, Tolerance for Risk in Play Scale. Note: Statistical significance was set at $P < .05$, indicated in bold.

^a*P* value generated using *t* test for continuous outcome measures, and chi-squared test for differences in means across categorical outcome measures. Weights applied to approximate the national profile of all adults (>18 y), including those without internet access ($N_{\text{weighted}} = 1937$). Where total population does not equal 1937, this is due to rounding. ^bTRiPS categories based on predefined cut points reported by Jelleyman et al.²⁹

To investigate child and parent sex in the same model, associations between parent and child genders with total TRiPS, REPS-PFI, and REPS-EWR are shown in Table 3. Parent sex was not associated with total TRiPS for either REPS scores. However, parents of girls scored lower on TRiPS ($B = -4.48$; 95% CI, -7.89 to -1.07) and REPS-EWR ($B = -0.62$; 95% CI, -1.08 to -0.16) compared with parents of boys. There was no interaction between parent and child sex for all outcomes (TRiPS: $P = .44$; REPS-PFI: $P = .88$; REPS-EWR: $P = .98$).

Relationships Between Parent and Child Sex and Individual TRiPS Items

Table 4 shows substantial variability in how male and female parents approach the idea of allowing their children to partake in the 31 specific risky activities. The proportion of parents agreeing to allow their child to participate was highest for "play chase with other children" (TRiPS 2 = female: 98.0%; male: 96.3%). The least accepted activity was "let your child play near the edge of steep cliffs" (TRiPS 14 = female: 2.5%; male: 6.2%). Statistically significant differences between male and female parents were found for 15/31 risky play activities. Of these findings using crude data, the proportion of participants agreeing to tolerate them was higher in female parents for 9/15 (eg, letting your child play in a backyard unsupervised) and higher in male parents for 6/15 (eg, letting your child run close to an open fire). The complementary data summarizing parental attitudes toward individual TRiPS activities by child sex are shown in Supplementary Table S1 (available online). For these, significant differences between parents of boys and girls were found for around a third of risky play activities (9/31).

Figure 1 shows how parent gender (Figure 1A) and child gender (Figure 1B) are related to the probability of agreeing to allow a child to engage in the individual TRiPS activities. Full data are summarized in Supplementary Table S2 (available online). TRiPS items are ordered by the level of risk acceptability, starting with the item rated as highest risk according to the developers of the measure.²⁸ Relative to male caregivers, the odds ratio (OR) for female caregivers not agreeing to let their child engage in risky play activities were significantly higher for 5/15 items, independent of child gender: "letting the child jump off steep cliffs" (T14: OR = 2.06; 95% CI, 1.22 to 3.49), "playing in the woods" (T15: OR =

Table 3 Association Between Parent Gender and Child Gender With Total TRiPS, REPS-PFI, and REPS-EWR, Adjusted for Sociodemographic Factors (n = 1919)

	<i>B</i>	95% CI	<i>P</i>
Total TRiPS			
Parent gender			
Female vs male	0.25	−3.19 to 3.68	.89
Child gender			
Girl vs boy	−4.48	−7.89 to −1.07	.01
REPS-PFI			
Parent gender			
Female vs male	−0.25	−0.76 to 0.24	.32
Child gender (boy)			
Girl vs boy	0.34	−0.33 to −0.07	.18
REPS-EWR			
Parent gender			
Female vs male	0.17	−0.29 to 0.63	.47
Child gender			
Girl vs boy	−0.62	−1.08 to −0.16	<.01

Abbreviations: BCPS, British Children's Play Survey; CI, confidence interval; EWR, Engagement with Risk; PFI, Protection from Injury; REPS, Risk Engagement and Protection Survey; TRiPS, Tolerance for Risk in Play. Note: Model adjusted for child age, ethnicity, parental social grade, rural–urban classification (urban, town/fringe, and rural), child birth order, and population weighting. Weights applied to approximate the national profile of all adults (>18 y) including those without internet access ($N_{\text{weighted}} = 1937$). Statistical significance was set at $P < .05$.

1.32; 95% CI, 1.04 to 1.66), "playing with open fire" (T17: OR = 2.00; 95% CI, 1.47 to 2.72), "bike downhill" (T25: OR = 1.30; 95% CI, 1.04 to 1.62), and "letting your child climb a rock wall that goes straight down to the water" (T22: OR = 1.98; 95% CI, 1.44 to 2.74). Child gender was associated with parental tolerance for 7/31 risky play activities. For boys relative to girls, these included higher tolerance to "letting them play in the woods out of sight" (T15: OR = 1.39; 95% CI, 1.11 to 1.76), "playing with risk

Table 4 Prevalence and Crude Associations Between Parent Sex With Individual TRiPS Items in the BCPS (N = 1919)

Individual TRiPS items Would you ... [n (% agree ^a)]	Male parent		Female parent		P ^a
	n	(%)	n	(%)	
[1] ... let your child jump down from a height of 3–4 m?	258	(29.3)	337	(32.4)	.14
[2] ... allow your child to play chase with other children?	848	(96.3)	1017	(98.0)	.02
[3] ... trust your child to play by themselves without constant supervision?	724	(82.2)	859	(82.7)	.79
[4] ... let your child go headfirst down a slide?	661	(75.0)	855	(82.4)	<.01
[5] ... allow your child to continue playing if they get a few scrapes during play?	819	(93.1)	1007	(97.0)	<.01
[6] ... let your child have lots of challenges when they play at home?	792	(90.0)	95	(92.0)	.12
[7] ... let your child use a hammer and nail unsupervised?	177	(20.2)	228	(22.0)	.33
[8] ... let your child climb up a tree in your reach?	781	(88.6)	965	(93.0)	<.01
[9] ... let your child walk barefoot across a floor after broken glass had been swept up?	199	(22.5)	200	(19.3)	.09
[10] ... let your child walk on slippery rocks close to water?	262	(29.2)	297	(28.3)	.67
[11] ... allow your child to play-fight other children with sticks?	403	(46.0)	516	(50.0)	.09
[12] ... encourage your child to try new things that involve some risk?	779	(88.5)	921	(88.7)	.91
[13] ... allow your child to engage in rough and tumble play?	714	(81.1)	830	(80.0)	.60
[14] ... let your child play near the edge of steep cliffs?	55	(6.2)	27	(2.5)	<.01
[15] ... allow your child to play in the woods out of your sight?	292	(33.0)	275	(26.3)	<.01
[16] ... let your child experience minor mishaps if what they are doing is lots of fun?	770	(87.3)	911	(87.8)	.74
[17] ... let your child run close to an open fire?	157	(17.6)	92	(8.9)	<.01
[18] ... let your child swim in the sea close to the shore while watching from the beach?	433	(48.8)	449	(43.4)	.02
[19] ... allow your child to continue playing if there is potential they may break a bone?	261	(29.4)	283	(27.1)	.27
[20] ... let your child play in a backyard unsupervised?	761	(84.0)	928	(89.5)	<.01
[21] ... allow your child to play-fight, testing who is strongest?	486	(54.2)	531	(51.3)	.22
[22] ... allow your child to climb a rock wall that goes straight down to the water?	141	(15.7)	86	(8.1)	<.01
[23] ... wait to see if your child manages challenges alone before getting involved?	761	(86.5)	944	(91.0)	<.01
[24] ... let your child climb as high as they want to in trees?	280	(31.4)	408	(39.1)	<.01
[25] ... allow your child to ride a bicycle down a steep hill at full speed?	316	(35.7)	310	(29.8)	<.01
[26] ... trust your child to play safely?	744	(84.6)	895	(86.1)	.37
[27] ... allow your child to use a sharp knife?	269	(29.8)	439	(42.0)	<.01
[28] ... let your child play in a garden unsupervised?	763	(86.5)	944	(91.1)	<.01
[29] ... let your child balance on a fallen tree more than 2 m above the ground?	438	(49.4)	482	(46.3)	.19
[30] ... encourage your child to take some risks if it means having fun during play?	752	(85.3)	916	(88.3)	.06
[31] ... allow your child to climb up a tree beyond your reach?	416	(47.0)	467	(44.6)	.30

Abbreviations: BCPS, British Children's Play Survey; TRiPS, Tolerance for Risk in Play Scale. Note: Weights applied to approximate the national profile of all adults (>18 y), including those without internet access (N_{weighted} = 1937). Statistical significance was set at $P < .05$, indicated in bold.

^aP value generated using *t* test for continuous outcome measures.

of breaking a bone" (T19: OR = 1.33; 95% CI, 1.06 to 1.66), "their ability to manage challenges alone" (T23: OR = 1.55; 95% CI, 1.12 to 2.16), "climb a high tree" (T31: OR = 1.45; 95% CI, 1.18 to 1.79), "play fight" (T21: OR = 1.34; 95% CI, 1.09 to 1.64), and "biking down on a hill" (T25: OR = 1.37; 95% CI, 1.10 to 1.71).

Overall, risk tolerance appeared to be greater for the "riskier activities" for male caregivers and toward boys, whereas attitudes favored female caregivers and girls for the "lower risk activities" (eg, letting your child play in a backyard unsupervised, trusting your child to play safely).

Associations Between Parent and Child Genders With Individual REPS Parent Attitudes

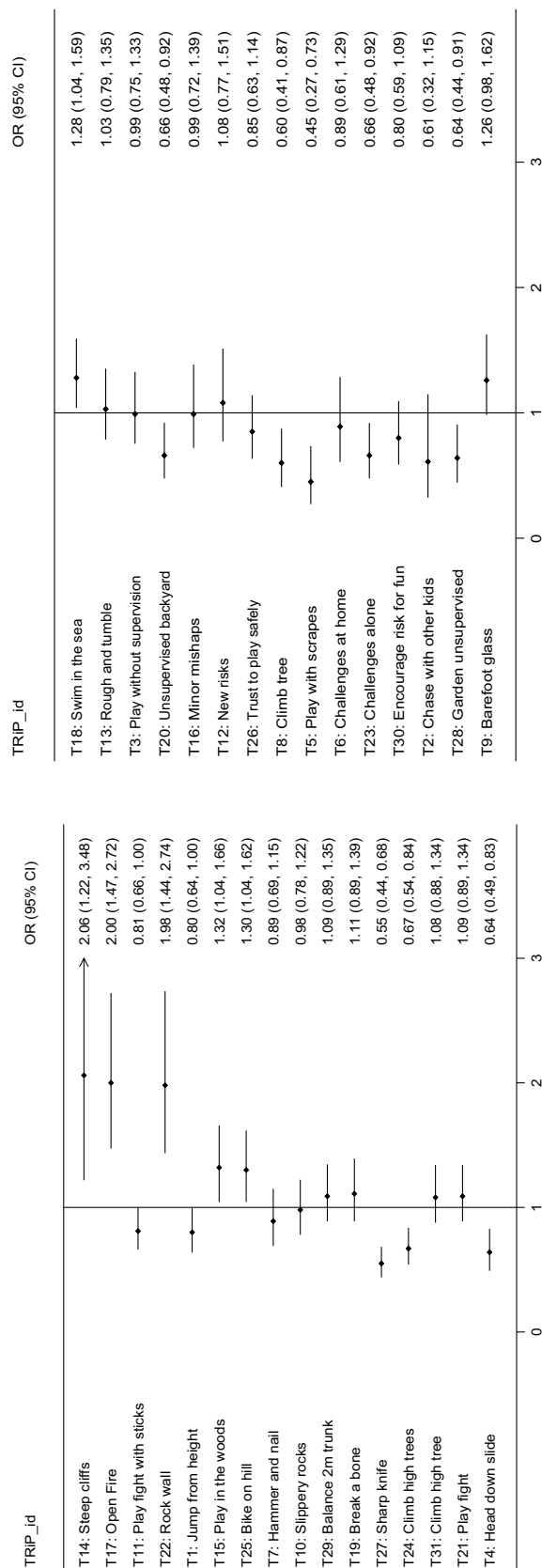
Four out of 12 REPS items showed an association with parent gender (Table 5), but there was no specific pattern favoring either

gender. Child gender was also associated with 4/12 REPS items, all favoring greater tolerance for boys. Female parents place a higher emphasis on safety measures, while male parents may lean toward encouraging exploration. Similarly, parents of girls emphasize low-risk play environments, while parents of boys prioritize the benefits of physical activity during play.

Discussion

This study shows that there were no significant differences between male and female parents in their overall tolerance for risk in play when considering their child aged 5–11 years. There was some evidence that fathers may be more permissive when it comes to individual risky play activities that are higher in risk, relative to mothers. Our findings also showed that the gender of the child was consistently related to parental attitudes, with parents of boys

A



B

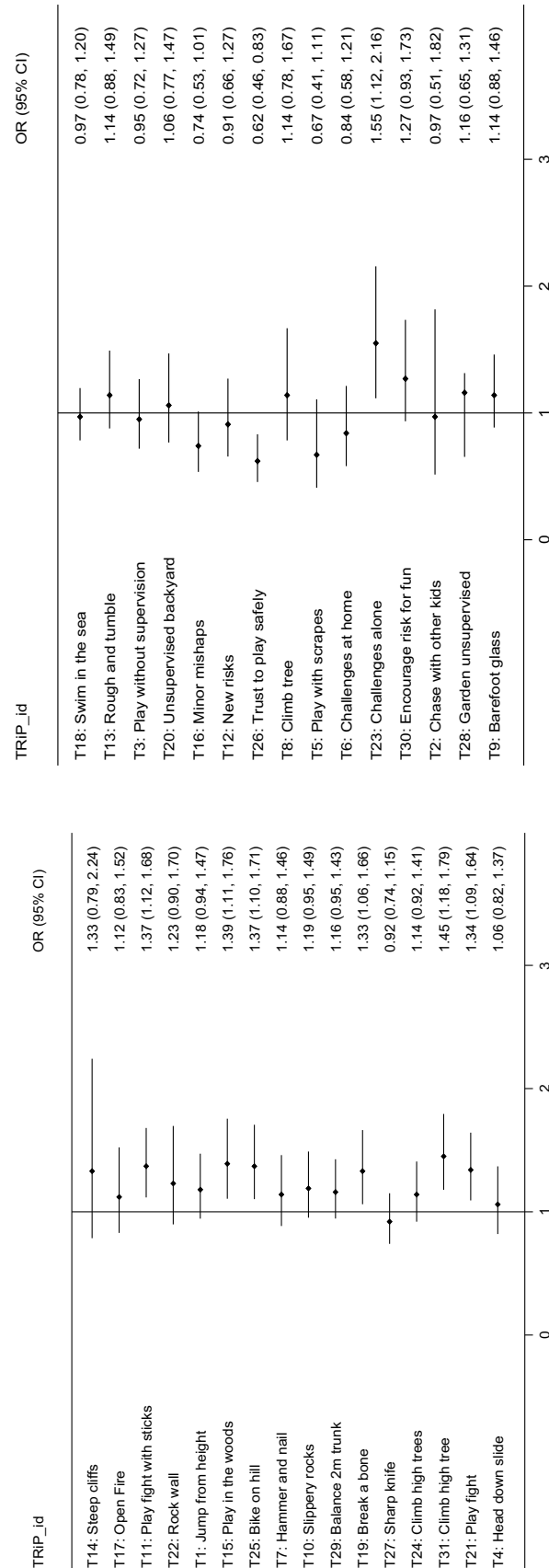


Figure 1 — Associations with individual TRiPS items ordered by level of “riskiness” in BCPS (n = 1919), by (A) parent sex and (B) child sex. ORs >1 indicate a greater likelihood for a father to allow their child to engage in the specific activity relative to the mother, or for a parent to allow a boy to engage in a specific activity relative to a girl. Note: ORs adjusted for child age, ethnicity, parental social grade, rural–urban classification (urban, town/fringe, and rural), and childbirth order. Weights applied to approximate the national profile of all adults (>18 y), including those without internet access ($N_{\text{weighted}} = 1937$). TRiPS items are ordered by the level of risk acceptability, starting with the item rated as highest risk (least tolerated) by caregivers in the underlying development paper by Hill and Bundy.²⁸ Item T9: “Would you let your child walk barefoot across a floor after broken glass had been swept up?” has no level of risk acceptability ranking but is included as in item in the total TRiPS score. It is included as the final item in the graph. BCPS indicates British Children’s Play Survey; CI, confidence interval; OR, odds ratio; TRiPS, Tolerance for Risk in Play Scale.

Table 5 Associations Between Parent Sex and Child Sex With Individual REPS Items in the BCPS (N = 1919)

	Parent sex ^a		Child sex ^b	
	<i>B</i> (95% CI)	<i>P</i>	<i>B</i> (95% CI)	<i>P</i>
PFI				
REPS 1: I am concerned about the things I cannot control that can physically injure my child.	.22 (.08 to .36)	<.01	.03 (−.11 to .17)	.69
REPS 2: Fewer injuries happen to children when parents plan ways to prevent them.	−.20 (−.32 to −.08)	<.01	.01 (−.12 to .12)	.98
REPS 3: I am concerned about the potential hazards in my home.	−.17 (−.29 to −.04)	<.01	.07 (−.05 to .19)	.28
REPS 4: Children should play in places where there is low risk of injury.	−.06 (−.18 to .05)	.27	.12 (.01 to .23)	.04
REPS 5: Good supervision of my child means knowing where my child is always going.	−.02 (−.15 to .11)	.80	.07 (−.06 to .20)	.28
REPS 6: Letting my child engage in physical activities without supervision increases their chance of injury.	−.02 (−.14 to .10)	.76	.07 (−.05 to .19)	.27
EWR				
REPS 7: It is important for my child to engage in physically challenging experiences.	.05 (−.04 to .14)	.30	−.06 (−.15 to .03)	.22
REPS 8: I like to let my child find his or her own physical limits.	0.04 (−.05 to .14)	.35	−.07 (−.17 to .02)	.13
REPS 9: I value opportunities for my child to explore new environments.	.11 (.01 to .21)	.03	−.11 (−.21 to −.02)	.02
REPS 10: Benefits of physical activity for my child outweigh the risk of experiencing minor injuries.	−.05 (−.16 to .05)	.33	−.19 (−.29 to −.08)	<.01
REPS 11: I prefer to teach my child how to manage risky situations rather than avoid them.	.04 (−.07 to .14)	.50	−.10 (−.21 to .01)	.05
REPS 12: Participating in challenging and potentially risky physical activities will help my child develop self-confidence.	.01 (−.09 to .10)	.88	−.11 (−.21 to −.01)	.03

Abbreviations: BCPS, British Children's Play Survey; CI, confidence interval; EWR, Engagement with Risk (subscale of REPS); PFI, Protection from Injury (subscale of REPS); REPS, Risk Engagement and Protection Survey. Note: Model adjusted for parent sex, child sex, child age, ethnicity, parental social grade, rural–urban classification (urban, town/fringe, and rural), and child birth order. Analyses using weighted data set. Statistical significance set at $P < .05$, indicated in bold.

^aReference category: Male parent. ^bReference category: Boy.

encouraging their child's involvement in risky play and perceiving less need to safeguard them from potential injuries than parents of girls. This observation aligns with previous studies which have suggested that caregivers are more tolerant of risk in play when their child is a boy, compared with a girl, and that a parent's own gender is less influential on these attitudes.^{5,34,35} However, these findings are not universal, with some studies showing no differences between male and female caregivers with respect to engagement with risk or risk tolerance.²² It is also possible that these perceptions have been passed on across generations, for instance boys are allowed to engage in more risky play then they may have more confidence allowing their own children to do the same because they know they have the skills and experience to do it safely.

This study found that parent gender did not consistently shape attitudes toward tolerance for child risky play in 5- to 11-year-olds. There were, however, striking parent gender differences for specific types of risky play activities, and this was particularly for those activities considered to be very high risk. Fathers showed pronounced higher tolerance of activities such as letting the child playing near steep cliffs, playing in the woods out of sight, and climbing up a rock wall, irrespective of child gender. There are several possible reasons for differences regarding the higher risk activities. Fathers may be completing the survey from a more "hypothetical" perspective, whereas mothers were drawing on regular experiences with their child. It also speaks to the role of societal influences, media, parenting styles, and personal experiences in shaping caregivers' attitudes to what kind of publicly visible activities they let their child engage in. Traditionally,

mothers have assumed a larger share of childcare responsibilities, including activities such as feeding, attending to the emotional needs of the child, and engaging the child in extracurricular activities. In 2022, women in the United Kingdom are still providing more than twice as much unpaid childcare per year compared with men.³⁶ Mothers, in particular, may feel societal pressure to adhere to perceived norms of risk avoidance to be seen as "good" mothers.^{37,38} In contrast, historically, fathers have been associated with providing protection and guidance in a more adventurous and risk-taking manner. This can translate into a perception that fathers may be more permissive when it comes to high-risk activities. Fathers may believe that exposure to certain risks can be beneficial for a child's development, to learn independence, and resilience.³⁹ Some fathers may also use high-risk activities to bond with their children.⁴⁰ Specifically, in the United Kingdom, it has also been shown that both mothers and fathers rated play as important for their child's development, but fathers also believed that academic activities were more important. This highlights fathers' perceived importance of their child's education.⁴¹

In contrast, in the present study, mothers are more likely to allow children to play with sharp knives, which could presumably be linked to more exposure and confidence in cooking skills (which routinely uses kitchen knives). Collectively these attitudes may contribute to observed parent gender-related disparities for risky play activities.

Parental tolerance for risky play and outdoor time is shaped by fear of judgment by other parents.^{42,43} As alluded to above, this may be explained by fathers being less affected by social safeguarding norms, different expectations for mothers and fathers, or

both. Parents indicated a higher level of acceptance for their child engaging in risky play when the child was a boy. Previous research has shown that while fathers' and mothers' approaches toward risky play are similar, their attitude toward boys' risk-taking behaviors in play is more permissive than girls.⁴⁴ In a study of Canadian parents ($n = 50$) of 6- to 10-year-olds, mothers reported that they expected less risky behavior from their daughters than sons, had higher tolerance of risk-taking by sons, and reported greater worry about injuries to daughters than to sons.⁴⁵ This is consistent with the findings observed here. Other factors that could explain why parents are more risk tolerant of some activities for boys rather than girls link to general attitudes toward the capability of boys versus girls,⁴⁶ their higher general physical literacy,⁸ their inclination to take more risks,⁴⁷ or wider societal factors such as the more pronounced worries about safety of girls in public places.⁴⁸ Parenting ideologies with regard to parental responsibilities and being involved with supervision of organized play activities have also evolved over generations, with this felt most by mothers. Increasingly in western cultures (eg, Canada), fathers are perceiving these pressures too.¹³

Parenting attitudes toward risky play are complex and are influenced by a multitude of factors beyond socially shaped parenting roles. With most people now residing in urban settings, considering the influence of the wider physical and social environment on adults' tolerance for risky play is crucial for developing comprehensive interventions and strategies that promote positive risk-taking behaviors.^{49,50} It is important to bear in mind that parental concern about child safety is a consistently reported barrier to independent free play, across rural and urban settings alike.⁴⁶ Merely focusing on individual behaviors disregards this substantial influence of the built environment in shaping parental risk tolerance for child's play.⁵¹ Parents generally recognize the value of risky play but may not always be able to provide opportunities, for example, modern playgrounds are designed to maximize safety and minimized unstructured areas that challenge the child.^{29,52–54} Effective interventions should focus on addressing the specific challenges that prevent parents from allowing their children to engage in risky play, for example, by providing risk-reframing interventions, rather than simply emphasizing the benefits of such play. These changes need to be encouraged and valued across different settings (eg, in the family home, at school). Mapping variation in risk perceptions among different demographic groups (eg, child or parent sex) can help identify and address health disparities. Tailoring public health interventions to the specific needs and beliefs may contribute to more equitable health outcomes.⁵⁵ It remains promising that young people continue to derive joy from in-person play. Contrary to common assumptions that children are increasingly immersed in digital screen time, a recent national survey revealed that children ($n = 1033$; 6–17 y old) were still significantly more likely to express a preference for in-person play compared with digital environments.⁵⁶

A key strength of the study was the recruitment of a nationally representative sample, which was weighted back to the national profile of the adult population of Britain to increase representativeness. Other strengths include the use of validated questionnaires to assess the outcomes, the investigation of individual questionnaire items rather than composite scores, the large sample size, and comprehensive range of attitudes and activities relating to risky play ascertained. A key limitation, however, is that the parents in this sample were not from family dyads, meaning that they are talking about different children (not from the same family) when responding to the questionnaire. The results are specific to

primary-school-aged children, and it is unclear if results would apply to younger children. When children are more vulnerable perhaps stronger gender differences would emerge. We were also not fully able to untangle the reason underlying some of the observed gender differences in attitudes toward risky play, and future qualitative work may be needed. It is also important to consider that the data were collected in a cross-sectional study using a self-reported questionnaire, which may not always align with actual attitudes in different contexts. Finally, data were collected in April 2020 in the United Kingdom, which coincided with the start of the COVID-19 pandemic. Societal fears and worries around health and safety were heightened and skewed at the time of data collection, and this may have been perceived strongest by mothers with caregiving responsibilities in the context of this study. Despite the questionnaire explicitly prompting participants to answer the questions thinking about normal life before the COVID-19 pandemic, external factors may have impacted risk perceptions.

Conclusion

This study provides insights into the complex nature of parental attitudes toward child risky play. Parent gender was not shown to be associated with overall tolerance for risky play, rather there was activity-specific variation in the types of play activities, showing that male parents of young children are more tolerant of the riskiest activities. Parents were consistently more tolerant of boys' risk in play (vs girls), and this was generally consistent across a wide range of activities. This study adds to the growing body of research that can support the development of tailored interventions to support parents in making informed decisions about their children's active play opportunities and promote healthy risk-taking behaviors in their children.

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