

Telling young children they have a reputation for being smart promotes cheating

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Abstract

The present research examined the consequences of telling young children they have a reputation for being smart. Of interest was how this would affect their willingness to resist the temptation to cheat for personal gain as assessed by a temptation resistance task, in which children promised not to cheat in the game. Two studies with 3- and 5-year-old children (total $N = 323$) assessed this possibility. In Study 1, participants were assigned to one of three conditions: a smart reputation condition in which they were told they have a reputation for being smart, an irrelevant reputation control condition, or a no reputation control condition. Children in the smart reputation condition were significantly more likely to cheat than their counterparts in either control condition. Study 2 confirmed that reputational concerns are indeed a fundamental part of our smart reputation effect. These results suggest that children as young as 3 years of age are able to use reputational cues to guide their behavior, and that telling young children they have a positive reputation for being smart can have negative consequences.

RESEARCH HIGHLIGHTS

- The current study examined whether telling young children that they have a reputation for being smart promotes cheating.
- Three- and 5-year-olds were randomly assigned to a smart reputation condition, or one of three control conditions.
- Children in the smart reputation condition were more likely to cheat in a guessing game than were the children in the control conditions.
- The results are the first to show that telling children that they have a reputation for being smart promotes cheating, and that even 3-year-olds are responsive to reputational cues.

1 | INTRODUCTION

For parents and teachers around the world, an important focus of the socialization process involves helping children learn to comply with social rules and not to circumvent them by cheating or other immoral

means. However, despite the significance of this topic there has been very little experimental research on it to date. Consequently, there are few clear answers about which socialization practices are effective. This gap in research means that even well-informed parents and teachers are left with little more than intuitions, personal experiences, and folk theories to guide them. The present research seeks to fill this gap by systematically testing the effects of one practice that may influence young children's tendency to follow rules: telling children that they have a reputation for being smart.

It is well established that children's understanding of reputation emerges over a protracted period of time (Aloise-Young, 1993; Banerjee, 2000; Banerjee, Bennett, & Luke, 2010; Bennett & Yeeles, 1990; Fu, Heyman, Qian, Guo, & Lee, 2016; Heyman, Barner, Heumann, & Schenck, 2014; Juvonen & Murdock, 1995; Watling & Banerjee, 2007). Nevertheless, they acquire a basic understanding of how reputations are obtained and shaped by age 5 (Banerjee, 2002; Gee & Heyman, 2007; Hill & Pillow, 2006). By age 5 children also show some capacity to act in reputation-enhancing ways (Engelmann, Herrmann, & Tomasello, 2012; Engelmann, Over,



Herrmann, & Tomasello, 2013; Fu, Evans, Xu, & Lee, 2012; Fu et al., 2016; Leimgruber, Shaw, Santos, & Olson, 2012; Piazza, Bering, & Ingram, 2011). For example, 5-year-olds are more likely to share when they are in the presence of a peer than when they are alone (Engelmann et al., 2012). These findings raise the possibility that in cultural contexts in which being smart is highly valued, telling children that they are smart might motivate them to engage in actions like cheating that could make them appear smarter even when doing so requires them to violate social rules.

Although no evidence exists as to whether telling children they have a reputation for being smart affects their rule-following behavior, research has documented that praising children for being smart can have a range of negative consequences (Brummelman, Crocker, & Bushman, 2016; Cimpian, Arce, Markman, & Dweck, 2007; Elliot & Dweck, 2013; Kamins & Dweck, 1999; Mueller & Dweck, 1998; Zentall & Morris, 2010). For example, Mueller and Dweck (1998) found that fifth graders who were given global ability praise (e.g., "you are smart") showed less task persistence, less task enjoyment, and had worse task performance than children who were praised for their effort. Both praising children for being smart and telling them they have a reputation for being smart are likely to make them think about how others judge them and thus increase performance pressure. Consequently, it is possible that telling children that they have a reputation for being smart may also lead to negative consequences in rule-following behavior. The present study specifically tests this hypothesis with preschool children.

An alternative possibility is that telling preschool children they have a reputation for being smart has no effect on their rule-following behavior. This possibility is consistent with the evidence that children have a very limited understanding of what it means to be smart before they are about 7 or 8 years of ages (Nicholls, 1978; Nicholls & Miller, 1983; but see Heyman & Compton, 2006, and Wimmer, Wachter, & Perner, 1982, for evidence of sophisticated thinking about ability by age 5). Further, children younger than 7 or 8 show less concern than older children about intellectual ability information when making judgments about people (Benenson & Dweck, 1986; Stipek & Iver, 1989). These findings suggest that young children may not know what it means to have a reputation for being smart or may not care about having such a reputation.

It may also be that the effects of learning one has a reputation for being smart change with age over preschool years. This possibility is based on the fact that no evidence to date has demonstrated that children younger than 4 years of age show any reputation concerns, whereas there is evidence that children at 5 begin to show reputational concerns (Fu et al., 2016). Thus, it is possible that the effect of telling children that they have a reputation for being smart on their rule-following behavior may increase with age between 3 and 5 years.

In the present research, we examine whether informing preschool children that they have a reputation for being smart would motivate them to uphold this reputation by violating social rules. We assessed our hypotheses among 3- and 5-year-old children in China (see Legare & Harris, 2016, regarding the importance of incorporating data

from non-Western samples in developmental theories). To examine whether reputational cues would affect children's cheating behavior, we adopted a well-established peeking paradigm that has been extensively used to study moral behavior in young children (Ding et al., 2014; Fu et al., 2016; Heyman, Fu, Lin, Qian, & Lee, 2015; Talwar & Lee, 2002; Talwar, Lee, Bala, & Lindsay, 2002). The version of this paradigm being used in the present study involved an experimenter hiding a playing card behind a barrier and asking children to guess the number on the card. Children were told that they could win a prize with three correct guesses out of six trials. When children had two correct guesses, the experimenter left the room. Children were told not to break the rule by peeking at the card behind the barrier in the experimenter's absence. However, unbeknownst to them, a hidden video camera in the room recorded their actions during the experimenter's absence. For the current purpose, cheating is defined as the engagement of any forms of obvious peeking, which is recorded by the camera. The logic of adopting this paradigm is that children need to cheat in order to ensure success, and that young children tend to equate successful outcomes with being smart (Heyman, Gee, & Giles, 2003). Thus, informing children that they have a reputation for being smart potentially poses a threat because their failure in this game may be perceived as a reflection of the fact that they were not living up to their reputation.

It should be noted that most of the versions of the standard peeking paradigm tend to elicit cheating rates close to 90%, which makes it difficult to reveal any significant increase in cheating due to this ceiling effect. To avoid this problem, we modified the standard paradigm whereby the experimenter asked children to promise not to cheat before she left the room. Previous work has shown that having children promise not to cheat can reduce cheating, with baseline cheating rates around 50% (see Heyman et al., 2015). Thus, this modification created a situation where we could manipulate reputational cues to test whether this would affect rates of cheating behavior.

2 | STUDY 1

To address our hypotheses, we randomly assigned children to one of the following three conditions. In the *smart reputation experimental* condition (for short, *smart reputation* condition), at the beginning of the game, the experimenter informed children that they had a reputation among their teachers and classmates for being smart. The *no reputation control* condition (for short, *no reputation* condition) is identical to the smart reputation condition except that the experimenter did not give any information relating to their reputation. In addition to these two conditions, we also included the *irrelevant reputation control* condition (for short, *irrelevant reputation* condition). This condition was identical to the smart reputation condition except that the experimenter told children that they had a reputation among their teachers and classmates for being clean. Cleanliness has been used as a control trait in prior research (Li, Heyman, Xu, & Lee, 2014) and its importance is highly emphasized to young children in



China. We included this condition to examine the specificity of any potential effect of telling children that they have a reputation for being smart.

Based on the existing albeit indirect evidence, we predicted that telling children they have a reputation for being smart would make them more inclined to cheat because it motivates them to try to maintain this reputation. Given the general finding that children's understanding of reputation and desire to maintain it tend to increase with age, we also predicted that the tendency to cheat in the smart reputation condition would increase with age. Further, we predicted that with increased age, children would become more inclined to cheat in the smart reputation condition than in the irrelevant reputation condition, as their behavior might become increasingly influenced by the specific nature of their positive reputation.

2.1 | Methods

2.1.1 | Participants

Participants were 243 children from a preschool in eastern China, with 120 in the 3-year-old group (aged from 3 years 1 month to 3 years 12 months; $M = 3.62$ years, $SD = 0.24$ years; 62 boys and 58 girls) and 123 in the 5-year-old group (aged from 5 years 1 month to 5 years 12 months; $M = 5.49$ years, $SD = 0.30$ years; 65 boys and 58 girls). For the younger group, there were 40 participants in each of three conditions, and for the older group there were 41 participants in each condition. All participants were Han Chinese from middle-class backgrounds, and the sessions were conducted in Chinese.

2.1.2 | Design and procedure

Participants were tested in one-on-one sessions in a private room at their preschool. We used a between-subjects design in which participants were randomly assigned to one of the three conditions. The entire procedure was videotaped by a hidden camera.

A version of the temptation resistance paradigm (Ding et al., 2014; Fu et al., 2016; Heyman et al., 2015; Talwar & Lee, 2002; Talwar et al., 2002) was adapted from one used by Heyman et al. (2015). Each participant was instructed not to peek in a card guessing game in which he or she sat opposite the experimenter (a female graduate student) at a table. The experimenter told participants that they were going to play a number guessing game in which they could win a desirable gift if they guessed correctly on three or more trials within a total number of six trials. On each trial, participants were presented with a single card that was taken from a set of six playing cards. The value of the six cards ranged from 3 to 9, with the number 6 missing. The goal of the task was to guess whether the number on each card was greater or less than 6. Before starting, participants viewed all six cards and were asked whether each of the cards was greater or less than 6. All participants answered these questions correctly.

During the game, the experimenter placed a cardboard divider between the participant and herself to make sure that the participants

could not see what was on the experimenter's side of the table without engaging in some forms of obvious peeking (i.e., by getting out of their seat or leaning across the divider), which ensured that the cheating measure (as recorded by the hidden camera) had a reliability of 100%.

Participants were first given a practice trial, and then six formal trials. On each trial, they were presented with a single card selected from a custom deck of cards in which each card had a value less than 6 on one side and a value greater than 6 on the other side. This custom set allowed the experimenter to provide standardized success and failure feedback, regardless of what children guessed: Trial 1 and Trial 4 were always success trials, and Trials 2, 3, and 5 were always failure trials. Before guessing on each trial, the participant was reminded that no peeking was allowed; and after guessing, the participant was allowed to check whether he or she was correct.

At the beginning of the final trial (Trial 6), the participant was told that he or she had only one more chance to get the third correct answer that was needed to win the gift. Then the experimenter's cell phone rang and she pretended to answer. She told the participant that she had to leave and would be back soon. She then said, "Let me put the last card down now. When I'm back you can tell me whether you think the card is greater or less than 6. Remember not to peek while I'm gone." The experimenter then left the room for 60 seconds. Just before the experimenter left the room, a verbal promise not to cheat (see Heyman et al., 2015) was elicited from participants. The participants were told, "I want you to promise that you are not going to peek", and were asked to verbally repeat, "I promise I will not peek at the card." All participants promised not to peek. After the experimenter came back, the participant was asked whether the card was greater or less than 6. Cheating was assessed as peeking behavior during these 60 seconds. Among children who peeked, the cheating latencies were also calculated.

The procedure was identical across three conditions except for the reputation manipulation. In the two reputation conditions, before beginning the formal trials, the experimenter told each participant that she had learned his or her reputation from teachers and other students in the class. Specifically, in the smart reputation condition, the participant was told, "I know teachers and kids in your class and they told me you are a *smart* kid." In the irrelevant reputation condition, they were told, "I know teachers and kids in your class and they told me you are a *clean* kid." In both conditions, this reputational information was provided only once. In the no reputation condition, there was no reputational cue.

2.2 | Results and discussion

Cheating rates broken down by age group and condition are shown in Figure 1 and Table 1. As can be seen in the figure, the cheating rate was higher in the smart reputation condition than that in either of the control conditions, but those in the two control conditions were similar. This tendency was the same for both age groups. Also, regardless of conditions, boys had higher cheating rates than girls (see Table 1).

To confirm these observations statistically, we conducted a binary logistic regression analysis with cheating behavior (0 = *no cheating*, 1 = *cheating*) as the predicted variable, gender (0 = *girls*, 1 = *boys*), age

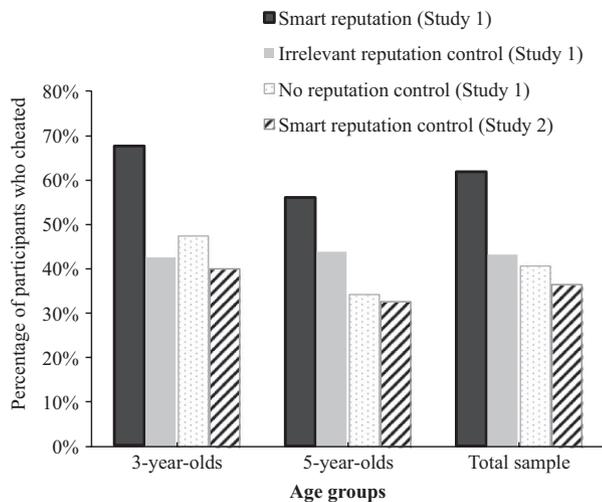


FIGURE 1 Percentage of participants who cheated for each age group in different conditions across two studies

group (0 = 3-year-olds, 1 = 5-year-olds), condition (0 = smart reputation, 1 = irrelevant reputation, 2 = no reputation, which were later recorded into two dummy variables for analysis), as well as their interactions as the predictor variables.

The regression model was significant, $\chi^2(3, N = 243) = 14.14, p = .003$, $-2\text{Log likelihood} = 322.53$, Nagelkerk $R^2 = .075$. As presented in Table 2, two significant effects were included in the model. One was the significant main effect of condition ($p = .017$). A priori comparisons with the smart reputation condition as the reference for the predictor variable showed that a significantly higher proportion of participants cheated in the smart reputation condition than in the no reputation condition ($p = .009$), as well as in the irrelevant reputation condition ($p = .020$). The other was a main effect of gender, with a smaller proportion of girls cheating across three conditions ($p = .019$). No other effects were included in the model ($ps > .1$). These results support our hypothesis that telling children they have a reputation for being smart promotes their cheating behavior. In contrast, providing children with irrelevant reputation information does not affect their cheating behavior.

In addition, we also compared the cheating latencies for participants who cheated among three different conditions. Given that the latencies were not normally distributed, we adopted a series of non-parametric analyses (i.e., Kruskal-Wallis H tests and Mann-Whitney U tests). We found no significant differences in these latencies among

three conditions, either for the whole sample, or for each subgroup (i.e., 3-year-olds and 5-year-olds, as well as boys and girls; $ps > .1$).

Overall, Study 1 showed that children cheated significantly more in the smart reputation condition than in either of the control conditions. Moreover, inconsistent with the hypothesis that the desire to maintain a smart reputation increases with age, we found that 3-year-olds showed the same pattern of results as 5-year-olds.

3 | STUDY 2

Study 1 provides evidence that telling both 3- and 5-year-olds that they have a reputation for being smart increases their willingness to cheat. However, it is unclear whether this smart reputation effect would be specific to the person who told the child that he or she had a smart reputation. An alternative is that it is simply a response to being told that they are smart regardless of who informed them of their smart reputation. Study 2 tests these possibilities by introducing a new control condition in which one experimenter provided the child with the smart reputation information and the second experimenter who appeared to know nothing about their reputation tested the child on the guessing game (for short, the *smart reputation control* condition). If children are concerned with upholding their reputation to a specific individual, they should cheat significantly less than the children in the smart reputation condition.

3.1 | Methods

3.1.1 | Participants

Participants were 40 3-year-old children (aged from 3 years 1 month to 3 years 12 months; $M = 3.59$ years, $SD = 0.24$ years; 21 boys and 19 girls) and 40 5-year-old children (aged from 5 years 1 month to 5 years 12 months; $M = 5.52$ years, $SD = 0.32$ years; 21 boys and 19 girls) from the same preschool. None of them had participated in Study 1. All participants were Han Chinese.

3.1.2 | Design and procedure

We used the same design and procedure as the smart reputation condition of Study 1, except that rather than having only one experimenter run the session, there were two experimenters, E1 and E2,

Subgroups	Study 1			Study 2
	Smart reputation	Irrelevant reputation control	No reputation control	Smart reputation control
3-year-olds	67.5%	42.5%	47.5%	40.0%
5-year-olds	56.1%	43.9%	34.1%	32.5%
Boys	68.2%	54.8%	43.9%	45.2%
Girls	54.1%	30.8%	37.5%	26.3%
Total sample	61.7%	43.2%	40.7%	36.3%

TABLE 1 Cheating rates in different conditions across two studies

TABLE 2 Logistic regression results for children's cheating behavior as predicted by condition, age and gender in Study 1

Predictor variables	B	SE	Wald	df	p	OR	95% CI OR	
							Lower	Upper
Condition			8.17	2	.017			
Condition (1) (irrelevant reputation vs. smart reputation)	-.75	.32	5.41	1	.020	.47	.25	.89
Condition (2) (no reputation vs. smart reputation)	-.85	.33	6.82	1	.009	.43	.23	.81
Gender	-.62	.27	5.48	1	.019	.54	.32	.90
Constant	.77	.27	8.47	1	.004	2.17		

Note. *Wald*, Wald test (z-ratio); OR, odds ratio; CI OR, confidence interval for odds ratio.

both of whom were female graduate students. E1 presented the reputation information in the first stage and left. E2 then tested participants on formal trials in the second stage.

In Stage 1, when participants arrived, E1 introduced herself as a visitor from a distant city, who would go back to her city soon and wanted to play a game with them before leaving. E1 gave the same instructions about how to play the game that were provided in the smart reputation condition of Study 1, set up the game in the same way, and gave the same smart reputation information ("I know teachers and kids in your class and they told me you are a *smart kid*"). However, in contrast to that smart reputation condition, E1 then looked at her watch and said: "Oh, it is time for me to go to the airport. I'm sorry that I must leave now. I have to catch a plane and will never come back. I'll ask someone (E2, who was absent during Stage 1) at this preschool to play the following game with you, OK?" E1 then left the room.

In Stage 2, E2 came in and discovered that the child was waiting for a teacher to come to play with them. She then played a series of six formal trials with participants. The procedure was identical to that of Study 1, and cheating behavior was recorded and measured in the same way, again with a reliability of 100%.

3.2 | Results and discussion

Cheating rates in this smart reputation control condition for age and gender groups are also presented in Table 1. For the current purpose,

we conducted a binary logistic regression analysis combining this new condition with the smart reputation and no reputation control conditions in Study 1. The predicted variable was cheating (0 = *no cheating*, 1 = *cheating*), and the predictors were condition (0 = *smart reputation control*, 1 = *smart reputation*, 2 = *no reputation*, which were later recorded into two dummy variables for analysis), gender (0 = *girls*, 1 = *boys*), age group (0 = *3-year-olds*, 1 = *5-year-olds*), as well as their interactions.

Results showed that the regression model was significant, $\chi^2(3, N = 242) = 16.489, p = .001, -2\text{Log likelihood} = 317.65, \text{Nagelkerk } R^2 = .088$. The effects included in the model are presented in Table 3. As can be seen from the table, there were two main effects. One was the main effect of condition ($p = .003$). A priori comparisons with the new smart reputation control condition as the reference for the predictor showed that the cheating rate in this new condition was significantly lower than that in the previous smart reputation condition ($p = .001$), whereas it was not significantly different from that in the no reputation condition ($p > .1$). The other was the gender effect ($p = .037$), revealing that a significantly higher percentage of boys cheated across conditions, as compared with girls. No other effects were included in the model ($ps > .1$).

In addition, by conducting a series of non-parametric analyses (i.e., Kruskal-Wallis H tests and Mann-Whitney U tests), we found that the cheating latencies in the new control condition did not significantly differ from those in the previous smart reputation or no reputation

TABLE 3 Logistic regression results for children's cheating behavior as predicted by condition (smart reputation control,^a smart reputation,^b no reputation^b), age and gender in Study 2

Predictor variables	B	SE	Wald	df	p	OR	95% CI OR	
							Lower	Upper
Condition			11.59	2	.003			
Condition 1 (smart reputation vs. smart reputation control)	1.05	.33	10.21	1	.001	2.86	1.50	5.46
Condition 2 (no reputation vs. smart reputation control)	.20	.33	.39	1	.533	1.23	.65	2.33
Gender	-.56	.27	4.36	1	.037	.57	.34	0.97
Constant	-.31	.26	2.75	1	.237	.73		

Note. ^aCondition in Study 2; ^bconditions in Study 1. *Wald*, Wald test (z-ratio); OR, odds ratio; CI OR, confidence interval for odds ratio.



conditions, either for participants overall, or for each subgroup (i.e., 3-year-olds and 5-year-olds, as well as boys and girls; $p_s > .1$).

In sum, Study 2 provides evidence that our smart reputation effect seen in Study 1 is specific to the person who told the child about his or her smart reputation.

4 | GENERAL DISCUSSION

In the present research, we found that telling 3- and 5-year-olds that they had a reputation for being smart promoted cheating. In Study 1, children given this information showed significantly higher cheating rates than children who had received information concerning their reputation about an irrelevant trait (cleanliness) and those who received no information about their reputation. In Study 2, we found evidence that the smart reputation effect seen in Study 1 should be understood in terms of children's interest in upholding their smart reputation.

Our findings build on evidence that young children's concerns about reputation have implications for morally relevant behavior (Engelmann et al., 2013; Fu et al., 2016; Leimgruber et al., 2012; Piazza et al., 2011; Ross, Smith, Spielmacher, & Recchia, 2004; Shaw et al., 2014; Stipek, Recchia, McClintic, & Lewis, 1992). Our work suggests that different types of reputation information can have different behavioral consequences: we found that unlike the smart reputation condition, the irrelevant reputation condition, in which children were told they had a reputation for being clean, had no effect on cheating rates. This suggests that our participants were sensitive to the relation between their reputation and what they could do to maintain it, given that cheating had the potential to make them appear smarter but not to appear cleaner. The results of Study 2 also suggest that children were sensitive to the target of their reputational concerns: they only increased their cheating in response to individuals with whom they felt they had a smart reputation to uphold. Furthermore, our work demonstrates that young children's efforts to engage in reputation management do not always lead to behavior that is more prosocial or less antisocial.

One of the most striking findings in our study was that 3-year-olds behaved very much like 5-year-olds in their patterns of responses to the different conditions across two studies. The effectiveness of the smart reputation manipulation with 3-year-olds is surprising given that negative consequences of ability-related praise have only been documented in children older than this age (e.g., Cimpian et al., 2007; Elliot & Dweck, 2013; Kamins & Dweck, 1999; Mueller & Dweck, 1998; Zentall & Morris, 2010). In addition, 3-year-olds have much more limited knowledge than 5-year-olds of traits like intelligence (Boseovski, Chiu, & Marcovitch, 2013; Li et al., 2014; but see Lane, Wellman, & Gelman, 2013, for evidence that even 3-year-olds have some capacity to engage in trait-related reasoning). Thus, the present findings suggest that 3-year-olds either have a more sophisticated understanding of being smart than is suggested by prior research, or that they need only a skeletal understanding of what it means to use what people say about it to guide their own behavior (see Lewis, Alessandri, & Sullivan, 1992).

Our finding that 3-year-olds showed evidence of reputational sensitivity in the present research also raises questions about why Fu et al. (2016) found evidence of reputational sensitivity in 5-year-olds, but not younger children, in response to having a "good kid" reputation. This may have to do with children's understanding of being smart versus their understanding of being good, or with the behaviors thought to be associated with these traits. For example, it may be that children are more highly motivated to appear smart at a younger age or that for 3-year-olds the decision about whether to cheat is seen as having clearer implications for being smart than for being good. There are also methodological reasons why we might see this difference. Notably, in Fu et al. (2016) children showed evidence of reputational sensitivity by *decreasing* their cheating in comparison with a baseline condition, whereas in our study children showed evidence of reputational sensitivity by *increasing* their cheating in comparison with a baseline condition. Only the former condition likely required inhibitory control strategies to exert reputation management, and the use of such strategies in the service of compliance with prohibitive rules is likely to be viewed more favorably with age (Lagattuta, 2005).

Another unexpected finding in the present research was that boys tended to cheat more than girls. This finding parallels those seen in some studies of adults conducted in the fields of economics and psychology, in which males were more likely than females to engage in acts of dishonesty such as cheating (e.g., Alm, Jackson, & McKee, 2009; Bucciol, Landini, & Piovesan, 2013; Houser, List, Piovesan, Samek, & Winter, 2016). This could be because males tend to be socialized to be more individualistically oriented and thus are more likely than females to engage in risk-taking behavior (e.g., Baillargeon et al., 2007; Robbins & Martin, 1993; Tibbetts, 1997; Tibbetts & Herz, 1996). There is also evidence that girls are more responsive than boys to the socialization efforts of their parents and caregivers (Baillargeon et al., 2007; Bucciol & Piovesan, 2011). For example, in their study with 5- to 15-year-old children, Bucciol and Piovesan (2011) assessed cheating by measuring the over-reporting of prize-winning outcomes, and found that girls were more likely than boys to follow explicit instructions not to cheat. Taken together, these findings suggest early emerging gender differences in rule violating tendencies. However, because gender effects have not been observed in other research using paradigms similar to the one used in the present research (e.g., Ding et al., 2014; Fu et al., 2016; Heyman et al., 2015), it will be important to assess the replicability of this pattern before any firm conclusions can be drawn.

Although our research reveals that informing young children that they have a reputation for being smart can have a negative effect on their moral behavior, further research will be needed to thoroughly understand the underlying mechanism of this effect. In particular, further research is needed to assess the extent to which our results imply that young children care about having a reputation for being smart, and how specific these effects are. Further research will also be needed to pull apart the effects of cheating and promise breaking. As noted previously, we included a promise manipulation to avoid ceiling effects in cheating rates, which meant that children could not cheat without breaking a promise. Thus, our study in effect showed that the smart reputation manipulation leads to an increase in children's willingness



to violate a promise by cheating. Future specifically designed studies will be needed to determine whether we would have significant cheating effects in the absence of a promise not to do so.

In summary, the present research is the first to demonstrate that telling children they have a reputation for being smart may have the unintended consequence of motivating them to cheat in pursuit of personal gain. This new finding, along with the extensive evidence about the effects of praise on children's motivation, suggests that providing positive information to children about their intellectual ability can have unintended negative consequences. Further, our findings show that different reputational cues affect moral behaviors differently in children as young as 3 years of age, suggesting that children this young are already sensitive to reputational information and will act accordingly.

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