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Beliefs About Factors Affecting the Reliability of Eyewitness Testimony: A Comparison of Judges, Jurors and the General Public

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SUMMARY

We surveyed 164 members of the juror pool of the Court of Appeal and a representative sample of 1000 adult Norwegians without juror experience, about their knowledge and beliefs about eyewitness testimony, and compared their answers to a prior survey of Norwegian judges. Although the judges were somewhat more knowledgeable than jurors and the general public, all groups had limited knowledge of eyewitness testimony. Juror experience, in terms of number of times serving as juror, did not correlate with eyewitness knowledge. Consistent with this finding, the knowledge scores of the jurors were similar to the scores of the general public, tested with an abridged seven-item version of the questionnaire. Comparisons with the results of surveys conducted in the US, indicate similar levels of knowledge among law professionals and jurors in the two countries. Increasing the knowledge of eyewitness testimony among the principal participants in the judiciary system may be an important component of the solution to eyewitness error. Copyright © 2009 John Wiley & Sons, Ltd.

Errors made by eyewitnesses contribute to wrongful convictions in an alarmingly high proportion of cases (Saks & Koehler, 2005; Scheck, Neufeld, & Dwyer, 2000; Wells, Memon, & Penrod, 2006); according to the most recent statistics such errors are involved in 75% of the DNA exoneration cases tracked by the Innocence Project.[1] While most eyewitness errors in these cases represent mistaken person identifications, eyewitnesses also report about events, physical action and conversations. Eyewitness errors cannot be eliminated but the impact of such errors in criminal trials might be reduced if the principal participants in the criminal justice system were aware of eyewitness fallibility, of the limitations of human perception and memory and the factors that may distort these processes (Schacter, 2001). Knowledge about such factors might make judges and jurors look with sceptical eyes at the truly extraordinary memory feats that are sometimes presented in court:

> In 1984, Thomas Campbell and Joseph Steele were sentenced to life imprisonment for armed assault and for murdering six people. In what is known as the Ice Cream Wars in

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[1]http//www.innocenceproject.com

Glasgow in the 1980s, there was a fierce competition for the most lucrative runs of ice cream vans with intimidations and violence employed by rival vendors. Campbell and Steele were convicted for shooting in the windows of the van owned by Andrew 'Fat Boy' Doyle and for later setting his house on fire, resulting in the death of Fat Boy and five of his family members, including a baby. There was no evidence that the men had been at the site of crime, the case rested on the testimonies of four police officers who attended at Campbell's home in execution of a petition warrant that concerned the shooting, and who claimed to have overheard a remark by Campbell, 'I only wanted the van windows shot up. The fire at Fat Boy's was only meant as a frightener which went too far'. Campbell denied having made such a statement, but the confident testimonies by the police officers obviously impressed the court. But it was precisely this point that worried the Scottish Criminal Case Review Commission.[2] The commission noted that the police officers' accounts of the remark were identical, despite claims that they had not compared notes, and asked, what is the probability that four witnesses remember, in identical wording, a remark consisting of 23 words dropped under such conditions? The commission engaged a cognitive psychologist who conducted two experiments, in which he tested the ability of witnesses to remember Campbell's alleged statement after being presented with a recording made with a Glasgow accent. None of the participants, including 14 Scottish police officers, were able to remember the statement verbatim, and the majority of the participants remembered less than half the statement. The commission referred the case to the Scottish Appeal Court, the High Court of Justiciary, which decided that the evidence had been fabricated, and in 2004 quashed the convictions of Campbell and Steele.[3]

Would a judge or a jury with sufficient knowledge about the imperfections of eyewitness (or, in this case, earwitness) memory be less convinced of the truthfulness of the police officers' testimonies in the Campbell case? We do not know, but it is obvious that knowledge of such factors is important in preventing wrongful convictions.

What do the major players in the judicial system know about the limitations of human perception and memory, and the factors that might affect the reliability of eyewitness testimony? Confirming and extending the results of a number of early studies on US (Deffenbacher & Loftus, 1982), Canadian (Yarmey & Jones, 1983), British (Noon & Hollin, 1987) and Australian (McConkey & Roche, 1989) samples of respondents (see review by Benton, McDonnell, Ross, Thomas, & Bradshaw, 2007) recent surveys of jury eligible laypersons (Benton, Ross, Bradshaw, Thomas, & Bradshaw, 2006; Durham & Dane, 1999; Read & Desmarais, 2008; Schmechel, O'Toole, Easterly, & Loftus, 2006) and legal professionals (Benton et al., 2006; Granhag, Strömwall, & Hartwig, 2005; Magnussen, Wise, Raja, Safer, Pawlenko, & Stridbeck, 2008; Melinder, Goodman, Eilertsen, & Magnussen, 2004; Wise & Safer, 2004; Wise, Pawlenko, Meyer, & Safer, 2007) suggest that such knowledge is not common sense, despite frequent claims to the contrary (Benton et al., 2007; Stuesser, 2005). Magnussen et al. (2008) and Wise and Safer (2004) asked US and Norwegian judges ($n \approx 160$ in each sample) a wide range of questions about factors known to affect eyewitness accuracy, selecting issues which frequently occur in criminal trials and whose influence on eyewitness accuracy is supported by strong

[2]In three European countries, England, Scotland and Norway, appeals are referred to the court by an independent commission. The commission reviews the evidence, evaluates new evidence and conducts further investigations if necessary.
[3]www.scotcourts.gov.uk/opinions/XC956.html

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Table 1. Eyewitnesses topics and statements

Topics	Statements
1. Effects of a hat	It is significantly harder for a witness of a crime to recognize a perpetrator who is wearing a hat during the commission of a crime than a perpetrator who is not wearing a hat.
2. Minor details	A witness's ability to recall minor details about a crime is a good indicator of the accuracy of the witness's identification of the perpetrator of the crime.
3. Attitudes and expectations	An eyewitness's perception and memory for an event may be affected by his or her attitudes and expectations.
4. Conducting lineups	A police officer who knows which member of the lineup or photo array is the suspect should not conduct the lineup or photo array.
5. Effects of post-event information	Eyewitness testimony about an event often reflects not only what a witness actually saw but information obtained later on from other witnesses, the police, the media, etc.
6. Confidence-accuracy	At trial, an eyewitness's confidence is a good predictor of his or her accuracy in identifying the defendant as the perpetrator of the crime.
7. Confidence malleability	An eyewitness's confidence can be influenced by factors that are unrelated to identification accuracy.
8. Weapon focus	The presence of a weapon can impair an eyewitness's ability to accurately identify the perpetrator's face.
9. Mug-shot-induced bias	Exposure to mug-shots of a suspect increases the likelihood that the witness will later choose that suspect from a lineup.
10. Lineup presentation format	Witnesses are more likely to misidentify someone in a culprit-absent lineup when it is presented in a simultaneous (members of a lineup are present at the same time) as opposed to a sequential procedure (members of a lineup are presented individually).
11. Forgetting curve	The rate of memory loss for an event is greatest right after the event and then levels off over time.
12. Attorneys' knowledge	Attorneys know how most eyewitness factors affect eyewitness accuracy.
13. Jurors' knowledge	Jurors know how most eyewitness factors affect eyewitness accuracy.
14. Jurors distinguish eyewitnesses	Jurors can distinguish between accurate and inaccurate eyewitnesses.
15. Impact of stress	Very high stress at the time of observation has a negative effect on the accuracy of testimony.
16. Conviction solely on eyewitnesses statement	Only in exceptional circumstances should a defendant be convicted of a crime solely on the basis of eyewitness testimony.

empirical evidence (Deffenbacher, Bornstein, Penrod, & McGorty, 2004; Kassin, Tubb, Hosch, & Memon, 2001; Wells & Olson, 2003). The questionnaire of Magnussen et al. (2008) contained 15 eyewitness statements (listed in Table 1), including eight statements from Kassin et al.'s (2001) survey of eyewitness experts, representing issues on which expert agreement was very high. Using the expert's answers as a 'gold standard' of current scientific knowledge, the results showed that both US and Norwegian judges have limited knowledge of eyewitness factors, with Norwegian judges being slightly more knowledgeable than US judges. For example, a majority of judges believed that the recall of minor details was a good indicator of accuracy, did not know that eyewitness confidence at trial was not a good indicator of eyewitness accuracy, and were unaware of the course of

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normal forgetting. The results of Benton et al. (2006), who tested a smaller sample of US judges, were comparable.

The judges in the Magnussen et al. (2008) and Wise and Safer (2004) surveys were also asked to indicate for a subset of the questions how they believed the average juror would answer the eyewitness statement. Interestingly, the judges, many of themselves with limited knowledge of eyewitness psychology, believed that jurors would know even less. Thus, in this respect the judges, as a group, considered themselves experts compared to jurors. Benton et al. (2006) surveyed a sample of potential jurors in rural Tennessee and the results confirmed the judges' opinions, indicating that the average juror does in fact know less about eyewitnesses than does the average judge.

In the Benton et al. (2006) study, the juror sample consisted of persons who had responded to a jury summons; thus is not clear how many had actually served as jurors, and if so, how many times. It is possible that serving on a criminal trial would make a juror more sensitive to the fallibility of eyewitness testimony and less relying on psychological folklore. In the present paper, we have distributed the questionnaire used by Magnussen et al. (2008) and Wise and Safer (2004), to a large sample of jurors from the juror pool of the largest court district in Norway, the size, gender and age composition of this sample being quite similar to the sample of judges (Magnussen et al., 2008).

The Norwegian judicial system is a combination of the US system wherein laypersons decide under a unanimity or non-unanimity rule and the Western European escabinado system (Martin, Kaplan, & Alamo, 2003) in which laypersons and judges together decide verdict and sentence. In Norway, 10-member lay juries are used by the Court of Appeal ('lagmannsretten') in serious crimes with a penal framework of more than 6 years imprisonment, and juries report a guilty verdict by 'more than six votes', which may reflect unanimity or one to three dissenting members; the proceedings are secret and not publicly disclosed. Potential jurors are appointed for a period of 4 years with a possibility of successive reappointments and many of them serve on several trials; we are therefore able to evaluate the importance of trial experience.

In the present study, we have also asked a representative sample of 1000 adult Norwegians a selected set of questions from the questionnaire. We can therefore compare the knowledge of judges (Magnussen et al., 2008) and jurors to the wisdom of psychological folklore. Assuming that trial experience alerts people to eyewitness factors, we hypothesized that as a group, experienced jurors would score higher than the general public but perhaps lower than the judges on items that estimate their level of knowledge in regard to eyewitness issues.

METHODS

Survey of jurors

Participants

The jurors were requested to answer a brief questionnaire on eyewitness testimony distributed by mail to 300 members of the juror pool of the Borgarting Court of Appeal ('lagmannsrett'), and followed up by a reminder after 2 weeks. We obtained completed questionnaires from 168 jurors. There were 57% male and 43% female jurors ranging in age from 21 to 80 years ($M = 51.90$, SD = 13.79), with juror experience varying from 0 to 25 years ($M = 4.89$, SD = 3.99), and serving on zero to 17 trials ($M = 2.27$, SD = 2.52) with a median of five times.

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The results for the jurors are compared to the results for a sample of Norwegian judges (Magnussen et al., 2008). The sample consisted of 157 judges (33% female, 67% male judges), age 28–69 years ($M = 50.23$ years). Thus, the gender and age compositions of the two samples are roughly comparable. The judges had been on the bench for an average of 9.11 (SD = 6.72) years, and practiced law for an average of 13.65 (SD = 7.21) years. Of the judges who participated in the survey, 80.1% were trial judges at the District Court ('tingretten') and 19.9% were appellate judges at the Court of Appeal ('lagmannsretten').[4] The judges responded to a questionnaire distributed electronically on the internet, by the Administration of Norwegian Courts ('Domstoladministrasjonen'). The sample constituted 32.3% of all Norwegian judges, which is a relatively high percentage considering that many judges were probably unfamiliar with electronic formats.

Materials and procedures

The questionnaire was based on the questionnaire developed by Wise and Safer (2004), adapted to the Norwegian judicial system by Magnussen et al. (2008). The jurors were asked to: (a) respond to 16 statements, shown in Table 1, and (b) provide the personal background information that was summarized in the preceding paragraph. Twelve of the statements were directly concerned with factors affecting eyewitnesses, three of the statements concerned the respondents' opinions about the knowledge of attorneys and judges, paralleling the questions asked judges about juror knowledge (Magnussen et al., 2008; Wise & Safer, 2004) and the final statement probed the willingness to convict based solely on eyewitness statements. Statements 3 and 4–11 are taken from Kassin et al. (2001), statements 1, 2 and 15 represent issues on which the empirical evidence for the correct answer is quite strong (Deffenbacher et al., 2004; Wells & Olson, 2003). Magnussen et al. (2008) and Wise and Safer (2004) compared the responses of US and Norwegian judges to the responses of the eyewitness experts. Because of the different purposes of the surveys and the different roles of the respondents, the judges—and in the present study jurors—and experts answered slightly different questions about the statements (see Wise & Safer, 2004). The Kassin et al. (2001, p. 407) experts indicated whether an eyewitness statement was 'reliable enough for psychologists to present in courtroom testimony'. Our respondents indicated whether they agreed or disagreed with a statement (statements 1–6, 12–16), or whether they believed the statement to be generally true or generally false (statements 7–11).[5]

Population survey

The population survey was carried out by OPINION, a major Norwegian survey research company, in March 2007. A total of 1000 participants were tested. The survey was conducted as a telephone interview, and interviews were completed within a 3-day period. The survey was embedded in a larger survey which, depending upon the subscribers of that month, might also probe a number of other topics such as political preferences, holiday habits, opinions on current television programmes, attitudes towards foreigners and so on. The eyewitness survey occupied one section in the general survey and was introduced as a

[4]In Norway, judges handle both criminal and civil cases.

[5]The Kassin et al. (2001) experts did not agree about the impact of stress on the accuracy of testimony (statement 15), but a recent meta-analysis (Deffenbacher et al., 2004) clearly demonstrated the negative impact of extreme stress at the time of crime on later accuracy. The statement was therefore included in the Magnussen et al. (2008) and the present surveys.

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survey of knowledge and opinions about eyewitnesses. The respondents were selected according the company's standard sampling procedures and form a representative sample of the adult Norwegian population between 18 and 85 years of age. Several background variables were recorded, such as gender, age, education and geographical location. The format of the survey has the advantage that the findings, presented as estimated population distributions weighted with respect to gender and age, have an estimated deviation of ±1.4–3.3% from the actual population distributions. The disadvantage is the restricted time allotted to each subscriber and each question. We therefore selected seven statements from Table 1, statements 2, 3, 5, 6, 8, 11 and 15, rephrased to fit the telephone interview format. All questions were presented in Norwegian.

RESULTS

Comparison of jurors and judges

We first report the jurors' responses to the 12 statements about eyewitness factors and the four related questions. Magnussen et al. (2008) found for Norwegian judges, as did Wise and Safer (2004) for US judges, that judges on the average scored lower than the gold standard provided by the Kassin et al. (2001) experts. A preliminary analysis of the results indicated that the scores of the jurors were lower than the scores of the judges for 10 of the 12 eyewitness statements. Therefore, jurors are not compared with the experts, as any significant difference between jurors and judges would automatically turn up as even larger and significant in juror—expert comparisons. In Table 2, the responses of the jurors are compared with the responses of the Norwegian judges, taken from Magnussen et al. (2008,

Table 2. Distribution of the responses of jurors ($n = 164$) and judges ($n = 157$) to eyewitnesses statements (%)

Topic		Jurors	Judges	Jurors	Judges	Jurors	Judges
		Agree		Neither		Disagree	
1.	Effects of hat	77*	55	18	34	5	11
2.	Minor details	62	30	23	40	15*	31
3.	Attitudes and expectations	89*	98	8	1	4	1
4.	Conducting lineups	76*	83	18	9	5	8
5.	Post-event information	78*	94	17	6	5	0
6.	Confidence-accuracy	48	22	29	48	23*	31
		Generally true		Generally false		Don't know	
7.	Confidence malleability	62*	85	7	1	31	14
8.	Weapon focus	47*	68	22	5	31	27
9.	Mug-shot bias	71*	84	7	3	22	13
10.	Lineup presentation	33*	38	26	7	42	55
11.	Forgetting curve	40*	51	39	24	21	25
		Agree		Neither		Disagree	
12.	Attorneys' knowledge	53	12	24	41	22	47
13.	Judges' (jurors') knowledge	59	3	23	24	18	73
14.	Judges (jurors) distinguish eyew.	14	8	43	52	43	40
15.	Stress impairs accuracy	79*	70	18	19	3	11
16.	Convictions solely from eye witnesses	42	36	18	32	40	32

Correct answer is indicated by *.

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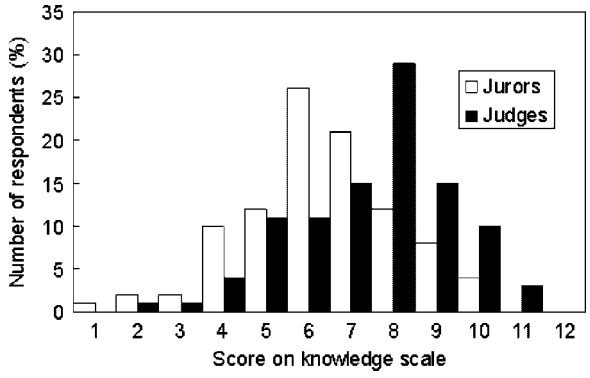

Figure 1. Distribution of scores on the knowledge scale in the samples of jurors and judges

Table 2); for each statement the correct answer is indicated by an asterisk, except for statements 12–14 and 16 where correctness cannot be decided.

The percentage of jurors giving what we deemed to be the correct answer ranged from 15 to 89% with an average score 57.5% correct; the corresponding results for the judges were 31–98% and an average of 65.7%. We next calculated for each juror the total number of correct responses for 12 of the statements (1–11, 15). Figure 1 shows the distributions of scores on this knowledge scales in the samples of Norwegian jurors and judges. The distribution of scores in the sample of jurors is shifted downwards compared to the distribution in the sample of judges, with a peak at six correct answers for the jurors and eight correct answers for the judges. When the knowledge scale was entered as a dependent measure into an ANOVA, the results confirmed that judges ($M = 7.37$, SD = 1.91) were superior to jurors ($M = 6.24$, SD = 1.87), $F(1,323) = 28.73$, $p < .001$, $\eta^2 = .08$.

A further inspection of Table 2 shows that jurors' have a generally higher opinion of the level of knowledge among attorneys and judges than the judges' have about jurors and attorneys, with more than half of the jurors responding that both professional groups know how most eyewitness factors affect eyewitness accuracy. Thus, in the eyes of jurors, judges and attorneys are both eyewitness experts.

Reliability of eyewitness testimony and its effects on erroneous convictions

To assess the jurors' view of the reliability of eyewitness testimony, we asked whether they agreed or disagreed with the following statement (16): 'Only in exceptional circumstances should a defendant be convicted of a crime solely on the basis of eyewitness testimony'. The responses are fairly evenly distributed between the categories, indicating no obvious scepticism towards eyewitness testimony in either sample.

Correlates of jurors' knowledge of eyewitness testimony

Magnussen et al. (2008) and Wise and Safer (2004) found that number of years of legal practice was not related to scores on the knowledge scale among judges. A multiple regression of the present juror sample confirmed these results and showed that neither gender, age nor prior experience (as defined by number of times on jury duty) did predict

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Table 3. Responses to seven eyewitnesses statements in the adult population ($n = 1000$, representative sample); corresponding values of the juror sample ($n = 164$) in brackets

Topic	Agree	Neither	Disagree
2. Minor details	56 (62)	24 (23)	16 (15)*
3. Attitudes and expectations	82 (89)*	9 (8)	7 (4)
5. Post-event information	75 (78)*	14 (17)	8 (5)
6. Confidence-accuracy	60 (48)	24 (29)	13 (23)*
15. Stress impairs accuracy	84 (79)*	8 (18)	7 (3)
	Generally true	Generally false	Don't know
8. Weapon focus	67 (47)*	23 (22)	10 (31)
11. Forgetting curve	55 (40)*	31 (39)	14 (21)

Note: The general population was asked seven questions during their phone interview. Numbers in front of topic correspond to the number in Table 1. Correct answer is indicated by *.

accuracy on the knowledge scale, age, $t = 1.84$, $\beta = .14$, $p = .07$; gender, $t = -1.42$, $\beta = -.11$, $p = .16$; experience, $t = -1.76$, $\beta = -.14$, $p = .08$.

We next analysed the relationship between knowledge of eyewitness factors as measured by the knowledge scale, and the belief that convicting a defendant solely on the basis of eyewitness testimony should occur only in exceptional circumstances (eyewitness statement 16). We found a weak and non-significant association, $r = -.08$, $p = .28$. Thus, greater knowledge of general eyewitnesses factors was, in general, not associated with a more critical assessment of the value of eyewitness testimony. The results for Norwegian judges (Magnussen et al., 2008) showed a similarly weak, but significant correlation between the knowledge scale and statement 16, $r = -.16$, $p < .05$.[6]

Comparison of jurors and the general public

To evaluate the possible effect of being alerted to questions of the reliability of eyewitness testimony by being called to jury duty, and to provide a psychological folklore reference to these questions, we had a representative sample of 1000 adult Norwegians respond to seven of the eyewitness statements of Table 1. The results are shown in Table 3, together with the corresponding answers of the juror sample. The percentage of the general public giving a correct answer on the items probed was 56%, the corresponding value for the seven statements was 53% for the jurors. In general, age, gender or level of education did not affect the distribution of responses. The notable exceptions to this are the distributions of responses to statements 3 and 5 where the percentage of correct answers were proportional to years of education of the respondent, increasing on statement 5 (effect of post-event information) from ≈61% correct for respondents who had completed elementary school to ≈80% correct for respondents with university degrees or equivalent, and from ≈65 to ≈92% on statement 3 (effect of attitudes and expectations). An inspection of Table 3, indicates, however, no systematic differences between the samples; the general public is as knowledgeable about factors affecting eyewitness testimony as are citizens serving on jury duty.

[6]The correlation is negative because the responses 'strongly agree' and 'agree' were assigned values 1 and 2, respectively, on a five-point Likert scale for statement 16. The correlation in the sample of judges is somewhat weaker than reported by Magnussen et al. (2008) because of fewer items on the knowledge scale.

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DISCUSSION

Several recent surveys have found that knowledge about factors that affect the reliability of eyewitnesses is not impressively high among professionals in the judiciary systems in Europe and USA (Benton et al., 2006; Granhag et al., 2005; Magnussen et al., 2008; Wise and Safer, 2004; Wise, Pawlenko, et al., 2007) when compared to eyewitness experts (Kassin et al., 2001), but that the knowledge scores of law professionals are higher that the scores of potential jurors (Benton et al., 2006). The results of the present study confirm this, and further show that there is no correlation between the numbers of times serving on jury duty and knowledge about eyewitness factors. This finding parallels the results of the previous studies of Norwegian and US judges (Magnussen et al., 2008; Wise & Safer, 2004), that number of years on the bench does not correlate with the eyewitness knowledge. Consistent with this finding, and contrary to the hypothesis that trial experience alerts jurors to the pitfalls of eyewitness testimony, the knowledge scores of the jurors were comparable to the scores of the general public, as tested in a large representative sample of the Norwegian adult population.

Despite the differences in the judicial systems of Norway and US, and in the recruitment procedures of judges and jurors (Magnussen et al., 2008), judges and jurors in the two countries score at comparable levels of knowledge about eyewitness factors, and the knowledge of the judges is not much ahead of the knowledge of the jurors and the general public. In fact, the average knowledge score of the Norwegian jurors (57.5%) is slightly better that the scores of the US judges (55%, Wise & Safer, 2004). It should also be noted that on the subset of questions testing the general public, the Norwegian jurors scored at the same level of the general public. It is interesting to note, however, that Wise et al. (2007) found, for a large sample of experienced defence attorneys, an knowledge score of 78% correct on the 12 eyewitness statements, which is well above the scores of both the judges and jurors in the present study, and the results for the US judges (Wise & Safer, 2004). However, also among the defence attorneys, the relationship between eyewitness knowledge and years of practice was very weak (Wise et al., 2007). This suggests that it is the role of the defence attorneys in the criminal proceedings—the siding with the defendant—that leads to an enhanced awareness of eyewitness errors in this professional group.

Jurors know less about eyewitness factors than do judges but the difference is not very large, by 8% points on the knowledge scale based on the responses to the 12 eyewitness statements. The eyewitness knowledge among jurors and the general public is better than expected by both experts and judges. The experts surveyed by Kassin et al. (2001) were also asked to indicate for each statement whether 'most jurors believe this statement to be true as a matter of common sense', and the judges in the Magnussen et al. (2008) and Wise and Safer (2004) studies were asked to indicate for a subset of the statements how they believed jurors would answer. Table 4 compares these beliefs with the actual scores of the present sample of jurors, showing that even if the knowledge of the jurors is inferior to that of the judges, and certainly to the experts, they score much better than believed by these two professional groups. For the statements overlapping the Kassin et al. (2001) survey, the mean juror score in the Norwegian sample was ≈57.5% correct, which compares with the results of Benton et al.'s (2006) sample of potential jurors on the same issues (≈55% correct), whereas a minority of experts (≈20%) expected a correct juror answer to the questions. As the results for the general public in the present study compares with the results of the jurors, we may conclude that knowledge about witness factors is,

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Table 4. Jurors' knowledge compared with beliefs about jurors' knowledge among experts (Kassin et al., 2001) and judges (Magnussen et al., 2008)

Topic	Jurors' score (%)	% judges believing jurors know	% experts believing jurors know
3. Attitudes and expectations	89		31
5. Post-event information	78		17
6. Confidence-accuracy	23		5
7. Confidence malleability	62	20	10
8. Weapon focus	47	21	34
9. Mug-shot bias	71	40	13
10. Lineup presentation form	33	15	0
11. Forgetting curve	40	20	29
15. Stress impairs accuracy	79		37

perhaps, a little more common sense that believed by experts and judges. Read and Desmarais (2008) reached a similar conclusion based on a survey of a Canadian sample. On the other hand, a majority of the jurors believed that judges and attorneys are knowledgeable of eyewitness factors, although they are uncertain whether judges are able to distinguish between accurate and inaccurate witnesses. Thus, in the eyes of most jurors judges are assigned an undeserved role of eyewitness expert.

It is a little alarming that relevant criminal trial experience did not correlate, or correlated weakly, with knowledge of eyewitness errors among judges (Magnussen et al., 2008; Wise & Safer, 2004), defence attorneys (Wise et al., 2007) and jurors (present study). Wise, Dauphinais, and Safer (2007) have recently proposed a tripartite solution to cope with the potentially damaging effect of limited knowledge of eyewitness errors. Two components of the solution are, first, permitting eyewitness expert testimony when the case leans heavily on eyewitnesses and, second, education of the principal participants of the criminal system. The first part of the solution might be controversial. In USA, there are many examples that courts rule eyewitness expert testimony inadmissible for a variety of reasons, eyewitness knowledge as common sense being one (Benton et al., 2007). In Norway, the court may likewise rule expert testimony inadmissible, but the practice is very liberal. However, in the comparatively few cases where eyewitness experts have testified, they were not allowed to touch the specifics of the case; the role of the expert has been to educate the court about general principles of everyday perception and memory processes. Most experts would probably agree to this educator role, but also agree that introducing eyewitness knowledge during court proceedings in many cases may be a bit too late. Thus, the second part of the solution, educational programmes, may be both uncontroversial and realistic.

Educational programmes should target legal professionals involved in all phases of the legal process including police officers and investigators, professional groups that were not covered by the present survey. Granhag et al. (2005) observed that Swedish police officers harbour many wrongful beliefs about eyewitness testimony, and a recent experimental study by Bollingmo, Wessel, Eilertsen, and Magnussen (2008) showed that witness credibility judgments by Norwegian police officers were governed by similar social stereotypes as judgments by laypersons. In Norway, eyewitness psychology is now taught at the Police Academy, albeit on a small scale. Norwegian judges, appointed by the King in Council following the recommendations by an independent consultative body of experts evaluating the qualifications of applicants to vacant positions, are offered a number of

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courses administered by the Administration of the Norwegian Courts; eyewitness psychology is now taught in the compulsory course programme for newly appointed judges, and offered to judges appointed before the programme was implemented. Educational programmes might contribute significantly to reduce miscarriages of justice.

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