

Fantasy vs. Reality: Young Children's Understanding of Fear
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Presented at the Association for Psychological Science Conference,
Washington, DC (2007)

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Abstract

What is scarier to a young child: a mean, growling dog, or the monster in the closet? Two studies explored young children's understanding of fear. Study 1 was a recoding of a prior study in which children (N = 120, 3-4 years) described the causes of emotions. They used fantasy themes (monsters, ghosts) primarily for fear and surprise. In study 2, children (N=108, 3-7 years) labeled emotion stories, including fear stories with either fantasy or reality themes. Children's understanding of fear follows a developmental path. By 5 years, children labeled fantasy-theme fear stories at ceiling-level but reality-theme at .69; at 6 years, children's performance on the fantasy- and reality-fear stories was high and did not differ significantly.

Introduction

Researchers and laypeople alike assume, when young children use emotion labels such as *scared*, that they understand these concepts in the same way adults do.

- But research suggests that children's early understanding of fear is different from adults': It is based on fantasy themes and imaginary creatures.
 - When preschoolers described the causes of fear, they were more likely refer to monsters, ghosts, and dragons than to snakes, spiders, and rats (e.g., Denham & Zoller, 1991; Strayer, 1986).
 - In addition, they did not use the fantasy for other emotions.
- Developmentally, fear may be a qualitatively different emotion from happiness, sadness, anger, and surprise, for each of which children's causal descriptions were similar to adults'.

Study 1

- Data from a prior study, in which children (N=120, 3 to 4 years) described the causes of fear, surprise, happiness, sadness, anger, and disgust, were reanalyzed (Widen & Russell, 2004).
 - The focus here is the emotions children used the fantasy theme for.

- We also predicted that, given the young ages of our sample, children would be more likely to use fantasy themes for fear than for other emotions.

Method

Participants. Participants were 120 children, all proficient in English and enrolled in daycares in the Greater Boston, MA, area. There were 60 boys and 60 girls between the ages of 35 and 70 months (mean age = 50.1 months, SD = 9.4 months).

Materials

Six emotions (happiness, sadness, anger, fear, surprise, and disgust) were presented in one of three modes: label, behavioral consequence, or facial expression. The labels were presented verbally: happy, sad, angry, scared, surprised, disgusted. The behavioral consequences were six stories describing stereotypical behavioral consequences of each emotion were created based on prior work in our lab in which slightly older children generated consequences of specific emotions (Russell, 1990). The facial expressions were posed prototypical expressions that met Ekman and Friesen's (1978) criteria.

Procedure

Each child was randomly assigned to one of the three modes of presentation. The experimenter and the child took turns telling a story. The experimenter introduced the emotion and prompted the child to take his or her turn by asking, "What happened? What made Danny feel that way?" The child's task was to generate the cause of each emotion. The happy trial, presented first, included all three modes simultaneously (label, face, and behavioral consequence) and served as a gatekeeper such that children failing to produce a plausible cause for happiness were replaced with same-sex age-mates. The remaining emotions were presented in random order.

Coding

Children's stories were coded for different themes: Internal mental state (personality traits, mental states, perceptions), External situation or location, Nonsocial, Social (conflict, physical aggression, spending time with loved-ones), Interactions with objects or animals, Food (getting to eat cookies all the time; having to eat my veggies), Fantasy (improbable, impossible).

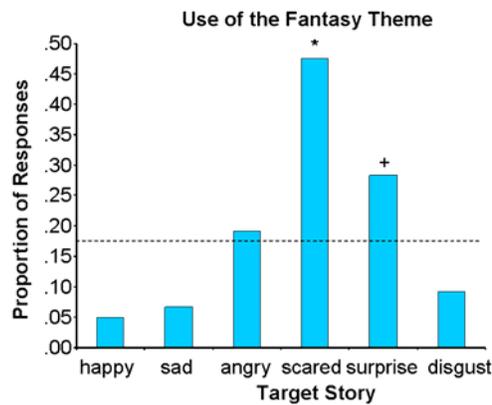


Figure 1. Preschoolers used the fantasy theme to describe the causes not only of fear, but also of surprise at above chance (.17) levels.

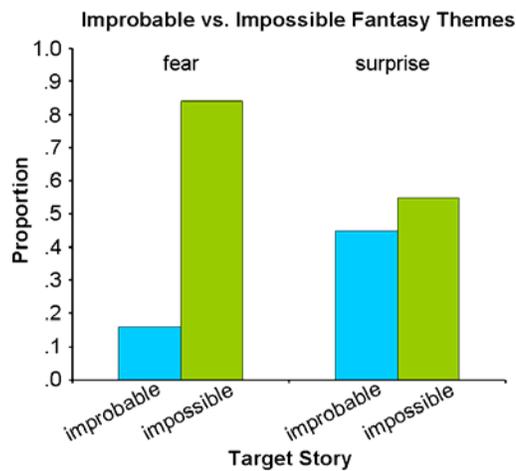


Figure 2. When the subcategories of the fantasy theme were analyzed, different patterns for fear and surprise were revealed: For fear, preschoolers described significantly more ($p < .001$) impossible fantasy events involving monsters and other imaginary creatures than improbable events (e.g., lions, sharks).

- For surprise, preschoolers fantasy events were more evenly divided between improbable and impossible events.
- Thus, when preschoolers described the causes of fear and surprise in terms of fantasy themes, their descriptions of fear events were more likely to be strictly fantastic, whereas their descriptions of surprise events tended to be unlikely but possible fantasy events.

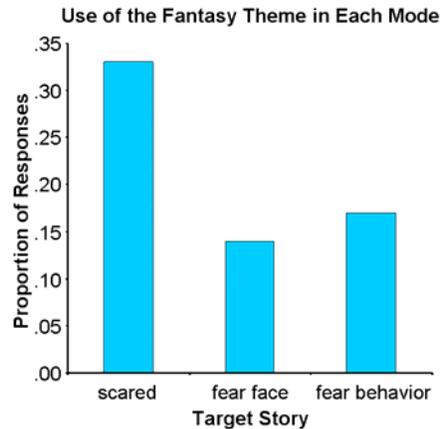


Figure 3. Preschoolers’ understanding of the label *scared* may be more strongly linked to fantasy creatures and themes than their understanding of other aspects of fear (facial expression, $t_{78} = 1.99, p = .05$; behavioral consequence, $t_{78} = 1.16, ns$).

Study 2

- In this study, rather than asking children to generate stories describing the causes of emotions – an admittedly difficult generative task – we asked children (N = 104, 3 to 7 years) to freely label brief stories describing fantasy-based fear (monster in the closet; seeing a ghost), and reality-based fear (being chased by a dog; discovering a big spider on your leg) events.
 - We predicted that younger preschoolers would label the fantasy-themed stories as ‘scared’ more frequently than the reality-themed stories.
 - As age increased, children’s performance for fantasy-fear stories would increase quickly to ceiling levels.
 - Performance on the reality-fear stories would also increase to ceiling levels but at later age.

Method

Participants. Participants were 104 children enrolled in preschools and after school-care programs in the Greater Boston area. All children were proficient in English. There were thirty-six young preschoolers (18 girls, 18 boys; 35 to 56 months, mean = 46.0 months), thirty-six older preschoolers (18 girls, 18 boys; 56 to 69 months, mean = 62.4 months), and 32 Kindergarten and Grade 1s (15 girls, 17 boys; 64 to 95 months, mean = 79.3 months).

Materials

Stories of Emotional Events. The happiness (birthday party), sadness (goldfish dies), anger (someone knocking over protagonist’s block tower on purpose), fantasy-based fear (monster in the closet; seeing a ghost), and reality-based fear (being chased by a dog; discovering a big spider on your leg) stories describing

stereotypical emotion-eliciting events and their behavioral consequences. The stories were created based on prior work in which children generated causes and consequences for specific emotions (Russell, 1990; Russell & Widen, 2002, Denham & Zoller, 1991; Strayer, 1986).

Procedure

On the initial visit to the child-care facility, the experimenter spent time playing with those children who had parental consent to participate in the study until the children seemed comfortable with the experimenter. On a subsequent visit, the experimenter invited the child to play a game with her. This ‘game’ lasted on average less than 10 minutes and consisted of three phases. The first phase was a priming session – a brief conversation in which each of the target emotion labels was mentioned. In the second phase, the experimenter read a brief description of three different animals in turn. The child was asked to label each animal. Phase 2 served as a training trial for phase 3. In the third phase, the child was asked to label Sally’s emotion in each story. The happy trial was always presented first and served as a gate-keeping trial: children had to label this trial as *happy* (or some close synonym) to be included in the sample. There were seven emotion trials, one for each for happiness, sadness, and anger, and two each for fantasy- and reality-fear, presented in various random orders.

Scoring

The participants were allowed to use any label they chose. The scoring key used in this study was drawn from Widen and Russell (2003), who describe the development of a scoring key based on ratings of two judges blind to the source of the labels.

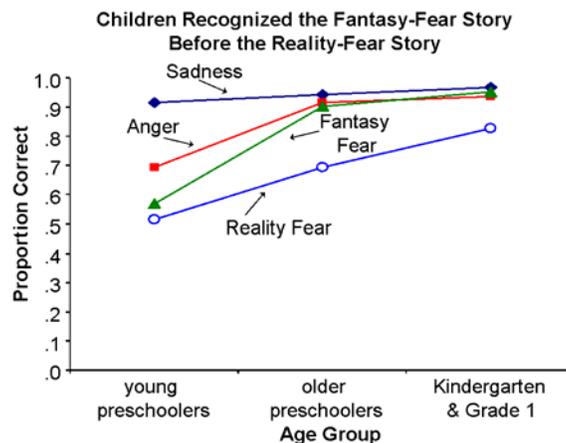


Figure 4. In a repeated measures ANOVA ($\alpha=.05$), our prediction was supported by the significant age x story interaction, $F(6, 294) = 3.31, p = .003$. Young preschoolers’ performance did not differ significantly on the fantasy- and reality-fear stories, and performance on each of these stories was significantly

lower than performance on the sadness and anger stories (LSD comparisons, $p \leq .001$).

Older preschoolers' performance on the on the fantasy-fear stories was significantly higher ($p < .001$) than on the reality-fear stories, and also significantly higher ($p = .01$) than young preschoolers' performance for the fantasy-fear stories.

The Kindergarten and 1st Graders' performance was at ceiling level for the fantasy-fear stories and marginally significantly higher ($p = .06$) than the reality-fear stories.

Performance on the reality-fear story did show the significant increase in performance with age: the Kindergarten and 1st Graders' performance was significantly higher than the young preschoolers. But understanding of the reality-themed fear stories lagged behind the fantasy-themed fear stories.

Discussion

- In both studies, preschoolers understood fear in terms of fantasy themes – monsters and ghosts.
- Study 2 showed that only gradually, over the course of 4 years, did children acquire a more reality-based understanding of the causes fear.
 - The youngest children labeled both types of fear stories at a moderate level.
 - The older preschoolers labeled fantasy-based fear at ceiling level, but their performance on reality-based fear was still moderate.
 - The oldest children labeled reality-based fear at higher level, though their performance on these stories was still somewhat lower than on fantasy-based fear stories.
- These findings have implications for research on children's understanding of emotion that use stories as stimuli and point to the importance of finding the best themes to tap children's understanding.
 - Developmental researchers carefully choose the content of stories based on what they think children will relate to.
 - Adults assume that mean dogs, large spiders, and getting lost are scary situations that young children may have experienced and will understand.
 - But the current study suggests that preschoolers more readily associate fantastic, nonrealistic creatures with fear.
- These findings also have implications for child rearing and early childhood education: Perhaps children appear fearless in clearly dangerous situations because they genuinely don't anticipate that those realistic dangers will be scary.

References

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