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Short Note

Children's communication of the Linguistic Intergroup Bias and its impact upon cognitive inferences

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Abstract

The hypotheses that children use language strategically (e.g. as in the Linguistic Intergroup Bias) and with increasing strength with age were supported in an experiment with participants ranging in age from 8 to 19 years. In a second experiment, the impact of biased language use on participants' inferences was examined in a sample ranging in age from 5 to 11 years. It was shown for all age groups that participants' inferences were systematically influenced by the abstractness or concreteness of a message. The implications of these findings for the communication and transmission of stereotypes at an early age are discussed. Copyright © 1999 John Wiley & Sons, Ltd.

The Linguistic Intergroup Bias (LIB) is the tendency to describe desirable in-group and undesirable out-group behaviors at a higher level of abstraction than undesirable in-group and desirable out-group behaviors (Maass, Salvi, Arcuri, & Semin, 1989). Support for this bias comes from experimental as well as non-experimental studies, diverse linguistic communities, and a number of intergroup settings (Maass & Arcuri, 1996). Further, this linguistic bias has been found to occur also at an individual level (Maass, Milesi, Zabbini, & Stahlberg, 1995). The LIB has been investigated predominantly by asking participants to describe events depicted in cartoons by choosing one of four response alternatives. These response alternatives correspond to the four levels of linguistic abstraction described by the

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Linguistic Category Model (Semin & Fiedler, 1988). That is, an event may be described by choosing a descriptive action verb (e.g. 'A reaches his hand out to B'); an interpretive action verb (e.g. 'A helps B'); a state verb (e.g. 'A cares for B'); or an adjective (e.g. 'A is helpful'). In depicting a social event with the use of abstract language (i.e. state verbs or adjectives), one provides generalizing information about the actor, namely that it is likely to recur in the future. In depicting the same event with the use of concrete language, on the other hand, one provides particularizing information about the actor, namely that the event is context-specific. These differences in how an event is represented in language are assumed to contribute in a subtle way to the maintenance and transmission of stereotypes and in-group favouring biases.

Although the LIB has been examined in a variety of intergroup settings, as yet, the presence of this bias in children's descriptions of behavioral events has not been reported. Evidence for strong in-group bias has been found in quite young children, even at 4 years of age (e.g. Vaughan, 1978). However, for children to display the LIB, a fairly sophisticated mastery of abstract and concrete interpersonal terms is required. There is developmental evidence suggesting an increase in the use of abstract language with age. Around the age of 8 years, children show a move from using external and concrete characteristics in the explanation of social events to more internal and abstract characteristics (e.g. Livesley & Bromley, 1973). Additional support for an increase in the use of abstract language in children's spontaneous speech comes from a study investigating developmental changes in children's explanations of interpersonal events (Werkman & Semin, submitted manuscript). Indeed, although there are indications that children may *understand* abstract terms at a younger age (e.g. Eder, 1989; Berndt & Heller, 1985), there seems to be agreement that children's *use* of abstract terms to describe and explain interpersonal events appears from middle childhood onwards (e.g. Barenboim, 1977; Peevers & Secord, 1973; Rosenbach, Crockett, & Wapner, 1973). However, regardless of whether the children use abstract terms at an earlier or later age, the more interesting question in the present context is whether children are able to use abstract and concrete terms *strategically*. Some studies show a developmental increase in children's ability to vary their self-presentation by selecting specific formulations as a function of context (e.g. Aloise-Young, 1993; Bennet & Yeeles, 1990). These studies suggest that with age, children obtain the mastery to make strategic use of linguistic tools in order to convey specific person impressions.

A sample was chosen ranging in age from 8 to 19 years to investigate whether the LIB is manifested across these age groups. Participants were asked to choose the most appropriate description for a cartoon depicting either their best friend or their worst enemy engaging in socially desirable or undesirable behavior. In a similar study, Maass *et al.* (1995) found a linguistic bias for liked or disliked persons who display positive and negative behavior. On the basis of these findings and the LIB model, it was expected that participants describe desirable behavior of a friend and undesirable behavior of an enemy at a higher level of abstraction than undesirable behavior of a friend and desirable behavior of an enemy (Hypothesis 1). Moreover, this LIB effect was expected to increase over the age groups represented in this study (Hypothesis 2).

STUDY 1

Method

Participants

Two hundred and fifty-three participants of four different age groups participated in the study. The mean age of the respective groups was: 9.4 years; 11.6 years; 13.9 years; and 16.6 years. Gender was equally distributed across age groups (in total 121 males and 132 females participated). The participants attended different elementary and secondary schools, situated in middle class neighbourhoods in the Amsterdam area.[1]

Procedure

A booklet was given to each participant during class sessions at its school. This booklet contained four socially desirable (e.g. giving a present) and four socially undesirable cartoons (e.g. fighting), depicting the behavior of two gender-neutral cartoon characters. For four of the cartoons (two desirable and two undesirable) participants had to think of the cartoon character as their best friend and for the remaining four as their worst enemy. The order of this task was controlled for. The eight cartoons were balanced across the conditions. Underneath each cartoon, four response alternatives were given that corresponded to the different levels of abstraction in the Linguistic Category Model. In constructing these alternatives we only used words that were known to be familiar to 6-year-old Dutch children (Kohnstamm, Schaerlaekens, de Vries, Akkerhuis, & Froonincksx, 1981). Pilot testing had indicated that all response alternatives gave appropriate descriptions of the cartoons and that the desirable cartoons were more desirable than the undesirable ones. Participants were instructed to select for each cartoon the response alternative that best described it.

Dependent variable

As in previous LIB research (e.g. Maass *et al*., 1989), the responses were scored such that higher scores indicated a higher level of abstraction (DAV = 1; IAV = 2; SV = 3; ADJ = 4).

Results

We expected that all age groups represented in the sample would display the LIB and that the strength of the LIB would increase with age. To test these hypotheses, the mean abstraction scores were subjected to a 4 (Age Group: 9-year-olds versus 11-year-olds versus 13-year-olds versus 16-year-olds × 2 (Target: Friend versus Enemy) × 2 (Behavior: Desirable versus Undesirable) ANOVA, the last two variables being

[1]Participants who were not native speakers were excluded from the analyses, to prevent potentially confounding cultural or linguistic influences

Table 1. Mean level of abstraction as a function of the target and the behavior

Target	Behavior	
	Desirable	Undesirable
Friend		
M	2.48[a]	2.36[c]
SD	0.83	0.73
Enemy		
M	2.07[b]	2.58[a]
SD	0.91	0.81

Note: $N = 251$. Means were based on a 4-point scale with higher values indicating an increasing level of abstractness. Cell means in rows and columns not sharing the same superscripts differ significantly from each other ($p < 0.05$).

within-subjects variables. Because the LIB was expected to increase with age, a linear contrast was put on the age group factor.[2] Two participants were omitted because of missing data. The expected interaction between Target and Behavior, indicating a LIB, was significant, $F(1,247) = 39.84$, $p < 0.001$. As can be seen in Table 1, the behavior of the friend was described at a higher level of abstraction when this behavior was desirable than when it was undesirable, $F(1,247) = 3.86$, $p < 0.05$. Moreover, the behavior of the enemy was described at a higher level of abstraction when this behavior was undesirable than when it was desirable, $F(1,247) = 46.96$, $p < 0.001$. Also, desirable behavior was described more abstractly when performed by a friend than by an enemy, $F(1,247) = 33.01$, $p < 0.001$. The reverse was the case for undesirable behavior, $F(1,247) = 11.76$, $p < 0.001$. These results provide support for Hypothesis 1. Moreover, this LIB interaction between target and behavior was significantly moderated by age group, $F(3,247) = 4.65$, $p < 0.05$. In line with Hypothesis 2, with increasing age, the strength of the LIB interaction between target and behavior increased: 9-year-olds, $F(1,247) = 5.25$, $p < 0.05$; 11-year-olds, $F(1,247) = 5.67$, $p < 0.05$; 13-year-olds, $F(1,247) = 9.60$, $p < 0.005$; 16-year-olds, $F(1,247) = 22.02$, $p < 0.001$. Another way of testing the relationship between LIB and age, is by calculating a 'LIB index' which can be calculated on the basis of the different types of behaviors. It consists of the sum of the mean abstraction of the desirable behavior of a friend and the undesirable behavior of an enemy, minus the mean abstraction of the undesirable behavior of a friend and the desirable behavior of an enemy. Thus, the higher the LIB index, the more LIB is demonstrated. The amount of LIB based on the LIB index increased with age: 9-year-olds LIB index = 0.46; 11-year-olds LIB index = 0.44; 13-year-olds LIB index = 0.70; 16-year-olds LIB index = 1.07. The LIB index was significantly higher for 16-year-olds than for 9-year-olds, $t(247) = 2.02$, $p < 0.05$; or 11-year-olds, $t(247) = 2.13$, $p < 0.05$. Although not significantly different from the other age groups, the amount of LIB shown by 13-year-olds lay in between the two youngest age groups and the oldest age group.[3]

[2]With the weights of 1, 2, 3, 4 respectively

[3]The ANOVA also revealed significant main effects for age group, target and behavior. However, because of space limitations, effects that did not modify the LIB effect are not discussed

Discussion

The results of the experiment lend support for both hypotheses. First, participants ranging in age from 8 to 19 years described desirable behavior of a friend and undesirable behavior of an enemy at a higher level of abstraction than undesirable behavior of a friend and desirable behavior of an enemy (Hypothesis 1). Thus, participants of all age groups represented in this study demonstrated a LIB pattern. Moreover, the LIB effect increased over the age groups (Hypothesis 2). This increase appears to be in line with earlier research reporting an increase in the selective use of abstract language with age (e.g. Aloise-Young, 1993; Bennet & Yeeles, 1990).

The question that these findings raise is the following. The fact that children are able to use language strategically in order to communicate stereotypes shows a sensitivity to the different implications that concrete and abstract language may have. However, this does not necessarily mean that when they hear such messages they can detect these subtle differences in message composition. Consequently, we do not know how messages that vary in abstraction level impact the recipients of such messages and in particular at what age such messages influence the inferences that people make in a systematic manner. Earlier research with adults (Semin & de Poot, 1997; Wigboldus, Semin & Spears, submitted manuscript) has shown that the type of language used in the composition of a message systematically influences the types of inferences recipients of these messages make. Adults more readily infer that the likelihood of repeating a certain behavior is high when the behavior is described in abstract terms than when it is described in concrete terms. Likewise, adults more readily attribute the cause of a certain behavior to the person when the behavior is described in abstract terms. When the same behavior is described in concrete terms, it is predominantly attributed to the situation. Thus, subtle differences in the composition of messages or narratives have been shown to have communicative implications for their recipients. It is to this issue that we now turn, but from a developmental perspective. First, we briefly discuss the existing developmental literature that has a bearing on this issue. Second, we draw the implications from this literature for the current research question.

STUDY 2

Traditional approaches to children's understanding of abstract terms such as traits and dispositional terms show a change at around the age of 7–8. This change is marked by an increase in their spontaneous use (Livesley & Bromley, 1973; Peevers & Secord, 1973). These findings suggest that children younger than 7–8 years do not regard traits and adjectives as describing stable, abiding characteristics (e.g. Flavell, 1977; Rholes & Ruble, 1984). More recent studies, on the other hand, suggest that distinctions between specific behaviors and behaviors that are general or habitual are already made at 3–4 years (e.g. Eder, 1989) and that children are already perfectly capable of handling the notion of generality of behavior across time at the age of 5 years (e.g. Berndt & Heller, 1985; Yuill, 1992).

Additional support for young children's ability to make inferences based on linguistic information comes from research investigating the acquisition of verb mediated inference processes. Werkman & Semin (submitted manuscript) examined children's explanations of interpersonal events for changes in conventional causal

attribution patterns and attributional content. They found that whereas conventional inference patterns for the most concrete and the most abstract verbs were manifested at all ages (6–16 years), intermediate categories of verbs showed a lag in informed use. They further showed that conventional inferences increased with age.

From these findings it is possible to argue that 6-year-old children should, in principle, be able to detect the subtle differences in linguistic terms used in communication (e.g. concrete verbs, abstract verbs, and trait terms). A sample was chosen ranging in age from 5 to 12 years to investigate whether this indeed is the case. Participants listened to stories of different levels of abstraction and, as is customary in research with adults, they were asked to answer questions about the repetition likelihood and cause of the behavioral event described in the story. On the basis of the literature on children's understanding of traits and their acquisition of verb mediated inference processes, we predicted that messages that vary in abstraction level will systematically influence the kind of inferences 5-year-old (and older) recipients of these messages make: Children's inferences about (a) the repetition likelihood of an event and (b) the cause of a certain behavioral event should differ depending on the abstraction level of the description (Hypothesis 1). As children grow older, and their understanding of dispositional terms evolves, these inferences should become stronger (Hypothesis 2).

Method

Participants

One hundred and forty-one participants (70 girls, 71 boys) from different age groups participated in the study. The mean age for the respective groups was 5.6 years (Kindergarten); 7.7 years (second grade); 9.7 years (fourth grade); and 11.6 years (sixth grade). Gender was equally distributed across age groups (see footnote 1).

Stimulus material

Four stories of a child displaying a certain trait were created. The traits 'talkative' and 'funny' were selected because research has shown them to be gender neutral and familiar to young children (Powlishta, 1995). For each trait a story describing behaviors based on the trait was created. For the abstract version of these stories, qualifiers were added. For the 'talkative' story the qualifiers 'chatterbox' and 'twaddler' were added. For the 'funny' story the qualifiers 'funny' and 'joker' were added. This led to a total of four stories, two stories (an abstract and a concrete one) describing the trait 'talkative' and two stories describing the trait 'funny'. The Dutch stories were gender neutral; no information was given about the sex of the actors in the story.

Procedure

Each participant was tested individually in a quiet room in the school by a female experimenter. After a general introduction, the participant listened to the first story.

Each participant heard a story about a child being talkative in the classroom and one about a child being funny in the playground. One of the stories was abstract, the other concrete. The order of concrete–abstract and funny–talkative stories was counterbalanced. The participants were told that they were going to listen to a story about a child, and that they had to listen carefully because afterwards they had to answer questions about the story. They then heard, for example, a concrete story about a funny child. After this story they answered the following multiple-choice questions about the attribution (situational versus personal) and the likelihood of repetition of the behavior: (a) How often do you think (name of the actor in the story) will repeat this behavior in the future? You can choose between: Never again; sometimes; often; or very often; (b) Do you think that what happened in the classroom/in the playground was due to the fact that (name of the actor in the story) told a joke/talked so much or do you think it happened because that's just the way (name of the actor in the story) is?

The participants subsequently listened to the second story, for example an abstract story about a talkative child, and answered the same questions for the second story. The order of questions and stories was balanced over participants.

Dependent variables

The first dependent variable was based on the *situation–personality attribution* participants made for each story. Children could attribute the behavior to the situation, the person or to both. These answers were scored in the following way: situational attribution = 1 (classroom, playground); attribution to both classroom/playground and person = 2; person attribution = 3. The second dependent variable was based on the *repetition likelihood measure*. Children could choose how often the actor was likely to repeat the behavior. These answers were scored in the following way: never again = 1; sometimes = 2; often = 3; very often = 4.

Results

The hypothesis that participants' inferences about the cause of a certain behavioral event should vary depending on the abstraction level of the description was analyzed first, along with the prediction that as children grow older these inferences become stronger. To test these hypotheses, the ratings on the *situation–personality* attribution scale were subjected to a 4 (Age Group: 5-year-olds versus 7-year-olds versus 9-year-olds versus 11-year-olds) ($\times 2$ (Participant Gender: Male versus Female) $\times$ 2 (Story Abstraction: Concrete versus Abstract) ANOVA, with repeated measures on the last factor. Two participants were omitted from this analysis due to missing data. First, the analysis revealed the expected main effect for story abstraction, $F(1,131) = 90.43$, $p < 0.001$. In line with Hypothesis 1, the abstract story led to more personality attributions ($M = 2.60$, $SD = 0.66$) than the concrete story ($M = 1.73$, $SD = 0.82$).

Second, a significant interaction was found between story abstraction and age group, $F(3,131) = 5.43$, $p < 0.001$. Analyses of the simple main effects revealed that only 5-year-olds did not differentiate significantly between the concrete and the abstract story, $F(1,131) = 2.11$, *ns*; whereas the older children did: 7-year-olds,

$F(1,131) = 32.57$, $p < 0.001$; 9-year-olds, $F(1,131) = 18.65$, $p < 0.001$; 11-year-olds, $F(1,131) = 64.56$, $p < 0.001$. In order to gain more insight into a possible developmental pattern, a difference score was calculated based on the difference in attributions between the abstract and the concrete story. Specific comparisons between these difference scores indicated that 5-year-olds showed a significantly smaller difference ($M = 0.27$, $SD = 0.84$) than 11-year-olds ($M = 1.30$, $SD = 0.85$). Seven ($M = 0.94$, $SD = 1.16$) and 9-year-olds ($M = 0.78$, $SD = 1.15$) seemed to lie in between the youngest and the oldest age groups. This suggests a linear increase in attributional receptiveness. To test if this linear increase was significant, a 4 (Age Group: 5-year-olds versus 7-year-olds versus 9-year-olds versus 11-year-olds) $\times$ 2 (participant Gender: Male versus Female) ANOVA was performed with the difference score as dependent variable. A linear contrast was put on the age group factor (see footnote 2). The only significant effect was the expected linear main effect for age group, $F(1,131) = 13.24$, $p < 0.001$. In line with Hypothesis 2, attributional receptiveness to differences in the level of abstraction increased over the age groups.

The second analysis investigated whether the *likelihood of repeating* the behavior in the event that was described would increase as a function of both abstraction level and age. To test these hypotheses, the ratings on the repetition likelihood scale were also subjected to a 4 (Age Group: 5-year-olds versus 7-year-olds versus 9-year-olds versus 11-year-olds) $\times$ 2 (Participant Gender: Males versus Female) $\times$ 2 (Story Abstraction: Concrete versus Abstract) ANOVA, with repeated measures on the last factor. Two participants were omitted from this analysis because of missing data. First, the analysis revealed the expected main effect for story abstraction, $F(1,131) = 51.22$, $p < 0.001$. In line with our hypothesis, the abstract story led to a higher repetition likelihood score ($M = 3.06$, $SD = 0.92$) than the concrete story ($M = 2.22$, $SD = 0.95$). This main effect was however, not moderated by age group. The interaction between story abstraction and age group was not significant, $F(3,131) = 0.23$, *ns*.

GENERAL DISCUSSION

Study 2 shows that children are sensitive to the types of predicates used in narratives. Children of all ages represented in the study infer that a certain behavior is more likely to be repeated if the behavior was described at a high level of abstraction than when it was described at a low level of abstraction. Furthermore, this study shows that with increasing age children are more likely to make dispositional attributions from abstract stories and less likely to make situational attributions from the same stories. These findings provide support for Hypothesis 1 and in part for Hypothesis 2. In line with Hypothesis 1, inferences about the predictability and cause of an event differed depending on the abstraction level of the narratives. These findings are in line with research suggesting young children's understanding of the function of traits and other abstract terms as descriptions of stable, abiding person characteristics. In addition, we found that with increasing age, abstract stories increasingly led to attributions to the person instead of the situation, whereas inferences about the repetition likelihood showed no increase with age. Children's ability to make inferences about the repetition likelihood of a certain behavior based on linguistic information seems to have reached full bloom at the age of 5. Children's causal attributions of behavior

based on linguistic information, on the other hand, seem to evolve during elementary school.

The findings from Studies 1 and 2 complement each other in a number of different and important ways. Whereas the findings of our first study suggest that children are able to systematically use interpersonal language in a strategic way from the age of 8 onwards, the findings of the second study show that the type of predicate used in narratives influences children's inferences from the age of 5 onwards. That is, whereas the first study provides support for the operation of the linguistic intergroup bias, the second study provides evidence that narratives depicting the same social behavior either in abstract or concrete language influence the repetition likelihood and the dispositional versus situational inferences that children make. This allows us to complete a circle between the communication of a bias as represented in language and its reception. These findings also tie up neatly with the work done earlier in different domains (de Poot & Semin, 1995; Wigboldus *et al*., submitted manuscript) which shows the impact of the properties of interpersonal terms upon the inferences that the receiver makes in question/answer situations.

The current research extends earlier work on the LIB by Anne Maass and her colleagues by showing the presence of this bias in children. Furthermore, this research also shows that children are able to identify the significant properties of interpersonal language and are able to draw systematic inferences as a function of how social behaviors are represented in language, namely abstractly or concretely. An interesting new line of research may be to investigate the relationship between the *expression* of the linguistic intergroup bias at an early age and its *reception*. That is, how biased are children's spontaneous expressions of desirable and undesirable in- and out-group behaviors when communicating with their peers? Further, does such communication actually impact the assessment of in- and out-group members? It would certainly seem to be the case that the LIB plays an important role in the formation and maintenance of stereotypes already at a very early age.

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REFERENCES

Aloise-Young, P. A. (1993). The development of self presentation: Self-promotion in 6- to 10-year-old children. *Social Cognition*, **11**, 201–222.

Barenboim, C. (1977). Developmental changes in the interpersonal cognitive system from middle childhood till adolescence. *Child Development*, **48**, 1467–1474.

Bennet, M., & Yeeles, C. (1990). Children's understanding of the self-presentational strategies of ingratiation and self-promotion. *European Journal of Social Psychology*, **20**, 455–461.

Berndt, T. J., & Heller, K. (1985). Predictions of future behavior, trait ratings, and responses to open ended questions as measures of children's personality attributions. In S. R. Yussen (Ed.), *The growth of reflection* (pp. 37–60). New York: Academic Press.

Eder, R. A. (1989). The emergent personologist: The structure and content of 3.5-, 5.5- and 7.5-year-olds' concepts of themselves and other persons. *Child Development*, **60**, 1218–1228.

Flavell, J. H. (1977). *Cognitive development*, Englewood Cliffs, NJ: Prentice Hall.

Kohnstamm, G. A., Schaerlaekens, A. M., de Vries, A. K., Akkerhuis, G. W., & Frooninckxs, M. (1981). *Nieuwe streeflijst woordenschat voor 6-jarigen* (The new normative vocabulary list for 6-years-olds). Lisse, The Netherlands: Swets & Zeitlinger.

Livesley, W. J., & Bromley, D. B. (1973). *Person perception in childhood and adolescence*. London: Wiley.

Maass, A., & Arcuri, L. (1996). Language and stereotyping. In N. Macrae, M. Hewstone, & C. Stangor (Eds), *The foundations of stereotypes and stereotyping* (pp. 193–226) New York: Guilford Press.

Maass, A., Milesi, A., Zabbini, S., & Stahlberg, D. (1995). The linguistic intergroup bias: Differential expectancies or in-group protection? *Journal of Personality and Social Psychology*, **68**, 116–126.

Maass, A., Salvi, D., Arcuri, L., & Semin, G. R. (1989). Language use in intergroup contexts: The linguistic intergroup bias. *Journal of Personality and Social Psychology*, **57**, 981–993.

Peevers, B., & Secord, P. (1973). Developmental changes in attribution of descriptive concepts to persons. *Journal of Personality and Social Psychology*, **27**, 120–128.

de Poot, C. J., & Semin, G. R. (1995). Pick your verbs with care when you formulate a question! *Journal of Language and Social Psychology*, **14**, 351–368.

Powlishta, K. (1995). Gender bias in children's perceptions of personality traits. *Sex Roles*, **32**, 17–28.

Rholes, W. S., & Ruble, D. N. (1984). Children's understanding of dispositional characteristics of others. *Child Development*, **55**, 550–560.

Rosenbach, D., Crockett, W. H., & Wapner, S. (1973). Developmental level, emotional involvement and the resolution of inconsistency in impression formation. *Developmental Psychology*, **8**, 120–130.

Semin, G. R., & Fiedler, K. (1988). The cognitive functions of linguistic categories in describing persons: Social cognition and language. *Journal of Personality and Social Psychology*, **54**, 558–568.

Semin, G. R., & de Poot, C. J. (1997). The question–answer paradigm: You might regret not noticing how a question is worded. *Journal of Personality and Social Psychology*, **73** (in press).

Vaughan, G. (1978). Social categorization and intergroup behaviour in children. In H. Tajfel (Ed.), *Differentiation between social groups* (pp. 339–360). London: Academic Press.

Yuill, N. (1992). Children's conception of personality traits. *Human Development*, **35**, 265–279.

