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Adult Judgments of Children's Veracity: The Role of Parenthood and Interpersonal Sensitivity

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Abstract

Background: Previous research has shown that parents perform better than non-parents in correctly identifying deception in children's testimony.

Objectives: To test the efficacy of different professionals in determining if a child is being truthful controlling for parental status.

Methodology: In an experimental study 4 groups of participants, police officers (n=45), teachers (n=42), social workers (n=44), and early childhood studies students (n=47), judged the accuracy of children's testimony in video recordings of 5 different children.

Results: Parents, particularly female parents, performed consistently at better than chance levels in correctly classifying children. Ethnicity had a negligible impact on performance. In addition those who performed best scored significantly higher on interpersonal sensitivity, and within parents those who correctly classified children scored higher on family sensitivity.

Conclusions: There appears to be something about the skills acquired as a parent in interacting with children that might usefully inform the training of those who have to make judgements about children's veracity.

Keywords: Child witness; Deception; Interpersonal Sensitivity; Family Sensitivity

Introduction

Identifying children at risk and protecting them is an essential element of the work of many practitioners in the caring and legal professions. However mistakes are costly particularly in terms of the resultant distress for the children and their families. Clearly it is important that children who are at risk are not overlooked, but it is equally important that children are not mistakenly identified and removed from the safe environment of their family.

Decisions often hinge on the evidence of the children themselves and may ultimately depend on adult's ability to recognise when children are not being accurate or truthful [1-3] suggest that adult's perceptions of children's credibility may be as important as actual accuracy in reaching a verdict. While there has been a reasonable amount of research looking at the broader issue of child witness testimony there has been relatively little looking at the issue of adult judgements of children's truthfulness.

Studies on detecting deception in adults suggest that rates of accuracy vary from 45% to 65% [4,5], and professionals who work in the criminal justice system do not perform any better than lay people [6]. Similar performance rates are observed in adult detection of children's deception [2,7] suggested from their study that parents did better than non-parents in correctly identifying when children were lying or being truthful in a series of video presentations. [8] carried out three experimental studies on participant's performance in judging the correctness of children's recall of a recent visit to the dentist. They found that participants were better at judging when children were correctly reporting the event and did less well when the children were incorrectly reporting details. Overall they found that parents and professionals who work with children performed better in all conditions. [9] looked at parents versus non-parents beliefs about the cues to deception in children using four different scenarios. Parents did have different beliefs from non-parents but both groups were aware that cues to deception could vary from situation to situation. Parents anticipated more 'shrugs' if children were lying, but interestingly they anticipated less 'touching mouth or face', 'gestures', 'pupil dilation', or 'increased speech rate'. The differences were small and may reflect the automaticity of the skill of detecting deception. When skills are perfected they become automatic and at this stage people often find it difficult to articulate exactly the individual elements of the skill.

The limited evidence that exists seems to suggest that experience of interacting with children is related to better performance in detecting deception or truthfulness. The Taylor and Hill-Davies study suggests that this ability may be related to sensitivity to physical cues associated with deception. Another perspective is that perhaps parents and experienced professionals working with children who are better at detecting deception are generally more sensitive in terms of interpersonal behaviour.

The Chahal and Cassidy [2] study provided some evidence of differences dependant on whether the target child was a boy or a girl. The social work group were better at detecting deception in the female target whereas teachers were better when the target was a male. In the adult literature there was a consistent gender [10] and ethnicity effect [11] in responses to offenders in the criminal justice system. The question remains as to whether gender or ethnicity has an impact on adult judgements regarding children's testimony.

The current study aimed at testing the ability of parents and professionals who work with children to detect deception and truthfulness in children from different gender and ethnicity. In addition it explored the role of interpersonal sensitivity in regard to performance.

Method

Participants and design

The study used an experimental design in which video-taped statements of 5 different children reporting on the same incident were played to a total of 178 participants in four groups, police officers, social workers, teachers, and early childhood studies students as set out in the demographics table below. The sample consisted of 50 males (mean age 30.2, Sd= 2.1) and 128 females (mean age 29.6, Sd =2.3), 91 parents (mean age 30.8, Sd=1.9) and 87 non-parents (mean age 28.9, Sd=2.0). The overall age range was 27-40 years with a mean age of 30.0. The sample was selected within a narrow age range in order to control for an age – experience effect. The sex distribution of parents was 28 males and 63 females and for non-parents 22 males and 65 females.

Apparatus

Videotaped recordings of 5 children all aged 8 years, 2 white males, 2 white females, and 1 black male. A black female initially recruited felt too shy to proceed and withdrew from the recording. The children were reporting on the same incident which they had watched on television. Each recording lasted for 5 minutes.

Participants were given a questionnaire designed to collect information on age, sex, and parental status. In addition they completed a twenty-item bipolar rating scale which included a question on whether or not the child was lying, a 16 item Inter-Personal Sensitivity Scale (IPSS), and those who were parents were asked to complete a Parental Communication Style Scale (PCSS). See Appendix for all scales used.

The **Inter-Personal Sensitivity Scale (IPSS):** This was a 16 item measure of interpersonal sensitivity measuring perceived style of social interaction. Each item was measured on a 5-point Likert scale from strongly agree to strongly disagree. The scale had been developed for another study [12]. Using Principal Component Analysis (PCA) and Varimax rotation into simple structure the scale collapsed into 6 factors accounting for 68% of the variance. Four factors were identified, labelled, and reliability tested; interpersonal skill (Cronbach Alpha = .75), eye-contact (Cronbach Alpha =.71), intrapersonal emotion (Cronbach Alpha = .89), and interpersonal emotion (Cronbach Alpha = .65). High scores on the scales indicate; interpersonal skill – more confident social interaction; eye-contact - more ease in engaging in eye-contact with others; intrapersonal emotion – in control of own emotions, and interpersonal emotion – comfortable in dealing with other's emotions.

The **Parental Communication Style Scale (PCSS):** This is a 7-item scale developed for the study to measure the level and depth of perceived communication of parents with children. The scale has a Cronbach Alpha of .79.

Procedure

The stimulus material was prepared by video recording the 5 children being interviewed by a researcher about a short television clip which they had just seen. They all saw the same clip and were asked the same questions by the interviewer. The recording showed the child from the waist up in order to capture facial expression and body movement. Just before being video taped two children, one white boy and one white girl, were asked to falsify some major aspects of the incident but were told that the aim was to convince anyone watching that they were telling the truth. They were each told which bits to falsify and had an opportunity to practice what they would say. The other three children were told to report accurately on the incident. Ethical approval and parental permission was obtained.

Participants watched all 5 clips which were presented in varied order to control for order effects. After watching each clip the participants were asked to complete the rating scale and indicate whether they thought the child was telling the truth or lying. They were told that some of the children may not be reporting truthfully and asked to make their judgement based simply on what they observed in each video recording.

At the end participants were asked to complete the IPSS, and if they were a parent, to complete the PCSS. They were then debriefed and thanked for their participation.

Results

The first stage in analysis was to test the relative performance of the police officers, teachers, social workers, and early childhood study students, in judging the veracity of the children. Using the cross tabulations procedure the frequencies shown in Table 1 were produced.

	Child 1 – White Female Lying		**Child 2 – White Male Truthful**		**Child 3 – White female truthful**		**Child 4 – White male lying**		**Child 5 – Black male truthful**	
	%Correct	%Incorrect	%Correct	%Incorrect	%Correct	%Incorrect	%Correct	%Incorrect	%Correct	%Incorrect
Police officer (n=24	37.5	62.5	54.2	45.8	45.8	54.2	54.2	45.8	37.5	62.5
Teacher (n=51)	58.8	41.2	64.7	35.3	56.9	43.1	54.9	45.1	37.3	62.7
Social worker (n=31)	41.9	58.1	41.9	58.1	41.9	58.1	38.7	61.3	41.9	58.1

Student (n=38)	47.4	52.6	55.3	44.7	47.4	52.6	63.2	36.8	52.6	47.4
Chi-square	3.89		4.08		2.01		4.19		2.42	
Cramer's V	.16		.17		.12		.17		.13	
Non-parent (n=94)	31.0	69.0	42.5	57.5	33.3	66.7	32.2	67.8	26.4	73.6
Parent (n=50)	75.4	24.6	75.4	24.6	73.7	26.3	86.0	14.0	66.7	33.3
Chi-square	27.18***		15.11***		22.43***		40.04***		22.83***	
Cramer's V	.43***		.33***		.40***		.53***		.40***	
White (n=100)	43.0	57.0	56.0	44.0	51.0	49.0	51.0	49.0	44.0	56.0
Black (n=44)	61.4	38.6	54.5	45.5	45.5	54.5	59.1	40.9	38.6	61.4
Chi-square	4.13*		0.03		0.38		0.80		0.36	
Cramer's V	.17*		.01		.05		.08		.05	
Male (n=39)	46.2	53.8	38.5	61.5	28.2	71.8	43.6	56.4	41.0	59.0
Female (n=105)	49.5	50.5	61.9	38.1	57.1	42.9	57.1	42.9	42.9	57.1
Chi-square	0.13		6.33**		9.53**		2.10		0.04	
Cramer's V	.03		.21**		.26**		.12		.02	
* p<.05 ** p<.01 *** p<.001										

Table 1: Percentage of correct and incorrect classification by group, parental status, ethnicity, and sex.

None of the groups differed significantly from any other in terms of ability to judge the accuracy of any of the children.

Previous research has suggested that parents might have an advantage in judging children's accuracy and this was tested using cross tabulations and is also shown in Table 1. Parents performed significantly better than non-parents in correctly classifying all children. Cramer's V shows that this was a robust effect.

There was only one significant effect for ethnicity (see Table 1) with black participants performing significantly better in correctly classifying child 1, a white female who was lying.

There was a significant effect for sex (see Table 1) with females performing significantly better than males in correctly classifying child 2 (a white male who was being truthful) and child 3 (a white female who was being truthful).

The fact there was one significant effect for ethnicity, and two for sex, raised the question if the parental status effect might be partially explained by sex or ethnicity interactions. Cross tabulations were used to test for sex, ethnicity, and parental status interactions, as shown in Table 2.

	Child 1 – White Female Lying		Child 2 – White Male Truthful		Child 3 – White female truthful		Child 4 – White male lying		Child 5 – Black male truthful	
	%Correct	%Incorrect	%Correct	%Incorrect	%Correct	%Incorrect	%Correct	%Incorrect	%Correct	%Incorrect
Male non-parent	31.8	68.2	27.3	72.7	13.6	86.4	22.7	77.3	40.9	59.1
Female non-parent	30.8	69.2	47.7	52.3	40	60	35.4	64.6	21.5	78.5
Chi-square	0.01		2.8		5.14*		1.21		3.17	
Cramer's V	0.01		0.18		.24*		0.12		0.19	
Male parent	64.7	35.3	52.9	47.1	47.1	52.9	70.6	29.4	41.2	58.8
Female parent	80	20	85	15	85	15	92.5	7.5	77.5	22.5
Chi-square	1.51		6.62**		8.86**		4.75*		7.08**	

Cramer's V	0.16		.34**		.39**		.29*		.35**	
White non-parent	25.4	74.6	42.4	57.6	35.6	64.4	27.1	72.9	27.1	72.9
Black non-parent	42.9	57.1	42.9	57.1	28.6	71.4	42.9	57.1	25	75
Chi-square	2.69		0.01		0.42		2.16		0.04	
Cramer's V	0.18		0.01		0.07		0.16		0.02	
White parent	68.3	31.7	75.6	24.4	73.2	26.8	85.4	14.6	68.3	31.7
Black parent	93.8	6.3	75	25	75	25	87.5	12.5	62.5	37.5
Chi-square	4.03*		0.01		0.02		0.04		0.17	
Cramer's V	.27*		0.01		0.02		0.03		0.06	
White male	40.7	59.3	44.4	55.6	22.2	77.8	44.4	55.6	44.4	55.6
White female	43.8	56.2	60.3	39.7	61.5	38.4	53.4	46.6	43.8	56.2
Chi-square	0.08		2		12.26***		0.64		0	
Cramer's V	0.03		0.14		.35***		0.08		0.01	
Black male	58.3	41.7	25	75	41.7	58.3	41.7	58.3	33.3	66.7
Black female	62.5	37.5	65.6	34.4	46.9	53.1	65.6	34.4	40.6	59.4
Chi-square	0.07		5.81*		0.09		2.07		0.19	
Significance	0.04		.36*		0.05		0.22		0.07	
* p<.05 ** p<.01 *** p<.001										

Table 2: Interaction effects in percentage of correct and incorrect classification for sex by parental status, ethnicity by parental status, and sex by ethnicity.

Sex does seem to interact with parental status with female parents performing significantly better than male parents in correctly classifying child 2, 3, 4, and 5. There was no sex by parental status effect for child 1. There was only one case where sex seemed to have a significant effect independent of being a parent and this was on child 3 where male non-parents performed significantly worse than female non-parents.

There was only one significant effect for ethnicity by parental status with black parents performing significantly better than white parents in correctly classifying child 1. There were no effects for ethnicity by non-parents indicating that any effect of ethnicity was not independent of being a parent.

There were two significant effects for sex by ethnicity with black females performing significantly better than black males in correctly classifying child 2, and white females performing significantly better than white males in correctly classifying child 3.

The next stage in analysis was to explore whether the factors of the IPSS could discriminate between those who performed better in classifying children correctly. A total performance score was calculated by adding together performance scores for each child. The performance percentages were, 0 correct = 9.7%; 1 correct = 24.3%; 2 correct = 22.2%; 3 correct = 16.7%; 4 correct = 4.9%; 5 correct 22.2%. A one-way analysis of variance was used to test for main effects on performance, parenthood, sex, and ethnicity. The means and standard deviations for this analysis are shown in Table 3.

	Total number of children correctly classified						Parenthood		Sex		Ethnicity	
	0	1	2	3	4	5	Non-parent	Parent	Male	Female	White	Black
Total sample	Mean(Sd)	Mean(Sd)	Mean(Sd)	Mean(Sd)	Mean(Sd)	Mean(Sd)	Mean(Sd)	Mean(Sd)	Mean(Sd)	Mean(Sd)	Mean(Sd)	Mean(Sd)
Interpersonal skill	23.2(4.1)	21.0(4.4)	21.2(4.7)	22.2(4.7)	21.9(4.8)	26.1(4.0)	21.4(4.5)	24.6(4.6)	21.9(4.3)	22.9(4.9)	22.9(4.6)	21.9(5.3)

Eye contact	10.8(3.2)	10.7(2.1)	11.3(2.5)	10.9(2.1)	10.3(2.7)	10.2(2.9)	10.7(2.4)	10.8(2.7)	11.5(2.6)	10.5(2.4)	11.1(2.5)	9.9(2.3)
Intra emotional control	6.1(1.2)	5.8(1.4)	6.1(1.5)	5.9(1.2)	6.0(1.1)	5.8(1.4)	5.9(1.4)	5.9(1.4)	6.1(1.2)	5.8(1.4)	5.8(1.4)	6.2(1.2)
Inter emotional control	6.3(1.9)	6.6(1.5)	6.5(1.5)	6.3(1.5)	7.7(1.3)	7.6(1.3)	6.7(1.5)	6.9(1.7)	6.6(1.6)	6.8(1.5)	6.9(1.6)	6.6(1.4)

Table 3: Means and standard deviations on the Interpersonal Sensitivity Scale factors by performance in correctly classifying children, parenthood, sex and ethnicity

There were significant main effects for performance on interpersonal skill (F (5,177) =5.70, p<.001), and on interpersonal emotional control (F (5,177) =3.85, p<.01). Post hoc analysis shows that those who got all five correct scored significantly higher on interpersonal skill than all others, and those who got 4 or 5 correct scored significantly higher than all others on interpersonal emotional control.

There was one main effect for parenthood on interpersonal skill (F (1,177) =16.91, p<.001). Parents scored significantly higher than non-parents.

There was one main effect for sex on eye contact (F (1,177) =4.89, p<.05), with males scoring higher than females, and one main effect for ethnicity on eye-contact (F (1,177) = 6.07, p<.05). A Multivariate Analysis of Variance (Manova) shows that there was a significant interaction between sex and ethnicity on eye contact (F (1,177) = 4.44, p<.05). While the difference between white females (x = 10.6, sd = 2.4) and black females (x = 10.1, sd = 2.5) was not significant, the difference between white males (x = 12.3, sd = 2.5) and black males (x = 9.7, sd = 2.1) was significant.

The final analysis involved looking at parent's scores on the Family Sensitivity Scale (FSS) by their performance in correctly classifying children. The total number of parents in the sample was 50 and using a total performance score (range 0-5) would have meant some cell sizes of 3 and 4 participants, hence performance was analysed for each child separately. The means and standard deviations for this are shown in Table 4.

	Correct		**Incorrect**	
	Mean (Sd)	Participant N	Mean (Sd)	Participant N
Child 1	18.5 (6.4)	36	17.1 (4.5)	14
Child 2	19.8 (6.1)	36	13.7 (2.1)	14
Child 3	19.6 (6.3)	35	14.5 (2.5)	15
Child 4	18.8 (6.1)	42	13.9 (2.9)	8
Child 5	19.9 (6.4)	31	15.1 (3.6)	19

Table 4: Means and standard deviations on Family Sensitivity by performance for each child for parents

There were significant main effects for parents on family sensitivity by performance in correctly classifying child 2 (F (1, 90) =13.13, p<.001), child 3 (F (1, 90) = 9.29, p<.01), child 4 (F (1, 90) = 5.19, p<.05), and child 5 (F (1, 90) = 8.95, p<.01). Those who correctly classified children scored higher on family sensitivity in all cases. There was no significant effect for child 1, although the direction of difference in means scores favored the successful performance.

Discussion

The findings from this study support several previous studies [2,8] in showing that while different professional groups do not perform at greater than chance levels in correctly judging the accuracy of children's testimony those who have children of their own do show a significant advantage in performance. Parents performed at significantly greater than chance levels in correctly classifying all of the enrolled children. The replication of this finding further confirms the idea that experience with children provides the best basis for training in identifying cues to deception. Ethnicity or gender of child does not seem to play a role in judgements made with participants performing similarly across all 5 children. Ethnicity did have one small effect in that black participants performed significantly better than white participants in correctly classifying child number one, a white female who was lying. The relative size of Cramer's V for this effect was small at .17 compared to the lowest Cramer's V for parent effect at .33. Gender also had a small effect with females performing significantly better than males in correctly classifying child 2 (a white male who was truthful) and child 3 (a white female who was truthful). Further analysis of the effect of sex and parenthood together on performance shows that while male parents do perform at better than chance levels the larger performance effect is for female parents. In essence it appears that the most effective performances (as shown in Table 2) in correctly classifying children are for females who are also parents. Ethnicity interacted with parenthood in only one case with black parents exhibiting superior performance in classifying child 1. Ethnicity also interacts with sex in two cases. White females showed a superior performance to white males on child 3 and black females performed significantly better than black males on child 2. The main conclusions so far are that while the parent effect found in previous studies is replicated, this is largely dependent on sex, with female parents being most effective.

Previous research [9] has shown some differences between parents and non-parents in their beliefs about cues to deception which might go some way towards explaining the superiority of parents in correctly classifying children. This would support an argument that perhaps parents are more sensitive to interpersonal cues and perhaps more interpersonally sensitive per se. This would be supported by the findings in this study that those who performed better in successfully classify at least 4 of the children differed significantly from their peers on two dimensions of the IPSS, interpersonal skill and interpersonal emotional control. The argument is that those who are more effective in interpersonal situations do seem to be better able to judge the

accuracy of children's testimony. Interestingly while parents differed significantly from non-parents on interpersonal skill, they did not differ on interpersonal emotional control. Since this was a self-report measure we are looking at participant perceptions of their own inter personal skill and we therefore need to be careful in drawing strong conclusions. However, in combination with other research it does suggest that there may be areas around interpersonal perception that could be usefully drawn on in training those who deal with children in the criminal justice system.

Further to interpersonal sensitivity this study measured self reported family sensitivity in parents. While the overall number of parents was only fifty, those who correctly classified each of the children scored significantly higher than those who did not on family sensitivity. In essence, although again it is a self-report measure, it attempts to measure openness to interpersonal communication within the family and one would logically expect this would relate to an ability to identify deception in children. This provides further support for the argument that sensitivity to interpersonal cues may provide a useful basis for training child witness experts.

References

1. Akehurst L, Kohnken G, Vrij A , Bull R (1996) Lay person's and police officers' beliefs regarding deception behaviour. Applied Cognitive Psychology 10: 461-471.
2. Chahal K, Cassidy T (1994) Deception and its detection in children: A study of adult accuracy. Psychology, Crime and Law 1: 237-245.
3. Castelli P, Goodman GS, Ghetti S (2005) Effects of interview style and witness age on perceptions of children's credibility in sexual abuse case. Journal of Applied Social Psychology 35: 297–317.
4. DePaulo BM, Stone JL, Lassiter GG (1985) Deceiving and detecting deceit: In B. R. Schlenker (Edn.,). The self and social life. New York McGraw-Hill.
5. Vrij A (2000) Detecting lies and deceit. Chichester, Wiley.
6. Bond CF Jr, Omar A, Pitre U, Lashley BR, Skaggs LM, et al. (1992) Fishy-looking liars: deception judgment from expectancy violation. Pers Soc Psychol 63: 969-977.
7. Ceci SJ, Bruck M (1995) Jeopardy in the courtroom: A scientific analysis of children's testimony. Washington DC, American Psychological Association.
8. Ball CT, O'Callaghan J (2001) Judging the accuracy of children's recall: a statement-level analysis. See comment in PubMed Commons below J Exp Psychol Appl 7: 331-345.
9. Taylor R, Hill-Davies C (2004) Parents' and non-parents' beliefs about the cues to deception in children. Psychology, Crime & Law 10: 455-464.
10. Gowan M A, Zimmerman R A (1996) Impact of ethnicity, gender, and previous experience on juror judgements in sexual harassment cases. Journal of Applied Social Psychology 26: 596-617.
11. Lindholm T (2005) Group-based biases and validity in eye-witness credibility judgements: Examining effects of witness ethnicity and presentation modality. Journal of Applied Social Psychology 35: 1474-1501.
12. Cassidy T, Wills E (1999) Unpublished Thesis. Coventry University.