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NEWS ANALYSIS

Neuroscience or stealth marketing? Experts alarmed at free Barbies for primary schools to teach social skills

Free dolls were given to 700 UK schools as part of Mattel's "Barbie School of Friendship" programme, which the company says was based on neuroscience research, but critics are worried about overt marketing. **Hristio Bovtchev** reports

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The toy company Mattel has been criticised for "stealth marketing" after giving away free Barbie and Ken dolls to schools as part of a programme to teach empathy to children.

Mattel's "Barbie School of Friendship" programme, in which free dolls were given to children to carry out role play exercises, has been rolled out to 700 schools across the UK, "with the potential to reach 150 000+ pupils," said the company.

Mattel said research it had sponsored showed that playing with dolls offered "major benefits" for child development, including nurturing social skills such as empathy. But experts have criticised the programme, questioning the potential negative effects of Barbie dolls in terms of gender stereotyping and the use of research to justify the programme, and asking whether companies should be able to market their products freely in schools.

The Department of Education for England refused to confirm whether it had evaluated the programme and told *The BMJ* that schools had autonomy to introduce any educational materials they believed were appropriate.

"The project makes me suspicious that it may be exploitative," said Philippa Perry, a psychotherapist and author of books on parenting and education. "I feel faintly repulsed by it." Mark Petticrew, professor of public health evaluation at the London School of Hygiene and Tropical Medicine, called the programme "alarming."

"Commercial entities like Mattel are not experts in children's health or education, they are experts in selling products to maximise profits," said May van Schalkwyk, a specialty public health registrar, also at the London School of Hygiene and Tropical Medicine. "The Mattel materials are heavily branded—why should children be exposed to this type of stealth marketing?"

Evidence indicates that, when compared with the use of other toys, exposure to a Barbie doll may have negative effects, such as shaping girls' perception of their career options or their internalisation of the ideal of thinness, ¹² while the longer term effects of exposure to Barbies are largely unknown, van Schalkwyk told *The BMJ*. Given the long history of commercial actors seeking to influence school curriculums, engagement with industry needed to be taken much more seriously, she said.

Free Barbies and Kens

Mattel said that each school registered in the programme received a package of 12 Barbie and Ken dolls, lesson plans for role play activities, a guide for teachers, additional guidance concerning children with special educational needs and disabilities, flashcards, certificates and stickers for pupils, a poster, a leaflet about a competition, information to give to parents, and additional images of dolls to be cut out.

The teaching materials, which Mattel provided to *The BMJ*, are all branded with the company's logo and include a classroom poster and leaflets for the pupils showing pictures of dolls and branded with the logos of Mattel, Barbie, and SUPER, the marketing company involved in creating and promoting the programme and which communicated with the participating schools.

Leaflets aimed at pupils said, "Enter the 'Barbie's School of Friendship' Competition for a chance to win a Barbie Toy Bundle worth £100!!" They instructed the pupils to "draw a friend/Barbie/Ken" expressing a feeling of their choice to send in to SUPER for a chance to win.

The company's offer of free resources was, "given the current lack of funding in schools, always a positive," said Lisa Georgeson, a teacher at Lord Blyton Primary School in Tyne and Wear, which participated in the programme. A teaching assistant there delivered half hourly sessions once a week for seven weeks, working with around eight boys and girls in reception class, Georgeson said. She said that the children enjoyed the sessions, which helped them engage in positive discussions about friendship, social skills, empathy, stereotypes, disabilities, and kindness.

"We are in a relatively socially deprived area, and many of our children don't get the opportunity to engage in speaking and listening activities about subjects such as these," Georgeson told *The BMJ*.

Overselling the research

The school's website says that the "Barbie School of Friendship is based on neuroscientific research to help children develop important social skills." In information aimed at teachers, parents, and the public Mattel refers several times to the studies it has funded as the basis for the programme.

"In 2020, Barbie unveiled some new scientific findings that show—for the first time—real, tangible benefits of doll play," says a brochure aimed at parents. "In short, the research concludes that playing with dolls, such as Barbie, offers major benefits in preparing children for the future through nurturing social skills like empathy."

This research was part of a five year collaboration between Mattel and Cardiff University, a Mattel spokesperson said. A 2020 paper found higher brain activity in children when they played with Mattel dolls than when they played with games on electronic tablet computers. A Mattel sponsored reanalysis of the same experiment group concluded in 2022 that the children playing with dolls used more "internal state language" to describe feelings and thoughts. Both papers received widespread media coverage. 6

Franziska Korb, a psychologist at the Dresden University of Technology, Germany, told *The BMJ* that the study's idea was good and its methods appropriate. But she pointed out that although the studies found significant differences between doll and tablet play when each child was playing alone the differences disappeared when the children played with an adult. Korb also said the research could not be used to make statements about long term developmental or behavioural effects.

Sarah Gerson, a senior lecturer at Cardiff University who is the senior author of both studies and a recipient of Mattel's research funding, agreed that the higher brain activity found related to solo and not social play, a limitation expressed in the papers but not in Mattel's materials for schools.

Even though Mattel said that the school programme was built on the neuroscience led by Gerson, she said that the "exercises themselves aren't directly based on our research."

Gerson said she found the programme interesting but had some reservations. "I think it's a tricky one, for sure," she said, adding that there was "moral ambiguity" about it. She described Mattel's statement to parents—that the research showed that playing with dolls such as Barbie offered major benefits—as a "bit strong."

Brand marketing rife in schools

Aaron Lipman, founding director of the marketing company SUPER, told *The BMJ* that it had a database of 5000 UK primary schools (including preschools and nurseries), a quarter of the total number, that had subscribed to receive free branded education programmes from a range of companies. Mattel approached it with the task to use the commissioned research to create a classroom activity, he said.

The science was important for the campaign, according to Lipman. "We didn't want teachers to think this was a commercial venture to sell more Barbies." Sharing some of the research was crucial to get their participation and to become brand ambassadors, he said. He added that the response had been "phenomenal," with schools subscribing in "record" speed. He believed that more than 225 000 children were introduced to the programme over the course of three months.

When confronted with the criticism of the campaign, Lipman said that the materials contained no sales messages and that the children weren't asked to do anything other than learn from the education content. "The marketing is simply branding done carefully and considered," he said.

Wider rollout

A Mattel spokesperson told *The BMJ* that, because of the positive results, the company would consider expanding the programme to

other markets. Underfunding of education meant that schools had to look to commercial companies to try to help them with their lesson planning, the spokesperson said.

When presented with criticism of the programme, the spokesperson sent anonymous testimonials to *The BMJ* from teachers celebrating the programme for the positive response it had elicited in pupils and the diversity of the dolls in terms of body type, disability, and skin tone.

The Department of Education did not answer *The BMJ*'s query whether it was aware of the campaign and had evaluated the materials. "Each school has autonomy over the materials they use, provided they are factual and age appropriate," a spokesperson said. "Next year, school funding will be at its highest level in history—in real terms," they added.

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