Promising to Tell the Truth Makes 8- to 16-year-olds More Honest

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Techniques commonly used to increase truth-telling in most North American jurisdiction courts include requiring witnesses to discuss the morality of truth- and lie-telling and to promise to tell the truth prior to testifying. While promising to tell the truth successfully decreases younger children's lie-telling, the influence of discussing the morality of honesty and promising to tell the truth on adolescents' statements has remained unexamined. In Experiment 1, 108 youngsters, aged 8–16 years, were left alone in the room and asked not to peek at the answers to a test. The majority of participants peeked at the test answers and then lied about their transgression. More importantly, participants were eight times more likely to change their response from a lie to the truth after promising to tell the truth. Experiment 2 confirmed that the results of Experiment 1 were not solely due to repeated questioning or the moral discussion of truth- and lie-telling. These results suggest that, while promising to tell the truth influences the truth-telling behaviors of adolescents, a moral discussion of truth and lies does not. Legal implications are discussed. Copyright © 2010 John Wiley & Sons, Ltd.

Promoting truth and honesty within the justice system has been the focus of many studies over the past decade (e.g., London & Nunez, 2002; Lyon & Dorado, 2008; Lyon, Malloy, Quas, & Talwar, 2008; Talwar, Lee, Bala, & Lindsay, 2002; Talwar, Lee, Bala, & Lindsay, 2004). Researchers have examined issues such as the influence of question types (e.g., Hutcheson, Baxter, Telfer, & Warden, 1995; Quas, Davis, Goodman, & Myers, 2007), support mechanisms for witnesses (e.g., Bala, 1999; Bennett, 2003; Goodman et al., 1998), and promising procedures (Lyon & Dorado, 2008; Lyon et al., 2008; Talwar et al., 2002; Talwar et al., 2004) on the honesty and accuracy of testimony.

To date, research has demonstrated that children begin to tell lies during the preschool years (Hala, Chandler, & Fritz, 1991; Lewis, Stanger, & Sullivan, 1989; Peskin, 1992; Polak & Harris, 1999; Talwar & Lee, 2002) and that by 4 years of age children demonstrate clear signs of intentions to deceive others (Polak & Harris, 1999). Young children's lie-telling behavior also appears to increase with age (Gervais, Tremblay, Demarais-Gervais, & Vitaro, 2000; Talwar & Lee, 2002; Wilson, Smith, & Ross, 2003). For example, Talwar and Lee (2002) used a temptation resistance paradigm in which children were asked not to peek at a toy. When children who had peeked at the toy were later asked about whether they had transgressed, about half of the 3-year-olds and the majority of older children lied about their transgression.

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Additionally, Wilson et al. recorded 2- and 4-year-olds' lie-telling at home using a naturalistic observation method. They found that older children tended to tell lies more often than younger children. Gervais et al. (2000) also found that 7- and 8-year-olds tended to tell lies more frequently than 6-year-olds. Overall, this developmental increase in lie-telling suggests a need to develop techniques to promote honesty with children beyond the preschool years.

One technique commonly used in most North American jurisdiction courts to increase truth-telling involves requiring witnesses to promise to tell the truth prior to testifying in court. Empirical studies have demonstrated that explicitly asking children to promise to tell the truth significantly decreases the lie-telling behaviors of 3- to 11-year-olds (Lyon et al., 2008; Talwar et al., 2002, 2004). For example, Talwar et al. (2002) asked 3- to 7-year-olds to promise to tell the truth prior to asking them about an earlier transgression they had committed (peeking at a toy). They found that children were significantly less likely to lie about their transgression after promising to tell the truth than were children who only participated in discussions of the morality of lie- and truth-telling. Talwar et al. (2004) further found that promising to tell the truth decreased 3- to 11-year-olds' lie-telling to conceal a transgression their parent had committed. Lyon and Dorado (2008) found similar results with maltreated 5- to 7-year-olds. When asked to promise to tell the truth, maltreated children were significantly less likely to conceal a transgression they previously committed with an adult confederate. Additionally, Lyon and Dorado (2008) demonstrated that promising to tell the truth did not increase children's acquiescence to the questioner, as children who did not transgress did not falsely claim to have done so.

Children are also often required to participate in a discussion of truth and lies in which their understanding of such concepts are assessed prior to testifying in court. These requirements are typically part of judicial procedures to determine whether they are legally competent to testify (Bala, Lee, & McNamara, 2000; Haugaard, Reppuci, Laird, & Nauful, 1991; Myers, 1996). While North American courts tend to use discussions of truth and lies as a measure of competency to testify, researchers have examined the potential honesty benefits of such discussions. Some researchers have found that discussing or evaluating the morality of truth- and lie-telling increases the accuracy rates of children's reports (Huffman, Warren, & Larson, 1999; London & Nunez, 2002), while others have found it to have no impact on children's truth- or lie-telling behaviors (Talwar et al., 2002).

Findings indicating that requiring children to promise to tell the truth successfully decreased children's lie-telling, while a moral discussion of truths and lies was not related to the honesty of children's statements (Talwar et al., 2002), resulted in reforms to the procedure of admitting child witnesses in the Canadian criminal court through Bill C-2 in 2006 (Bala, Duvall-Antonacouplos, Lindsay, Lee, & Talwar, 2006; Bala, Lee, Lindsay, & Talwar, 2010; Bala, Ramakrishnan, Lindsay, & Lee, 2005). Specifically, in Canada, from 2006 onward, children under the age of 14 are no longer required to complete a moral competency examination but are still required to promise to tell the truth prior to testifying in a criminal court. However, to date, studies supporting these revisions have only been conducted with children up to 11 years of age (Lyon et al., 2008; Talwar et al. 2002, 2004). Each year there are over one million juvenile court cases in North America, of which over 400,000 adjudicated cases involve adolescents between 13 and 16 years of age (Puzzanchera & Kang, 2008). Given this

astounding heavy involvement of adolescents in the court system, it is vital to gain a greater understanding of this age group's lie-telling behaviors.

While we currently have a general understanding of lie-telling behaviors in younger children through experimental studies, no such studies have been completed with adolescents. A recent self-report study conducted by Jensen, Arnett, Feldman, and Cauffman (2004) demonstrated that adolescents commonly lied to their parents, with more than half of high school students lying to their parents about drugs/alcohol, parties, friends and money. However, these self-reported rates of deception may be underestimated due to the negative perception associated with telling lies. Behavioral measures of lie-telling are therefore required in order to gain a greater understanding.

The present investigation examined the honesty of adolescents through a series of studies. Experiment 1 assessed whether discussing truth and lies in a competence examination and asking 8- to 16-year-olds to promise to tell the truth would decrease lie-telling behaviors about a transgression they had committed. A modification of Talwar, Gordon, and Lee's (2007) temptation resistance paradigm was used to assess 8- to 16-year-olds' truth- and lie-telling behaviors. Participants were tempted to cheat on a test to gain a monetary prize (based on methods used with younger children: Lewis et al., 1989; Polak & Harris, 1999; Talwar et al., 2002; Talwar & Lee, 2002, 2008). Participants were then later questioned about whether they had peeked at the answers to the test. This method allowed us to assess 8- to 16-year-olds' truth- and lie-telling behaviors in a naturalistic situation where they were faced with the option of being deceptive to cover up their transgression. Prior to asking participants the critical question of whether they had transgressed, they were asked questions similar to those commonly used in the competence examination procedures in the United States' court systems (Bala et al., 2000; Huffman et al., 1999; Lyon & Saywitz, 1999). Participants were given a hypothetical situation in which a character violates a rule (e.g., eating a candy they were told not to eat) and makes a false statement about it (e.g., denies eating the candy). Participants were then asked to label the statement as either the truth or a lie and to evaluate how good or bad the statement was. In addition, participants were asked to promise to tell the truth. Based on previous findings with younger children (Lyon et al., 2008; Talwar et al., 2002, 2004), it was expected that the procedure including both moral discussions of lies and truths and promising to tell the truth would significantly lead 8- to 16-year-olds to be more inclined to tell the truth. Experiment 2 examined whether the findings of Experiment 1 were simply the result of participants being asked twice about their transgression and completing a moral discussion of truth and lies The same paradigm as Experiment 1 was used but the requirement of promising to tell the truth was removed.

EXPERIMENT 1

Method

Participants

One hundred and eight 8- to 16-year-olds participated in this study (M=12.07, SD=2.32, 58 males). Participants were recruited through mailings that advertised research studies on children's honesty to families in a major Canadian city and came

from a middle socioeconomic background (median individual income = CAD 25,301 per year, SD = 9,351.61 based on census tract information). University ethics approval was obtained for the procedure. Prior to commencing the study session, informed consent was obtained from all parents and oral assent was obtained from all participants.

Materials

Ten trivia-style questions were placed on the front page of a testing booklet (e.g., "How many musicians are in a trio?"). Unbeknownst to the participants, two of the 10 questions ('no-answer questions') had no correct answer ("Who invented the hairbrush?" and "Who discovered Tunisia?") with the purpose of motivating participants to peek at the test answers. The answer to each question was listed in numerical order on the inside of the testing booklet. Fabricated answers were inserted for the no-answer questions (Jones and Nelson, respectively).

Design and procedure

Participants were taken to a quiet testing room with a female experimenter and were asked to complete a trivia-style test designed to assess their general knowledge about the world. They were told that there were 10 questions and if they got all 10 correct they would receive \$10, but if they got even one question incorrect they would not receive the money. Participants were told the experimenter would wait for them to complete the task down the hall and they were to retrieve the experimenter when they had completed the test. Participants were also told the answers were on the inside of the testing booklet but were told not to look at the answers while the experimenter was gone. Since two of the test questions had no known correct answer, it was extremely tempting for participants to peek at the test answers.

While the experimenter was out of the room, four hidden cameras recorded whether participants peeked at the answers to the test. Those participants who looked at the answers were classified as 'peekers' and those who did not look were classified as 'non-peekers'. Once the participants completed the test, they retrieved the experimenter from the waiting room. Prior to collecting the answers to the test, the experimenter, who was blind to whether the participant had peeked at the answers, asked the target question, "While I was gone out of the room, did you peek at any of the answers to the test?" (Time 1). Peekers' responses were coded into one of two categories. If they peeked at the answers and said "yes" in response to the target questions they were classified as 'truth-tellers'. If they peeked at the answers and said "no" in response to the target question they were classified as 'lie-tellers'.

Participants then completed a filler task assessing their trivia knowledge and memory. Next, assessments of their conceptual knowledge about truth- and lie-telling, and their understanding of a promise were completed. To assess their conceptual knowledge about lie-telling, participants were read two stories. First they were given a scenario where a story character, Kathy, eats a candy that her teacher told her not to eat. When the teacher returns, she asks Kathy whether she has eaten the candy. Participants were asked, "What do you think Kathy should say?" They were then told that Kathy said she had not eaten the candy and were asked a series of questions: "Is what Kathy

said the truth or a lie?", "Is what she said good or bad?", and "Was it a little bit good/ bad or very good/bad?" In the second scenario, participants were asked to place themselves in a situation where their mother asked them not to touch a new glass vase. While their mother is out of the room, they drop it and break the vase. Participants are then asked what they would say if their mother asked them if they broke the vase. All participants were also asked what it means to promise to do something. Finally, participants were asked to promise to tell the truth for the next question the experimenter asked. Regardless of their responses at Time 1, all participants were asked to promise to tell the truth. The experimenter then asked them the target question again, "While I was gone out of the room, did you turn around and peek at the answers to the test?" (Time 2 target question). Responses to the target question at Time 2 were coded into the categories of 'truth-tellers' and 'lie-tellers' based on the same criteria as Time 1.

Upon completion of the testing session, all participants were debriefed with their parents. Debriefing included telling participants about the purpose of the study and general findings of previous studies with similar procedures, a discussion about truthand lie-telling, and an opportunity to view the hidden cameras. Parents were provided with a brochure about truth and lie-telling to take home. All participants received \$10 for participating in the study regardless of their performance on the test.

Results

Two female experimenters conducted the testing sessions, a graduate student and a fourth-year undergraduate student. No significant differences were found between experimenters and thus the results for both experimenters were collapsed for all subsequent analyses. Preliminary results also revealed no significant effects of participants' gender, so the results for both genders have been collapsed for all subsequent analyses.

Fifty-four per cent of participants (58 of 108) peeked at the answers to the test while the experimenter was gone. Of the 58 participants who peeked at the answers to the test, 84% lied (N = 49), and 15% told the truth (N = 9) prior to promising to tell the truth. A logistic regression was performed with honesty (at Time 1) as the predicted variable (0 = truth, 1 = lie) and age (continuous variable) as the predictor variable. The model was significant [$\chi^2(1, 58) = 6.86$, Nagelkerke $R^2 = 0.30$, P < 0.05], demonstrating that as age increased, participants were significantly more likely to tell the truth rather than to lie (B = -0.46, Wald = 5.91, P < 0.05, odds ratio = 1.59).

After promising to tell the truth (Time 2), 65% (N=38) of the peekers continued to lie and 34% (N=20) told the truth. A logistic regression was performed with honesty (at Time 2) as the predicted variable (0 = truth, 1 = lie) and age (continuous variable) as the predictor variable. The model was again significant [$\chi^2(1, 58) = 5.47$, Nagelkerke $R^2 = 0.13$, P < 0.05]. As age increased, participants were significantly more likely to tell the truth than to lie (B = -0.32, Wald = 5.03, P < 0.05, odds ratio = 1.37).

The consistency of answers from participants who peeked at the test answers from Time 1 to Time 2 was examined to determine whether participants were significantly more likely to change their answer to the truth after making a promise to tell the truth. The Wilcoxon signed-rank test revealed a significant difference in participants' statements from Time 1 to Time 2 (Z = -2.67, P < 0.05). Specifically, participants were



Figure 1. The percentage of 8- to 16-year-olds who told a lie at Time 1 and Time 2 in Experiments 1 and 2. *P < 0.05; ns, not significant.

significantly more likely to tell the truth when asked to promise at Time 2 (M = 0.66, SD = 0.48, where 1 = lie) than they were when no promise had been made at Time 1 (M = 0.84, SD = 0.37) (see Figure 1). No participant changed from truth-telling at Time 1 to lying at Time 2.

Past research on question repetition has demonstrated that children sometimes change their original responses after being asked the same question a second time (Krähenbühl & Blades, 2006; Poole & White, 1991; Zajac & Hayne, 2003). Children may perceive the repeated question about their peeking behavior as an indirect request to change their original response, as adults typically only repeat questions when the desired answer was not obtained (Siegal, 1991). To assess whether the change in participants' responses to the question of whether they peeked was possibly due to repeating the question at Time 2, a comparison of responses at Time 1 and Time 2 of those participants who had not transgressed (non-peekers) was assessed. The Wilcoxon signed-rant tests did not reveal a significant difference in participants' statements from Time 1 to Time 2 (Z=0.00, P=1.00), with all participants telling the truth at both Time 1 and Time 2.

Overall, participants were significantly more likely to tell the truth after being asked to promise to tell the truth. However, it is also possible that asking participants a second time about their transgression may have resulted in them changing their answer. Perhaps over the passage of time participants may have begun to regret their lie and thus the repeated question itself, rather than the promise, may have increased honesty. In addition, the moral discussion of truth and lies prior to promising may have influenced the honesty of the statements made by those participants who transgressed and peeked at the test answers. Thus, promising to tell the truth alone may not explain the findings of Experiment 1, because participants were asked twice about their transgression and were involved in a moral discussion of truth and lies.

EXPERIMENT 2

Experiment 2 addressed whether the findings of Experiment 1 were due to the fact that participants were asked twice about their transgression and completed a moral discussion of truth and lies. In this experiment, participants were no longer asked to promise to tell the truth. However, participants were asked twice whether they had peeked at the test answers. In addition, prior to the second question as to whether participants had peeked at the answers to the test, participants completed the same

moral discussion of truths and lies as in Experiment 1. If Talwar et al.'s (2002) findings with younger children can be generalized to older children, the moral discussion of truth and lies alone would not be expected to increase truth-telling in 8- to 16-year-olds. Otherwise, there might be a significant increase in truth-telling after the moral discussion procedure (Huffman et al., 1999; London & Nunez, 2002). Similarly, if over time participants regret their lie, they should be more inclined to change their responses after the moral discussion procedure.

Method

Participants

Forty-one participants aged 8–16 years (M = 11.34, SD = 2.29, males = 22) completed the same temptation resistance paradigm as in Experiment 1. Participants were recruited through mailings that advertised research studies on children's honesty to families in a major Canadian city and came from a middle socioeconomic background (median individual income = CAD 23,706 per year, SD = 7021.59 based on census track information). University ethics approval was obtained for the procedure. Prior to commencing the study session, informed consent was obtained from all parents and oral assent was obtained from all participants.

Design and procedure

The same methods and experimenters were used as in Experiment 1 except that participants were not asked to promise to tell the truth. After completing the truth–lies conceptual knowledge task, participants were simply asked a second time whether they peeked at the answers to the test while the experimenter was out of the room.

Results

The same two female experimenters as in Experiment 1 conducted the testing sessions. Again, no significant differences were found between experimenters and thus the results for both experimenters were collapsed for all subsequent analyses. Preliminary analyses also revealed that participants' gender was not significantly related to their peeking or lie-telling and thus both genders were collapsed in all further analyses.

Sixty-eight per cent of participants (28 out of 41) peeked at the answers to the test while the experimenter was gone. Of the 28 participants who peeked at the answers, 82% lied (N = 23) and 18% told the truth (N = 5) at Time 1 (see Figure 1). A logistic regression was performed with honesty (at Time 1) as the predicted variable (0 = truth, 1 = lie) and age (continuous variable) as the predictor variable. The model was marginally significant [$\chi^2(1, 28) = 2.98$, Nagelkerke $R^2 = 0.09$, P = 0.08], suggesting a trend of increased truth-telling with age (B = -0.25, Wald = 2.78, P = 0.09, odds ratio = 1.30).

Similar truth and lie-telling rates were found at Time 2, with 79% telling a lie (N=22) and 21% telling the truth (N=6) (see Figure 1). A logistic regression was

performed with honesty (at Time 2) as the predicted variable (0 = truth, 1 = lie) and age (continuous variable) as the predictor variable. The model was not significant $[\chi^2(1, 28) = 1.15, \text{Nagelkerke } R^2 = 0.06, P = 0.28]$, suggesting that age was no longer significantly related to whether participants would tell the truth or a lie.

Comparisons between the statements made at Time 1 and Time 2 were made to assess whether participants were significantly more likely to tell the truth when being asked about their transgression a second time and completing the truth–lies conceptual knowledge task. As in Experiment 1, participants' responses were coded into two categories: the truth or a lie for Time 1 and Time 2, respectively. The Wilcoxon signed-rank test confirmed that there was no significant difference in truth-telling rates between Time 1 and Time 2 (Z=-1.00, P=0.32). No participant changed from truth-telling at Time 1 to lying at Time 2.

To examine the influence of promising to tell the truth versus repeating questions and moral competency examinations on whether participants will change their statements from a lie to the truth, a comparison between Experiments 1 and 2 was made. Participants' statements were coded into two categories to denote whether or not the veracity of their statements changed from Time 1 to Time 2. Participants who told a lie at both Time 1 and Time 2 were categorized as 'deception maintained' (lie-lie). Participants who told a lie at Time 1 and then told the truth at Time 2 were categorized as 'deception to truth-tellers' (lie-truth). If promising influenced participants to tell the truth significantly more than repeated questioning and the moral competency examination alone, Experiment 1 should have significantly more participants in the deception to truth-telling category than Experiment 2.

The logistic regression was run with the two veracity categories of participants' responses from Time 1 to Time 2 as the predicted variable (0 = lie-lie, 1 = lie-truth) and experiment [1 = Experiment 1 (promise), 0 = Experiment 2 (no promise)] as the predictor. The model was significant $[\chi^2(1, 72) = 6.83$, Nagelkerke $R^2 = 0.14$, P < 0.05], indicating that participants in Experiment 1 (promise) were significantly more likely to change their response from a lie to the truth rather than maintaining their lie than were participants in Experiment 2 (no promise) ($\beta = -2.17$, Wald = 4.13, P < 0.05, odds ratio = 8.77). Specifically, the odds ratio indicated that participants in Experiment 1 were over eight times more likely to change their lie to the truth than were participants in Experiment 2. Given the distribution of the data, a non-parametric analysis was also performed comparing participants' responses (lie-lie or deception-truth) in Experiment 1 with those in Experiment 2, and confirmed that participants in Experiment 1 were significantly more likely to change their response (M = 0.43, SD = 0.50) than those in Experiment 2 (M = 0.06, SD = 0.24) (Mann-Whitney U = 257.00, n1 = 108, n2 = 41, P < 0.05).

These results suggest that promising to tell the truth does indeed decrease lie-telling behavior in older children and adolescents. In addition, simply asking 8- to 16-year-olds a second time and asking them about their moral knowledge of truth and lies does not appear to influence their truth- and lie-telling behavior.

GENERAL DISCUSSION

This study examined the influence of promising to tell the truth and moral discussion of truth- and lie-telling on 8- to 16-year-olds' tendency to tell the truth. Consistent with

previous findings of children under 11 years of age (Lewis et al., 1989; Polak & Harris, 1999; Talwar & Lee, 2002, 2008; Talwar et al., 2007) the majority of children peeked and lied about their transgression.

More importantly, asking 8- to 16-year-olds to promise to tell the truth increased truth-telling about their own transgression. To ensure that the effect of promising was not the result of asking participants a second time whether they peeked at the test answers, or the moral competency examination alone, Experiment 2 was performed. Results of Experiment 2 revealed no significant difference in participants' lie-telling behavior from Time 1 to Time 2, suggesting that neither repeating the question, "Did you peek?", nor asking participants to complete the truth–lies competency examination alone led to decreases in lie-telling behaviors in 8- to 16-year-olds.

A comparison of the results of Experiment 1 and Experiment 2 revealed that participants who were asked to promise to tell the truth (Experiment 1) were eight times more likely to change their response from a lie to the truth, rather than maintaining their lie, than were participants who only completed the moral competency examination (Experiment 2). Given that participants still completed a discussion of the concepts and moral implications of truth- and lie-telling in both experiments, the act of promising to tell the truth appears to have a significantly stronger truth-promoting effect on 8- to 16-year-olds' truth-telling behavior than discussing the concepts and moral implications of truth- and lie-telling. It is important to note that while promising to tell the truth decreased lie-telling behaviors, it did not eliminate lie-telling, as 48% of 8- to 16-year-olds continued to lie after promising. Nevertheless, a significant reduction in deception after promising was achieved.

The results of the present investigation are consistent with previous findings indicating that asking younger children to promise to tell the truth reduces their tendency to lie, while the discussion of truth and lies does not influence the honesty of their statements (London & Nunez, 2002; Lyon et al., 2008; Talwar et al., 2002, 2004). Taken together, our findings, along with others (Lyon et al., 2008; Talwar et al., 2002), support the revisions made to the Canadian justice system indicating that while promising to tell the truth should be retained, the requirement to complete moral competency examination may not be needed for 3- to 16-year-olds if the purpose of using such procedures is to promote truth-telling in the court. While the Canadian justice system has revised the requirements so that moral discussion of truth and lies is no longer required, many other justice systems have maintained this requirement. In most common law countries, children are only permitted to testify if they correctly answer questions about abstract concepts such as the "truth," "promise" and "oath." This form of questioning can be confusing and intimidating to children, and may prevent children who are capable of giving important evidence from testifying, potentially resulting in miscarriages of justice. Another issue is that competency questions asking about the morality of honesty are essentially irrelevant to the issue of whether a child is actually committed to telling the truth.

Future studies are required to gain an understanding of why asking children and adolescents to promise to tell the truth significantly increases honesty and the potential correlates. While previous studies have demonstrated that children's and adolescents' moral understanding of honesty or promising is not related to whether children will be more honest after promising (London & Nunez, 2002; Lyon et al., 2008; Talwar et al., 2002, 2004), there are other possible variables that need to be considered, such as whether the socioeconomic status of the speaker, parenting style, characteristics of the

questioner, or the seriousness of the transgression, influences the effects of promising. To date, studies have not investigated whether the influence of promising to tell the truth is impacted by the severity of the transgression. Perhaps with increased severity the influence of promising is reduced. However, it is important to note that promising to tell the truth has not been found to negatively influence children's responses (e.g., increase false confessions), and thus, even with a reduced influence on the honesty of reports, it may still be a useful tool. Additionally, characteristics of the questioner, such as the level of authority the questioner holds (e.g., judge vs. another child), the child's relationship to the questioner (e.g., parent vs. stranger), or the gender of the questioner (e.g., male vs. female) may influence the effectiveness of promising.

These results also have implications for other investigative situations when obtaining the truth is imperative. For example, when conducting forensic interviews with child and adolescent witnesses, police officers, social workers, and lawyers could use the honesty-promoting technique of promising to tell the truth. In turn, the likelihood of obtaining truthful statements may increase.

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