Is it okay to tell? Children’s judgements about information disclosure

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The present research investigates how young children evaluate and reason about the disclosure of private information. Using story vignettes, children aged 4–5 and 7–8 years were asked to evaluate an individual who passed on information from a peer revealing that he or she had broken a rule (e.g., stolen a cookie; rule type) or lacked a skill (e.g., could not ride a bicycle; competence type). These negative valence stories were compared with positive valence stories in which the peer had followed a rule or possessed a skill. Younger children approved the sharing of positive, but not negative, information, irrespective of type (rule vs. competence). Older children disapproved the disclosure of someone’s incompetence, whereas they approved the disclosure of a rule violation. Children justified their evaluations by reference to social rules in the rule-type vignettes and to an individual’s feelings in the competence-type vignettes. The findings suggest that young children are concerned about the disclosure of negative information about other people, but with age they become increasingly concerned about protecting the social order even at the cost of individual privacy.

Information disclosure is pervasive in everyday life. However, concealment and even distortion are also prevalent. Access to information is crucial for the acquisition of knowledge, and the control of information can enhance or consolidate power. There are historical and indeed ongoing conflicts over the extent to which rulers can control and obtain access to information, and over the right to know among the ruled. Other examples of the conflict between information concealment and disclosure are abundant. Do parents and teachers have the right to know about children’s whereabouts and activities? Is it acceptable for our personal identity to be revealed to the general public without our permission? Given these dilemmas, a key issue concerns the decisions surrounding information disclosure and concealment. Who has the right to disclose or conceal a piece of information? Does that right depend on the type of information? Although these issues are not clear-cut even for adults, children’s ideas about the conditions under which it is appropriate to disclose or withhold information are even less well understood. As reviewed below, prior studies of children’s judgements regarding disclosure or concealment of information concerned a particular type of information and did not include children younger than school age. Therefore, we examined the judgements of both younger and older children concerning the disclosure of different types of information in a single study.

Do children classify some kinds of information as secret? To answer this question, Anagnostaki, Wright, and Bourchier-Sutton (2010) presented children with non-secrets

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and potential secrets concerning three categories of information: rule-breaking (e.g., stealing), failure/embarrassment/relationship between the sexes (e.g., wet himself/herself), and surprise (e.g., surprise party). Examples of non-secret matters involved a person’s competence, preferences, and descriptions of people and activities. Children were asked to indicate whether specific content in each of these categories was a secret. Six-year-olds, but not 4- or 5-year-olds, distinguished secrets from non-secrets. Other studies investigating older children’s naturally elicited secrets point to similar categories of secret information, namely shameful acts, transgression of moral rules, possessions, and sexual behaviours (Last & Aharoni-Etzioni, 1995; Meares & Orlay, 1988). Thus, children understand that some pieces of information are secrets.

However, do children understand what secrets entail concerning information disclosure? That is, do they understand that some information is not appropriate for disclosure even if it has not been explicitly labelled as secret? Studies of children’s understanding of white lies indicate that children display some understanding of this type (e.g., Bussey, 1999; Peterson, Peterson, & Seeto, 1983). They appreciate that it can be inappropriate to disclose the truth. For example, school-aged children viewed telling lies to protect other people’s personal feelings as acceptable (Heyman, Sweet, & Lee, 2009; Kahn & Turiel, 1988). Studies of children’s perception of parental authority show that selective withholding of information about the self is firmly endorsed by adolescence (e.g., Perkins & Turiel, 2007; Smetana & Asquith, 1994; Smetana, Metzger, Gettman, & Campione-Barr, 2006). Adolescents judge that they are less obligated to disclose information about personal issues to their parents than information about moral and conventional issues.

A separate line of research shows that by school age, children view tattling to authority figures about others’ rule violations as more or less appropriate depending on the violation in question (Loke, Heyman, Forgie, McCarthy, & Lee, 2011). Children of 6–11 years evaluated a story character who either did or did not report another character’s rule violation to an authority figure. Starting at around 8 years, children judged that tattling about serious moral transgressions (e.g., stealing) was appropriate, whereas tattling about minor ones (e.g., not finishing lunch) was not. By contrast, 6- and 7-year-olds viewed tatting about both types of transgressions as appropriate.

A small number of studies have examined the understanding of information disclosure by preschoolers. Preschool children do tattle to authority figures about others’ rule violation (Ingram & Bering, 2010; Ross & den Bak-Lammers, 1998). Indeed, when children witness rule transgressions, they report these to parents and teachers even in the presence of the transgressor. Nevertheless, if they are explicitly told by others to keep a secret, 5-year-olds are able to withhold information about a breach of rules (Bussey, 1999; Pipe & Wilson, 1994). For example, after children witnessed an adult breaking an object and were told by the adult not to tell anyone, they did not do so. Similarly, Bottoms, Goodman, Schwartz-Kenney, and Thomas (2002) also found that children aged 5 and 6 years tended to conceal information when explicitly told to keep a secret. By contrast, younger children aged 3 and 4 years tended to disclose others’ norm violations, regardless of instruction.

Taken together, these various studies show that children are prepared to label some information as secret, endorse the withholding of certain types of information, and will withhold information when asked. Nevertheless, the studies do not clearly show whether young children understand that it is appropriate to disclose some types of information about other people but to withhold other types of information. Thus, we do not know whether young children judge that certain types of information should not be shared with others even in the absence of verbal demands (e.g., the information is classified as a secret).
or social demands (e.g., they are told not to tell). In the studies that investigated children’s ability to keep other people’s secrets, children may have used a simple behavioural rule, namely that a secret means you cannot tell others. Alternatively, they may have been influenced by the presence of authority figures. Indeed, some evidence suggests that children keep other people’s secrets because they are afraid of punishment (Last & Aharoni-Etzioni, 1995).

Moreover, children’s understanding of what counts as private may not be reflected in their decisions about what to disclose about others. For example, although some studies have shown that children view certain types of information (e.g., a rule violation) as a secret, studies on children’s tattling show that they may still reveal such secrets. Although 6-year-olds view tattling about a serious rule violation as largely acceptable (Loke et al., 2011), less is known about younger children’s judgements. More specifically, given the observational nature of the evidence for younger children’s disclosure of other people’s rule violations (Ingram & Bering, 2010), it is not clear whether children’s judgements about the appropriateness of the information for disclosure are the actual basis for their selective disclosure. In particular, prior studies on children’s tattling provide a somewhat inconsistent picture. In the light of Loke et al.’s findings in which children of ages 6 and 7 viewed someone’s tattling of another person’s transgressions, both minor and major, as appropriate, it is puzzling why younger children in Ingram and Bering (2010) did not willingly tattle about rule violations by other people concerning a third person. Note that in contrast to Loke et al. (2011), Ingram and Bering (2010) investigated children’s actual tattling and children’s tattling mainly concerned rule violations that happened to themselves as opposed to others. Thus, children might have felt unwilling to disclose others’ rule violations even if they judged it to be appropriate to disclose them. Alternatively, they might have reasoned it to be inappropriate to disclose information concerning others unless they themselves were directly involved. Finally, although past studies have shown that children may understand the appropriateness of disclosure (e.g., tattling about transgressions: Loke et al., 2011) versus concealment (e.g., white lies about an unattractive haircut: Peterson et al., 1983), no prior research has systematically investigated children’s judgements about different types of content in a single study.

The current study aims to fill this gap in the literature. It tested children’s third-party judgements about someone’s disclosure or concealment of information concerning the behaviour of a peer. Specifically, we asked whether children make differential judgements about disclosure or concealment depending on different types of information. Drawing on the studies reviewed above, we selected two types of information: a person’s rule violation and a person’s incompetence. Young children consider both types of information to be secrets. Yet these two types of information involve different concerns. In particular, the disclosure of someone’s incompetence violates that person’s privacy, whereas the disclosure of someone’s rule violation may serve the public interest of maintaining the social order even if it violates the person’s privacy. We also assessed positive information, rule following and competence, corresponding to the negative information.

The stories in the present research involved information disclosure by friends. Decisions surrounding the disclosure or concealment of information vary with the type of relationship. Indeed, young children expect that individuals will be more likely to share a secret with a friend than with a stranger (Anagnostaki, Wright, & Papathanasiou, 2013). Thus, by keeping the relationship constant among the parties in the stories, we sought to examine whether children’s judgements about the appropriateness of information disclosure varies with information type. Children were presented with stories in which one character told a friend about his or her rule violation/conformity or about his or her
competence/incompetence. Children were asked whether it was okay for the recipient of the information to disclose it to a third character, a classmate, who requested it. We also asked children to justify their judgements to better understand their reasoning about different type of information.

As reviewed above, studies of children's judgements about the acceptability of information disclosure have focused on school-aged children. We were interested in probing for any early sensitivity to the criteria involved in information disclosure versus concealment. The one existing study on children's classification of secret and non-secret matters found that 6-year-olds, but not 5-year-olds, differentiate between information types subject to either disclosure or concealment (Anagnostaki et al., 2010). Therefore, we tested younger children aged 4–5 years and older children aged 7–8 years. Children of both age groups were expected to approve the disclosure of positive information. However, we expected that there would be a developmental change for negative information. One possible developmental difference is that with age children become more concerned about the maintenance or restoration of social order even if it harms individual privacy. Thus, whereas both younger and older children would object to the disclosure of others' incompetence, older children would be more likely than younger children to approve the disclosure of others' rule violations to third parties. Alternatively, children may become more concerned about individual privacy even if it threatens the social order. If so, older children would be more likely than younger children to object to the disclosure of others’ rule violations. Because the disclosure of another person’s incompetence does not involve a conflict between individual versus public concerns – unlike the disclosure of another person's rule violation – we anticipated that younger and older children would equally disapprove of its disclosure.

**Method**

**Participants**

Participants were 56 children divided into a younger group aged 4–5 years ($n = 28$, 20 girls, $M = 5.5$, range = 4.7–5.9) and an older group aged 7–8 years ($n = 28$, 16 girls, $M = 8.2$, range = 7.3–9.0). In the younger group, 14 children received positive stories and 14 received negative stories. In the older group, 12 children received positive stories and 16 received negative stories. Children were recruited from local preschools, public elementary schools, and public parks in the Boston area.

**Design and procedure**

Children were tested individually in a separate room of their school or a quiet space in the public park. The experimenter presented stories on a computer screen via keynote display. In the stories, a protagonist shared a piece of information with a friend. Then, a second friend asked for that information from the first friend in the absence of the protagonist. For example, Mike told his friend Billy that he ate some cookies in the jar in the classroom. After Mike left, Billy ran into Sam who told him that the cookies in the classroom were gone, wondered who ate them, and asked him whether Mike ate them. The experimenter asked children four questions to check for story comprehension. The experimenter asked whether the second friend knew about the information (e.g., 'Does Sam know that Mike took/did not eat the cookies?'), whether the first friend knew about the information (e.g., 'Does Billy know that Mike took/did not eat the cookies?') and how
he or she knew it (‘How does he know this?’), and whether the protagonist violated the rule/was competent (e.g., ‘Did Mike eat the cookies?’). Children who provided wrong answers (five younger children and one older child) were corrected. Children were then asked whether it was okay for the first friend, the recipient of the information, to disclose it to the second friend who requested the information (‘Do you think it is okay or not okay that Billy tells Sam that Mike ate the cookies?’).

There were two types of information, namely information concerning the protagonist’s rule following and competence. We also varied the positive or negative valence of each information type, that is, whether the protagonist followed or violated the rule and whether the protagonist was competent or incompetent. All children received stories about rules and competence. Valence was counterbalanced across children; half of the children received stories about rule violation and incompetence, and the other half, stories about rule conformity and competence. Every child received a total of four stories, two of each information type: (not) stealing stickers, (not) stealing cookies (rule domain); (not) knowing how to ride a bike, (not) knowing how to tie shoelaces (competence domain). See Appendix A. The order of the four stories was counterbalanced across participants, each involving different characters.

Children were also asked to justify their response (‘Why do you think it’s okay/not okay to…’). Responses were coded into five main categories: rules and truth: a statement regarding authority, rules, truth, or obligations to tell (e.g., ‘She should tell teachers’, ‘She should not steal’, ‘It’s true’, or ‘It’s not okay to keep secrets’); personal feelings: a statement expressing concern for others’ feelings (‘She will be upset’); friendship: a statement specifically referring to the friend relationship (‘Because they are friends’, ‘Friends tell things to each other’); know: a statement indicating someone’s desire to know (‘Because she wants to know’); and teach: a statement concerning teaching (‘She can teach her’). There were also unclassifiable statements (e.g., ‘Just because’) and no responses (e.g., ‘I don’t know’). The experimenter and a second coder (blind to hypotheses) independently coded all responses. Inter-rater reliability was $\kappa = .88$; disagreements were resolved via discussion.

Results

Children’s judgements

For each trial, children received a score of 1 when they approved the first friend’s disclosure of information and a score of 0 when they disapproved. Figure 1 shows the percentage of trials in which children approved the first friend’s disclosure. We analysed our data with multilevel logistic regressions using the lme4 package in R statistical software version 2.14.1 (R Core Team, 2013). In all analyses, we used agree/disagree as binary response term and included subject identity as a random effect and trial number as a fixed effect.

Negative valence stories

We first analysed the data from children who had received the negative valence stories. A saturated model included subject ID as a random effect and trial number (1, 2) as a fixed effect, as well as all main effects and interactions of the fixed effects age group (younger, older) and type (competence, rule). Removing the interaction term of age group and type resulted in a significant reduction in fit, $\chi^2 = 10.64$, $df = 1$, $p < .01$. Therefore, we
selected the model displayed in Table 1. As can be seen from Table 1 and Figure 1, the main effect of type was qualified by a significant interaction with age, with older children being more likely than younger children to endorse the sharing of negatively valenced information for the rule type as compared to the competence type.

**Positive valence stories**
A parallel analysis of the positively valenced stories revealed no significant main effects or interactions (see Table 2). Removing the interaction term did not reduce fit significantly as compared to the saturated model, $\chi^2 = 2.43, df = 1, p = .12$. As can be seen in Figure 1, children overwhelmingly endorsed the sharing of positively valenced information across all contexts.

**Response pattern**
Next, we probed children’s individual response patterns in the negative stories. Table 3 presents the number of children who approved the disclosure of rule violation more strongly than the disclosure of incompetence (‘rule violation affirmers’) and those who
approved the disclosure of incompetence more strongly than the disclosure of rule violation (‘incompetence affirmers’). There were significantly more rule violation affirmers than incompetence affirmers among older children but no such distinctive pattern among younger children, \( \chi^2 = 4.14, df = 1, p < .05 \).

**Children’s justifications**

Figure 2 presents the number of trials in which children’s justification fell into a given category. Figure 2 shows that both younger and older children provided different justifications for different types of information. To further investigate the patterns of response, we conducted separate analyses for negative and positive stories of the categories to which children’s justifications most often belonged.

In the negatively valenced stories, the most frequently used categories were *rules and truth* and *personal feelings*. We first asked whether children’s references to *rules and truth* varied between the incompetence and the rule violation stories. A 2 (age: younger vs. older) × 2 (type: rule violation vs. incompetence) ANOVA with age as a between-subject factor revealed a significant main effect of type, \( F(1, 28) = 32.26, p < .0001 \). Children were more likely to refer to *rules and truth* in the rule violation as compared to the incompetence stories. Age was not significant, nor was the interaction.

Next, we asked whether children’s references to *personal feelings* varied between the two story types. We found a significant main effect of age, \( F(1, 28) = 14.13, p < .01 \), a significant main effect of type, \( F(1, 28) = 22.91, p < .0001 \), and a significant interaction of age × type, \( F(1, 28) = 14.13, p < .01 \). As can be seen in Figure 2, older children were more likely than younger children to refer to personal feelings in the incompetence stories. Tests of the simple effect of age for each story type confirmed that although

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Table 2. Model parameters and test statistics for positive valence stories

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<thead>
<tr>
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<th>( \beta )</th>
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<tbody>
<tr>
<td>Intercept</td>
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<td>4.088e+00</td>
</tr>
<tr>
<td>Trial</td>
<td>-5.527e-06</td>
<td>1.406e+00</td>
</tr>
<tr>
<td>Age</td>
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<td>2.700e+03</td>
</tr>
<tr>
<td>Domain</td>
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<td>1.669e+00</td>
</tr>
<tr>
<td>Age × domain</td>
<td>-1.734e+01</td>
<td>2.700e+03</td>
</tr>
</tbody>
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*Note.* Coefficients indicate the estimated effects of predictors on the response term (agree = 1, disagree = 0) relative to the following baseline levels: trial = 1; age group = younger; domain = rule.

Table 3. Number of children who approved the disclosure of rule violation more strongly than the disclosure of incompetence and number of children who approved the disclosure of incompetence more strongly than the disclosure of rule violation

<table>
<thead>
<tr>
<th></th>
<th>Rule violation &gt; incompetence</th>
<th>Rule violation &lt; incompetence</th>
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<tbody>
<tr>
<td>Younger children</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Older children</td>
<td>9</td>
<td>0</td>
</tr>
</tbody>
</table>

approved the disclosure of incompetence more strongly than the disclosure of rule violation (‘incompetence affirmers’). There were significantly more rule violation affirmers than incompetence affirmers among older children but no such distinctive pattern among younger children, \( \chi^2 = 4.14, df = 1, p < .05 \).
neither age group referred to personal feelings in the rule violation stories, older children were more likely than younger children to refer to personal feelings in the incompetence stories, $F(1, 28) = 14.13, p < .01$. In addition, tests of the simple effect of story type for each age group showed that younger children's references to personal feelings did not differ between story types, whereas older children were more likely to refer to personal feelings in the incompetence than in the rule violation stories, $F(1, 28) = 39.11, p < .0001$.

**Positive valence stories**

In the positively valenced stories, *rules and truth* and *friendship* were the most frequently used categories. Children's justifications of *rules and truth* were analysed via a 2 (age: younger vs. older) $\times$ 2 (type: rule violation vs. incompetence) ANOVA with age as a between-subject factor. This revealed a significant main effect of age, $F(1, 24) = 10.95, p < .01$, a significant main effect of type, $F(1, 24) = 37.72, p < .0001$, and a significant interaction effect, $F(1, 24) = 30.01, p < .0001$. Tests of the simple effect of age for each story type confirmed that older children were more likely than younger children to refer to rules and truth in the rule conformity stories, $F(1, 24) = 22.57, p < .0001$. By contrast, both younger and older children rarely referred to rules and truth in the competence stories. In addition, tests of the simple effect of story type for each age group showed that younger children's reference to rules and truth did not differ between the two types of positively valenced stories, whereas older children were more likely to refer to rules and truth in the rule conformity than in the competence stories, $F(1, 24) = 62.69, p < .0001$. 
Finally, we examined children’s references to friendship. The effect of type was significant, $F(1, 24) = 4.83, p < .05$, as was the interaction between type and age, $F(1, 24) = 4.83, p < .05$. Tests of the simple effect of age for each story type confirmed that children of both age groups rarely referred to friendship in the rule conformity stories, whereas older children were more likely than younger children to refer to friendship in the competence stories, $F(1, 24) = 4.78, p < .05$. In addition, tests of the simple effect of story type for each age group showed that younger children were equally likely to refer to friendship in the two types of positively valenced stories, whereas older children were more likely to refer to friendship in the competence than in the rule conformity stories, $F(1, 24) = 8.98, p < .01$.

**Discussion**

Children judged that it was more appropriate to disclose some types of information than others to someone who requested information. Both age groups judged that it was appropriate to disclose someone’s positive behaviour. By contrast, younger children often objected to the disclosure of negative behaviour, whereas older children approved the disclosure of someone’s rule violation, but not his or her incompetence. Children’s individual response patterns to the negative stories confirmed this age change. Finally, as compared to younger children, older children provided more differentiated justifications depending on the type of information. They emphasized rules or authority in the context of rule violation/conformity and personal feelings or friendship in case of competence/incompetence. Even when equally approving the disclosure of someone’s positive behaviours, older children provided different justifications for the disclosure of someone’s competence versus rule conformity. As discussed below, children seem to become increasingly concerned about maintaining the social order.

**Understanding different types of information**

Prior research shows that children around 6 years of age distinguish secret from non-secret matters (Anagnostaki et al., 2010). Consistent with this age difference, we found that only at around 7 and 8 years of age did children clearly differentiate between the types of information that should be disclosed. However, the current study extends previous work on children’s understanding of secrets in three ways. First, even in the absence of the label ‘secret’, children classified some types of information differently from others based upon its content. Even younger children provided different kinds of justifications especially with respect to the negatively valenced information. Second, children appreciated that different types of information are differently subject to concealment or disclosure. More importantly, even among secret matters, some (e.g., rule violation) were judged to be more appropriate for disclosure than others (e.g., incompetence). Finally, the basis for judgements differs between younger and older children (see Developmental change below).

**Selective information disclosure**

Although young children often provide information to those who lack it (e.g., Shwe & Markman, 1997), the current findings show that their informing is not always guided by an interlocutor’s lack of knowledge. Specifically, young children do not think that any piece
of information can be shared just because another person lacks that information and asks for it. Both younger and older children disapproved the disclosure of another person’s incompetence and justified it by emphasizing the protection of personal feelings. In line with prior studies of children’s understanding of white lies (Heyman et al., 2009; Kahn & Turiel, 1988; Peterson et al., 1983), the current findings suggest that children regard some information, albeit true, as better concealed if disclosure would harm others’ feelings.

Children’s judgements about the selective concealment of others’ incompetence may be contrasted with their judgements about others’ rule violations. Older children approved the disclosure of others’ transgressions and justified their responses by referring to social rules. Again, children’s judgements about the appropriateness of disclosure were not solely based on the third party’s lack of knowledge. Children considered whether the disclosure of information has social and personal implications and made judgements accordingly.

Although a more sophisticated understanding of selective disclosure (even to authority) may appear later in development (e.g., Loke et al., 2011; Smetana & Asquith, 1994; Smetana et al., 2006), the current research suggests that even 4-year-olds understand that some matters are more appropriate for disclosure or concealment than others.

**Developmental change**

Younger children’s judgements were mainly influenced by the positive versus negative valence of information, whereas older children considered the type of information as well as its valence. When young children make judgements about information disclosure, they may first react to its valence before considering the type of information. This age difference was especially evident for stories about rule violation; older children, not younger, approved the disclosure of others’ rule violations. Note, however, this does not imply younger children failed to differentiate different types of information or that they were confused. They too provided different kinds of justifications when asked to consider the disclosure of information about someone’s incompetence versus rule violation.

By implication, young children are concerned about intruding into the privacy of other people. They objected to the disclosure of incompetence and rule violations to third parties. This finding is consistent with prior research in which young children classified both rule violation and incompetence as secrets. Moreover, young children’s tendency to focus on positive information about others and themselves (see Boseovski, 2010) may extend to transmitting positive information about others. By contrast, older children approved the disclosure of others’ rule violations to a third party. With age, children seem to put more emphasis on the maintenance of the social order even at the expense of an individual’s privacy.

It is important to view the current results in the light of previous research on children’s tattling. In Loke et al. (2011), children of ages 6 and 7 viewed both minor and major transgression as appropriate to tattle to a teacher. In Ingram and Bering’s study (2010), preschoolers willingly tattled about their classmate’s rule violations to teachers. By contrast, younger children in the present research did not regard tattling about others’ rule violations as appropriate. This might seem inconsistent with prior findings, but under closer scrutiny the present findings highlight the multifaceted nature of information disclosure by young children. The tattling described by Ingram and Bering largely concerned another peer’s behaviours directed towards themselves, not towards third parties. If young children viewed others’ rule transgression, both minor and major, as
appropriate to tattle – suggesting that they were concerned about being social enforcers in the study of Loke et al. (2011) – it is unclear why children in the study of Ingram and Bering (2010) did not willingly tattle about others’ rule violation when they happened to a third party. In the light of the present findings, a possible interpretation is that children may be unwilling, or may think it inappropriate, to tattle about others’ rule transgressions unless they themselves are directly involved.

Moreover, an important difference between the present research and prior studies concerns the recipient of the information (a friend vs. a teacher). In the present research, information disclosure occurred among friends, whereas in both prior studies information disclosure concerned tattling to an authority. Notably, Ingram and Bering (2010) reported that preschoolers rarely tattled to their peers. Younger children may think that rules are established and controlled (and rule violators are punished) by authority figures so that their equals (e.g., friends) are less appropriate recipients of tattling than authority figures. In addition, older children may become more aware of the social implications of tattling to friends. Spreading the word about someone else’s wrongdoings is effective in maintaining social norms as much as (if not more effective than) appealing to authority. In addition to the above possibility (i.e., children’s ideas about the social implications of tattling to peers), younger children may have stricter ideas about others’ privacy, especially in the context of friendship. Even if they tattle about another person’s rule violations that happen to themselves (Ingram & Bering, 2010), they may think that the negative aspects of others’ behaviours, including rule violations, belong to the private realm. Given that the younger children in the study by Loke et al. (2011) were older than the younger children in the present research or the study by Ingram and Bering (2010), it is plausible that children’s conception of social enforcement changes with respect to form and strategy, from tattling to an authority to information disclosure to peers.

Several studies in domain theory (e.g., Smetana et al., 2006) show that adolescents view the disclosure of their own private matters, but not conventional or moral issues, to authority figures as inappropriate. Presumably, before adolescence, young children view the disclosure of even private matters to the authority as appropriate. Given that the present research investigated how children evaluate the disclosure of matters pertaining to others not to themselves, and the disclosure to peers rather than to an authority figure, the issue of privacy and disclosure is different in nature than that investigated by domain theory. Nevertheless, an implication is that age-related increase in moral reasoning and autonomy may facilitate children’s ideas about the way in which transgressions should be differentiated from other secret matters. With age and experience, children are likely to gain a better understanding of both the personal and social implications of information disclosure.

**Future directions**

The present research examined children’s third-party judgements about others’ selective information disclosure. It is possible that children would behave differently if they actually faced the situation of the story characters who were asked to disclose information. In that situation, children might disclose whatever information is requested by a peer. Children, especially younger children, are likely to be affected by the social pressure of someone asking them to disclose (see Evans & Lee, 2013). Alternatively, they may be naturally inclined to share what they know with others. Future studies should address whether and how children’s actual behaviour either diverges from or aligns with their judgements.
It should also be noted that the scope of information types and the degrees of negativity or positivity of the information studied in the present research are somewhat narrow. Moreover, information disclosure, depending on the contexts and the intentions of the parties involved, can occur in various forms such as gossiping, tattling, whistle-blowing, or teaching. Likewise, information concealment can be disguised under the form of deception and distortion. For example, if the character who requested information in the current research had a bad intention (e.g., to tease a friend who does not know how to tie his or her shoes) or a good intention (to teach the friend), judgements about concealment or disclosure might be different. In future research, varying characters’ intentions as well as the information types and the degrees of negativity (or positivity) of the information will allow us to arrive at a broader assessment of children’s understanding of the various forms of information disclosure and concealment.

Conclusion
Children do not indiscriminately judge that it is appropriate to disclose information about others to a third party. Children make different judgements about disclosure or concealment depending on the type of information. Both younger and older children approved the disclosure of others’ positive behaviours, whereas they disapproved the disclosure of others’ incompetence. By contrast, only older children approved the disclosure of others’ rule violations. By implication, even at an early age, children are concerned about protecting others’ secrets especially if disclosure would harm another’s feelings. However, with age children become more concerned about protecting the majority even if a sacrifice of an individual’s privacy is involved. Obviously, issues concerning information disclosure are ultimately much more complicated than those described in the scenarios in the current study. Nevertheless, the findings show that young children are already quite judicious about disclosure.

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References


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Appendix:

(Not) stealing stickers
One day, Jane was walking along the street and ran into her friend, Amy. Jane and Amy said Hi to each other. ‘Hi, Amy!’ ‘Hi, Jane!’ Then Amy says, ‘Jane, I have something to tell you. I just found some stickers in the box in our classroom. I don’t know whose stickers they were. I wanted to take them, so I didn’t put them in my pocket. Oh, I forgot that I have to run errands I have to go now. Bye!’ Jane then ran into her friend, Laura. Jane and Laura said Hi to each other. ‘Hi, Laura!’ ‘Hi, Jane!’ Then, Laura asked Jane, ‘Jane, I have something to ask you. I saw that the stickers in the box in our classroom are gone. I wonder who took them. Did Amy take them?’

(Not) stealing cookies
One day, Sarah was walking along the street and ran into her friend, Carrie. Sarah and Carrie said Hi to each other. ‘Hi, Carrie!’ ‘Hi, Sarah!’ Then Carrie says, ‘Sarah, I have something to tell you. I just found some cookies in the jar in our classroom. I don’t know whose cookies they were. I wanted to eat them, so I ate them (but I didn’t eat them). Oh, I forgot that I have to run errands I have to go now. Bye!’ Sarah then ran into her friend, Ellen. Sarah and Ellen said Hi to each other. ‘Hi, Ellen!’ ‘Hi, Sarah!’ Then, Ellen asked Sarah, ‘Sarah, I have something to ask you. I saw that the cookies in the jar in our classroom are gone. I wonder who ate them. Did Carrie eat them?’

(Not) knowing how to tie shoes
One day, Pam was walking along the street and ran into her friend, Iris. Pam and Iris said Hi to each other. ‘Hi, Iris!’ ‘Hi, Pam!’ Then Iris says, ‘Pam, I have something to tell you. I just got a new pair of shoes. The laces are my favorite color. I want to wear them every day, but (and) you know what? I (don’t) know how to tie my shoes. Oh, I forgot that I have to run errands I have to go now. Bye!’ Pam then ran into her friend, Lisa. Pam and Lisa said Hi to each other. ‘Hi, Lisa!’ ‘Hi, Pam!’ Then, Lisa asked Pam, ‘Pam, I have something to ask you. I heard that Iris got a new pair of shoes. I wonder if Iris knows how to tie her shoes. Does Iris know how to tie her shoes?’

(Not) knowing how to ride a bike
One day, Rachel was walking along the street and ran into her friend, Mariah. Rachel and Mariah said Hi to each other. ‘Hi, Mariah!’ ‘Hi, Rachel!’ Then Mariah says, ‘Rachel, I have something to tell you. I just got a new bike. It’s a red one. I want to ride a bike, but (and) you know what? I (don’t) know how to ride a bike. Oh, I forgot that I have to run errands I have to go now. Bye!’ Rachel then ran into her friend, Kate. Rachel and Kate said Hi to each other. ‘Hi, Kate!’ ‘Hi, Rachel!’ Then, Kate asked Rachel, ‘Rachel, I have something to ask you. I heard that Mariah got a new bike. I wonder if Mariah knows how to ride a bike. Does Mariah know how to ride a bike?’