

was for when people do *about the same* as they usually do, the two small stars were for when people do *worse* than they usually do, and the two big stars were for when people do *better* than they usually do. More specifically, the labels given to each star (in ascending order) were: *a lot worse*, *a little bit worse*, *about the same*, *a little bit better*, and *a lot better*. To reinforce this visually and to anchor the scale around the midpoint, the center star was presented with a pale blue background and the other stars had a white background.

Warm-up tasks trained children how to use the scale to make judgments about people's performance. The first warm-up task required children make judgments using all points of the scale, including the "no-change" response. The researcher showed children a series of drawings about a girl ("Janet") who is playing a game to see how high she can jump. The first drawing depicted Janet's typical performance ("Usually Janet can jump *this* high. That's how high she jumps most of the time."). Three additional drawings showed Janet jumping: (a) higher than she usually does, (b) lower than she usually does, and (c) the same as she usually does. Children were shown each drawing in turn and were asked to use the scale to respond to the question: "How did Janet do this time—the same as she usually does, or better, or worse?" (If children said "better" or "worse," they were subsequently asked to indicate on the scale whether they thought it was *a lot* or *a little bit worse/better*.) Children's responses to the three questions were recorded and errors corrected as necessary.

The second warm-up task elicited children's judgments about the impact of high versus low effort on cognitive performance, something children of this age should understand (Miller & Shannon, 1984; Miller & Zalsenski, 1982). Children were shown a drawing of a boy ("Casey") sitting at a school desk and were asked to predict his school performance based on his level of effort and attention. First, they predicted Casey's performance when "Casey isn't trying to do well on his school work at all" and does not look or listen to his teacher. Then, they predicted Casey's performance when "Casey is really trying extra hard to do a good job on his school work" and looks and listens carefully to his teacher. Failure to predict impaired performance in the first case and improved performance in the second case was noted but not corrected.

Finally, before proceeding to the experimental task, the researcher listed each response option and asked children to point to the corresponding star (e.g., "Which star is for when people do about the same as they usually do?") in the order: *about the same* (no change), *a little bit better*, *a lot better*, *a little bit worse*, *a lot*

worse. Children were corrected as necessary and did not proceed to the main task until they could match all responses correctly. If children made two or more errors on any of the five warm-up task questions, or could not learn the points of the scale even after correction by the researcher, they were not included in the final sample.

For the experimental task, the researcher read each story aloud and children predicted the character's performance using the scale. After each prediction, children were also asked to explain their responses (e.g., "Why do you think she will do worse this time?"). Explanations were requested for all trials, regardless of whether children predicted impairment, improvement, or no change. If children said "I don't know" or failed to respond, requests were repeated. If children explained the character's performance in relation to an internal state or external condition but did not describe why or how that factor would influence performance (e.g., "She'll do worse because she's sad"), the researcher requested more information (e.g., "Why will it make her do worse if she's sad?"). When it was clear that children had no further explanations, the experimenter proceeded to the next trial. Children's explanations were transcribed verbatim from the videotapes and coded for the type of explanation given (see below).

Adult participants received the task as a written questionnaire. Participants read each scenario and made predictions about the protagonist's performance on a 5-point numerical scale, with points labeled as described above for children. They also provided written explanations for their responses. Pictures were not used with the task for adults.

Story order and counterbalancing. For all participants, the first scenario presented was the no-change control story, in which the character experienced no new events or state changes. This was because we did not want to prime children to attend to characters' emotions or internal states. Presentation order for the remaining 14 stories was counterbalanced by dividing the stories into two blocks of seven stories, with each block containing one example of each story type: positive emotion, negative emotion, positive physiological state, negative physiological state, noisy-quiet, neutral change, and valence change. Two different groupings, determined by randomly assigning stories to blocks, were used (Half of the participants received *proud*, *sad*, *wide awake*, *hungry*, *different clothes*, *messy hair*, and *quiet room* as one block, and *happy*, *mad*, *full/healthy*, *tired*, *new rug*, and *noisy room* as the other. The other half of the participants received an alternate grouping.). To control for order effects, presentation order for each task block (first vs.

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Appendix: Examples of Task Stories

Positive Emotion Stories

Happy—memory task. One day Judy is walking to school when she finds a really cool, special rock on the side of the road. It is blue and gold and shiny. Judy feels happy. Later that day in school, Judy is still feeling happy because of her cool rock. Her teacher says, "OK, everyone, now it's time for a remembering game. I'm going to show you lots of different pictures in this book, and at the end I want to see how many things you can remember. It's pretty hard." Judy usually does okay remembering hard things like these. How do you think she will do right now, when she is feeling happy?

Proud—spatial problem-solving task. One morning Max's friend Joey gives him a very nice card. It says, "Dear Max, you are the best friend in the whole world. From Joey." Max feels proud. Later that day in school, Max is still feeling proud because of Joey's nice card. His teacher says, "OK, everyone, now it's time to make special paper airplanes. You have to follow a lot of directions to do it just right. It's pretty hard." Max

usually does okay following hard directions like these. How do you think he will do right now, when he is feeling proud?

Negative Emotion Stories

Sad—language task. One day Lisa is walking to school when her favorite teddy bear falls out of her backpack and gets lost forever. Lisa feels sad. Later that day in school, Lisa is still feeling sad because of her lost teddy bear. Her teacher says, "OK, everyone, now it's time to play a word game. I want to see how many different words you can think of that start with X, Y, or Z. It's pretty hard." Lisa usually does okay on hard word games like these. How do you think she will do right now, when she is feeling sad?

Mad—reading task. One morning Sam is playing outside in the sandbox before school. He builds a big sandcastle. Then some mean kids come up to him and jump all over his sandcastle until it is all ruined. Sam feels mad. Later that day in school, Sam is still feeling mad because of his ruined sandcastle. His teacher says, "OK, everyone, now it's time for reading. We are going to read a story in our new reading books. It's pretty hard." Sam usually does okay reading hard stories like these. How do you think he will do right now, when he is feeling mad?

Positive Physiological State Stories

Wide awake—spelling task. One night Becky goes to bed extra early, before her regular bedtime. She has a nice long sleep and gets lots of rest. In the morning when Becky gets up, she feels wide awake. Later that day in school, Becky is still feeling wide awake because of her long sleep. Her teacher says, "OK, everyone, now it's time for a spelling test. I'll say the words and you write down how they are spelled. They're pretty hard." Becky usually does okay on hard spelling tests like these. How do you think she will do right now, when she is feeling wide awake?

Full and Healthy—spatial problem-solving task. One morning before school Robert eats an extra big and healthy breakfast with yummy cereal, toast, eggs, orange juice, and an apple. After breakfast, Robert feels full and healthy. Later that day in school, Robert is still feeling full and healthy because of his big, healthy breakfast. His teacher says, "OK, everyone, now it's time to make special paper airplanes. You have to follow a lot of directions to do it just

pants in the closet and he decides to wear them to school. He gets dressed. He looks all blue. Later that day in school, David is still looking all blue because of his blue clothes. His teacher says, "OK, everyone, now it's time to do some math problems. You have to add, subtract, and multiply. They're pretty hard." David usually does okay on hard math problems like these. How do you think he will do right now, when his clothes are blue?

No-Change Control Story (Baseline)

Tim goes to school every day. One day when Tim is at school, his teacher says, "OK, everyone, now it's time for a remembering game. I'm going to show you lots of different pictures in this book, and at the end I want to see how many things you can remember. It's pretty hard." Tim usually does okay remembering hard things like these. How do you think he will do right now?

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