

**ARTICLE**

# On a need-to-know basis: Young children distinguish conventional and privileged information

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**Abstract**

Young children are biased to treat new information communicated to them as conventional, shareable, and known by others in their community. However, some information is privileged in the sense that is not intended to be shared with or known by all. The current study compared judgements regarding sharing conventional versus privileged information. Seventy-four 3- to 5-year-olds and adults responded to vignettes in which a protagonist had to decide whether to share conventional (an object name) or privileged information (surprise). Consistent with our hypothesis, there was no developmental change in sharing judgements for conventional information but a clear decrease with age for sharing privileged information. Nonetheless, even 3-year-olds were more likely to judge that conventional information should be shared more than privileged information, though this difference increased with age. While children overall treat information as shareable, there is an emerging ability to distinguish how conventional versus privileged information should be shared.

**KEYWORDS**

children, communication, conventionality, privileged information, sharing

## BACKGROUND

It is no exaggeration to say that we live in a world in which the manner and speed of the transfer of information is changing dramatically. Much of the information that can be found in electronic and social media and other outlets is meant to be shared with others and can often be beneficial to individuals and society (e.g., tornado warnings). However, not all information is meant to be shared broadly or at all. In this paper, we use the term *privileged information* to refer to any information or knowledge that is not intended to be shared broadly with members of a culture. Some common examples of such information are secrets, surprises, and intellectual property. Privileged information or knowledge stands in contrast to *conventional* information or knowledge (Clark, 1990; Diesendruck, 2012; Diesendruck &

### Statement of contribution

- Young children learn conventional information through social interaction, though not all information is conventional.
- Privileged information differs from conventional information in that it is not freely shareable with others.
- This study is the first to examine children's judgements about sharing conventional versus privileged information.
- Conventional information was shared frequently across age groups, but privileged information sharing judgements decreased with age.
- This study documents children's emerging distinction between conventional and privileged information by virtue of their sharing judgements in a manner consistent with theoretical accounts of children's cultural learning.

Markson, 2011; Kalish & Sabbagh, 2007). Basing their analysis of conventional information on the philosophical work by Lewis (1969), Diesendruck and Markson describe five characteristics of conventional knowledge: this knowledge is socially conveyed, cognitively opaque, arbitrary, community bound, and prescriptively powerful within a community. Substantial empirical research supports the conclusion that young children treat information learned through social interaction as conventional, by virtue of their expectations that others will know names for familiar or novel objects (Diesendruck & Markson, 2001), will use objects for their typical functions (Casler & Kelemen, 2005), and will follow game rules (Rakoczy et al., 2008). Furthermore, these types of information differ from what Diesendruck and Markson (2011) call *idiosyncratic* information, such as a pet's name. Idiosyncratic information is limited in terms of who can be expected to know it, as is the case with privileged information, but may also be arbitrary and culturally variable like conventional information.

One aspect of children's understanding of conventional information that has not been investigated as widely is what children do with this information once they have learned it. If it is true that children treat information learned via social interaction as conventional then they should share that information freely with others. Analyses of conventional information imply, but rarely focus on, this output side of the nature of conventional information. For example, Csibra and Gergely's (2006, 2009) natural pedagogy theory argues that children are specifically prepared to treat information learned via teaching as conventional, generic, and generalizable, though it is not clear in this approach how children determine whether they should share this new information. This problem of 'scope restriction' (Kalish & Sabbagh, 2007) rests on the child being able to distinguish conventional from non-conventional information, determining with whom to share the information, and if there is a norm or obligation to share that information (see also Diesendruck & Markson, 2011). We focus in this paper on the first issue with an emphasis on children's judgements regarding whether people should share conventional information and should not share privileged information.

There is a growing body of research on this topic, with much of the focus on children's identification of information that is privileged, or under what circumstances and to whom secrets can or cannot be shared (Anagnostaki et al., 2013; Gordon et al., 2014; Misch et al., 2016; Watson & Valtin, 1997). This research typically shows that while young children (e.g., 3- to 5-year-olds) show some understanding of what a secret is and can keep secrets under some conditions, they are far from adult-like in either their ability to distinguish secrets from non-secrets or to engage in activities that require secret-keeping, such as playing hide and seek. Studying undergraduates, Vangelisti (1994) described three types of privileged information that occur within families: taboos, transgressions, and *conventional secrets*, with the last of these similar to our definition of privileged information. Similarly, Girgis and Behrend, (2013) demonstrated that both undergraduates and young children distinguished between these more typical secrets

and surprises and other types of privileged information such as rule-breaking. In particular, both children and adults were more likely to share the rule violations than secrets and surprises.

More recent work (see Bedrov et al., 2021 for a review) has examined some of the social aspects of secrets and secret-keeping. For example, Misch et al. (2016) found that 4- and 5-year-olds were more likely to disclose the location of a hidden object to a puppet who was a member of their group (i.e., wearing the same colour scarf as they were wearing) than to a member of another group, and remained loyal to this minimal in-group by keeping secrets. Kim et al. (2014) found that 4- to 8-year-olds thought sharing positive information was more appropriate than sharing negative information, though older children also distinguished between different sorts of negative information (rule-breaking vs. incompetence). Liberman and Shaw (2018) found that secret sharing was a stronger cue to friendship than other possible indicators such as fact-sharing or team membership for children aged six and above. Following up on this, Liberman et al. (2020) demonstrated that children consider social relationship status when making judgements about what information others will know. For example, children expected friends to have knowledge of a target character's personal information (i.e., privileged information such as a secret) and that a member of a different culture would know culturally relevant information (i.e., conventional information about a holiday). The authors view these results as support for a Selective Inferences hypothesis, which predicted that children will take into account the social relationship between individuals when making judgements about what information others will know. Again, these patterns were clearer for children six and older (see Anagnostaki et al., 2013 for comparable results).

These studies have advanced our knowledge of young children's understanding of and judgements about secrets. These studies, however, have not asked the more basic question of whether and when children distinguish between conventional and privileged information by examining children's judgements about what information *should* and *should not* be shared with others. We argue that the conventionality framework described earlier (Diesendruck & Markson, 2011) predicts that young children will be biased to treat incoming information as conventional and thus expect information to be known by others. In a context in which another demonstrates they do not know such information, children should then judge that this information may be freely shared. Thus, if children do not yet distinguish between conventional and privileged information, they should judge that both types of information should be shared with others. As it is normative to share conventional information with others, in the current study we ask children if a child protagonist *should* share a piece of information with another child. As prior research has demonstrated that judgements about sharing secrets can change as a function of social relationships, we intentionally left the relationship ambiguous so the focus of the child's judgements would be on the information at hand. Using the term 'should' implies normativity and/or an obligation and thus encourages children to reason deontically, which has been shown to be in the cognitive repertoire of young children (Clément et al., 2011). If this reasoning is correct, we can then hypothesize that young children should be biased to share information regardless of its status as conventional or privileged, and that distinctions between sharing conventional and privileged information develop from this initial conventional stance in a context in which the relationship between the information holder and information recipient is unknown.

The purpose of this study is to test this hypothesis by comparing children's judgements about whether information should be shared within conventional versus privileged information scenarios. Three-, 4-, and 5-year-old children and adults were exposed to brief vignettes in which a protagonist had to decide whether to share either conventional or privileged information with another character in the vignette. We chose these age groups because prior research has demonstrated that children in this age range have some understanding of secrets but that understanding is not yet fully developed (Anagnostaki et al., 2013; Misch et al., 2016; Watson & Valtin, 1997). Participants then were asked to judge if the protagonist should share that information. We chose specific instances of conventional and privileged information to ensure that any variation in responses would be a function of information type and not confounded by valence or familiarity of the information. All information scenarios were pre-tested with adults, and the information included in the scenarios was neutral or positive in valence and represented situations with which most young children should be familiar and have been used in

previous research on secrets with this age group (Anagnostaki et al., 2013; Girgis & Behrend, 2013; Peskin & Ardino, 2003; Watson & Valtin, 1997). Instances of rule violations were excluded since these are negatively valenced and both children and adults believe they should be reported to the proper authority (Anagnostaki et al., 2013; Behrend & Girgis, 2013; Kim et al., 2014). Based on the preceding analysis, we predicted that there would be no developmental change in participants' judgements that conventional information should be shared, but that judgements that privileged information should be shared would decrease with age.

## METHOD

### Participants

There were 74 participants: 18 three-year-olds ( $M_{\text{age}} = 3.6$ , 9 females), 20 four-year-olds ( $M_{\text{age}} = 4.6$ , 10 females), 17 five-year-olds ( $M_{\text{age}} = 5.4$ , 8 females), and 19 undergraduate students ( $M_{\text{age}} = 19.5$ , 13 females). Child participants were recruited from and tested in preschools in a predominately middle-class, European-American community located in the south-central United States. The adults were undergraduate students in the same community who participated in the study for course credit. The demographics of the sample reflected the general population of the area with 79.1% White, 7.7% bi-or multi-racial, 7.5% Hispanic, 5.9% African American, and 2.8% Asian.

### Materials

For 3-, 4- and 5-year-olds, the materials included a picture scale with faces representing 3 possible responses (smile = should tell, quizzical = it is okay either to tell or not to tell, frown = shouldn't tell). Each picture was 2.25 in.  $\times$  2.5 in. There was a 0.25-inch coloured border around each of the pictures: green for 'should tell', yellow for 'it is okay either to tell or not to tell', and red for 'shouldn't tell' (see Appendix A). The pictures were placed in front of the participant with the smiling picture always to the participant's left, followed by the quizzical face and then the frown face.

Adult participants did not use the picture scale. Instead, they circled their answers on a 3-point scale (1 = *should tell*, 2 = *it's okay either to tell or not*, 3 = *shouldn't tell*).

### Procedure

Child participants were tested in an empty classroom or a quiet area in their preschool. The procedure took approximately 10 min to complete.

To start, the preschool participants were familiarized with the task and the picture scale. To familiarize children with the task, the researcher said she was going to 'ask you some questions about people doing or saying different things and then I will ask you if they should tell someone else about it'. The picture scale was in place before participants were brought into the testing area. Participants were told they could answer the questions by pointing to one of the pictures and that each picture meant something different. The researcher then pointed to each picture and explained what it meant (e.g., 'the first picture means the person *should tell*'). To check for comprehension, participants were asked to identify which picture meant 'should tell', 'it's okay either to tell or not' and 'shouldn't tell'. Responses were corrected and questions were re-asked if necessary.

The researcher gave a brief demonstration on how to use the picture scale by announcing 'Now, let's practice!' The researcher told the participant if a teacher asked her name, she would respond by pointing to the 'should tell' picture and if a stranger asked her name, she would respond by pointing to the 'shouldn't tell' picture.

The testing began directly after the demonstration. The researcher read 10 vignettes that were taken from a larger group of vignettes that had previously been pretested with adults and were judged by the researchers to include content that was familiar to young children. Each vignette involved a protagonist who was exposed to either privileged or conventional information. The test question was always whether the protagonist should tell someone about the newly learned information. Five questions about conventional information were asked (e.g., ‘Sean sees Dylan playing with a toy he's never seen before. He asks Dylan what kind of toy it is. Should Dylan tell him?’). Five questions about privileged information were asked (e.g., ‘Danielle is going to give Beth a Barbie doll for her birthday. Beth asks Danielle what she is getting her for her birthday. Should Danielle tell her?’). See [Table 1](#) for the list of vignettes. Two random orders of the 10 items were created. Approximately half of the participants in each age group received each order.

Adult participants were tested in a classroom in small groups. Researchers instructed them to read through the following vignettes about common interactions people might have and to answer by circling their responses on the provided 3-point scale underneath each question.

## RESULTS

The number of times each participant responded that the protagonist should share the information was recorded and served as the dependent variable. Participants infrequently responded that it was ‘ok to tell or not to tell’ (fewer than 3% of all responses) so these responses were eliminated from analyses. Proportional scores were created for each type of information, Conventional and Privileged, by summing share responses for all items and then dividing by the corresponding number of items for each (i.e., five for each information type). See [Table 2](#) for per cent of sharing responses by age and scenario.

A 4 (Age [3-, 4-, 5-year-olds, adults]) x 2 (Information Type [conventional, privileged]) mixed ANOVA was conducted on the percentage of ‘should share’ responses for each type of information. This

**TABLE 1** Conventional and privileged information vignettes presented to participants.

Conventional	
Song words:	Chester is singing a song. John wants to sing the song too, but doesn't know the words. He asks Chester to teach him the words. Should Chester tell John the words to the song?
Object name:	Sean sees Dylan playing with a toy he's never seen before. He asks Dylan what kind of toy it is. Should Dylan tell him?
Game rule:	Alice is playing a card game with Mary. Kelly would like to play, but doesn't know how to. She asks Alice and Mary how to play the game. Should they tell her?
Spelling:	Michael learned in class today how to spell the word ‘apple’. When he comes home, his mom asks what he's learned in school today. Should Michael tell his mom?
Drawing:	Amy knows how to draw a cat. Hank would like to draw a cat, but doesn't how to. He asks Amy how to draw one. Should Amy tell him?
Privileged	
Birthday present:	Danielle is going to give Beth a Barbie doll for her birthday. Beth asks Danielle what she is getting her for her birthday. Should Danielle tell Beth?
Secret:	Ben tells his friend Mark that he might be moving to a new town. He told Mark to keep it a secret until he knows for sure. Jimmy asks Mark if Ben is moving. Should Mark tell Jimmy?
Hide and Seek:	Jessica, April and Melissa are playing hide and seek. Melissa closed her eyes and counted to 50 before going to find Jessica and April. Jessica saw where April is hiding. Melissa found Jessica and asks her where April is hiding. Should Jessica tell Melissa?
Surprise:	Nancy told Henry that she wanted to surprise her best friend, Marilyn, with a new DVD. Marilyn asks Henry if she is getting a gift from Nancy. Should Henry tell Marilyn?
Password:	James asked Kevin to join his boys-only club and gave him the password to it. Helen is a girl who wants to join the club and asks Kevin for the password. Should Kevin tell Helen the password?

TABLE 2 Mean per cent of share responses for each scenario by age.

Scenario	3-years	4-years	5-years	Adults
Conventional				
Song words	83.3*	75.0*	100*	94.7*
Object name	88.8*	85.0*	94.1*	94.7*
Game rule	66.6*	80.0*	93.7*	94.7*
Spelling	83.3*	85.0*	100*	100*
Drawing	61.1	90.0*	93.3*	100*
Total means	76.6	83.0	96.2	96.8
Privileged				
Birthday present	50.0	55.0	28.5	0.0*
Secret	55.5	70.0	58.8	0.0*
Hide and seek	61.1	60.0	41.1	5.2*
Surprise	55.5	73.6*	47.0	10.5*
Password	50.0	80.0*	70.5	0.0*
Total means	54.4	67.7	49.1	3.1

Note: Asterisks indicate significantly above or below at chance levels at  $p < .05$  or greater.

analysis revealed a main effect for Age,  $F(3, 70) = 4.74, p = .005, \eta_p^2 = .16$ ; a main effect for Information Type  $F(1, 70) = 200.88, p < .001, \eta_p^2 = .74$ , and an Age by Information Type interaction,  $F(3, 70) = 33.57, p < .001, \eta_p^2 = .59$ . The main effect for Information Type revealed that participants were more likely to say that protagonists should share conventional information ( $M = 87.0\%$ ) than privileged information ( $M = 43.2\%$ ). For the interaction, Bonferroni adjusted one-way ANOVAs (alpha level set at .025) with age as the between-subjects factor on each type of information separately showed that there was no significant difference as a function of age for sharing conventional information,  $F(3, 70) = 2.90, p = .041, \eta_p^2 = .11$  and a significant effect of age on sharing privileged information,  $F(3, 70) = 18.97, p < .001, \eta_p^2 = .44$ . Post-hoc Tukey HSD tests revealed that adults ( $M = 3.76\%$ ) were less likely to share privileged information than 3- ( $M = 54.4\%$ ), 4- ( $M = 67.0\%$ ), and 5-year-olds ( $M = 48.2\%$ , all  $p$ 's  $< .01$ ) while the groups of children did not differ from each other.

We also compared participants' responses to chance expectations. Participants in all age groups responded that conventional information should be shared more frequently than expected by chance (all  $p$ 's  $< .002$ ). For privileged information, 3- and 5-year-olds did not differ from chance on these judgments, adults ( $M = 3\%$ ) responded that privileged information should be shared less often than expected by chance,  $t(18) = 20.3, p < .001, d = 6.25$ , while 4-year-olds responded that it should be shared more frequently than expected by chance,  $t(16) = 2.74, p < .02, d = 0.61$ . This unexpected pattern for the four-year-olds was largely a result of all the females in this age group responding 'should share' to the password item, in which the privileged information was whether a password to a boys' club should be told to a girl. Performance on the other four items was at chance,  $t(16) = 2.45, p = .09$ . See Figure 1 for per cent of sharing responses by age and information type.

Adults in this experiment were near ceiling on the conventional items and near floor on the privileged items, and children's responses were much more variable than adults' responses. Thus, to reduce variability and more carefully examine any developmental change within the child groups, we conducted two additional analyses. The first was generating a difference score by subtracting the number of privileged items shared from the number of conventional items shared for each participant and submitted these scores to a one-way ANOVA with age as the between-subjects variable. This analysis revealed a significant effect,  $F(3, 70) = 33.6, p < .001, \eta^2 = .13$ . Follow-up Tukey HSD tests ( $p < .05$ ) showed adults' difference scores ( $M = 4.68$ ) were significantly greater than any group of children's scores and that 5-year-olds' difference scores ( $M = 2.18$ ) were significantly greater than

either 4-year-olds ( $M = .80$ ) or 3-year-olds ( $M = 1.11$ ), whose difference scores did not differ from each other. In addition, we compared each group's difference score to chance (i.e., a difference score of 0). All age groups were significantly more likely to share conventional than privileged information;  $t(17) = 4.11, p = .001, d = 1.2$  for 3-year-olds,  $t(19) = 2.14, p = .046, d = 1.0$  for 4-year-olds,  $t(16) = 5.51, p < .001, d = 1.9$  for 5-year-olds.

As a type of manipulation check, we assessed whether the items chosen for our conventional and privileged scenarios comprised items that were similar within information type and different across information type. We first calculated phi coefficients for all possible pairs of scenarios. This analysis revealed that 19 of the 20 (95%) within-information type coefficients were positive and significant at least at the  $p < .05$  level. Conversely, we found that only 3 of the 25 (12%) between-information type coefficients were positively correlated. These coefficients can be found in Table 3. Participants responded similarly to items of the same information type but responses across information type were generally unrelated. Finally, and to test more directly whether responses within information types were interrelated, we calculated Cronbach's alpha for the five conventional items and five privileged items separately with  $\alpha = .79$  and  $.80$ , respectively. Taken together, these analyses suggest that the conventional and privileged items each comprised a coherent and reliable set of items.

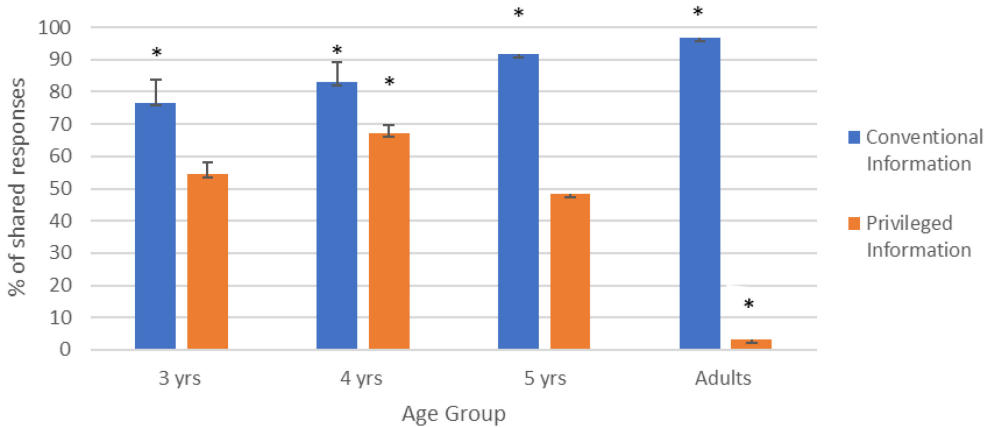


FIGURE 1 Per cent of share responses to conventional and privileged information items by age. Note: Asterisks (\*) denote above or below at chance levels of responding (50%,  $p < .05$ ).

TABLE 3 Phi coefficients for sharing responses on conventional and privileged scenarios.

Scenario	1	2	3	4	5	6	7	8	9	10
Song words	–	.480**	.480**	.304**	.285*	.124	.011	–.103	.177	.081
Object name	–	–	.093	.369**	.234*	.046	.113	–.006	.113	–.072
Game Rule	–	–	–	.457**	.471**	.320**	.141	–.040	.069	.092
Spelling	–	–	–	–	.484**	.139	.113	–.100	.020	.027
Drawing	–	–	–	–	–	.293*	.332*	–.147	.038	.070
Password	–	–	–	–	–	–	.542**	.356**	.597**	.404**
Surprise	–	–	–	–	–	–	–	.426**	.347**	.404**
Hide and seek	–	–	–	–	–	–	–	–	.371**	.465**
Secret	–	–	–	–	–	–	–	–	–	.520**
Birthday present	–	–	–	–	–	–	–	–	–	–

\* $p < .05$ , \*\* $p < .01$ .

## DISCUSSION

Young children are efficient and flexible learners of conventional information, and there is substantial evidence to support the claim that they can distinguish between information that others should know (e.g., object labels and game rules) and that others might not know (e.g., proper names and idiosyncratic properties). Further, children seem to be sensitive to the fact that the knowledge that others share is at least partly determined by their social relationships. The current research adds to this growing literature by systematically examining whether young children judge that conventional or privileged information should be shared (Anagnostaki et al., 2013; Csibra & Gergely's, 2006, 2009; Diesendruck & Markson, 2011; Kalish & Sabbagh, 2007; Kim et al., 2014; Liberman & Shaw, 2018; Misch et al., 2016). In the current study, we contrasted conventional information with a specific type of privileged information, that is information that is typically not freely shareable with other members of one's community or what Vangelisti (1994) labelled 'conventional secrets'.

Consistent with our hypothesis, 3- to 5-year-olds and adults did not differ in their judgements regarding the sharing of conventional information but did differ strongly when making sharing judgements about privileged information, with adults less likely to share such information than younger age groups. A difference score analysis further elucidated these findings by demonstrating that participants in all age groups were more likely to share conventional information than privileged information, though the magnitude of that difference was greater for 5-year-olds than for younger children and greater for adults than for 5-year-olds. Thus, it appears that even 3-year-olds judge that conventional information should be shared more often than privileged information. There is improvement in these judgements across the preschool years, but even 5-year-olds' responses did not closely resemble adults' nearly categorical differentiation of sharing judgements for these two types of information. These results add to the existing research showing that children share information differentially based on the characteristics of social partners (Anagnostaki et al., 2013; Liberman & Shaw, 2018; Misch et al., 2016) by demonstrating that children in this age range also take into account the nature of information when judging if it should be shared with others under normative circumstances. Thus, we believe that the current novel results are consistent with the theoretical conceptualization of conventionality described earlier (Csibra & Gergely, 2009; Diesendruck & Markson, 2011; Lewis, 1969). Importantly, the current study extends work derived from these theories by demonstrating that young children begin to understand that not all information carried by language is conventional, and therefore start to make distinct sharing judgements as a function of the type of information at hand.

A possible alternate explanation for these results is that the observed developmental pattern reflects change in some underlying ability. Theory of mind is an excellent candidate for such an ability because of its well-established relation to children's increasing understanding of their own knowledge or belief states as compared to those of others. Indeed, Diesendruck and Markson (2011) proposed a 'limited theory-of-mind' explanation for young children's propensity to treat novel information as conventional. Though Lavoie and Talwar (2022) recently demonstrated in a sample of young adolescents that ToM abilities were correlated with concealment and disclosure strategies, Gordon et al. (2014) found no significant relation between theory of mind ability and young children's secret-keeping behaviours (see also Clément et al., 2011). Certainly, the relation between theory of mind capacities and children's understanding of privileged information should be examined thoroughly and explicitly. However, given that there is *no difference* in the belief or knowledge states of the characters in our conventional and privileged information vignettes (in all cases, the recipient does not know what the vignette protagonist knows), it seems unlikely that changes in young children's ToM abilities will be a strong correlate of developmental differences in children's responses to the sorts of vignettes used in the current study. Similarly, variables such as executive function and inhibitory control could also mediate children's ability to appropriately share or not share information (Carlson & Wang, 2007; Peskin & Ardino, 2003). However, parallel to the argument regarding the theory of mind, there is no reason to believe that these factors would differentially impact the sharing of conventional and privileged information in the current task



given the identical structure of the conventional and privileged information vignettes (see also Gordon et al., 2014).

Thus, we believe the best interpretation of the current findings is, consistent with prior research and theoretical claims, that young children have a strong bias to treat incoming information as conventional and thus typically expect others to know this information and *believe that such information is shareable with others*. However, this default expectation is not always realized as children learn early in childhood through activities such as hiding games (Peskin & Ardino, 2003), surprise parties, and the potential consequences for sharing privileged information (e.g., telling secrets or using swear words).

These findings also raise some additional questions and opportunities for further research. First, it is important to know whether the individual identity or social category membership of the potential recipient of the information would impact children's judgements about sharing conventional versus privileged information (see Anagnostaki et al., 2013; Liberman et al., 2020; Misch et al., 2016). We expect that such judgements would vary more for privileged information than for conventional information which is consistent with findings from several previous studies (Liberman & Shaw, 2018; Misch et al., 2016). Second, with research demonstrating that infants and young children develop preferences for others as a function of characteristics such as trustworthiness (Brosseau-Liard & Birch, 2010) and language (Kinsler et al., 2007; Myers-Burg & Behrend, 2021), it is also plausible that children will show a preference for others who honour the conventional/privileged information distinction. That is, we can expect that children would prefer to affiliate with those who appropriately share or withhold information as a function of its degree of conventionality. Finally, it would be informative to study whether there are linguistic and/or contextual cues present in social interactions that help children distinguish between these types of information. Anagnostaki et al. (2013) showed that an explicit linguistic cue to whether the information is privileged (i.e., asking participants 'What is a secret?') reduced children's information disclosure.

We recognize that this study has a limited scope and is not an exhaustive investigation of the full range of information that could be considered privileged and that the distinction between information types may reside on a continuum. As mentioned earlier, idiosyncratic information as described by Diesendruck and Markson (2011) shares some properties with both privileged and conventional information. In addition, certain types of mental states (e.g., dreams or imagination) and specific episodes (e.g., what one had for dinner) may not be known by or shared freely with others. It is also true that by gendering one of the privileged items (Boys Password) and using some gendered names in the scenarios, we may have inadvertently brought aspects of children's developing gender schemas into the current study (Bigler & Leaper, 2015; Bigler & Liben, 2007). Researchers interested in children's information sharing should remain cognizant of this issue in future work on this topic. We also note that given our oldest age group was far from perfect in making the conventional-privileged distinction, research with older children should be able to further clarify the developmental progression towards adult-like responding. Finally, though our sample size was relatively small as is typical of work with young children, all but one of our reported effect sizes as measured by partial eta-squared and Cohen's *d* statistics were in the medium to large range suggesting that this study was adequately powered. Despite these limitations, we believe that the emerging abilities demonstrated in this study are likely a predecessor to the more inference-based decisions that older children make about who knows what information, what information should be shared, and to whom it is disclosed (Liberman et al., 2020; Liberman & Shaw, 2018).

Finally, the findings from this study have implications for children's social interactions and learning in both face-to-face and online contexts. With children's nearly unlimited access to information, misinformation, and disinformation due to children's increasing access to mobile devices, computer-based learning (e.g., tablets in schools), and instruction from online sources (e.g., YouTube), understanding how and when children distinguish between shareable and non-shareable forms of communication becomes a critical endeavour.

## AUTHOR CONTRIBUTIONS

**Douglas A. Behrend:** Conceptualization; investigation; funding acquisition; writing – original draft; methodology; validation; software; data curation; formal analysis; supervision; visualization; project administration; resources; writing – review and editing. **Helana Girgis:** Conceptualization; methodology; software; data curation; investigation; validation; formal analysis; writing – review and editing; project administration; resources. **Rachel Stevens:** Writing – review and editing; resources; project administration; investigation.

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## CONFLICT OF INTEREST STATEMENT

None.

## DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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## REFERENCES

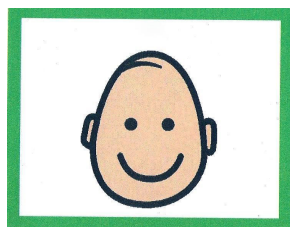
- Anagnostaki, L., Wright, M., & Papathanasiou, A. (2013). Secrets and disclosures: How young children handle secrets. *The Journal of Genetic Psychology, 174*(3), 316–334. <https://doi.org/10.1080/00221325.2012.672350>
- Bedro, A., Gable, S., & Liberman, Z. (2021). It takes two (or more): The social nature of secrets. *WIREs Cognitive Science, 12*(6), e1576. <https://doi.org/10.1002/wcs.1576>
- Behrend, D., & Girgis, H. (2013, April). *Who should know this? Children's willingness to share conventional and privileged information*. Poster presented at the biennial meeting of the Society for Research in Child Development, Seattle, Washington.
- Bigler, R. S., & Leaper, C. (2015). Gendered language: Psychological principles, evolving practices, and inclusive policies. *Policy Insights From the Behavioral and Brain Sciences, 2*(1), 187–194. <https://doi.org/10.1177/2372732215600452>
- Bigler, R. S., & Liben, L. S. (2007). Developmental intergroup theory: Explaining and reducing children's social stereotyping and prejudice. *Current Directions in Psychological Science, 16*, 162–166. <https://doi.org/10.1111/j.1467-8721.2007.0049>
- Brosseau-Liard, P. E., & Birch, S. A. (2010). 'I bet you know more and are nicer too!': What children infer from others' accuracy. *Developmental Science, 13*(5), 772–778. <https://doi.org/10.1111/j.1467-7687.2009.00932.x>
- Carlson, S., & Wang, T. (2007). The development of self-regulation: Towards the integration of cognition and emotion. *Cognitive Development, 22*(4), 489–510. <https://doi.org/10.1016/j.cogdev.2007.08.002>
- Casler, K., & Kelemen, D. (2005). Young children's rapid learning about artifacts. *Developmental Science, 8*(6), 472–480. <https://doi.org/10.1111/j.1467-7687.2005.00438.x>
- Clark, E. (1990). Speaker perspective in language acquisition. *Linguistics, 28*(6), 1201–1220. <https://doi.org/10.1515/ling.1990.28.6.1201>
- Clément, F., Kaufmann, L., & Bernard, S. (2011). Social cognition is not reducible to theory of mind: When children use deontic rules to predict others' behavior. *British Journal of Developmental Psychology, 29*(4), 910–928. <https://doi.org/10.1111/j.2044-835X.2010.02019.x>
- Csibra, G., & Gergely, G. (2006). Social learning and social cognition: The case for pedagogy. In Y. Munakata & M. H. Johnson (Eds.), *Processes of change in brain and cognitive development. Attention and performance XXI* (pp. 249–274). Oxford University Press.
- Csibra, G., & Gergely, G. (2009). Natural pedagogy. *Trends in Cognitive Sciences, 13*(4), 148–153. <https://doi.org/10.1016/j.tics.2009.01.005>
- Diesendruck, G. (2012). The scope and origins of children's assumption of conventionality. In M. Siegal & L. Surian (Eds.), *Access to language and cognitive development* (pp. 116–134). Oxford University Press.
- Diesendruck, G., & Markson, L. (2001). Children's avoidance of lexical overlap: A pragmatic account. *Developmental Psychology, 37*(3), 630–641. <https://doi.org/10.1037/0012-1649.37.1.49>
- Diesendruck, G., & Markson, L. (2011). Children's assumption of the conventionality of culture. *Child Development Perspectives, 5*(3), 189–195. <https://doi.org/10.1111/j.1750-8606.2010.00156.x>

- Girgis, H., & Behrend, D. (2013, March). *Children's beliefs on sharing conventional and restricted information*. Poster presented at the biennial Meeting of the Society for Research in Human Development, New Orleans, Louisiana.
- Gordon, H. M., Lyon, T. D., & Lee, K. (2014). Social and cognitive factors associated with children's secret-keeping for a parent. *Child Development, 85*, 2374–2388. <https://doi.org/10.1111/cdev.12301>
- Kalish, C. W., & Sabbagh, M. A. (2007). Conventionality and cognitive development: Learning to think the right way. *New Directions for Child and Adolescent Development, 115*, 1–9. <https://doi.org/10.1002/cd.178>
- Kim, S., Harris, P. L., & Warneken, F. (2014). Is it okay to tell? Children's judgments about information disclosure. *British Journal of Developmental Psychology, 32*, 291–304. <https://doi.org/10.1111/bjdp.12040>
- Kinsler, K. D., Dupoux, E., & Spelke, E. S. (2007). The native language of social cognition. *PNAS, 104*(30), 12577–12580. <https://doi.org/10.1073/pnas.0705345104>
- Lavoie, J., & Talwar, V. (2022). Theory of mind and concealing vs. forthcoming communication in adolescence. *Frontiers in Psychology, 13*, 866964. <https://doi.org/10.3389/fpsyg.2022.866964>
- Lewis, D. K. (1969). *Convention: A philosophical study*. Harvard University Press.
- Lieberman, Z., Gerdin, E., Kinzler, K. D., & Shaw, A. (2020). (un)common knowledge: Children use social relationships to determine who knows what. *Developmental Science, 23*, e12962. <https://doi.org/10.1111/desc.12962>
- Lieberman, Z., & Shaw, A. (2018). Secret to friendship: Children make inferences about friendship based on secret sharing. *Developmental Psychology, 54*(11), 2139–2151. <https://doi.org/10.1037/dev0000603>
- Misch, A., Over, H., & Carpenter, M. (2016). I won't tell: Young children show loyalty to their group by keeping group secrets. *Journal of Experimental Child Psychology, 142*, 96–106. <https://doi.org/10.1016/j.jecp.2015.09.016>
- Myers-Burg, M., & Behrend, D. A. (2021). More than just accent? The role of dialect words in children's language-based social judgments. *Journal of Experimental Child Psychology, 204*, 105055. <https://doi.org/10.1016/j.jecp.2020.105055>
- Peskin, J., & Ardino, V. (2003). Representing the mental world in children's social behavior: Playing hide-and-seek and keeping a secret. *Social Development, 12*(4), 496–512. <https://doi.org/10.1111/1467-9507.00245>
- Rakoczy, H., Warneken, F., & Tomasello, M. (2008). The sources of normativity: Young children's awareness of the normative structure of games. *Developmental Psychology, 44*(3), 875–881. <https://doi.org/10.1037/0012-1649.44.3.875>
- Vangelisti, A. L. (1994). Family secrets – Forms, functions, and correlates. *Journal of Social and Personal Relationships, 11*(1), 113–135. <https://doi.org/10.1177/0265407594111007>
- Watson, A. J., & Valtin, R. (1997). Secrecy in middle childhood. *International Journal of Behavioral Development, 21*(3), 431–452. <https://doi.org/10.1080/016502597384730>

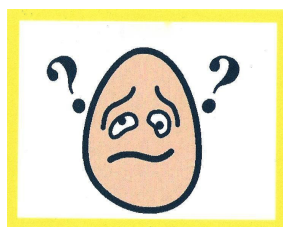
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## APPENDIX A

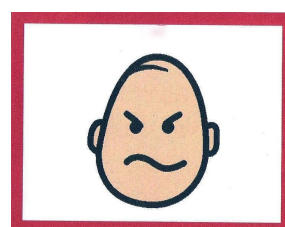
### Picture Scale



Should Tell



It's okay to tell or not to tell



Shouldn't Tell

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