Age, Gender and Birth Order as Predictors of Gender Bias in Children's Attitude to Toys

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Abstract

The current study investigates if there is a relationship between gender bias relating to toys and the age, gender or birth order of a convenience sample of Irish National School Children. Seventy children from 3 age cohorts, Senior Infants (5-6 year olds), Second Class (7-8 year olds) and Fourth Class (9-10 year olds) participated in a cross-sectional, quasi-experiment viewing toy images and expressing preference. The data collected was analysed in order to determine if gender bias was significantly different. No significant difference was demonstrated in relation to the gender of elder siblings. However the age cohort and gender analysis revealed significant difference pointing to an attitudinal flexibility in girls between age cohorts when compared to the more rigid nature of boys attitudes.
Introduction/Literature Review

Toys Indicative of Gender Bias in Society?
The issue of gender bias in the marketing and retail of toys may to some seem a trivial one, however it might be considered that the type of toy that we purchase for a child may be informative to that individual as to the parent's and/or society's expectations of them. Much of the existing literature correctly focuses on the influence and expectations of parents upon children (Campenni, 1999; Hupp et al, 2010), however there are wider influences, for example teachers (Serbin, Connor & Iler, 1979) and television advertising (Andronikidis & Lambrianidou, 2010). In a study of the gender divide in exam performance in the UK, Stobart, Elwood and Quinlan (1992 p. 266-268) point to the use of more mechanical type toys by boys in discussing their higher performance in subjects such as physics and maths, whilst the propensity of girls to read more fiction was referenced as a pointer to their greater capacity for descriptive writing perhaps leading to better performance in English, languages, history etc.

Toys play an important role in the life of children not only as a source of pleasure and fun, but also a means of self expression. Ray et al (2013) indicate that this expressive play is important for children as they do not possess the verbal skills of adults as a means of self expression. Their study looked at the selection of toys by children in a play therapy setting, one of the variables being gender. When children selected a toy and engaged in expressive play a significantly higher mean number of boys selected toys identified as aggressive/scary (weapons, toy spiders etc.), whilst a significantly higher mean number of girls selected family/nurture toys (stuffed toys, kitchen sets, dolls etc.). Though the study included an age range of 3 to 10 year olds, age was not identified as a significant predictor of difference (Ray et al, 2013). One limitation identified by the study is that it does not discuss the cultural reasoning behind the toy selection and measure for the type of play in which the children engaged. However it is discussed that some girls engaged in aggressive play with nurture category toys such as "stomping on the baby doll" whilst some boys engaged in nurturing behaviour with aggressive type toys such as "hugging the bop bag". This could indicate that although children may be inclined to select toys along gender lines, in some cases the style of play may betray their underlying intent or desire.
Taking a step back in age cohort to toddlers, clear patterns of gender stereotyping may be observed in children under three, but significantly also their parents (O'Brien & Huston, 1985). This may demonstrate a societal bias that could create a limiting influence on both genders from a very early age. However in some parts of the world issues relating to a child's gender could be viewed as far more serious. In areas of limited recourses such as regions of India, studies have observed a higher rate of malnutrition and neglect amongst young girls than their male peers (Murthi, Guio & Drèze, 1995, Borooah, 2004). This may create a cultural attitude amongst males of superiority leading to the mistreatment of women in later life (Mahalingam, Haritatos & Jackson, 2007). India has recently been the focus of much unwanted media attention following a number of extremely violent gang rape attacks on young women, resulting in the death or serious injury of the victims (Associated Press, 2013).

**Gender Stereotyping**

Although the previous example is an extreme one, intended to illustrate the point in a strong manner, the theory may be applied to more subtle examples in the European context. For example female participation in sport in teenage years has been observed as lower than their male peers which may have a negative effect on their mental health (Dishman et al, 2006). Perhaps this is due to messages that they have received from wider society about the perceived masculine nature of sporting activities. It may be apparent to any consumer of media that there is a far greater variety of observable male sporting role models in popular culture than female. Vescio, Wilde & Crosswhite, (2005) point to initiatives in Canada, the UK and Iceland where, in recognition of this concern, a concerted effort was made to promote female sports role models through poster campaigns. So if there is recognition of a negative in relation to female participation in sport, some may argue that perhaps similar attitudinal changes need to be affected in relation to toys.

Feminist Psychologist Sandra Lipsitz Bem has been influential in her theories on the issue of gender stereotyping in children and how this feeds through to gender perceptions throughout life. She too cites the example of a greater availability of athletic training for men as an example of how she perceives societal institutions promote gender stereotyping, also pointing to a greater availability of parental leave for women (Bem, 1985, p. 180). Her early advocacy in the 1970s and 1980s was for androgyny as a goal for society.
However she later came to her own realisation that this was an "unreachable utopian fantasy" (Bem 1995, p. 330) and sought to investigate how instead of striving for homogeny between genders, society may instead go a divergent route and achieve equality through recognition of and respect for variations in gender and sexuality amongst individuals. Perhaps the altered position of such an influential feminist figure is indicative of society's wider move away from early ideas of feminism of the 1970s and 1980s to an understanding that to be equal does not equate to some form of variation on traditional masculinity for both genders. More a recognition that both traditionally male and traditionally female characteristics and roles have their value in society and in the modern context should be open to both genders to partake in and value. So just as any career should be open to a woman based on ability, so too should the parenting and nurturing role of a father be valued in family structures and wider society. It is important to note that Bem (1995) also discusses wider acceptance of the various forms of human sexuality, but the gender issue is of most relevance to the current study.

Bem's theories relating to "the societal use of gender as a structural category" (Bigler, 1995 p. 1072) informed Rebecca S. Bigler's investigation seeking to identify if American elementary schoolchildren, grouped in terms of their gender for a period of weeks, would subsequently demonstrate more gender stereotyped attitudes. Those children were tested by comparison with control groups of children randomly assigned to mixed gender colour coded groups or assigned no groups at all. Bigler's study identified a greater propensity for the gender divided groups to identify jobs as specifically men's only or women's only. She also identified that younger children within the study were more susceptible to this gender influence and recommended that particularly younger children not be divided along gender lines in a school setting for that reason. This study points to the influence of peers, but is another piece of research that would seem indicative of the ease to which young children can be influenced along gender stereotyped lines. The elementary schoolchildren participating in Bilger's study would have been equivalent in age to Irish Primary or National School children such as those participating in the current study.
Gender Specific Marketing of Toys
With reference to the issue of toys, events in the UK would seem to point to a recognition that gender divides may be counter-productive in contemporary society. In December 2013, The Guardian newspaper reported that the large UK retailer Marks & Spencer had "agreed to make the packaging of all of its toys gender neutral by Spring 2014, after customers complained that it was marketing items according to stereotypes" (Smithers, 2013).

Similar action was taken by Toys R Us in Sweden where Kristina Henkel, author of "Give your Child 100 Opportunities Instead of Two" was quoted "We did many interviews with children about toys, and for example they complained they couldn't get a sword for their Barbie, or a baby stroller for Spiderman," (Crouch, 2013). So with such recent activity and media reporting, the issue would seem to have become one of topical interest. However, in the Irish context, there seems to be less movement on the issue by the country's largest toy retailer Smyths Toys, as the 2013 survey report from the campaign group Let Toys Be Toys recounts "Twelve surveys were conducted at Smyths. Three branches had explicit signage (Dublin, Limerick and Galway). Three other stores were said to use stereotypical colours and pictures of boys or girls on signage". So what could we point to as a possible effect of such marketing?

In discussing how children respond to marketing Calvert (2008) discusses Piaget's preoperational stage of development stating "Preoperational modes of thought put young children at a distinct disadvantage in understanding commercial intent and, thus, in being able to make informed decisions about requests and purchases of products". Berger (2008 p. 236) cites Piaget and another highly influential developmental psychologist, Vygotsky in asserting that children at this stage of development are actively working to create an understanding of the world. Berger goes further to discuss the Theory-Theory of developmental psychology indicating that children create their own narrative as to how things are in the world if they are not presented with a better alternative. So a preoperational stage child of either gender may consider that there are items that are specific to boys and items that are specific to girls, and in that context to cross that line would be to transgress a societal norm. Bakir & Palan (2010) discuss the inflexibility of children between the ages of four and seven as regards gender stereotypes in keeping with their realisation of gender constancy at that stage in their development. Furthermore they discuss the next stage of development between the ages of eight and eleven when rigidity gives way to flexibility.
However there is a reference to two differing dimensions of flexibility amongst this age cohort (Katz and Ksansnak, 1994 cited by Bakir & Palan, 2010) where, though tolerant of flexibility in others, children do not give themselves the same degree of flexibility.

**Self Actualisation**

Such a discordance could lead to low self esteem amongst some children when one considers that this could have a negative effect on the discrepancy between the real self and the ideal self in the child in keeping with the theories of self actualisation espoused by Carl Rogers (Gross, 2009 p. 745-747). Stainton Rogers & Stainton Rogers (2001, p. 106-107) refer to what they describe as a manifesto written by Carl Rogers in 1977, where he outlined aspirational ideals for reaching such a state. To paraphrase they included openness and honesty, quality of life over material gain, trusting oneself over authority figures and openness to change - perhaps this last one is most pertinent to the current study. However also outlined are Rogers' desired qualities for a harmonious marriage, including recognition and valuing of the growing independence of women and transcendence of traditional gender role expectations (Stainton Rogers & Stainton Rogers, 2001, p. 106-107). So in the 1970s Rogers awareness of the changing landscape as regards gender, coupled with his pioneering experience and expertise in the field of self actualisation, caused him to recognise that for one's own contentment flexibility is key, both within a relationship and in wider society. One may surmise even more so in the decades since.

**Gender Rigidity/Flexibility Relating to Toys**

In relation to toys, research by Freeman (2007) pointed to an increased rigidity between a group of 3 year olds and a group of 5 year olds in relation to gender bias. If one accepts such findings one may consider if the toy industry and indeed parental choices are serving our children well in preparing them for the gender role flexibility that the modern context requires. This is as important for boys as for girls, as one may argue that the boy who does not meet the criteria communicated to him at an early age for masculinity may suffer low self regard in later life. However Freeman (2007) used a small sample size (13 in each age group) and may have benefited from including elder age categories in order to observe if the trend continued. The current study will seek to focus on gender bias relating to three groups 5 to 6 year olds, 7 to 8 year olds and 9 to 10 year olds and use a sample size of 70 children in all.
In a study of self-efficacy amongst children, Bandura et al (2001) point to a perception split in gender roles that still remains as boys perceive themselves more suited to military/policing, mechanical or scientific careers, whilst girls perceive a greater suitability to healthcare, education or office careers. This study focused on the influence of the socio-economic and educational status of parents upon the self efficacy biases found in their children; but considering the Theory-Theory model discussed earlier one may extrapolate that any number of influences including the play with toys that forms such a central role in the life of many children may unconsciously communicate to a child a number of societal expectations or indeed limitations.

One may consider that the rigidity of gender identity may be stronger for young boys than girls. The dynamic nature of gender identity in young girls is addressed by Halim, Ruble & Amodio (2011). They identify a transition from a "pink frilly dress stage" to a tomboy stage. The pink frilly dress stage may involve the child insisting on wearing pink extremely girlish clothing from the age of 3 or 4 in what is considered a realisation, embracing and celebration of their gender identity. Then in middle childhood there follows a tomboy stage where the same children may completely change their behaviour and embrace more masculine styles of play and toys. The same degree of flexibility is not identified in boys, as the masculine activities established in early childhood continue through middle childhood. As indicated earlier this trend may see males more ill equipped for future workplaces and relationships. Much research has pointed to a crisis of masculinity in the modern context from collectivist, communist China (Yang, 2010) to individualistic, capitalist USA (Green & Van Oort, 2013). So if such trends may be observed in such diverse cultures, perhaps there is an underlying cause. Given that boys may be educated to embrace a more gender neutral world, but also may be unconsciously influenced of the opposite through play and role modelling, one may consider that confusion about their role in the family and wider society is a rational response. Heartfield (2002) contends that there is no crisis in masculinity, but somewhat contradicts his own thesis by outlining the various ways that modern society has in his opinion caused masculine traits to be viewed as problematic, pathological or even criminal. His contention however is that there is a crisis of the working class rather than of masculinity.

The current study would seek to identify if there is a significant difference observable between genders as to how boys and girls choose toys and also if there is an identifiable difference in age cohorts perhaps pointing to such a trend in the Irish context.
In considering why boys may be more rigid in their perception of gender, one might consider their peer structures and societal influences. Braza et al (2012) identify that when children separate into gender specific groups through early to mid childhood, boys tend to form more hierarchical groups involving aggressive styles of play whilst girls are more collaborative and communicative. There is also reference to fathers engaging in "rough and vigorous play with their sons much more frequently than with their daughters" (MacDonald & Parke, 1986 cited by Braza et al 2012). Given that such strong societal pressures are asserted from an hierarchical peer group and in many cases the primary masculine role model, it is not difficult to surmise that boys are bound by a much stronger societal pressure to conform more rigidly to their masculinity.

The affect that trends established in early childhood may have in later life may be observed in longitudinal studies such as that of Caspi, Elder & Bem (1987 & 1988, cited by Vasta, Haith & Miller, 1992, p. 70-71). In a study of shy and explosive personality type children, it was established that shy boys went on to become men who found it difficult to form relationships and delayed in starting a family. Whilst shy girls seemed to show little long term effects, explosive or ill tempered children of both genders seemed to continue into adulthood with difficulty in establishing successful careers and long lasting relationships. This would seem to point to the importance of establishing a good balance in behaviour and attitudes from an early age in order that the child be given the best opportunity to establish a successful personal and professional life in adulthood.

**Birth Order/Siblings**

Bem's Gender Schema Theory (1981) point's to the means by which a child acquired their gender identity as an indicator as to how they develop clear barriers between gender roles even through later life indicating "that sex-typed individuals do, in fact, have a greater readiness to process information, including information about the self, in terms of the gender schema" (Bem, 1981 p. 354). In researching a single parent/two parent family comparison, Hupp et al (2010) indicates that family structure may influence such gender bias, however this research centres on a single parent/two parent family comparison. The influence of siblings is not investigated.

The influence of family birth order on the individual has been the subject of much research since Alfred Adler's early analysis (Adler, 1931 p. 90) from risky behaviour amongst adolescents (Solmeyer, McHale & Crouter, 2013) to religious affiliation (MacDonald, 1969).
Zajonc (2001) points to the tutorial role adopted by elder siblings in relation to their younger counterparts as being beneficial not only to the younger sibling, but also to the elder in reinforcing existing knowledge. So this would point to a role of authority and guidance for the elder in relation to the younger. The propensity for younger siblings to imitate their elder counterparts may also be observed (Vespo, Pederson & Hay, 1995), pointing to the reciprocal nature of the informal tutor/apprentice relationship. Research relating to birth order and in particular its relationship to intelligence is not without its critics. Rodgers et al (2000) are strident in their critical analysis of research pointing to links between birth order and IQ. However what they fail to address is the tutor/apprentice type relationship that can exist between siblings, which goes beyond the academic and may also lead to mutual attitudes and schemas.

The current study seeks to identify if Irish primary schoolchildren display a significantly high rate of gender bias when selecting toys that they would like to receive as a present. In doing so, the experimenter would seek to identify a phenomenon upon which further research could build in order to identify further causal factors. Such research in the Irish context could inform the debate as to whether Irish toy stores should follow the example of some of their UK counterparts and also may inform teachers, parents and other interested child focused groups as to the existence of such bias within Irish society. The birth order/sibling element of the study may point to one potential influence on the child, however it is acknowledged that this is one of many possible influencers and again the intention would be to engender further research accounting for those additional factors.

As discussed the present study would seek to investigate the influence of elder siblings, either of the opposite or same gender. Furthermore, and as discussed earlier, the stronger propensity of boys to choose within expected male stereotypes will also be investigated and there will be comparative analysis of different age cohorts to test for attitudinal changes.
Hypotheses
In reviewing the above research and considering some questions that remain the current study hypotheses:

H1. There will be a significant relationship between gender bias relating to toys and age of National School children participating in a cross-sectional study of three age cohorts.

H2. Boys will be significantly more likely to display gender bias than girls in a cross-sectional study relating to toys.

H3. There will be a significant relationship between gender bias relating to toys and presence of elder sibling(s) of the same or opposite gender in National School children.
Method

Design:
The current study is a quasi-experiment as it involves convenience sampling rather than random sampling. The cross-sectional design involves a comparison between children, the independent variables being gender, age and birth order/gender of elder siblings. The dependent variable to be measured is gender bias specifically related to toys; i.e. whether toy preferences in children match with gender aligned marketing from retailers and manufacturers. Also whether there is a relationship between age cohort, gender or sibling relationships/birth order and levels of gender bias.

Participants:
Participants were a convenience sample of 70 children (32 boys & 38 girls) attending a National School in Co. Wicklow, Ireland. Having researched previous peer reviewed literature relating to similar studies, as discussed in the introduction, the experimenter concluded that the sample size used in the present study held comparative validity. Following initial consultation with two school principals (Junior & Senior National School), parental permission was sought and received for participating children. Some children whose parents had chosen to opt out of the study were present in class, however class activities continued whilst the children took part individually, so no child was discommoded. The experimenter visited three class groups on three separate occasions; a senior infants group of 5 & 6 year olds (19 children), a second class group of 7 & 8 year olds (28 children) and fourth class group of 9 & 10 year olds (23 children). The National School sample was drawn from an area where there would be a mix of working-class and middle-class backgrounds and some children of non-Irish national parents providing for a reasonably varied sample. However for reasons of privacy and sensitivity to the wishes of the school, individual children were not questioned regarding parental background, employment or education, so statistical information is not supplied as to how these categories were represented.

Each class was addressed as a whole by the experimenter, explaining a little about psychology as a field of study and further contextualising the study itself. Also all children were informed that they were free to withdraw at any time either before they sit with the experimenter or during the individual element (of the three class groups no participating child chose to exercise this freedom).
Class teachers assisted in organising for participating children to individually sit with the experimenter in an area observable by the teacher, but maintaining enough distance so other children would not be able to clearly overhear, providing for no undue influence on children yet to participate. There was a pre-prepared response sheet upon which the experimenter took note of each child's gender and age, but names were not taken as there was no requirement to infringe on anonymity considering there was no longitudinal aspect to the study. Also children were asked to identify if they had elder or younger brothers or sisters and a birth order category was assigned to them at a later time based on their responses.

Following this the children were shown the PowerPoint slides specific to their age group, from number one to twenty, and simply asked to respond positively or negatively as to whether they would like to receive each toy as a present. Most children chose to verbalise their responses but some simply chose to respond by means of a head shake or nod. The experimenter was happy to proceed on whichever basis the child was comfortable as long as the intent was clearly communicated, which it was in all cases. The experimenter recorded each child's responses on the response sheets for further analysis. The response sheets contained a list naming each toy and there was a "B" or "G" beside each toy to indicate the gender category, so the sheet was held away from the view or the child on a clipboard during the data collection.

**Stimuli:**
The stimuli used were a selection of 20 PowerPoint slides, full screen on a laptop facing away from the rest of the children in the class group. The slides contained photograph images of toys (10 toys marketed at boys & 10 toys marketed at girls). Toy images were selected from the website of Ireland's largest toy retailer Smyth's Toys and gender categories were assigned based on how they were presented or marketed, either with gender specific wording, colouring or images of only boys or only girls playing with the toy. The images selected for use in the study did not contain any child, only the toy itself against a plain background, so that there would be no influence on participants from the gender of a depicted child. Respecting the ethos of the school, and opinion of many parents, no militaristic toy images were used in the study. The toys selected for each age cohort were altered slightly to account for age appropriateness, however some toys were used across two or all age groups as they were deemed suitable for all ages participating.
Fig 1. Stimuli for Fourth Class Group (9-10) - Toys marketed at girls in pink/Toys marketed at boys in blue

<table>
<thead>
<tr>
<th>Teksta Puppy (Blue)</th>
<th>Lego Friends</th>
<th>Boys Bike 20 inch</th>
<th>Tool Set</th>
<th>Fashion Design Set</th>
<th>Pirate Ship &amp; Castle</th>
<th>Princess Castle</th>
<th>Lucy The Puppy</th>
<th>Fisher Price Fire Station</th>
<th>Monster High School</th>
</tr>
</thead>
</table>

Fig 2. Stimuli for Second Class Group (7-8) - Toys marketed at girls in pink/Toys marketed at boys in blue

<table>
<thead>
<tr>
<th>Teksta Puppy (Blue)</th>
<th>Lego Friends</th>
<th>Boys Bike 18 inch</th>
<th>Tool Set</th>
<th>Play Doh Boutique</th>
<th>Pirate Ship &amp; Castle</th>
<th>Princess Castle</th>
<th>Lucy The Puppy</th>
<th>Fisher Price Fire Station</th>
<th>Hot Wheels Monster Jam</th>
</tr>
</thead>
</table>

Fig 3. Stimuli for Senior Infants Group (5-6) - Toys marketed at girls in pink/Toys marketed at boys in blue

<table>
<thead>
<tr>
<th>Teksta Puppy (Blue)</th>
<th>Lego Duplo Ariels Undersea Castle</th>
<th>Boys Bike 16 inch</th>
<th>Toy Cleaning Trolly</th>
<th>Tool Set</th>
<th>Play Doh Boutique</th>
<th>Pirate Ship &amp; Castle</th>
<th>Princess Castle</th>
<th>Lucy The Puppy</th>
<th>Fisher Price Fire Station</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home Sweet Home</td>
<td>Massey Ferguson Tractor</td>
<td>Hot Wheels Monster Jam</td>
<td>Flutterbye</td>
<td>Disney Princess Leapfrog</td>
<td>Littlest Pet Shop</td>
<td>Jake &amp; The Neverland Pirates Duplo</td>
<td>DC Joker Funhouse</td>
<td>Mega Bloks Robot</td>
<td>My Little Pony</td>
</tr>
</tbody>
</table>

*For examples of toy image stimuli and copies of response sheets see appendix*
Materials/Apparatus:

Ethics:
Child Protection - In keeping with the ethical guidelines of Dublin Business School (DBS) for working with under 18 year olds, the experimenter signed a Statutory Declaration which was witnesses by P C Moore & Co., Solicitors, Dublin. Copies of the Statutory Declaration were presented to the two participating school principals and also the experimenter's DBS supervisor, Dr. Reid. As stated earlier, during the individual element of the study the experimenter and individual children were always in full view of the class teacher.

Participation - Following initial consultation with the school principals parental permission was sought by means of an information sheet and note from the school, which was written by the experimenter (see appendix) and approved by the study supervisor and school principals. A number of parents from each class group chose for their children to opt out of the study. As the parents' note explained, those children remained in the class whilst the study was proceeding however they were not discommoded as after an initial short talk to the class by the experimenter, normal class activity continued whilst individual children participated. During the short talk to class participating children were advised that they were free to withdraw at any time prior to or during the individual element of the study.

Deception - Children were advised that they were being asked to identify which toys they would like to receive as a present. However which toys had been categorised as marketed to boys and which toys were categorised as marketed to girls was not revealed to the children prior to, during or after the study. There was a concern that if toys were revealed as "gender specific" after the study it could cause some distress or confusion to young minds so the more sensitive course of action was to thank the children for their input and inform them that copies of the study would be made available to the school and interested parents upon request. The full nature of the study was communicated to parents via the information sheet and whilst this did pose a risk of parents preparing children, this was outweighed by the ethical considerations of full informed parental consent when working with young children.
**Coercion** - The class teacher was given bags of jellies to hand out to the children as a small token of gratitude, however all children in the class received jellies whether they participated or not. Also children were not made aware of jellies until after the study had finished and the experimenter was leaving or had left the class, so coercion was not a factor.

**Reliability:**

A Cronbach's Alpha Reliability Test was carried out to test the data collected. The Cronbach's Alpha revealed an adequate level of Reliability ($\alpha = .706$).
Results

Descriptive Statistics:
Descriptive statistics were calculated relating to gender bias scores and are listed in Table 1 (see below for method of calculation).

Table 1.

<p>| | |</p>
<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>70 (0 missing)</td>
</tr>
<tr>
<td>Mean</td>
<td>87.93</td>
</tr>
<tr>
<td>Median</td>
<td>100</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>20.266</td>
</tr>
<tr>
<td>Variance</td>
<td>410.705</td>
</tr>
<tr>
<td>Skewness</td>
<td>-1.736</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>1.963</td>
</tr>
<tr>
<td>Range</td>
<td>75</td>
</tr>
</tbody>
</table>

Allocation of Gender Bias Scores:
From the data collected the experimenter calculated a gender bias score for each child. This score was based on the percentage of positive responses to the stimuli that fell within their gender aligned category as outlined above. So for example a girl who gave 7 positive responses and all 7 were toys marketed at girls would receive a gender bias score of 100; whereas a boy who gave 8 positive responses, 4 to toys marketed at boys and 4 to toys marketed at girls, would receive a gender bias score of 50.

As indicated by the Mean (87.93) and Median (100) the majority of gender bias scores were high, with many at the maximum level. However as indicated by the Range (75) and Standard Deviation (20.266) there was some variation amongst a minority of participants.
As illustrated in Figure 4, the overall gender bias scores were negatively skewed due to the high number of participants who chose toys only within their own gender alignment (61.43%). There was also negative skew when participants were broken down by age cohort, gender or birth order/elder siblings category. For this reason non-parametric methods of testing were deployed.

**Age Cohort:**
A Kruskal-Wallis one-way Anova was carried out to test significance between the three age cohorts participating, senior infants aged 5-6 (M=91.47, SD=15.65), second class aged 7-8 (M=95.07, SD=9.39) and fourth class aged 9-10 (M=76.3, SD=27.61). The results were as follows:
The Kruskal-Wallis one-way Anova showed that the senior infants, second class and fourth class groups differed significantly ($\chi^2(2) = 6.28, p = .039$).

Table 2.

<table>
<thead>
<tr>
<th>Age Cohorts</th>
<th>Number</th>
<th>Mean Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-6 (Senior Infants)</td>
<td>19</td>
<td>37.21</td>
</tr>
<tr>
<td>7-8 (Second Class)</td>
<td>28</td>
<td>40.52</td>
</tr>
<tr>
<td>9-10 (Fourth Class)</td>
<td>23</td>
<td>27.98</td>
</tr>
<tr>
<td>Total</td>
<td>70</td>
<td></td>
</tr>
</tbody>
</table>

To provide for non-parametric post hoc pairwise comparisons, Mann-Whitney U tests were carried out to compare between age cohorts and the p value was divided by 3 to control for inflation (Bonferroni Correction). The results were as follows:

1. A Mann-Whitney U test was used to test if there would be a significant difference between the senior infants group and the second class group gender bias scores. The senior infants had a mean rank of 21.97 compared to the mean rank of 23.75 for the second class. The Mann-Whitney revealed that the senior infants and the second class did not differ significantly ($U = 227.5, Z = -.534$).

2. A Mann-Whitney U test was used to test if there would be a significant difference between the senior infants group and the fourth class group gender bias scores. The senior infants had a mean rank of 25.13 compared to the mean rank of 20.5 for the fourth class. The Mann-Whitney revealed that the senior infants and the fourth class did not differ significantly ($U = 187.5, Z = -1.311$).

3. A Mann-Whitney U test was used to test if there would be a significant difference between the second class group and the fourth class group gender bias scores. The second class group had a mean rank of 29.58 compared to the mean rank of 22.28 for the fourth class. The Mann-Whitney revealed that the senior infants and the fourth class differed significantly ($U = 232, Z = -1.990$).
**Gender:**
A Mann-Whitney U test was carried out to test if boys (M=96.81, SD=10.92) would be significantly more likely to display gender bias than girls (M=80.45, SD=23.25) relating to toys and the results were as follows:

The Mann-Whitney U test was used to test the hypothesis that boys will be significantly more likely to display gender bias than girls in a cross-sectional study relating to toys. The boys gender bias score had a mean rank of 44.78 compared to the mean rank of 27.68 for the girls gender bias scores. The Mann-Whitney revealed that boys and girls differed significantly (U = 311, Z = -3.996)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Number</th>
<th>Mean Rank</th>
<th>Sum of Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>32</td>
<td>44.78</td>
<td>1433</td>
</tr>
<tr>
<td>Female</td>
<td>38</td>
<td>27.68</td>
<td>1052</td>
</tr>
<tr>
<td>Total</td>
<td>70</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Given that the pairwise comparisons between age cohorts indicated that the fourth class group was significantly less gender biased than the younger groups, further analysis of the eldest group was carried out to compare between genders: A Mann-Whitney U test was used to test if boys in the fourth class group will be significantly more likely to display gender bias than fourth class girls in a cross-sectional study relating to toys. The fourth class boys gender bias score had a mean rank of 18.46 compared to the mean rank of 7.08 for the fourth class girls gender bias scores. The Mann-Whitney revealed that fourth class boys and fourth class girls differed significantly (U = 7, p = .000). Mann-Whitney U tests were also used to test the younger age cohorts revealing that the level of significance in difference between genders decreased in the second class group (U = 51, p = .038) and there was no significant difference in the senior infants group (U = 39.5, p = .807).
**Birth Order/Elder Siblings:**
A Kruskal-Wallis one-way Anova was carried out to test significance between three categories of children where elder siblings were present. Eldest children and only children were excluded from this element of the study. Youngest children and middle children were conflated into one of three categories. The Kruskal-Wallis tested difference between children where elder siblings were of the opposite gender/OG (M=81.93, SD=25.67), same gender/SG (M=96.24, SD=7.97) or mixed genders/MG (M=88.36, SD=21.08).

The Kruskal-Wallis one-way Anova showed that the OG, SG and MG categories did not differ significantly ($\chi^2(2) = 3.11, p = .211$). The null hypothesis must be accepted.

Table 4.

<table>
<thead>
<tr>
<th>Elder Sibling(s)</th>
<th>Number</th>
<th>Mean Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opposite Gender</td>
<td>14</td>
<td>17.71</td>
</tr>
<tr>
<td>Same Gender</td>
<td>17</td>
<td>24.21</td>
</tr>
<tr>
<td>Mixed Genders</td>
<td>11</td>
<td>22.14</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>42</strong></td>
<td></td>
</tr>
</tbody>
</table>
Discussion

Methodology
The methodology for allocating a gender bias score was initially intended to factor in both positive and negative responses to the toy stimuli; however the methodology was altered following data collection. During interaction with the participating children it became apparent that the reasons for a negative response to a toy were more varied than perceived gender appropriateness. Factors relating to personal taste must also be considered, so a negative response to a gender aligned toy, resulting in a lowering of gender bias score, would not meet the criteria for validity.

The altered methodology was to include only positive responses when calculating gender bias scores. In making a positive response the child would consider a number of factors as to whether the toy is to their taste including gender appropriateness, if that were a concern to the individual child.

If gender is a negative factor for a child when responding to a stimulus, then a child will respond negatively to a non-gender aligned toy, however a positive response could be viewed as a true reflection of taste including perceived gender appropriateness. Therefore only positive responses were taken into consideration when calculating gender bias scores.

Though the altered methodology had the effect of allocating the majority of the children (43 of 70) with a 100% gender bias score, skewing the data, validity must be a paramount concern.

Age Cohort
The results of the Kruskal-Wallis one-way Anova supported the hypothesis that there would be a relationship between gender bias relating to toys and age of the participating National School children. Providing for further analysis, the post hoc comparisons indicated that it was the eldest, fourth class group that accounted for the significant difference. This fed into the gender hypothesis as the study sought to investigate if it was the girls in the eldest age cohort that accounted for the significantly lower gender bias scores.
Gender
The overall gender comparison indicated that boys were significantly more likely to display gender bias than girls relating to toys as hypothesised. This supports the findings of the previous research discussed in the introduction. As previously discussed, considering the results of the age cohort element of the study, further analysis was carried out and each of the three individual age cohorts were tested. Again it was the eldest, fourth class group that accounted for the greatest degree of significance between genders as no significant difference was found in the youngest, senior infants group and a lower level of significance was found in the second class group, though the middle age cohort did demonstrate significance. This would seem to support previous research as regards the rigidity of boys development as compared with the more dynamic nature of development in girls. Of particular relevance is the earlier cited research of Halim, Ruble & Amodio (2011). The current research may support the theory of transition from a "pink frilly dress stage" in early childhood to a "tomboy stage" in middle childhood.

The youngest 5 & 6 year old girls were more likely to stay within their own gender aligned toy choices, as boys were. However in the 7 & 8 year old group there was a significant difference between girls and boys indicating that the girls had become less gender biased, showing more flexibility than boys. Furthermore the eldest group of 9 & 10 year old girls showed a highly significant difference when compared with boys, perhaps indicating a completion of the transition from the "pink frilly dress stage" to the "tomboy stage" as proposed by Halim, Ruble & Amodio (2011).

Birth Order/Elder Siblings:
*SG/same gender elder sibling(s); OG/oppoosite gender elder sibling(s); MG/Mixed Gender Elder Sibling(s)

Though no significant difference was observed between the three elder sibling categories, it may be noted that the mean gender bias score for children in the SG category was 7.88% higher than the MG category and 14.31% higher than the OG category, so same gender elder siblings may have had some influence, although not statistically significant in the current study. Also the standard deviation amongst the SG group was far lower than the other two groups (SG SD 7.97 < MG SD 21.08 < OG SD 25.67) perhaps pointing to a greater rigidity of attitude amongst this group. Further analysis of the influence of elder siblings with regard to gender bias, perhaps with a larger sample size, may be required.
Limitations of the Current Research
As an undergraduate study, the current research did not have the time or resources to invest in a longitudinal, within group comparison. It could be argued that such a study would provide for a more accurate indication of the development of children between the age groups investigated. Though the current research seems to demonstrate the dynamic nature of girls developing attitudes in comparison with the more rigid nature of boys' attitudes, a longitudinal analysis may provide for greater validity in this regard.

As discussed earlier, the altered methodology in research had the effect of skewing the data as the majority of children responded positively to gender aligned toys only. However it could be argued that this in itself provides for an accurate picture of existing gender bias. Further research may provide for a greater understanding of the underlying causes of gender bias, giving greater indication as to whether the current methodology may be deemed valid.

The current research points to a relationship between bias relating to toys, gender and age. However there was a failure to demonstrate any relationship between gender bias relating to toys and the gender of elder siblings. This combined with the lack of any investigation relating to other contributing factors means that further research would be required in order to investigate any additional causes of increased gender bias and greater rigidity amongst boys.

Conclusion
As discussed earlier the attitudinal flexibility demonstrated by girls in the current research may better prepare them for the demands placed on them by wider society as they progress through life. Extrapolating beyond gender attitudes to toys, boys rigidity of attitude may be to the detriment of their career prospects, relationships and mental health later in life. The current research, working within discussed limitations, provides for an indication of the difference in attitudes between girls and boys as they move between three age cohorts from early to mid-childhood. It may provide for a starting point from which further research may seek to identify causes and point to solutions, if indeed solutions are deemed necessary.
References


Toy Images Retrieved from http://www.toys.ie on 28.01.14


Appendix

Statutory Declaration

Dublin Business School
Excellence through learning

DUBLIN BUSINESS SCHOOL / DBS SCHOOL OF ARTS
STATUTORY DECLARATION

BRIAN RIordan
aged 18 years and upwards do solemnly and sincerely declare that:

1. I am not and have never been engaged in any conduct which could result in a conviction for any offence under the Child Pornography Act 1996. I understand that the offences under the Act comprise child trafficking, the taking of children for the purposes of sexual exploitation, allowing children to be used for the production of child pornography, the dissemination of child pornography, and the possession of child pornography.

2. I have never been convicted of any criminal offence for assault, battery, rape, murder, false imprisonment or unlawful carnal knowledge.

3. I have also never been convicted of any criminal offence relating to the trafficking or possession of drugs for supply.

4. I have never been excluded from working with children.

5. I have read and agree to abide by the code of ethical conduct set out by the Psychological Society of Ireland currently in force at the time of making this Declaration and I agree to abide by this code as subsequently amended from time to time.

6. I have read and agree to abide by the guidelines as set out in the DBS Ethics Policy.

7. I have been informed and understood that if I make a false declaration regarding any of these matters Dublin Business School will immediately terminate my research in the department and that any qualifications from the School will be negatated.

I make this declaration for the satisfaction of Dublin Business School believing the same to be true and by virtue of the Statutory Declarations Act 1998.

Signature

DECLARED before me by the said
BRIAN RIORDAN
in the City of Dublin this
23rd day of
October, 2015

Commissioner for Oaths / Practising Solicitor
The Georgian Business Centre
20 Baggot Street Lower
Dublin 2

Accountancy and Business College (incorporating TAFE Dublin Business School) Reg’d No 114413
Director: G. Auld (Chairman), P. O’Sullivan (CEO)
B. Sullins (Chief Secretary)
Response Sheet #1

Age Group 9-10 Years Old

Age ____________

Boy □ Girl □

Siblings

Older Brother(s) □

Older Sister(s) □

Younger Brother(s) □

Younger Sister(s) □

Birth Order _____________________________________________________

<table>
<thead>
<tr>
<th>No.</th>
<th>Toy Name</th>
<th>Boy/Girl</th>
<th>Positive</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Teksta Puppy (Blue)</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Lego Friends</td>
<td>G</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Boys Bike 20 inch</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Tool Set</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Fashion Design Set</td>
<td>G</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Pirate Ship &amp; Castle</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Princess Castle</td>
<td>G</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Lucy The Puppy</td>
<td>G</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Fisher Price Fire Station</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Monster High School</td>
<td>G</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Hot Wheels Monster Jam</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Flutterbye</td>
<td>G</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Password Journal 8</td>
<td>G</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Littlest Pet Shop</td>
<td>G</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Glitz Globz</td>
<td>G</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Lego Super Hero Batcave</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>LaLa Loopsy</td>
<td>G</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Sonic Speed Star</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Mega Bloks Robot</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Disney Remote Control Plane</td>
<td>B</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Response Sheet #2

Age Group 7-8 Years Old

Age ______________

Boy ☐ Girl ☐

Siblings
- Older Brother(s) ☐
- Older Sister(s) ☐
- Younger Brother(s) ☐
- Younger Sister(s) ☐

Birth Order _____________________________________________________

<table>
<thead>
<tr>
<th>No.</th>
<th>Toy Name</th>
<th>Boy/Girl</th>
<th>Positive</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Teksta Puppy (Blue)</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Lego Friends</td>
<td>G</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Boys Bike 18 inch</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Tool Set</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Play Doh Boutique</td>
<td>G</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Pirate Ship &amp; Castle</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Princess Castle</td>
<td>G</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Lucy The Puppy</td>
<td>G</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Fisher Price Fire Station</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Hot Wheels Monster Jam</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Flutterby</td>
<td>G</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Password Journal 8</td>
<td>G</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Littlest Pet Shop</td>
<td>G</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Glitz Globz</td>
<td>G</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>DC Joker Funhouse</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>LaLa Loopsys</td>
<td>G</td>
<td></td>
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</tr>
<tr>
<td>17</td>
<td>Sonic Speed Star</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Mega Blocs Robot</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>My Little Pony</td>
<td>G</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Disney Remote Control Plane</td>
<td>B</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Response Sheet #3  
Age Group 5-6 Years Old

Age ____________

Boy [ ]  
Girl [ ]

Siblings  
Older Brother(s) [ ]
Older Sister(s) [ ]
Younger Brother(s) [ ]
Younger Sister(s) [ ]

Birth Order _____________________________________________________

<table>
<thead>
<tr>
<th>No.</th>
<th>Toy Name</th>
<th>Boy/Girl</th>
<th>Positive</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Thomas Take &amp; Play Scruff</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Lego Duplo Ariels Undersea Castle</td>
<td>G</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Boys Bike 16 inch</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Toy Cleaning Trolly</td>
<td>G</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Tool Set</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Play Doh Boutique</td>
<td>G</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Pirate Ship &amp; Castle</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Princess Castle</td>
<td>G</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Lucy The Puppy</td>
<td>G</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Fisher Price Fire Station</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Home Sweet Home</td>
<td>G</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Massey Ferguson Tractor</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Hot Wheels Monster Jam</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Flutterbye</td>
<td>G</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Disney Princess Leapfrog</td>
<td>G</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Littlest Pet Shop</td>
<td>G</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Jake &amp; The Neverland Pirates Duplo</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>DC Joker Funhouse</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Mega Blocs Robot</td>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>My Little Pony</td>
<td>G</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Toy Images

Examples of Stimuli to which children responded:
INFORMATION SHEET FOR PARENTS

Research Topic: Birth Order, Age and Gender as Predictors of Gender Bias in Children's Attitude to Toys.

Researcher: Brian Riordan, Student researcher,
Dr. Rosie Reid, Supervisor,

Background and Purpose: My research is aimed at investigating how children think about toys specifically with regard to the gender divide. This is an area which is quite topical as a number of UK retailers recently decided to stop marketing toys as gender specific following lobbying by parents, however in the Irish context, as I'm sure many of you have observed, the practice continues in Irish toy retailers. I will be visiting a senior infants group, a second class group and a fourth class group in order to compare between age categories and also asking children to identify if they have siblings to measure for that possible influence. I am doing this as part of my studies at DBS, and I am working with Dr. Rosie Reid, whose contact details are included above.

What happens if my child takes part? I will be visiting your child’s school during class time, at a time arranged with the principal. I will speak to the class as a group and tell them that I will be showing them pictures of toys and I am interested in their opinion of each toy (would they be happy to receive it as a present). Each participating child will then be taken aside to an area observable by their teacher and shown a series of twenty toys on PowerPoint slides to which they will be invited to react positively or negatively. If you decide your child will not take part your child will be present in the classroom when I speak to the class as a whole but will not take part in the individual PowerPoint element. Normal class activity will be ongoing whilst children are participating so your child will not be discommoded should you decide they will not participate.

What will happen to the results of the study? The information gathered may indicate how children themselves perceive toys and whether they tend to follow apparent gender divides. It may also indicate if such a perception changes as the children get older or are influenced by older siblings. The study’s results could be published in academic journals and presented at academic conferences, however at no point would any children be identifiable.

How will my child’s information be protected? The information collected will not be linked to any individual child as I will not be taking children’s names as they participate. I will record only their gender, age and sibling details.

Voluntary Participation: It is up to you and your child to decide whether your child is going to take part or not. Participation is completely voluntary. Your child is free to withdraw at any time. I will remind the children of this when I meet them.

Important: The opt-out form! There is an opt-out form attached to this information sheet. If you do not wish your child to take part in the study please sign it and return it to the class teacher. If you do so your child will not take part in the individual element as outlined above.

Thank you very much for supporting this research study. Please keep this information for your records.
PARENT'S Opt-Out Form

Title of Study: Birth Order, Age and Gender as Predictors of Gender Bias in Children's Attitude to Toys.

Researcher: Brian Riordan, Student researcher,  
Dr. Rosie Reid, Supervisor,

Parents Name: _______________________________________________________________

Child’s Name: _______________________________________________________________

I do not wish my child to take part in the above study.

..................................................  ...............  ........................................
Name of Parent  (in block letters)  Date  Signature