

# When Do Children Understand Love as a Persisting Emotion?

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## Abstract

Do children consider love to be an emotion that persists regardless of emotions (e.g., happiness, anger) provoked by the current situation? In nine stories, an 8-year-old boy's mother, father, or neighbor made him feel happy, angry, or neutral. Adults indicated that the boy loved his parent, and the majority said that he did not love his neighbor, regardless of concomitant emotion. Adults view love as a persisting emotion. Almost half of the children ( $N = 111$ , 3 to 4 years of age) reported that the boy did *not* love his parents or his neighbor when they made him angry; over 90% reported that the boy loved his antagonist when he was happy or neutral. For children, love is a volatile emotion.

## Introduction

As adults, we consider filial love to persist over time regardless of current circumstances – a son continues to love his mother even when she forces him to eat spinach or makes him angry.

Children might not consider love to persist in this way. For example, young children claim to withdraw their love when a parent frustrates them: “I don’t love you any more.” Young children also profess love for new, fun activities, which then disappears in short order.

Perhaps children's early understanding of love is that it is an emotion similar to happiness in its volatility. Love comes and goes: Perhaps – in the mind of a child – when a mother makes her son happy, the son loves her; but when the mother makes her son angry, he ceases to do so.

## Overview

The question we addressed was whether, as understood by young children, love is a persistent emotion or a volatile one. Children (3 to 4 years of age) were told about an 8-year-old boy named Jamie. The experimenter explained that Jamie lived with his parents, and that they loved him and he loved them. The child was then presented with nine stories in which three different antagonists made Jamie feel happy, angry, or neutral. The antagonist was Jamie's mother, father, or neighbor (on the theory that Jamie could be assumed to love his mother and father but not the neighbor). Each story included one antagonist, some event, whether or not Jamie liked or wanted the event, and whether Jamie felt happy, angry, or neutral about the event. For example: "One day, Jamie's mom made Jamie eat spinach. Jamie hated spinach and was very angry." The participant was then asked three questions about the story. In this example: Does Jamie love his mom? Did he like the spinach? Was Jamie angry?

## Method

### *Participants*

The participants were 111 children (fifty-one 3-year-olds; sixty 4-year-olds) enrolled in daycares in Vancouver, BC, Canada. All children were fluent in English. A comparison group consisted of 16 university-aged adults.

### *Materials*

Nine stories (Table 1) were created by crossing three emotions (happy, angry, neutral) with three antagonists (mother, father, neighbor). All nine stories concerned an 8-year-old boy named Jamie, who was made to feel one of the emotions by one of the antagonists. Each story was accompanied by a drawing of the story's setting (e.g., the yard, kitchen). Jamie's parents were chosen as antagonists because Jamie loves his parents; his neighbor was chosen on the assumption that Jamie did not.

*Procedure*

Each child was first told, "In this game I am going to tell you some stories about a boy named Jamie. Jamie is 8 years old, and he lives with his mom and his dad. Jamie's mom and dad love him very much and take very good care of him. Jamie loves his mom and dad."

The first story began, "Once upon a time..." Each subsequent story began, "One week later..."

After each story, the child was asked three questions: (1) Whether Jamie loved his antagonist; (2) Whether Jamie desired the event; (3) Whether Jamie felt a particular emotion (happy, sad, angry).

*Table 1.* The Stories Used in the Current Study.

#### **Happy Stories**

Jamie's mom baked Jamie's favorite cookies! Jamie was very happy.  
 Jamie and his dad played baseball all afternoon. Jamie was very happy.  
 Jamie's next door neighbor gave Jamie a pet gold fish. Jamie was very happy.

#### **Angry Stories**

Jamie's mom made Jamie eat spinach. Jamie hated spinach and was very angry.  
 Jamie's dad sent Jamie to his room for being bad. Jamie was very angry.  
 Jamie's next door neighbor wouldn't let Jamie play in his sand box. Jamie felt very angry.

#### **Neutral Stories**

Jamie's mom picked-up Jamie from school and drove him home, just like she did every day.  
 Jamie and his dad watched TV together after dinner, like they did every night.  
 Jamie and his neighbor walked to the corner store together. They did this quite often.

*Note.* Each story was followed by three questions: Does Jamie love X? Does Jamie like/want Y? Does Jamie feel Z (happy, angry, sad)?

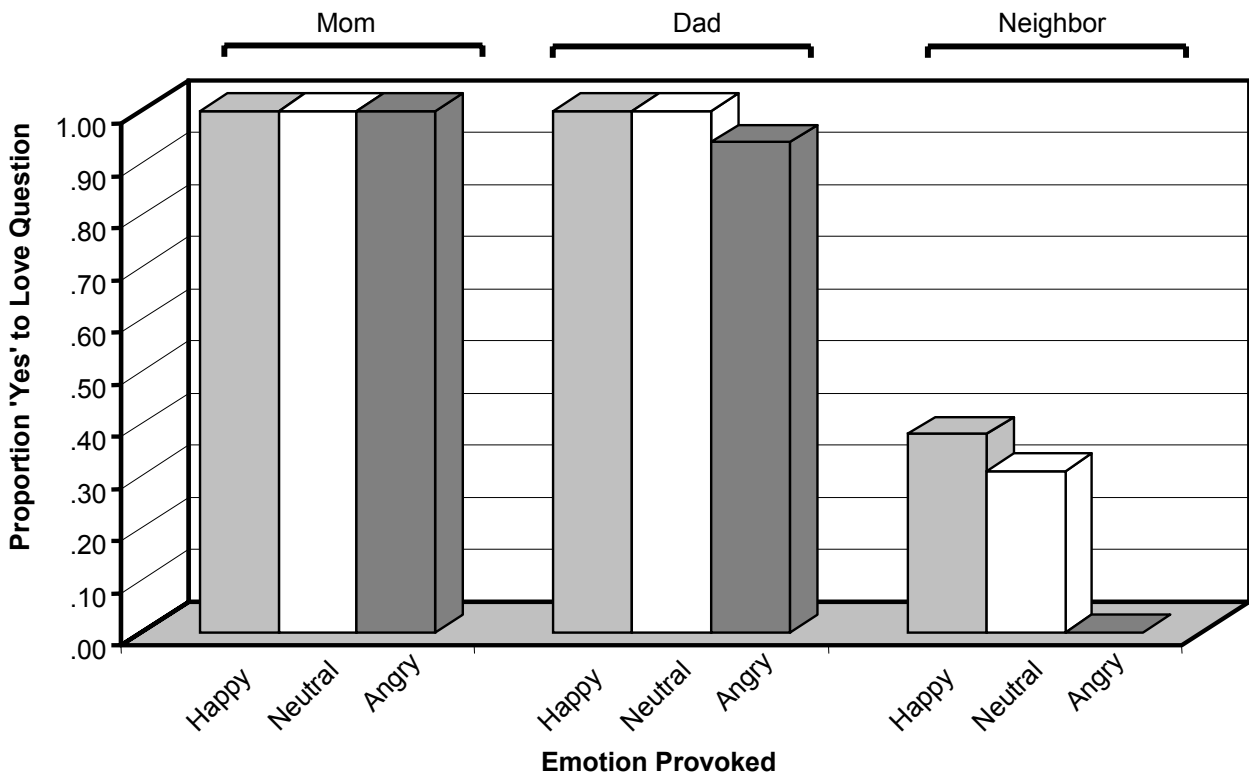
## Results

### *Responses to the Love Question*

The adult comparison group ( $N = 16$ ) responded as expected to the stories about Jamie's mother or father (Figure 1): they indicated that Jamie loved his parents regardless of the emotion provoked by the current event: love persists. For the stories about the neighbor, however, the pattern was different: 6 adults said that Jamie loved him in the happy story, 5 in the neutral story, and 0 in the angry story. Thus, some adults said that Jamie would love his neighbor under non-negative circumstances. The main effect for antagonist was significant,  $F(2, 32) = 45.96, p < .001$ , as was the concomitant emotion  $\times$  antagonist interaction,  $F(4, 64) = 2.76, p = .04$ .

The children's pattern of responses to the question of whether Jamie would love his antagonist was quite different from that seen in adults (Figure 2). Children said that Jamie loved his antagonist in the angry stories (.56) significantly less often ( $p < .001$ ) than in the happy (.99) or neutral stories (.94),  $F(2, 214) = 104.28, p < .001$ . This pattern replicated across antagonists: Thus, whether Jamie's antagonist was his mother, his father or his neighbor, in the angry story, love failed to persist.

In addition, the concomitant emotion  $\times$  antagonist interaction was significant,  $F(4, 428) = 3.03, p = .02$ : In the angry stories, significantly ( $p = .001$ ) fewer children said that Jamie loved his neighbor (.48) than his mother (.62) or father (.58).



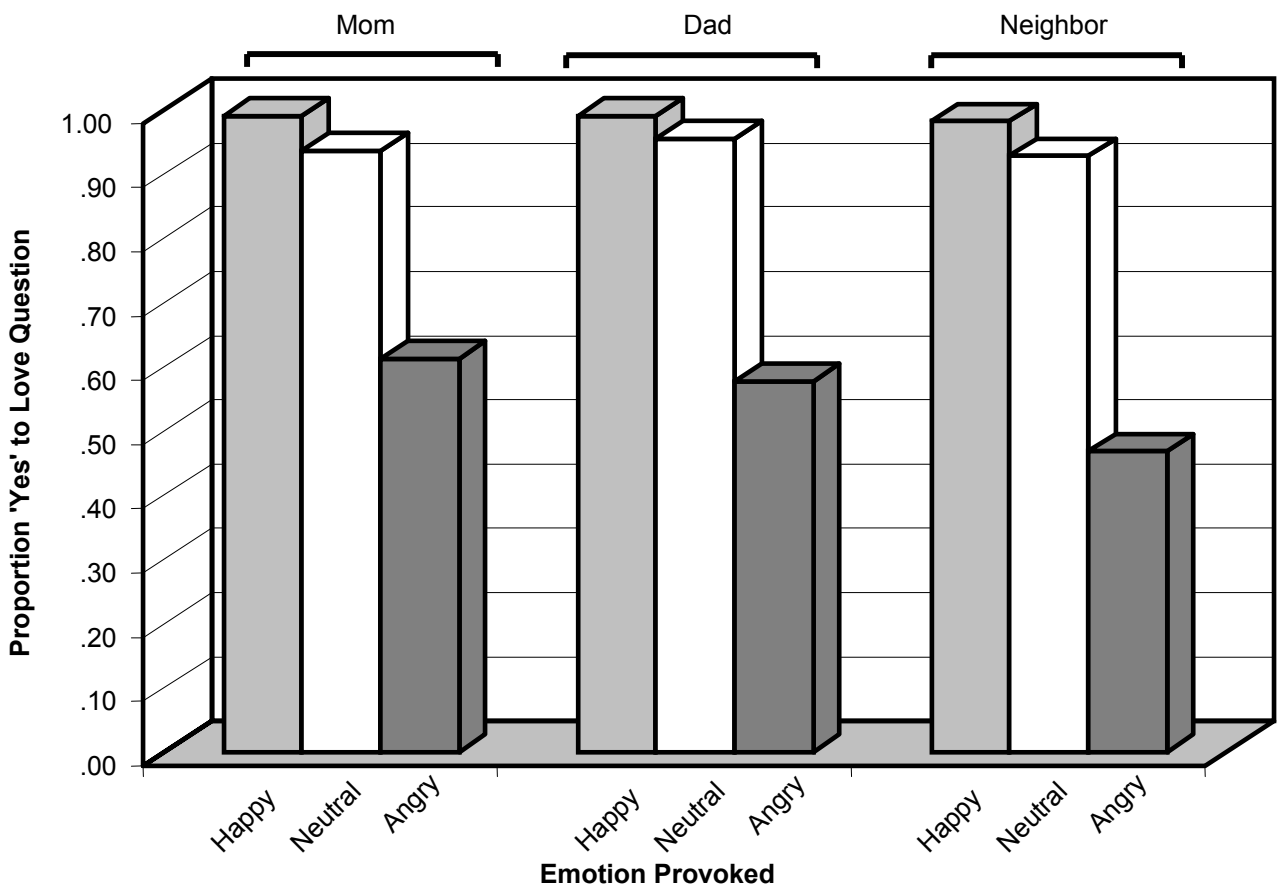
**Figure 1:** Adults said that Jamie loved his parents regardless of concomitant emotion. A few adults said that Jamie would love his neighbor in happy or neutral situations; none said he would love his neighbor when he was angry.

### The Desire and Emotion Questions

The happy and angry stories each included a stereotypically desirable or undesirable event and explicitly stated Jamie's emotional response to the event. The neutral stories each included a neutral (but pleasant), non-emotion-provoking event that was described as occurring every day. Thus, we predicted that children would answer the desire and emotion questions correctly. Unexpectedly, children made a large proportion of errors on the desire and emotion questions (16%).

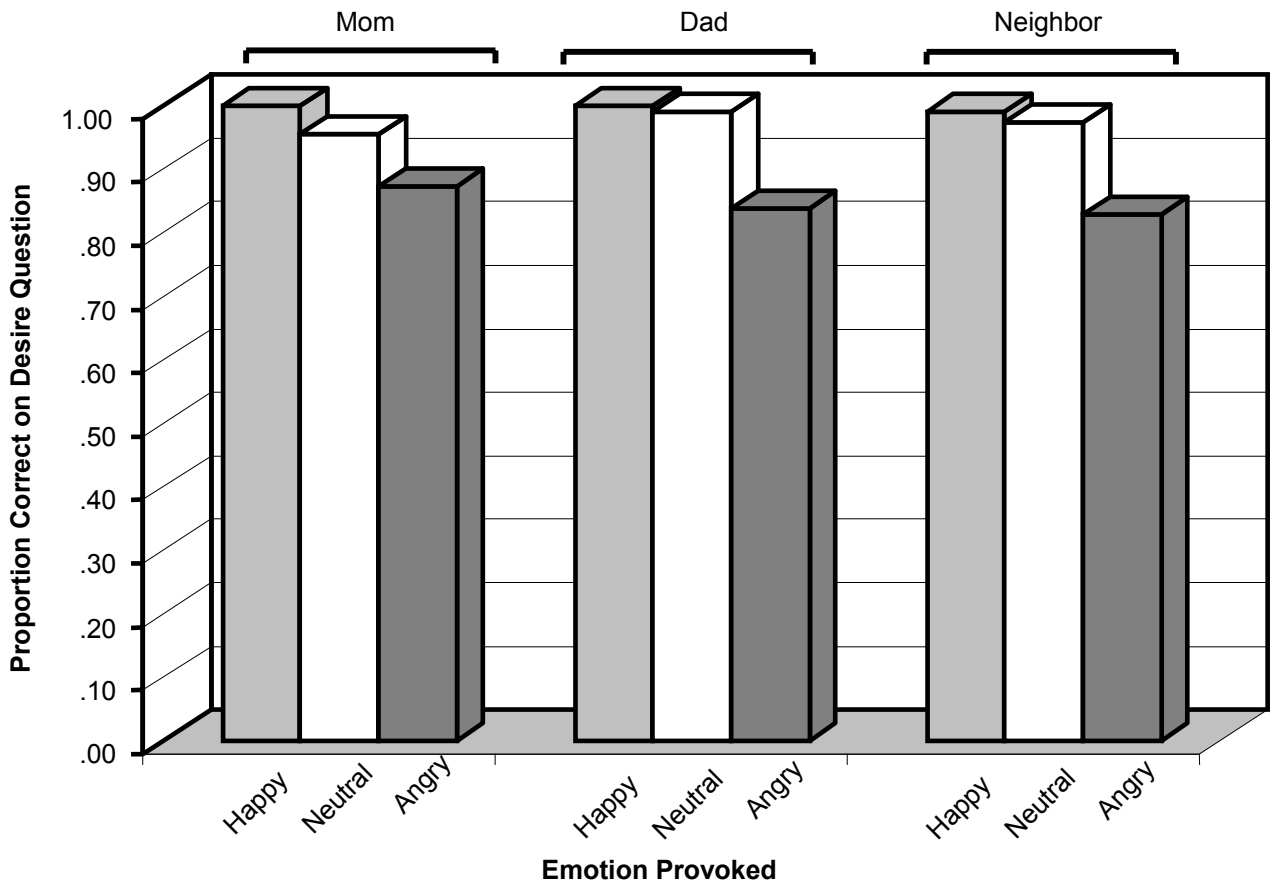
The errors on these two questions were not random, however, but occurred primarily for the angry stories, particularly for those children who said that Jamie loved his anger-provoking antagonist. Children made significantly ( $p < .001$ ) more errors in answering the desire question for the angry stories (.16) than for the happy (.03) or neutral (.02) stories,  $F(2, 214) = 39.65, p < .001$ . This pattern replicated across antagonists (Figure 3).

Children also made significantly ( $p < .002$ ) more errors in answering the emotion question for the neutral (.12) and angry stories (.08) than for the happy stories (.02) (the angry and neutral stories did not differ significantly for this question),  $F(2, 214) = 11.70, p < .001$ . This pattern replicated across antagonists, but was more pronounced for the stories involving Jamie's mom (Figure 4).

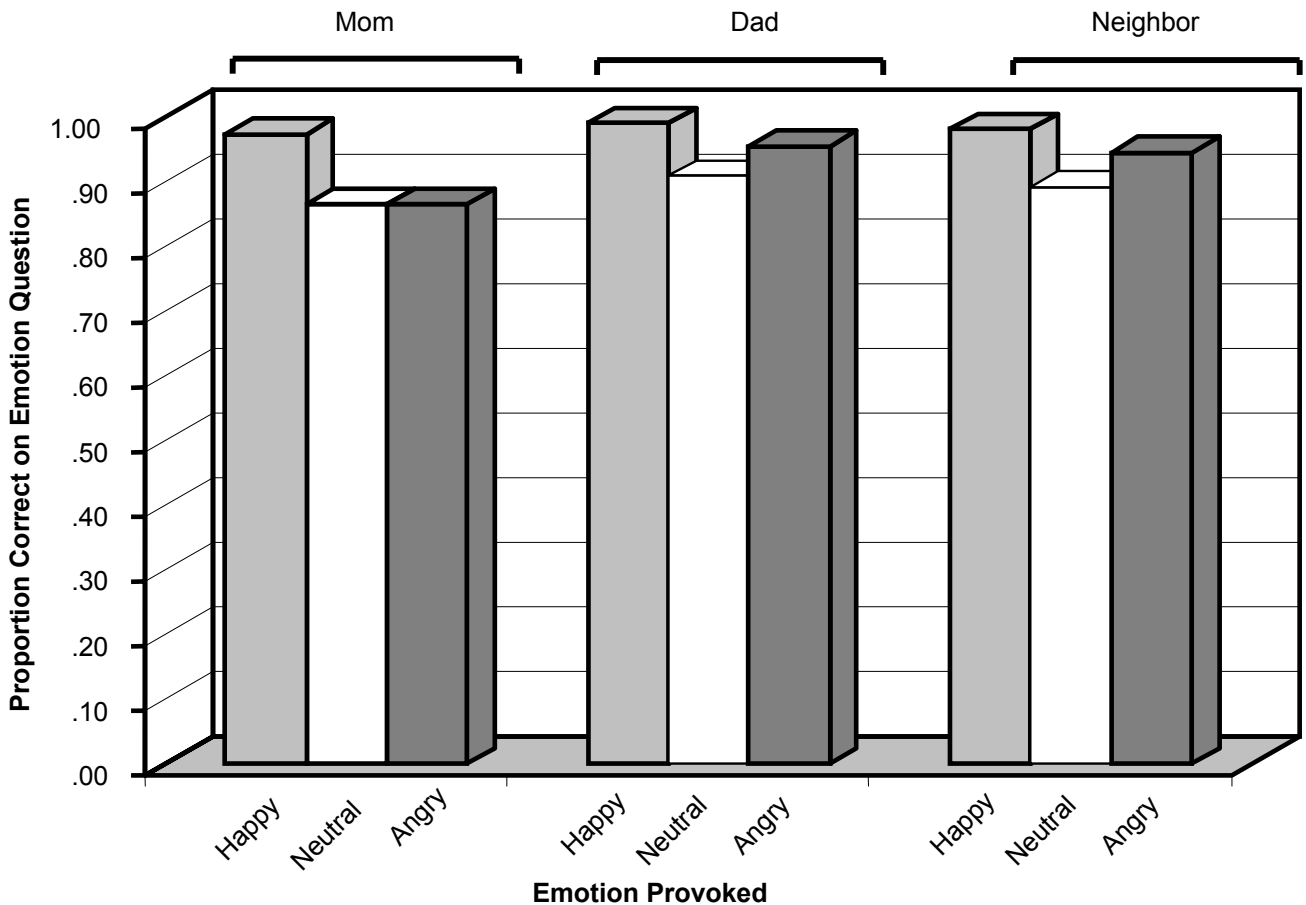


**Figure 2:** Children were as likely to say that Jamie loved his neighbor as his parents in the happy and neutral stories. Almost half of the children said that Jamie did not love his parents in the angry story, and over half said that Jamie did not love his neighbor in the angry story.

For the angry stories, the majority of errors on these two questions occurred when children said that Jamie loved his antagonist. Children who said that Jamie loved his antagonist when he or she made him angry may have been trying to make the rest of the story consistent with this judgment (i.e., make the story non-negative). For example, consider the story about Jamie's mother giving him hated spinach and making him angry: Sixty-eight children said that Jamie loved his mother in this story; of these 68, 21% either remembered Jamie as liking spinach or as not being angry. Of the 43 children who said that Jamie did not love his mother in this story, none said that he liked spinach, and only one answered the emotion question incorrectly.



*Figure 3:* Children were more likely to answer the desire question incorrectly on the angry stories than on the happy or neutral stories.



*Figure 4:* Children were more likely to answer the emotion question incorrectly on the neutral and angry stories.

### Conclusion

Children attribute love in pleasant or neutral situations regardless of who causes the event; but they are much less likely to do so in an unpleasant situation. Whereas adults (98.8%) assumed that Jamie continued to love his mother or father even when angry with them, preschoolers thought otherwise: only slightly more than half of the children said that Jamie loved his parent when he or she made Jamie angry. Thus, while adults' assumed filial love persisted regardless of the concomitant emotion, many 3- and 4-year-old children believe that when someone makes you angry you don't love them, whether that person is your mother or father or a neighbor.

Almost all the children reported that Jamie loved his neighbor in the happy and neutral stories. And just under half of them said that Jamie loved his neighbor in the angry story. Thus, children's pattern of responses for the neighbor was remarkably similar to their pattern of responses for his mother and father. In contrast, only a few adults indicated that Jamie loved his neighbor in the happy and neutral stories; none did so for the angry story. This finding supports our hypothesis that children do not

understand love in the same way adults do. Children's beliefs about love differ from those of adults. For children, love is more dependent on current emotion than on the target of the love.

Our preliminary finding is that preschoolers' early theory of love has it as more volatile than it is in adults' theory. Perhaps when a parent is angry or afraid or sad, a child believes that the parent no longer loves the child. Perhaps other emotions (hate), or attitudes (respect for rules), or moral inclinations, which are assumed persistent by adults, are thought volatile by preschoolers. It would be worthwhile to investigate whether the theory of mind held by older preschoolers, which is usually assumed to be fundamentally similar to the theory of mind held by adults, shows other such systematic differences about emotions.