

**Can you tell me something about yourself? : Self-presentation in children and adolescents with high functioning autism spectrum disorder in hypothetical and real life situations**

Anke M. Scheeren, Sander Begeer, Robin Banerjee, Mark Meerum Terwogt and Hans M. Koot  
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# Can you tell me something about yourself?

Self-presentation in children and adolescents with high functioning autism spectrum disorder in hypothetical and real life situations

ANKE M. SCHEEREN VU University, Amsterdam, the Netherlands

SANDER BEGEER VU University, Amsterdam, the Netherlands

ROBIN BANERJEE Sussex University, UK

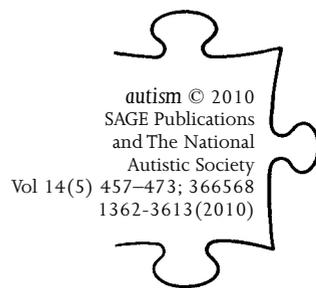
MARK MEERUM TERWOGT VU University, Amsterdam, the Netherlands

HANS M. KOOT VU University, Amsterdam, the Netherlands

**ABSTRACT** The self-presentation skills of children and adolescents with high-functioning autistic spectrum disorder (HFASD) and typically developing (TD) controls were compared, in response to both hypothetical and real life situations. In both situations, 26 HFASD and 26 TD participants were prompted to describe themselves twice, first in a baseline condition, and later in a goal-directed condition where specific information was given about the preferences and demands of the audience. Confirming and extending previous research, both TD and HFASD participants exhibited a tendency to be more positive when describing themselves in a goal-directed condition. However, HFASD participants were less strategic than TD participants in responding to the information they were given about the audience preferences and demands. Possible explanations and implications of the results are discussed.

**ADDRESS** Correspondence should be addressed to: ANKE SCHEEREN, VU University Amsterdam, Developmental Psychology, Van der Boerhorststraat 1, 1081 BT Amsterdam, the Netherlands. email: a.scheeren@psy.vu.nl

Self-presentation refers to an individual's efforts to shape the self-image that is portrayed to others. Thus, in the process of self-presentation an actor regulates his or her behaviour in order to manipulate the impression being made on an audience (Levine and Feldman, 1997). In order to do so, the



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actor has to a) understand the expectations of the audience; b) be aware of his or her own abilities and characteristics in this respect; and c) be able to match the two in such a way that he or she creates the desired impression. The first two abilities – awareness of the normative values and preferences of others and awareness of one's own assets – are central to the development of the self. Children as young as 8 years old have been found to be sensitive to audience preferences by selecting particularly those self-descriptions that are relevant to the audience (Aloise-Young, 1993; Banerjee, 2002). Children continue to develop these skills throughout childhood. In the current study we focus on self-presentation skills in children and adolescents with autism spectrum disorder (ASD).

There are several reasons to hypothesise that self-presentation skills may be deviant or delayed in individuals with ASD. An abundant number of studies has shown that individuals with ASD find it difficult to understand the intentions and feelings of others (e.g., Klin et al., 2003). This may cause them to misinterpret the preferences and evaluations of their audience, in turn making it difficult to achieve successful self-presentation. Furthermore, individuals with ASD often insist on routines and strict rules (e.g., Corbett et al., 2009; Russo et al., 2007). This lack of flexibility complicates the adaptation of their self-presentation to different audiences. While direct studies on self-presentation are sparse, research on self-awareness and processing of self-related information are in line with the suggested poor self-presentation in ASD.

In a series of experiments, Hobson et al. (2006) demonstrate that children with ASD show awareness of other's engagement with themselves to a lesser extent than verbally matched children without autism. Social emotions that are often considered the consequence of such engagement, like embarrassment, coyness (self-conscious, embarrassed smiling) or guilt, were less frequently found and were also considered to be of a slightly different quality in children with ASD. However, when explaining social emotions, these children do refer to others' perspectives on themselves, suggesting at least some understanding of basic self-presentational processes (Bauminger, 2004; Heerey et al., 2003; Hillier and Allinson, 2002). In a similar way, emotional display rules seem to be a stumbling block for individuals with ASD, even when their intelligence is average or above average (High Functioning ASD, HFASD). Compared to typically developing control children, those with HFASD were less sophisticated in inhibiting the expression of their true emotions (i.e., applying an emotional display rule), despite their adequate explanations of display rules (Barbaro and Dissanayake, 2007; Dennis et al., 2000; Peterson et al., 2005). In short, the awareness of others' perspectives on oneself is not wholly absent, but is likely not applied appropriately in children with HFASD.

Several studies have hinted at a deviant processing of self-related information in autism. The processing of personal experiences in individuals with ASD may be more rule-based than emotion-driven (Williams and Happé, 2009a). This could diminish superior knowledge of one's own mental states, which is typically accompanied by emotions, over the mental states of others. However, studies have produced mixed results about superior recognition or recall of self-related information over other-related information in individuals with ASD. Some studies did not find this so-called self-reference effect in individuals with ASD when compared to typically developing controls (Henderson et al., 2009; Toichi et al., 2002), whereas others did (Lind and Bowler, 2009; Williams and Happé, 2009b). Typically developing individuals do assign more knowledge about their inner states to themselves than to a close other, but this effect of privileged inner insight was not observed within a group with HFASD (Mitchell and O'Keefe, 2008). This detached and objective perspective on the self has been suggested as part of the allocentric perspective of individuals with autism, described by Frith and De Vignemont (2005), and merits further research.

In a preliminary investigation of self-presentational processes in autistic children, Begeer et al. (2008) asked children with HFASD and typically developing children how they would present themselves in two different hypothetical situations. In a baseline condition children were asked to describe themselves without knowledge of audience preferences. In a self-promotion condition children were encouraged to convince the audience of their competence, as they were told they might get selected for a prize-winning game. In the baseline condition children with HFASD spoke less positively about themselves than typically developing children. Both groups of children, however, were receptive to the condition manipulation: they expressed more positive statements about themselves in the self-promotion condition compared to the baseline condition. Yet, children with HFASD were less strategic than typically developing children in the self-promotion condition: their self-presentation was less relevant to competencies that were particularly useful for the desired activity (e.g., game-related skills).

The present study was designed to extend Begeer et al.'s (2008) research by including a wider range of self-presentational contexts. Specifically, the study of Begeer et al. (2008) could not shed light on how children's self-presentation strategies are used in real life situations, and how these compare with their responses in hypothetical situations. Older children with HFASD may perform reasonably well on cognitive social tasks (e.g., Capps, Yirmiya, and Sigman, 1992), but they may still experience subtle difficulties delineating social situations in real life (e.g., Channon et al., 2001). For this reason, the current study not only focused on self-presentation in response to hypothetical situations, but also included real life interactions with an interviewer.

The present study also covered a wider age range, including both school-aged children and adolescents. It is not yet clear how self-presentation strategies develop in individuals with HFASD. On the one hand, self-presentation strategies of adolescents with HFASD could be expected to benefit from developmental growth compared to younger children with HFASD. There are clear indications of improvement in behaviour from childhood to adolescence and adulthood in individuals with ASD (McGovern and Sigman, 2005; Seltzer et al., 2003). On the other hand, it is not uncommon for individuals with ASD to develop psychiatric and psychosocial problems in adulthood (Hofvander et al., 2009; Howlin et al., 2000). Due to an accumulation of social experiences, adolescents with HFASD may become increasingly aware of their own social difficulties (Meyer et al., 2006; White et al., 2009). This may induce a less positive self-presentation. Indeed, research suggests older children with HFASD provide lower evaluations of their social competence than younger children with HFASD (Vickerstaff et al., 2007). This could be indicative of an increasingly realistic perspective of individuals with HFASD on their own social competence.

To sum up, the present study compared the self-presentation skills of children and adolescents with HFASD to typically developing controls in response to hypothetical and real life situations. Based on the findings of Begeer et al. (2008), we expected children from both HFASD and typically developing groups to speak more positively about themselves in the goal-directed conditions compared to the baseline conditions, both in response to hypothetical situations as well as during a real life interaction with an interviewer. Second, we predicted that the HFASD group would express fewer positive statements about themselves than the typically developing group in the baseline conditions, and investigated the extent to which this presumed group difference would be more pronounced among adolescents. Crucially, based on the existing evidence regarding social cognition, self-understanding, and self-focus in ASD samples, we also expected that the HFASD group would exhibit a tendency to be less strategic (i.e., less responsive to specific audience demands and preferences) than typically developing controls in the goal-directed conditions. We also evaluated the extent to which this group difference would be attenuated among adolescents.

## Method

### Participants

The HFASD group consisted of 15 school-aged children and 11 adolescents and young adults with HFASD, henceforward 'adolescents with HFASD' (see Table 1). The typically developing control group consisted of 16 children

**Table 1** Sample description

	Group with HFASD			Typically developing group		
	Child (n = 15) M (SD)	Adolescent (n = 11) M (SD)	Total (n = 26) M (SD)	Child (n = 16) M (SD)	Adolescent (n = 10) M (SD)	Total (n = 26) M (SD)
Age (in years)	8.8 (1.36)	20.3 (2.08)	13.6 (6.05)	7.8 (0.78)	17.8 (1.09)	11.7 (5.07)
Gender (boys:girls)	14:1	9:2	23:3	16:0	6:4	22:4
Receptive verbal IQ	109 (15.92)	110 (5.11)	109 (12.17)	109 (10.35)	110 (8.40)	109 (9.49)
Social responsiveness (SRS)	94 (15.17)	82 (35.07)	88 (26.73)	30 (7.44)	24 (10.41)	28 (8.78)

Note. HFASD = high-functioning autism spectrum disorder.

and 10 adolescents. The diagnostic classification of the HFASD participants was based on assessments by a psychiatrist and multiple informants (psychologists and educationalists). All participants fulfilled established diagnostic criteria according to the DSM-IV-TR (APA, 2000). Additional diagnostic information about the participants was obtained from the parents with the Social Responsiveness Scale (SRS; Constantino and Gruber, 2007). As would be expected, the HFASD group scored substantially higher on the SRS than typically developing controls ( $t(51) = 10.31, p < .001, d = 3.04$ ). In the HFASD group there was a wide range of raw SRS scores: 44–152. Despite their clinical diagnosis, 6 adolescents received SRS scores below 70: the recommended cutpoint to screen for ASD. Five of six adolescents with relatively low SRS scores were university students and two lived independently. The SRS might be a less suitable measure to assess ASD in intelligent adolescents and young adults with ASD. Importantly, post hoc t-tests concerning our most important variables showed no difference between adolescents scoring below and above the ASD cutpoint. Also, none of the typically developing participants approached or surpassed this threshold (range of raw SRS scores: 11–46). The HFASD group and typically developing group did not differ on age ( $t(51) = 1.29, p > .10, d = 0.36$ ), gender ratio ( $\chi^2(1) = 1.65, p > .10, \phi = 0.06$ ), or receptive verbal IQ ( $t(51) = 0.13, p > .10, d = 0.04$ ) as assessed by the Dutch version of the Peabody Picture Vocabulary Test-III (Dunn and Dunn, 2004).

## Measures

### Hypothetical Task

**Baseline condition** Hypothetical self-presentation was examined using two vignettes about peer interactions (adapted from the peer interaction scenarios of Banerjee, 2002). In the baseline condition participants were told the following: ‘Imagine you move to a different neighbourhood. The family living next to you has a son/daughter [matched to participant’s gender]. The boy/girl next door introduces him/herself to you and you want the boy/girl to like you. What would you tell him/her about yourself?’ Participants were asked to explain their choice of self-description.

**Goal-directed condition** In the goal-directed condition participants were told the following: ‘Imagine you go to a new school where you know none of the students. The only thing you know about the person sitting next you is that he/she [matched to participant’s gender] likes animals very much and he/she also likes people who like animals. You want the boy/girl to like

you. What would you tell him/her about yourself?' Participants were asked to explain their choice of self-description.

## Real Life Task

**Baseline condition** The Real Life Task is based on the scenarios described in Begeer et al. (2008). In the baseline condition the interviewer first introduced him/herself and then asked the participant, 'Can you tell me something about yourself?' After the child's first answer the interviewer would ask, 'Can you tell me something more about yourself?'

**Goal-directed condition** In the goal-directed condition the interviewer said, 'A couple of the participating children will be picked to play a game where you can win lots of cool prizes. To determine who should be picked for this game with prizes, I ask everyone to tell me something about him/herself. So, can you tell me something about yourself?' To ensure children would not purposely leave out information they had already mentioned in the baseline condition, children were told information on this paper would later be used to choose children for the game. After the child's first answer the interviewer would ask, 'Can you tell me something more about yourself?' Because the type of game (e.g., physical/intellectual game, competitive/cooperative game) was not specified, game preferences were not expected to influence self-promoting. Still, three participants (one child with HFASD, one typically developing adolescent and one adolescent with HFASD) were not interested in the game. Exclusion of these participants did not affect the comparability of the two groups with regard to age, gender ratio and verbal IQ (all  $t$ 's  $\leq 1.07$ ; all  $p$ 's  $\geq .29$ ).

## Procedure

These tasks were part of a longer battery of assessments. The interview was either conducted by a psychology graduate student or a PhD student. Because it was natural for the interviewer and child to get acquainted with each other at the very beginning of the interview, every session started with the baseline condition of real life self-presentation. To reduce transfer risk (e.g., learning) from one task to the other, all tasks were separated by at least 20 minutes, with the exception of the two conditions of hypothetical self-presentation. Thus, an hour after the real life baseline condition, the real life goal-directed condition started. After another 20 minutes this was followed by hypothetical self-presentation. In line with the Real Life Task, the baseline condition was always offered first. Children's responses were taped and transcribed.

## Coding

### Positive self-statements

In both the Hypothetical Task as well as the Real Life Task, all self-statements were counted and evaluated. A self-statement was defined as a self-referring sentence with 'I' as grammatical subject or other self-referring statement. Positive self-statements included positive affect (like, enjoy), abilities (good at something) or socially desirable attributes (being nice). For examples, please see Table 2.

### Strategic self-statements

Every positive self-statement in the goal-directed conditions was categorised as strategic or non-strategic. Strategic self-statements included those positive self-statements that were relevant to a particular preference of the audience. Hence, in the Hypothetical Task a self-statement was coded as strategic when it was a positive self-statement about animals. In the Real Life Task a self-statement was coded as strategic when it was a positive self-statement about games.

### Social justifications

Justifications of answers in the Hypothetical Task were coded as either social or non-social (other). In a social justification the importance of a social relationship with another peer is acknowledged.

### References to honesty or truth

In the Hypothetical Task, presence of one or more references to honesty or truth was coded.

## Results

### Positive self-statements in baseline versus goal-directed conditions

The percentage of positive self-statements was analysed using a 2 (Group: HFASD vs. TD)  $\times$  2 (Age: children vs. adolescents)  $\times$  2 (Task: Hypothetical vs. Real Life)  $\times$  2 (Condition: baseline vs. goal-directed) analysis of variance (for descriptive statistics, see Table 3). All participants expressed more positive self-statements in the Hypothetical Task than in the Real Life Task ( $F(1, 28) = 5.90, p < .05, d = 0.40$ ; 44% vs. 30%, respectively). As predicted, participants were more positive about themselves in the goal-directed conditions compared to the baseline conditions ( $F(1, 28) = 67.32, p < .001, d = 1.36$ ). Importantly, this effect did not interact with Group

**Table 2 Coding scheme of dependent variables**

Variable	Definition	Example	Interrater reliability <sup>a</sup>
Self-statement	Self-referring sentence with "I" as grammatical subject or other self-referring statement	'I am eight years old' 'My name is ...'	$\alpha = .95-.98$
Positive self-statement	Self-statement which includes a positive affect, abilities or socially desirable attributes	Positive affect: 'I like dancing' Abilities: 'I am really smart' Socially desirable attributes: 'I am kind to other children'	$\alpha = .68-.89$
Strategic self-statement	Positive self-statement that is relevant to the preference of an audience	Hypothetical Task: 'I love animals' Real Life Task: 'I like winning with monopoly'	$\alpha = .78-.88$
Non-strategic self-statement	Positive self-statement that is irrelevant to the preference of an audience	Hypothetical Task: 'I can make a good drawing' Real Life Task: 'I love airplanes'	$\alpha = .70-.96$
Social justification	Participant's justification of self-presentation where the importance of peer relations is acknowledged	'Because I want to be friends' 'So he can get along with me'	$\kappa = .50$
Reference to honesty or truth	Reference of the participant to being honest or truthful	'Because in real life that is really true' 'Because that's just the way it is, who I am'	$\kappa = .58$

a. Agreement between two independent raters was obtained for 63% of the self-statements (in the baseline and goal-directed condition of the Hypothetical Task and Real Life Task) and 100% of the social justifications and references to honesty or truth (in the Hypothetical Task). Social justifications and references to honesty and truth were coded as present (1) or absent (0), therefore kappa values were calculated.

**Table 3** Proportions of positive self-statements in baseline and goal-directed conditions averaged over Hypothetical and Real Life Task (range = 0–1)

Condition	Group							
	Children				Adolescents			
	HFASD (n = 7)		TD (n = 10)		HFASD (n = 9)		TD (n = 9)	
	M	SD	M	SD	M	SD	M	SD
Baseline	.15	.18	.07	.07	.23	.22	.33	.19
Goal-directed	.73	.24	.75	.26	.33	.19	.55	.20

( $F(1, 28) = 0.26, p > .10, d = 0.08$ ). Furthermore, an Age  $\times$  Condition interaction ( $F(1, 28) = 19.74, p < .001, d = 0.74$ ) emanated from adolescents' tendency to give more positive self-statements than children in the baseline condition ( $t(28) = 1.81, p = .08, d = 0.67$ ), whereas children gave far more such statements than adolescents in the goal-direction condition ( $t(28) = 4.10, p < .001, d = 1.34$ ). No other two-, three- or four-way interactions were found (all  $F \leq 1.29$ ; all  $p \geq .27$ ; all  $d \leq 0.19$ ).

### Strategic self-statements in goal-directed conditions

The percentages of all self-statements that were categorised as positive and strategic or positive and non-strategic, in the goal-directed conditions only, were analysed using a 2 (Group: HFASD vs. TD)  $\times$  2 (Age: children vs. adolescents)  $\times$  2 (Task: Hypothetical vs. Real Life)  $\times$  2 (Strategy: strategic vs. non-strategic) analysis of variance (for descriptive statistics, see Table 4). All participants expressed more positive self-statements in the Hypothetical

**Table 4** Proportions of strategic and non-strategic self-statements averaged over Hypothetical and Real Life Task (range = 0–1)

Condition	Group							
	Children				Adolescents			
	HFASD (n = 10)		TD (n = 9)		HFASD (n = 10)		TD (n = 9)	
	M	SD	M	SD	M	SD	M	SD
Strategic	.62	.21	.71	.32	.20	.16	.46	.17
Non-strategic	.14	.19	.04	.08	.18	.15	.09	.09

Task than in the Real Life Task ( $F(1, 37) = 4.39, p < .05, d = 0.30$ ; 67% vs. 51%, respectively). More importantly, participants used more strategic self-statements than non-strategic self-statements in the goal-directed conditions ( $F(1, 37) = 67.79, p < .001, d = 1.19$ ). A Group  $\times$  Strategy interaction ( $F(1, 37) = 8.41, p < .01, d = 0.42$ ) originated from the HFASD group expressing significantly more non-strategic self-statements ( $t(37) = 2.15, p < .05$  (one-tailed),  $d = 0.70$ ) and fewer strategic self-statements ( $t(37) = 1.96, p < .05$  (one-tailed),  $d = 0.64$ ) than the TD group, averaged over both tasks. Furthermore, an Age  $\times$  Strategy interaction ( $F(1, 37) = 15.96, p < .001, d = 0.58$ ) was observed: children in general expressed more strategic self-statements than adolescents ( $t(37) = 4.36, p < .001, d = 1.41$ ), but there was no age effect on non-strategic self-statements ( $t(37) = 0.91, p > .10, d = 0.14$ ). A Task  $\times$  Strategy interaction was produced ( $F(1, 37) = 14.76, p < .01, d = 0.56$ ), because in the Hypothetical Task all participants expressed relatively more strategic self-statements ( $t(37) = 3.41, p < .01, d = 0.55$ ) and fewer non-strategic self-statements ( $t(37) = 2.75, p < .01, d = 0.45$ ) than in the Real Life Task. Finally, a Group  $\times$  Task trend was found ( $F(1, 37) = 3.56, p = .07, d = 0.28$ ), because controls used more positive self-statements (strategic and non-strategic self-statements combined) than the HFASD group in the goal-directed condition of the Hypothetical Task ( $t(37) = 2.00, p = .05, d = 0.65$ ), while no such group difference was found in the goal-directed condition of the Real Life Task. However, because this finding was based on combined strategic and non-strategic statements, it was not informative about strategic self-presentation. No other two-, three- or four-way interactions were found (all  $F \leq 1.78$ ; all  $p \geq .19$ ; all  $d \leq 0.19$ ).

### **Social justifications**

In the Hypothetical Task, all participants were asked to explain their choice of self-description, and we tallied the number of participants providing one or more social justifications. Eleven of 20 participants with HFASD (55%) mentioned at least one social justification against 12 of 17 TD participants (71 %) ( $\chi^2(1) = 0.95, p > .10, \phi = .16$ ).

### **References to honesty or truth**

In the Hypothetical Task, we also tallied the number of participants providing one or more references to honesty or truth. Eleven of 20 participants with HFASD (55%) mentioned at least once their tendency to be honest or telling the truth, whereas only 3 of the 17 TD participants did (18%) ( $\chi^2(1) = 5.45, p < .05, \phi = .38$ ).

## Discussion

The present study adds to our understanding of a neglected aspect of self-related reasoning and behaviour in ASD samples. First of all, it must be noted that the HFASD group performed surprisingly well. Compared to typically developing controls, the children and adolescents with HFASD expressed a similar proportion of positive self-statements in the baseline conditions and they also showed an increase in positive self-statements in the goal-directed conditions. Yet, importantly, the present study also extends one of the key findings reported by Begeer et al. (2008). Compared to typically developing peers, children and adolescents with HFASD gave fewer self-descriptions that were specifically relevant for audience preferences. In other words, their self-presentation was less strategic than their typically developing peers.

Because the HFASD group did not differ from the control group in their increase of positive self-statements from baseline to goal-directed condition, the HFASD group does appear to be receptive to audience preferences when sufficiently motivated. This builds on mounting evidence that HFASD children are receptive to manipulations focused on personal gain (Begeer et al., 2003, 2006). There was no interaction of this effect with task, suggesting that the increase in positive self-descriptions was generated to a similar degree by a real life prize incentive and by a hypothetical social incentive (to be liked by a peer audience). Interestingly, the hypothetical context in general elicited relatively more positive self-statements than real interactions with an interviewer, which could be interpreted as an overestimation of real life behaviour. Typically developing controls were even more positive in the goal-directed condition of the Hypothetical Task compared to the children and adolescent with HFASD, while no such group difference was observed in the Real Life Task. Also, although in both types of tasks participants mentioned more strategic than non-strategic self-statements in the goal-directed conditions, this pattern was more pronounced in the Hypothetical Task than in the Real Life Task. An overestimation of real life behaviour may be influenced by a self-enhancement bias: the tendency for mentally healthy people to describe themselves more positively compared to a normative criterion (e.g., Taylor and Brown, 1988). Another possible reason for the less positive self-presentation in real life may be the distracting element of complex and ambiguous real life situations compared to clearly circumscribed hypothetical situations. However, the two tasks used in the present study were different in several important ways; hence, further research is needed to explore task differences more systematically.

Our analysis also showed that adolescents, both typically developing and with HFASD, were more positive than children in the baseline conditions,

but less positive than children in the goal-directed conditions. Nonetheless, it is important to note that both children and adolescents did significantly increase positivity in the goal-directed conditions. It seems possible that the specific content of the goals/preferences in the two tasks used in this study (prizes and liking animals) was effective in eliciting positive self-descriptions across the age range, but was relatively less effective in engaging the enthusiasm and motivation of adolescents compared to children. This could also explain why the children, who were expected to have less efficient self-presentation strategies than adolescents, actually expressed more strategic self-statements compared to the adolescents. Hence, no support was found for a developmental increase in strategic self-presentation, in either group. Future research should include an activity or goal that is empirically determined to be equally motivating for younger and older youths.

Contrary to the Begeer et al. (2008) study, there was no evidence for any group difference in positive self-statements. This may be due to the fact that in the present study, participants generally provided fewer positive self-statements in the baseline conditions, thus making it more difficult to find robust group differences. Furthermore, we did not find support for a specific developmental decline in positive self-perceptions within the HFASD group, because we did not find a Group  $\times$  Age interaction. However, because of the small sample size for each age group in this study, we advocate further research on this question.

Importantly, we also demonstrated that the lower levels of strategic self-promotion reported by Begeer et al. (2008) in HFASD children can be generalised to other self-presentation tasks and to a wider age range. Specifically, in the goal-directed conditions, individuals with HFASD expressed fewer strategic self-statements and more non-strategic self-statements than typically developing controls. The lower levels of strategic responding in the HFASD group, compared to typically developing controls, cannot be attributed to a different evaluation of the incentives for the two groups. As noted earlier, both children and adolescents with HFASD seemed to be broadly responsive to the goal-directed conditions, as shown by an increase in positive self-statements. Indeed, in the hypothetical situation, the basic motive of being liked by others was identified as often by the HFASD group as by the TD group. Other research also suggests that individuals with ASD have a comparable desire for friendships as evinced by feelings of loneliness (Bauminger and Kasari, 2000).

There may be an alternative explanation that helps to account for the low strategic score of the HFASD group, and the HFASD adolescents in particular. A closer look at the qualitative data of the Hypothetical Task showed that 4 of 11 adolescents with HFASD made it explicitly clear they

would not make strategic self-statements (e.g., 'I like cats'), because they considered it to be dishonest or false. Therefore, it seems some adolescents with HFASD do in fact know when self-promotion strategies are expected, yet are reluctant to change their self-presentation to the varying requirements of an audience. Indeed, statements that referred to being honest or telling the truth were found more often in the HFASD than the control group.

This pattern is thrown into sharp relief by existing research showing that typically developing adults are more likely to lie about themselves when instructed to self-promote in a dyadic conversation, than when they are only instructed to have a neutral conversation (Feldman et al., 2002): sixty percent of all participants indicated they had told at least one lie during a 10 minute conversation. Hence, individuals who find it hard to deceive, may also find it hard to self-promote. The difficulties of individuals with HFASD in deceiving others (e.g., Barbaro and Dissanayake, 2007; Yirmiya et al., 1996) may be the result of poor perspective-taking or Theory of Mind abilities (e.g., Baron-Cohen, 1992). Yet, some adolescents with HFASD clearly did comprehend how they could make a positive impression on an audience, but did not act accordingly. Hence, the perspective-taking skills of this group did not appear to be hampered. An alternative, socio-motivational explanation of less strategic self-presentation in individuals with HFASD – despite intact knowledge about self-presentation – lies in their tendency to rigidly stick to moral and social rules (e.g., Begeer et al., in press), even at the expense of possible self-presentational gains. A possibly heightened awareness of the norms and conventions of the general public (e.g., 'Lying is bad') may stem from a lack of superior focus on self- rather than other-related information (Henderson et al., 2009; Toichi et al., 2002). A socio-motivational explanation of this kind can also help us understand why this pattern may become more pronounced with age, since social norms are likely to become more internalised over the course of development.

The present study has some other important limitations that can be addressed in future work. First, as noted earlier, the specific choice of tasks in the present study was varied, because we aimed to evaluate the generalisability of the effects reported by Begeer et al. (2008). However, this diversity makes it somewhat difficult to draw conclusions about specific task features that influence self-presentational behaviour. There were some main effects of task in the present study, suggesting that future studies of situational variables that could influence self-presentation (e.g., adult vs. peer audience, social vs. non-social goal, audience preference) could be fruitful. All of these variables can also be examined in both real life and hypothetical contexts, but it must be acknowledged that precisely matched

real life and hypothetical contexts in a repeated-measures design will increase the risk of transfer effects from one task to the other.

Second, the sample size of the present study was rather small, which may have influenced the ability to detect subtle effects. A four-way ANOVA on data from such a small sample warrants some caution while interpreting the results. We did replicate a key finding of Begeer et al. (2008), but further investigations of other variables such as age and task may require a larger sample. Indeed, it would be helpful to have a more complete picture of the development of self-presentation in participants with HFASD. The present study has shed some light on the generalisability of self-presentational patterns across a wider age range than previously studied, but the gap between 10 and 16 years needs to be filled. Longitudinal research in particular would be valuable for determining how self-presentational patterns emerge in youths with autism. Finally, the present study did not directly assess the motivational and cognitive factors that could underpin self-presentation skills. What milestones does a child have to reach to make a successful self-presentation possible? Is this different for typically developing children and children with HFASD? In our discussion above, we have identified Theory of Mind, flexibility, deceptive skills, and motivation as potentially relevant, and these deserve systematic exploration in future research.

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