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Children Prefer Familiar Fantasy, but not Anthropomorphism, in Their Storybooks

Sierra Eisen*, Jessica Taggart*, and Angeline S. Lillard

University of Virginia

ABSTRACT

Children's storybooks often contain fantasy elements, from dragons and wizards to anthropomorphic animals that wear clothes, talk, and behave like humans. These elements can impact children's learning from storybooks both positively and negatively, perhaps due in part to their ability to capture children's interest and attention. Prior research has found that children prefer realistic to make-believe stories, but little is known about children's preferences for anthropomorphic characters. The present study examines U.S. children's preferences for fantasy and anthropomorphism in storybooks. Seventy-two 4- to 6-year-old children (M = 65.74 months, SD = 10.84 months) were presented with 10 pairs of books (fantasy/anthropomorphic vs. realistic) and asked to select which book they liked better and why. Children chose fantasy but not anthropomorphic animal stories significantly more often than expected by chance. Children's preferences were not related to age or gender, and they most often justified their choices with references to the storyline. Implications for creating and selecting media are discussed, since children learn best when learning materials align with their interests.

Children often engage in fictional worlds through media; children under age 8 spend about half an hour each day reading and more than an hour and a half watching television and videos (Rideout, 2017). These media are often fantastical, depicting "things that cannot occur or exist in the real world" (Hopkins & Weisberg, 2017, p. 59), or contain anthropomorphic characters – nonhuman characters with human-like characteristics. For example, in a content analysis of 88 popular U.S. children's television shows, 65% portrayed fantasy and 75% portrayed anthropomorphic characters (Taggart, Eisen, & Lillard, 2019). A separate content analysis of children's television, books, and videos similarly revealed a wealth of supernatural content, including anthropomorphic characters and magical explanations for everyday events (Goldstein & Alperson, 2020). For science television shows specifically, one third present the science content in anthropomorphic ways (Bonus & Mares, 2018).

Fantasy and anthropomorphism are clearly prevalent in children's media, and there are reasons to believe young children might be attracted to this fantasy content. It is both familiar because it is prevalent, and novel compared to the real world; these features could add to its appeal. Additionally, pretend play peaks during the preschool years (Woolley,

CONTACT Sierra Eisen sle3jt@virginia.edu Department of Psychology, University of Virginia, P.O. Box 400400, Charlottesville, VA 22904

*co-first authors

1997), a period in which children willingly believe in magic and fantastical beings (e.g., Harris, Brown, Marriott, Whittall, & Harmer, 1991; Johnson & Harris, 1994; Phelps & Woolley, 1994) and have imaginary companions (Taylor, Cartwright, & Carlson, 1993).

Yet, some research suggests children are in fact *not* attracted to fantasy content in their media. Barnes, Bernstein, and Bloom (2015) found that 4- to 7-year-old children preferred stories that were presented as "real" compared to those described as "make-believe" when both stories contained events that could plausibly happen. When children chose between stories with realistic content versus fantastical content (e.g., a girl who lives on an invisible farm), 6- and 7-year-olds preferred fantasy stories, in line with adults' preferences, but 4- and 5-year-olds showed no preference. Four-year-olds also preferred to add realistic content to stories, regardless of whether the stories tend toward realism or fantasy (Weisberg, Sobel, Goodstein, & Bloom, 2013). These studies suggest a developmental shift wherein younger children prefer realistic story content, but as they enter elementary school, a proclivity toward fantasy begins and continues into adulthood. It is unclear why children prefer realistic stories around the same age when they are often highly engaged in fantasy worlds (Woolley, 1997).

Even less is known about children's preferences for anthropomorphism, another common feature of children's media. One study showed that, although US parents overwhelmingly predicted their preschoolers would want to hear a story about an anthropomorphic bear making a snowman over a story about a gender-matched child making a snowman, children did not show a preference (Guillot, 2014). This study matched anthropomorphic animal characters to human characters (i.e., a bear and a child) and suggested that children find them to be equally appealing. What happens when human characters are not an option? To our knowledge, no studies have examined whether children prefer anthropomorphic animals to realistic animals (e.g., two bears, one anthropomorphic and the other real). Since anthropomorphic animals often serve as tools for learning about real animals (Bonus & Mares, 2018), it is important to understand children's preferences regarding them.

Children's media that use fantastical and anthropomorphic content in educational contexts have been shown to affect learning, albeit with mixed results. In some cases, realistic or factual depictions of the world appear to best facilitate children's learning. Children more readily transfer information from a story to the real world if the story is realistic (Richert, Shawber, Hoffman, & Taylor, 2009; Richert & Smith, 2011; Walker, Gopnik, & Ganea, 2015). This may be because the similarity between surface features of the realistic story and real-world contexts makes transfer easier (Daehler & Chen, 1993). Realistic depictions also facilitate children's learning about animals (Ganea, Canfield, Simons-Ghafari, & Chou, 2014). For elementary-aged children, anthropomorphic language limits understanding of evolutionary change, whereas realistic (scientifically-accurate) explanations support learning (Legare, Lane, & Evans, 2013). And even if initial learning does not differ, children who view realistic visuals on television are more likely to transfer their science learning to the real world one week later, whereas children who view anthropomorphic visuals are more likely to anthropomorphize (Bonus, 2019).

At other times, fantasy supports children's reasoning and learning. For example, children who were asked to imagine conditions on a distant planet performed better on tasks requiring deductive and syllogistic reasoning (Dias & Harris, 1988, 1990). Lillard and Sobel (1999) demonstrated that 4- and 5-year-olds show a more accurate understanding

of the mental component of pretense when asked about fantasy characters, as compared to real animals and people (see also Sobel & Lillard, 2001). With regard to learning from stories, Weisberg et al. (2015) exposed preschoolers to target vocabulary words through storybooks that were either realistic (i.e., about farming and cooking) or fantastical (i.e., about dragons). Although children in both conditions recognized a similar number of target words, children in the fantasy condition showed greater gains in their production of information about the target words. Children have also learned biology and physics information best from stories that violated real-world physical laws (Hopkins & Weisberg, 2021).

Yet not all fantasy is equal, and the level of fantasy can influence its effects; the literature on problem solving demonstrates this well. Hopkins and Lillard (2021) found that children transferred a solution from a story to a real-world situation when the story contained fantasy that violated physical laws (e.g., walking through walls), but not when it contained superficial fantastical elements (e.g., a green sky). Similarly, children better transferred how to solve physical problems when read stories in which characters could do impossible things but employed realistic solutions to problems (Richert & Schlesinger, 2022), or when watching video clips with moderate amounts of fantasy or which included fantastical elements during problem solving (Richert & Schlesinger, 2017).

Anthropomorphism, like fantasy, can also support children's learning. When children watched television episodes with anthropomorphic depictions of science concepts, they demonstrated more factual knowledge compared to a pretest and to a no-episode-exposure control (Bonus & Mares, 2018). And as with fantasy, the level of anthropomorphism may also matter. Geerdts, Van de Walle, and LoBue (2016) note that in most research, anthropomorphic characters are depicted as strongly human-like, complete with complex social and moral problems. When children were taught biological facts using anthropomorphic characters that had names and mental states but were otherwise animal-like, they found no differences in learning between realistic and anthropomorphic depictions.

The present study

Understanding the conditions under which children do or do not prefer fantasy and anthropomorphism in media is important, in part due to this content's prevalence, and in part due to its potential impact on learning. The present study extends prior work on children's preferences by examining whether there are cases in which even young children prefer fantasy in their storybooks. Specifically, we asked whether fantasy content that U.S. children typically encounter in media, such as flying on a magic carpet, is preferred to realistic content that is closely matched, such as flying on an airplane. We chose to use fantasy content that was likely to be familiar to children in order to make the distinction between the fantastical and realistic stories highly salient. We also examined whether children prefer anthropomorphic animal characters compared to realistic animals – the first study of its kind, to our knowledge. It is also important to understand *why* children might prefer certain story types, and so children were asked to justify their choices. We considered fantasy and anthropomorphism separately because, although anthropomorphism is a form of fantasy, it is common to depict them in fictional worlds that are otherwise very realistic.

Method

Participants

Participants were 72 U.S. children ages 4 to 6 (M = 65.74 months, SD = 10.84 months, range 48.4–83.8 months; 37 girls): 22 four-year-olds, 26 five-year-olds, and 24 six-year-olds. Data from an additional two children were collected but excluded; one child failed to complete the study and the other child was accidentally tested twice so the second test session was eliminated. A post-hoc power analysis indicated that this sample size provided almost 100% power at $\alpha = .05$. Seventeen percent of participants did not report race; of those who did, 78% were white, 10% were multiracial, 5% were Asian, 5% were Black, and 2% were Native Hawaiian or Pacific Islander. Eighteen percent of participants did not report ethnicity; of those who did, 90% were non-Hispanic and 10% were Hispanic. Parents provided written consent and children verbally agreed to participate.

Materials

Materials were 10 pairs of book covers in a 22 × 28 cm binder: 5 pairs were realistic versus fantasy stories, and 5 pairs were realistic animal versus anthropomorphic animal stories (see Table 1 for all story pairs and Figure 1 for example covers). The fantasy and anthropomorphic story descriptions were identical to their realistic counterparts except for the inclusion of a fantasy or anthropomorphic event, respectively. For example, children were told, "In this book, clouds form in the sky and suddenly food begins to fall. In this book, clouds form in the sky and suddenly rain begins to fall." The fantasy events were inspired by events or objects in popular media (*Cloudy with a Chance of Meatballs, Aladdin, Harry Potter*). The paired book covers were identical in color, with no illustrations, and differed only in their titles (e.g., "The Food Storm" and "The Rain Storm"). The story descriptions were gender-matched to participants.

Table 1. Story pairs.

Pair	Title	Description
1	A Day in the Woods	A bear walks around the woods
1	A Day at School	A bear goes to school
2	Reading a Story	A cat reads a story
2	Looking Out the Window	A cat looks out the window
3	The Food Storm	Clouds form in the sky and suddenly food begins to fall
3	The Rain Storm	Clouds form in the sky and suddenly rain begins to fall
4	The Lost Bat	A boy/girl finds his/her baseball bat
4	The Lost Wand	A boy/girl wizard finds his/her magic wand
5	Barking at Squirrels	A dog is barking at a squirrel
5	Talking to Squirrels	A dog is talking to a squirrel
6	Day at the Playground	A boy/girl and his/her dog run to the playground
6	Day at the Castle	A boy/girl and his/her dragon fly to a magical castle
7	The Invisibility Coat	A boy/girl puts on a coat that makes him/her invisible
7	The Winter Coat	A boy/girl puts on a coat that makes him/her warm
8	Driving a Car	A horse drives a car into town
8	Pulling a Wagon	A horse pulls a wagon into town
9	Swimming in the Lake	A duckling is swimming in a lake on a sunny day
9	Swimming in the Pool	A duckling wears a bathing suit at the pool
10	Magic Carpet Ride	A boy/girl flies around the world on a magic carpet
10	Airplane Ride	A boy/girl flies around the world on an airplane

Figure 1. Example book covers for fantasy (left) and real (right) storybooks.

Procedure

Participants were tested in a laboratory (n = 32) or at a local children's museum (n= 40), and responses did not differ based on testing location. An experimenter said, "I'm going to tell you about all different books! I want to know what books *you* like. Does that sound good?" Following the brief, one-sentence descriptions of the two books, participants were asked check questions to ensure they correctly remembered which story was which (e.g., "Which book is about food falling from the sky? And which book is about rain falling from the sky?"). If participants were incorrect, the experimenter corrected them; this occurred for 2% of memory questions. Participants were then asked, "Which book do you like better?" After selecting, participants were asked to justify their choice: "Why do you like that one?" The order of the stories was randomly determined and then held constant for all participants, and whether the left or right book was described first was counterbalanced.

Coding

Participants' justifications were coded into one of three categories derived inductively from the data: *Story Element* (referencing liking elements specific to the chosen story, such as the plot or characters [e.g., "Because rain falls" or "Because there are dragons"]), *Fantasy/Reality Distinction* (referencing explicitly the realistic or fantastical nature of the story [e.g., "Because I think it's funny that a dog can talk"]), and *Familiarity* (referencing similarity to familiar media [e.g., "Because that's kind of like Aladdin"]). A fourth category was also coded due to its frequency, though deemed less meaningful: *Liking* (referencing general liking of the story, which also could be interpreted as simply repeating the question [e.g., "I like it"], or referencing liking an element shared across both stories [e.g., "I like cats (the focus of the two stories)"]). Eighteen percent of responses did not fit these categories and were labeled uncodable. These uncodable responses were either "I don't know"/no response (40% of uncodable responses) or irrelevant to the task (60% of uncodable responses). All

justifications were coded independently by two researchers, and reliability was nearly perfect, Cohen's κ = .98. The two researchers then met and resolved the few disagreements.

Results

Fantasy

Children chose fantasy for an average of 3.36 of the 5 stories (SD = 1.54, range = 0–5), which was significantly more than the 2.5 expected by chance, $t(71) = 4.74$, $p < .001$, Cohen's $d = 0.56$. Each individual story was then compared to chance responding using a binomial test (see Figure 2), and all fantasy stories were chosen significantly more often than expected by chance, all ps < .05. We then examined whether certain children had a strong proclivity for fantasy. Twenty-two children (31%; 5 four-year-olds, 11 five-year-olds, and 6 six-year-olds – 10 girls) always chose the fantasy options, whereas only 5 (7%; 1 five-year-old and 4 six-year-olds – 1 girl) never chose the fantasy options.

A Kruskal-Wallis H test was run to determine if there were differences in total fantasy choices between the three age groups (4, 5, 6). Median total fantasy choices were not statistically significantly different between groups, $\chi^2(2) = 1.52$, $p = .468$. Age in months was also not significantly correlated with total fantasy choices, $r(70) = -.09$, $p = .461$. A Mann-Whitney U test was run to determine if there were differences in total fantasy choices between boys and girls; total choices were not statistically significantly different between boys (Mdn = 3.00) and girls (Mdn = 4.00), $U = 694.50$, $z = .54$, $p = .587$.

Justifications

Justifications and percentages are located in Table 2. When children chose a real story, they most often justified that choice with story elements (e.g., "Because rain falls"; 64% of codable real justifications). The next most common reasons were liking (e.g., "I just like it – it's kind of neat"; 19% of codable real justifications) and the fantasy/reality distinction (e.g., "Rain is supposed to come from the sky"; 14% of codable real justifications). Children rarely appealed to familiarity (e.g., "Because I read it in a book in the library"; 3% of codable real justifications).

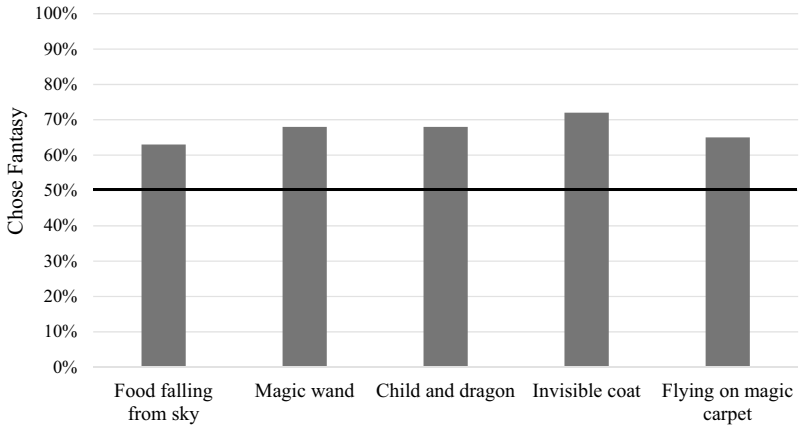

Figure 2. Percentage of fantasy choices.

Table 2. Counts and percentages of children's codable justifications.

		Fantasy		Anthropomorphism	
Category	Description	Real Justifications	Fantasy Justifications	Animal Justifications	Anthro Justifications
Story Elements	Referencing the plot or characters	64 (64%)	139 (68%)	57 (49%)	79 (47%)
Fantasy-Reality Distinction	Referencing distinction between fantasy and reality	14 (14%)	20 (10%)	25 (21%)	60 (36%)
Familiarity	Referencing similarity between the story and familiar media	3 (3%)	22 (11%)	4 (3%)	10 (6%)
Liking	Liking the story	19 (19%)	23 (11%)	31 (27%)	18 (11%)
Total Justifications		100	204	117	167

When children chose a fantasy story, they also most often justified that choice with story elements (e.g., "Because it has a wand in it"; 68% of codable fantasy justifications). The next most common reasons, all in roughly equal measure, were familiarity (e.g., "It reminds me of a movie I like"; 11% of codable fantasy justifications), liking (e.g., "Because I like it,"; 11% of codable fantasy justifications), and the fantasy/reality distinction (e.g., "Because it's weird that you fly on a magic carpet that takes you anywhere"; 10% of codable fantasy justifications).

Anthropomorphism

Children chose anthropomorphic animals for an average of 2.64 of the 5 stories (SD = 1.40, range = 0–5), which did not differ significantly from the 2.5 expected by chance, $t(71) = 0.84$, p= .402, Cohen's $d = 0.10$. Each individual story was then compared to chance responding using a binomial test (see Figure 3), and all anthropomorphic animal stories were chosen at chance, all ps > .05. We then examined whether certain children had a strong proclivity for anthropomorphic animals. Eight children (11%; 3 five-year-olds and 5 six-year-olds – 5 girls) always chose the anthropomorphic animal options, whereas 6 (8%; 1 four-year-old, 1 five-year-old, and 4 six-year-olds – 3 girls) never chose the anthropomorphic animal options.

A Kruskal-Wallis H test was run to determine if there were differences in total anthropomorphic animal choices between the three age groups (4, 5, 6). Median total anthropomorphic animal choices were not statistically significantly different between groups, $\chi^2(2) = .11$, p = .945. Age in months was also not significantly correlated with total anthropomorphic animal choices, $r(70) = .004$, p= .973. A Mann-Whitney U test was run to determine if there were differences in total anthropomorphic animal choices between boys and girls; total choices were not statistically significantly different between boys (Mdn = 2.00) and girls (Mdn = 3.00), $U = 667.50$, $z = .23$, p = .817.

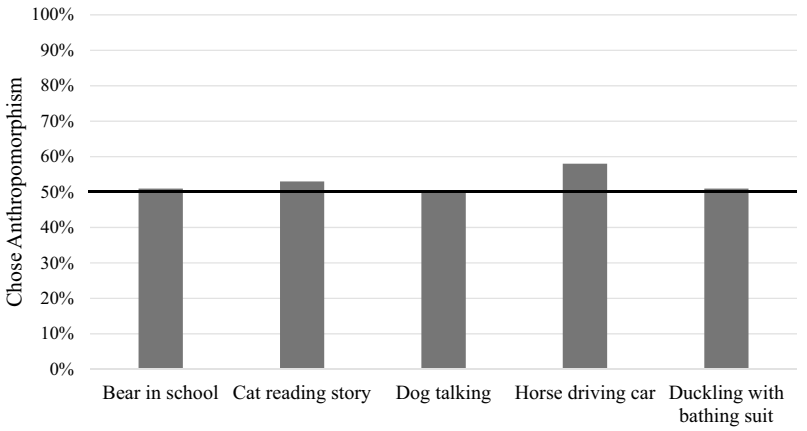

Figure 3. Percentage of anthropomorphism choices.

Justifications

Justifications and percentages are located in Table 2. When children chose a realistic animal story, they most often justified that choice with story elements (e.g., "Because it's a bear walking in the woods"; 49% of codable real animal justifications), followed by liking (e.g., "I like it"; 27% of codable real animal justifications). The next most common reason was the fantasy/reality distinction (e.g., "Dogs bark, they don't talk"; 21% of codable real justifications). They rarely mentioned familiarity (e.g., "Because I saw it on DVD"; 3% of codable real animal justifications).

When children chose an anthropomorphic animal story, they most often justified that choice with story elements (e.g., "Because he's reading a story"; 47% of codable real justifications) or the fantasy/reality distinction (e.g., "Because they don't wear them for real"; 36% of codable real justifications). Here, children often mentioned how silly it would be for the animal to behave in an anthropomorphized way (e.g., "A bear that goes to school is funny," and "Because a horse driving a car sounds silly"). The next most common justifications were liking (e.g., "Because I like this more"; 11% of codable real justifications) and familiarity (e.g., "It reminds me of a funny movie"; 6% of codable real justifications).

Discussion

In this study, U.S. children chose fantasy stories significantly more often than expected by chance, and neither their age nor gender influenced their choices. Almost a third of children always chose the fantasy option. However, they chose stories with anthropomorphic animal characters at chance, and again, neither their age nor their gender influenced their choices. Only four children always chose anthropomorphic animal characters. For both fantasy and anthropomorphism, the majority of their justifications for their liking of a storybook focused on elements of the story.

Our findings regarding fantasy stand in contrast to prior studies that show young children prefer stories that are described as real (Barnes et al., 2015) and choose realistic plot events to continue both realistic and fantastical stories (Weisberg et al., 2013). Given past research, we also expected that age might matter; based on Barnes et al. (2015), we

expected that younger children (4- to 5-year-olds) might prefer the realistic stories and older children (6-year-olds) might prefer the fantasy stories; this too was not the case. We believe these divergences were due to differences in our study design. Although we imitated the stimuli of Barnes et al. (2015) with plain book covers that featured only a title, we used different examples of fantastical and realistic stories that were purposefully similar to popular fantasy media. Familiarity may have contributed to younger children's preference for the fantastical stories compared to prior work. Indeed, when we looked at the 14 individual children who justified a fantasy choice with familiarity, 11 were younger children (4- to 5-year-olds). Even though children rarely mentioned familiarity with similar media when justifying their choices, they may still have been influenced without explicit awareness.

If familiarity drove children's preference for fantasy in the present study, it could be because prior experience with fantasy begets further exposure to fantasy. For example, if a child chose the fantasy stories in this study because they were familiar to them (e.g., they enjoy *Harry Potter*), their choices might reflect either appreciation of these specific fantasy stories, or fantasy stories in general, and both possibilities could lead to increased fantasy exposure in the future. If so, familiarity could be a noteworthy factor in why older children and adults enjoy fantasy (Barnes et al., 2015).

Another possibility is that the fantasy stories were preferred because their content is novel and impossible as compared to the commonplace events in the realistic stories. If the realistic story content were rare (e.g., a girl and her hedgehog instead of her dog), children might show greater interest. These findings indicate the need for further studies that examine the influence of familiarity and novelty, perhaps by measuring children's prior exposure to the story content or creating fantastical versions of well-known real stories. These studies would also shed light on the role of familiarity in children's preferences.

Fantastical content in media allows children to explore a world beyond their reality, but it remains unclear whether such content harms or benefits learning. Most research suggests that fantasy is harmful to learning (Richert et al., 2009; Richert & Smith, 2011; Walker et al., 2015), but a few studies have found positive effects of fantasy (e.g., Weisberg et al., 2015), particularly if the fantasy highlights the content to be learned (Hopkins & Lillard, 2021; Richert & Schlesinger, 2017). This may be because events that are surprising, such as violations of physical laws, attract attention and invite exploration that leads to learning (Stahl & Feigenson, 2015, 2017). In some contexts, fantasy content may operate similarly, drawing children's attention to the underlying content. Our results demonstrate that children are indeed attracted to familiar fantasy content in fiction, but further research is needed to show whether that attraction leads to enhanced learning and whether the familiarity of the fantasy content could play a specific role in aiding or impeding learning.

Regarding anthropomorphism, we did not find that children preferred either anthropomorphic or realistic animals. This aligns with the results of Guillot (2014) showing no preference between anthropomorphic animals and human characters. Anthropomorphic animals can vary greatly in their display of human-like behavior (Geerdts et al., 2016) and it is possible that children in our study showed no preference between the animal types because they interpreted even the realistic animals as showing anthropomorphic tendencies (e.g., a dog barking could be understood as talking by other dogs). However, this would mean that children consistently attributed human-like behavior to all animals despite the juxtaposition of anthropomorphic and real-world animal behaviors.

Instead, we think that other explanations – none mutually exclusive – could be at play. In some cases, children might pay greater attention to the species of the animal than what the animal is doing; for example, in this study several children justified their choice in the cat story with "I like cats," even though both stories included cats (one a realistic and the other an anthropomorphic animal). In other cases, children might focus on the actions performed by the animal; in this study, it seemed that both actions were appealing to children (e.g., walking in the woods and going to school). Children also might like a certain character (say, an anthropomorphic bear) more, but prefer the other character's action (say, walking in the woods) more. Or, anthropomorphic animals might be so common in children's media that they are not necessarily even seen as being fantastical anymore – although children did express an understanding that the behaviors used to anthropomorphize the animals (like going to school) were not species-typical. Finally, it is possible that children have different emotional responses to anthropomorphic animals; in the present study, some children chose them because they found them "funny" or "silly," whereas other children avoided them because animals "don't do that." In other words, the violation of behavioral norms appealed to some children and was aversive to others. Each of these possibilities, in isolation or in combination, could have been responsible for the observed lack of preference.

Given the prevalence of anthropomorphism in U.S. children's media (Taggart et al., 2019), it is surprising that children do not seem to prefer it. Indeed, familiarity would be a plausible reason for children to prefer the anthropomorphic stories, given the ubiquity of anthropomorphic depictions in popular media. Perhaps the popularity of anthropomorphic characters is due in part to adults' preferences. Parents often describe animals to their children as having human-like mental and social characteristics (Geerdts, Van de Walle, & LoBue, 2015), and even teachers use anthropomorphic language in science instruction, despite claiming it is misleading to children (Kallery & Psillos, 2004). Adult influence likely increases children's exposure to anthropomorphism, but children also clearly enjoy anthropomorphic media like *The Lion King* and *Finding Nemo*. Our findings suggest they may not prefer such media above realistic animal depictions, but future studies should test this with more ecologically valid materials.

Children in this study were asked to justify their story choices, and they most frequently referenced the story elements by describing what happened in their chosen story. This may characterize children's reasoning – they chose the story because of its plot – or it may reflect a surface-level understanding of what was asked: Perhaps they failed to understand the question and simply repeated back the limited information they knew about the story. Children also frequently referred to the reality/fantasy distinction when justifying anthropomorphic choices but did not refer to it as often as might be expected for fantastical choices, given their interest in the unreal. The anthropomorphic animal stories may have particularly highlighted the distinction between what is possible and impossible, although the fantasy stories were expected to do the same. Why children prefer certain stories is a question just as interesting as what they prefer, and this study provides a first attempt at answering it. Future research should probe further into the reasons underlying children's story choices and determine whether children's justifications change depending on the question asked. By better understanding how and why children make particular choices in their media consumption, we can help disentangle the individual (e.g., fantasy orientation, prior exposure) and contextual factors (e.g., level of fantasy, popularity) that can influence children's learning from real or unreal stories.

It is important to note that the present study did not resemble how children naturally encounter books in libraries and bookstores. Here, stories were presented abstractly with simple images of book covers to represent actual books. Although this is purposely similar to Barnes et al. (2015), it likely does not reflect how children typically make decisions about what to read because it does not allow decisions to be made based on cover design. By using a forced choice design, we are also unable to assess whether children were truly interested in reading either of our hypothetical books; they may simply have chosen the more appealing of two options. Lastly, our sample may not be representative of the population: 78% of participants were white and half were tested in a laboratory setting, which tends to be more accessible for higher-income families. Since story-telling traditions vary greatly, further research could examine differences in story preferences across cultural contexts.

In sum, children's preference for fantasy, but not anthropomorphism, in stories has important implications for their exposure to and learning from fiction. Both are highly prevalent in children's media, yet have been shown to impair learning in some settings. The popularity of fantasy and anthropomorphism reflects an inclination toward the impossible that is only partially supported by children's own preferences. Children's preferences influence the books they consume, but so do the preferences of adults: the caretakers and teachers who expose them to stories and the writers and publishers who produce stories. Perhaps the popularity of anthropomorphic media is driven more by the inclinations and assumptions of adults than by the desires of children themselves. By examining children's choices regarding fantastical and anthropomorphic stories, we open the door to a deeper understanding of how children and their caretakers consume media as a whole and the implications for learning.

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Disclosure statement

No potential conflict of interest was reported by the author(s).

ORCID

Sierra Eisen http://orcid.org/0000-0001-7450-6344
Jessica Taggart http://orcid.org/0000-0001-5482-8426
Angeline S. Lillard http://orcid.org/0000-0001-9697-6611

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