

Stimuli for Experiment 1: Adult Subjects

Uninformative Condition

Hank is taking his daily walk near the train tracks when he notices that the train that is approaching is out of control. There are five men walking across the tracks and the train is now rushing toward the five men. It is moving so fast that they will not be able to get off the track in time. Hank is standing next to a switch, which he can throw, that will turn the train onto a side track, thereby preventing it from killing the five men. There is a man on the side track. Hank can throw the switch, killing him; or he can refrain from doing this, letting the five die. Hank throws the switch.

Informative Condition Good

Joe is taking his daily walk near the train tracks when he notices that the train that is approaching is out of control. There are five men walking across the tracks and the train is now rushing toward the five men. It is moving so fast that they will not be able to get off the track in time. Joe is standing next to a switch, which he can throw, that will turn the train onto a side track, thereby preventing it from killing the five men. There is a man on the side track. Joe can throw the switch, killing him; or he can refrain from doing this, letting the five men die. Joe then recognizes that the five men are people who he deeply cares about. Joe thinks to himself, "This is my chance to save those people." Joe throws the switch.

Informative Condition Bad

Mark is taking his daily walk near the train tracks when he notices that the train that is

approaching is out of control. There are five men walking across the tracks and the train is now rushing toward the five men. It is moving so fast that they will not be able to get off the track in time. Mark is standing next to a switch, which he can throw, that will turn the train onto a side track, thereby preventing it from killing the five men. There is a man on the side track. Mark can throw the switch, killing him; or he can refrain from doing this, letting the five men die. Mark then recognizes that the man on the side track is someone who he hates with a passion. Mark thinks to himself, "This is my chance to kill that bastard." Mark throws the switch.

Test Questions for Experiment 1:

Is it morally permissible for Hank/Joe/Mark to throw the switch? (Options: Yes/No)

Why do you think Hank/Joe/Mark threw the switch? (Options: To save the five men on the main track/To kill the one man on the side track)

Stimuli for Experiment 2: Adult Subjects

Uninformative Condition

Hank is taking his daily walk near the train tracks when he notices that an empty runaway train is approaching. The train is rushing towards a man, who is walking across the tracks. It is moving so fast that he will not be able to get off the tracks in time. Hank is standing next to a switch, which he can throw, that will turn the train onto a side track, thereby preventing it from killing the man. There are five men on the side track. Hank can throw the switch, killing the five men; or he can refrain from doing this, letting the man on the main track die. Hank throws the switch.

Informative Good

Joe is taking his daily walk near the train tracks when he notices that an empty runaway train is approaching. The train is rushing towards a man, who is walking across the tracks. It is moving so fast that he will not be able to get off the tracks in time. Joe is standing next to a switch, which he can throw, that will turn the train onto a side track, thereby preventing it from killing the man. There are five men on the side track. Hank can throw the switch, killing the five men; or he can refrain from doing this, letting the man on the main track die. Joe then recognizes that the man is someone who he deeply cares about. Joe thinks to himself, "This is my chance to save that man." Joe throws the switch.

Informative Bad

Mark is taking his daily walk near the train tracks when he notices that an empty runaway train is approaching. The train is rushing towards a man, who is walking across the tracks. It is moving so fast that he will not be able to get off the tracks in time. Mark is standing next to a switch, which he can throw, that will turn the train onto a side track, thereby preventing it from killing the man. There are five men on the side track. Mark can throw the switch, killing the five men; or he can refrain from doing this, letting the man on the main track die. Mark then recognizes that the men on the side track are people who he hates with a passion. Mark thinks to himself, “This is my chance to kill those bastards.” Mark throws the switch.

Test Questions for Experiment 2:

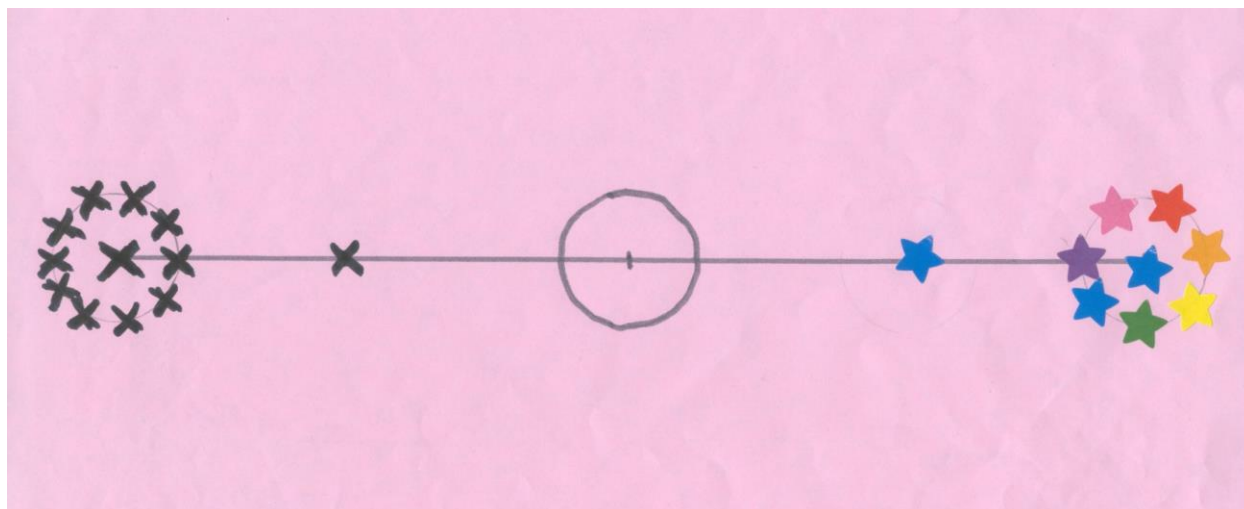
Is it morally permissible for Hank/Joe/Mark to throw the switch? (Options: Yes/No)

Why do you think Hank/Joe/Mark threw the switch? (Options: To save the one man on the main track/To kill the five men on the side track)

Stimuli for Experiment 3: Preschool Subjects

Pink Scale Screening:

Children were shown the following scale:



This is called the Pink Scale Game and in this game we show each other when things are good [point to stars], bad [point to x's] or just ok [point to circle]. First let's think of something good. Can you think of something good? [Wait for child to respond.] Is that really good [point to lots of stars] or just a little good [point to one star]?

Then encourage child to offer a suggestion of something that is a little good or really good, whichever they haven't already offered.

If child can't think of something good at all (or can't think of something really good or a little good) offer a suggestion such as "eating an apple" or "helping your teacher" or "playing outside."

Repeat with "bad" and "just OK".

Children are then told two stories accompanied by pictures:

This is a story about Billy and Johnny. In this story, Billy hits Johnny.

Should Billy have done that?

Can you show me on the pink scale? Was what Billy did: good, bad, or just OK?

This is a story about Sue and Anne. What is Anne holding? That's right, a flower! In this story, Anne gives her flower to Sue.

Should Anne have done that?

Can you show me on the pink scale? Was what Anne did: good, bad, or just OK?

To be included in the study, children needed to get both answers correct for both a good and bad story. If children failed the bad story, they were given another bad story; if they failed the good story, they were given another good story (below):

This is a story about Billy and Johnny. In this story, Billy has a cookie and he gives it to Johnny.

Should Billy have done that?

Can you show me on the pink scale? Was what Billy did: good, bad, or just OK?

This is a story about Sue and Anne. What is Anne holding? That's right, a flower! In this story, Sue takes Anne's flower and she breaks it.

Should Anne have done that?

Can you show me on the pink scale? Was what Anne did: good, bad, or just OK?

These stories were accompanied by animations shown to the subjects.

Uninformative Condition

This is a story about Sally. And Sally is playing in the park. And there are some other kids in this story too. There is one kid over here. And there are lots of kids over here. See this one kid?

This is a new kid. She has never been to the park before. Sally has never met her.

Does Sally know this kid?

If correct, say “That’s right, Sally does not know this kid”.

If incorrect, say “Now listen carefully” and repeat story

See all these kids? These are new kids. They have never been to the park before. Sally has never met them.

Does Sally know these kids?

If correct, say, “That’s right, Sally does not know these kids.”

If incorrect, say “Now listen carefully” and repeat story

Today, all the kids in the park are eating cookies. They are all eating cookies! But uh oh, here comes a mean sneaky squirrel who likes to eat other people’s food.

Can you tell where he wants to go?

If correct, say, “That’s right! The squirrel is going to go eat all those kids’ cookies!”

If incorrect, ask which way the squirrel is looking

If still incorrect, say, “He is going to eat these kids’ cookies over here.” Point to 5.

And if the squirrel eats their cookies, how will these kids feel?

If they give any negative affect emotion (sad, bad, mad) say, “That’s right, they’ll feel sad.”

If incorrect or no answer say, “They’ll be sad if the squirrel eats their cookies.”

Well, Sally knows what the squirrel is going to do. Sally knows that the squirrel is going to go eat those kid’s cookies and make them sad. So, let’s see what she does! Sally has a gate with her, and she decides to put the gate right there. She knows that now the squirrel can’t reach all these kids’ cookie. So he is going to go over here and eat this kid’s cookie instead. So this kid is sad because he doesn’t get to eat his own cookie. But these kids aren’t sad because they get to eat their own cookies.

Let’s watch that again. [Replay video from the start.]

If subjects don’t remember, help them. “Where is the squirrel looking? Whose cookies did he want to eat?”

If correct response, say “That’s right.”

How were these kids going to feel?

If subjects don’t remember, help them.

If correct response, say “That’s right.”

Exclusion Criteria:

What did Sally do?

What did the squirrel do?

How did that kid feel?

Were those kids sad?

Test questions:

Ok, that's the end of the story. But, I'm wondering about something. I'm wondering about Sally and what she did. See this sad kid? [Point to the one.] Did Sally make this kid sad on purpose?

In this story Sally used her gate. SHOULD she have done that?

Can you show me on the Pink Scale? Was what Sally did good, bad, or just OK?

Informative Condition Good

This is a story about Sally. And Sally is playing in the park. And there are some other kids in this story too. There is one kid over here. And there are lots of kids over here. See this one kid?

This is a new kid. She has never been to the park before. Sally has never met her.

Does Sally know this kid?

If correct, say "That's right, Sally does not know this kid".

If incorrect, say "Now listen carefully" and repeat story

See all these kids? Sally really likes these kids. These kids are Sally's friends. Sally likes these kids a lot.

Does Sally like these kids?

If correct, say, "That's right, Sally likes these kids."

If incorrect, say "Now listen carefully" and repeat story

Today, all the kids in the park are eating cookies. They are all eating cookies! But uh oh, here comes a mean sneaky squirrel who likes to eat other people's food.

Can you tell where he wants to go?

If correct, say, "That's right! The squirrel is going to go eat all those kids' cookies!"

If incorrect, ask which way the squirrel is looking

If still incorrect, say, "He is going to eat these kids' cookies over here." Point to 5.

And if the squirrel eats their cookies, how will these kids feel?

If they give any negative affect emotion (sad, bad, mad) say, "That's right, they'll feel sad."

If incorrect or no answer say, "They'll be sad if the squirrel eats their cookies."

Well, Sally knows what the squirrel is going to do. Sally knows that the squirrel is going to go eat those kid's cookies and make them sad. But remember, Sally likes these kids. Sally doesn't want the squirrel to eat these kids' cookies. Sally doesn't want these kids to be sad.

So, let's see what she does! Sally has a gate with her, and she decides to put the gate right there. She knows that now the squirrel can't reach all these kids' cookie. So he is going to go over here and eat this kid's cookie instead. So this kid is sad because he doesn't get to eat his own cookie. But these kids aren't sad because they get to eat their own cookies.

Let's watch that again. [Replay video.]

At the beginning, where was the squirrel going to go?

If subjects don't remember, help them. "Where is the squirrel looking? Whose cookies did he want to eat?" If correct response, say "That's right."

How were these kids going to feel?

If subjects don't remember, help them. If correct response, say "That's right."

Exclusion Criteria:

Does Sally like these kids? (the five)

How does Sally want to make these kids feel?

What did Sally do?

What did the squirrel do?

How did that kid feel?

Were those kids sad?

Test Questions:

Ok, that's the end of the story. But, I'm wondering about something. I'm wondering about Sally and what she did. See this sad kid? [Point to the one.] Did Sally make this kid sad on purpose?

In this story Sally used her gate. SHOULD she have done that?

Can you show me on the Pink Scale? Was what Sally did good, bad, or just OK?

Informative Condition Bad

This is a story about Sally. And Sally is playing in the park. And there are some other kids in this story too. There is one kid over here. And there are lots of kids over here. See this one kid? Sally doesn't like this kid. Sally doesn't like this kid one bit. They are not friends.

Does Sally like this kid?

If correct, say "That's right, Sally does not like this kid".

If incorrect, say "Now listen carefully" and repeat story

See all these kids? These are new kids. They have never been to the park before. Sally has never met them.

Does Sally know these kids?

If correct, say, “That’s right, Sally does not know these kids.”

If incorrect, say “Now listen carefully” and repeat story

Today, all the kids in the park are eating cookies. They are all eating cookies! But uh oh, here comes a mean sneaky squirrel who likes to eat other people’s food.

Can you tell where he wants to go?

If correct, say, “That’s right! The squirrel is going to go eat all those kids’ cookies!”

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And if the squirrel eats their cookies, how will these kids feel?

If they give any negative affect emotion (sad, bad, mad) say, “That’s right, they’ll feel sad.”

If incorrect or no answer say, “They’ll be sad if the squirrel eats their cookies.”

Well, Sally knows what the squirrel is going to do. Sally knows that the squirrel is going to go eat those kid’s cookies and make them sad. But remember, Sally doesn’t like this kid. Sally wants the squirrel to eat this kid’s cookie. Sally wants this kid to be sad.

So, let’s see what she does! Sally has a gate with her, and she decides to put the gate right there. She knows that now the squirrel can’t reach all these kids’ cookie. So he is going to go over here and eat this kid’s cookie instead. So this kid is sad because he doesn’t get to eat his own cookie. But these kids aren’t sad because they get to eat their own cookies.

Let’s watch that again. [Replay video.]

At the beginning, where was the squirrel going to go?

If subjects don't remember, help them. "Where is the squirrel looking? Whose cookies did he want to eat?"

If correct response, say "That's right."

How were these kids going to feel?

If subjects don't remember, help them.

If correct response, say "That's right."

Exclusion Criteria:

Does Sally like this kid? (the one)

How does Sally want to make this kid feel?

What did Sally do?

What did the squirrel do?

How did that kid feel?

Were those kids sad?

Test Questions:

Ok, that's the end of the story. But, I'm wondering about something. I'm wondering about Sally and what she did. See this sad kid? [Point to the one.] Did Sally make this kid sad on purpose?

In this story Sally used her gate. SHOULD she have done that?

Can you show me on the Pink Scale? Was what Sally did good, bad, or just OK?