APPLIED COGNITIVE PSYCHOLOGY
Appl. Cognit. Psychol. **13**: S109–S119 (1999)

Does Race Influence Measures of Lineup Fairness?

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SUMMARY

Little attention has been paid to cross-race effects on lineup fairness. Brigham demonstrated that lineup construction is influenced by race and that the mock-witness task may be influenced by racial differences. Two experiments extend our knowledge of cross-race issues in the measurement of lineup fairness to include target-absent lineups, descriptions based on viewing staged crimes, and Asian as well as Black and White participants. The results are mixed with some evidence suggesting little or no impact of race on measures of lineup fairness while other evidence indicates the opposite. Copyright © 1999 John Wiley & Sons, Ltd.

Facial recognition research generally confirms the tendency for people to be better at recognizing faces of their own race than faces of other races (for reviews see Bothwell *et al*., 1989; Shapiro and Penrod, 1986); though there are exceptions (e.g. Ayuk, 1991). Although fewer studies have explored the cross-race effect in eyewitness contexts, there is support for race being a factor in eyewitness identification situations as well (Lindsay, 1999; Shapiro and Penrod, 1986). The impact of race on the fairness of lineups has received even less attention.

Lineup fairness is measured by the mock-witness task (Doob and Kirshenbaum, 1973). Witnesses to real or staged crimes provide descriptions of the criminals. Mock witnesses (people who did not see the crime) attempt to select the suspect from the lineup based solely on the witness's description of the criminal. The lineup is considered unfair if the suspect is selected at a rate greater than expected by chance (Brigham and Brandt, 1992; Brigham *et al*., 1999; Brigham and Pfieffer, 1994; Corey *et al*., 1999; Lindsay *et al*., 1999; Malpass, 1981; Tredoux, 1996, 1999; Wells and Bradfield, 1999; Wells *et al*., 1979). Despite debate about the interpretation and best statistic to describe the results of the mock-witness task, it remains the primary means of evaluating lineup fairness in the eyewitness literature (Malpass and Lindsay, 1999).

Little work has been done on the impact of the cross-race effect on lineup fairness. Brigham and Ready (1985) reported that lineup fairness was higher when the lineup constructor was of the same race as the suspect. Brigham *et al*. (1990) found that lineup fairness measures for Black (but not White) lineups were influenced by the race

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Contract Grant Sponsor: Social Sciences and Humanities Research Council of Canada.

CCC 0888–4080/99/SIS109–11 $17.50

of the mock witnesses. These results suggest that discussions of measuring lineup fairness need to address cross-race issues. Measures of lineup fairness may indicate that a cross-race lineup is fairer than a same-race lineup because mock witnesses make finer discriminations between own-race than other-race people.

Because only a single published study has addressed the issue, it is not surprising that our knowledge is limited in several ways. Brigham *et al.* (1990) employed only target-present lineups. Lineups should be fair even when the suspect is guilty, at least because we often do not know if the suspect is guilty when the lineup is constructed. However, target-absent lineups will also be of interest because the argument in court, where measures of lineup fairness would be put to use, often will be that the suspect is innocent and was identified, at least in part, because the lineup was biased. Defence lawyers are unlikely to argue that the accused is guilty but should be let off because the lineup was poorly done. The extent to which mock-witness procedures will lead to a specific, innocent lineup member standing out is a critical issue for lineup-fairness measurement.

Brigham *et al.* (1990) also provided their mock witnesses with composite descriptions, based on the average or modal responses of 20 undergraduates who examined each target for 5 minutes and described the targets using a standardized rating form (asking for some specific details but not others). This procedure may influence the results in several ways. Witnesses rarely observe criminals exclusively for the purpose of describing them and often see them for shorter periods of time. Staged crimes would provide descriptions from brief, incidental exposure that would increase the generalizability of results. By using averaged and modal responses, the descriptions of the targets are likely to differ from those that would be produced by individual witnesses. In combination with long exposure and an explicit task to describe the targets, the descriptions may have been both more complete and more accurate than would be expected in real cases. Also, the use of standardized forms ensures that descriptions contain information on those items included on the form but may reduce the likelihood that descriptions will include other information not explicitly requested. One way to avoid these concerns is to present each mock witness with an open-ended description provided by a single witness. Because the quality of descriptions may vary dramatically from witness to witness, multiple descriptions could be employed.

The race of the witness also may influence the results of the mock-witness task. Same-race witnesses may provide superior descriptions thus leading to better discrimination among lineup members and a greater deviation from chance in mock-witness decisions. Another possibility is that the race of the witness influences the style or vocabulary used to describe people and mock witnesses of the same race as the witness may find such descriptions more informative. Different races do seem to use different information for facial memory tasks (Shepherd and Deregowski, 1981). This could lead to equal tendencies for deviation from chance distribution of mock-witness choices but different patterns in terms of which lineup members receive more selections. Either of these effects could influence lineup fairness measures. If true, it is possible that the race of the mock witness should be the same as the race of the witness rather than the race of the suspect.

Another issue requiring attention is the generalizability of cross-race effects in measuring lineup fairness. The work to date has studied only Blacks and Whites. Other races of witness, suspect, and mock witness may or may not reveal cross-race, lineup fairness effects.

We provide two experiments designed to replicate the cross-race effect with regard to the impact of mock-witness race on measures of lineup fairness. We also included several previously unexamined factors in the design of the studies. We varied the race of witness providing the description as well as the race of the criminals and mock witnesses to determine if race of witness is a factor in evaluating lineup fairness. We used open-ended descriptions provided by individual witnesses to staged crimes as the input to mock witnesses. We used target-absent lineups to examine whether some innocent individuals stood out more than others and whether such individuals stood out equally across the various conditions of race of witness and mock witness. Finally, we provided a study of White and Asian cross-race effects to explore the generalizability of the cross-race line-fairness effect.

EXPERIMENT 1

Witnesses

Witnesses observed a one-minute, videotaped, staged crime and then provided an open-ended description of the criminal. Descriptions were obtained from three Black and three White witnesses for each of three Black and three White confederates resulting in a total of 36 descriptions. All witnesses were psychology students participating for extra course credit.

Mock witnesses

Each description was presented to four Black and four White mock witnesses accompanied by a target-absent, six-person, simultaneous photo-array. The mock witnesses were asked to select the lineup member who seemed most likely to be the person described. This produced 288 mock-witness decisions. The mock witnesses were students recruited in public areas on local campuses and asked to volunteer a few minutes of their time. Each mock witness provided six decisions, one for each confederate. The order of presentation of the description and lineup combinations was randomized.

Data analysis

Although some lineup members were clearly a better fit to the descriptions and variance in similarity to the criminals existed in each lineup, we did not specify any particular lineup member as the 'suspect'. In real cases, an innocent suspect need not be the lineup member most similar to the criminal. Analyses treating each lineup member as a potential suspect provide information about the effect of similarity on lineup fairness. The analyses test first whether the proportion of choices of the six lineup members are distributed differently than would be expected by chance using all of the obtained data. Next we compared the distributions for each lineup using the data for same-race and other-race mock witnesses and then for same-race and other-race descriptions. Next we compared the proportion of choices of each lineup member selected (almost or) significantly above chance level across the four independent estimates of frequency of their selection (by same- versus other-race mock witnesses based on same- versus other-race descriptions). Finally, the proportions of mock-

witness choices across the 36 members of the six lineups as well as the 18 members of the three lineups for each race of criminal were correlated for the four categories of participants (same- versus other-race mock witnesses based on same- versus other-race descriptions). High correlations would indicate that the rate of mock witness choices across members of the lineups was similar regardless of the race of witness and mock witness.

Results and discussion

Overall

Mock witnesses showed strong preferences for some lineup members over others. As a result, significant deviations from chance distribution of mock witness choices existed for five of the six lineups: Black lineups χ^2 (5 df, $N = 48$) = 10.25, 11.75, 15.00 ($p < 0.10$, 0.05, 0.01); White lineups χ^2 (5 df, $N = 48$) = 17.75, 45.25, and 62.50 (all $p < 0.01$). The lineups provided ample opportunity for lineup bias to be detected and to differ depending upon the race of the criminal, witness, and mock witness.

Black lineups

For one of the Black lineups, the distribution of mock-witness choices was non-random if the mock witnesses were Black (χ^2 (5 df, $N = 24$) = 17.00, $p < 0.01$), but not if the mock witnesses were White (5 df, $N = 24$) = 5.00. This pattern of mock witness decisions by Black versus White participants was significantly different (χ^2 (5 df, $N = 48$) = 12.84, $p < 0.05$). This pattern is consistent with the hypothesis that same-race in comparison to cross-race mock witnesses will provide a more sensitive assessment of lineup bias. A second Black lineup produced a nearly non-random pattern of mock witness choices for both Black and White mock witnesses (χ^2 (5 df, $N = 24$) = 9.50, 10.00 respectively, $p < 0.10$). The third Black lineup resulted in a pattern of mock-witness choices that was not significantly different from chance expectation for either Black or White mock witnesses (χ^2 (5 df, $N = 24$) = 7.00, 6.50 respectively, $p > 0.20$). Neither of the latter two lineups produced significantly different choice patterns for different races of mock witness.

Race of witness (source of description) did not result in a significant difference in the pattern of mock witness decisions for any of the Black lineups. For one lineup, both Black and White descriptions resulted in patterns significantly different from chance (χ^2 (5 df, $N = 24$) = 12.00 and 11.50, $p < 0.05$). For another lineup, both Black and White descriptions resulted in patterns not different from chance (χ^2 (5 df, $N = 24$) = 8.00 and 5.00, $p > 0.10$). For the third lineup, Black descriptions resulted in patterns marginally different from chance while White descriptions did not (χ^2 (5 df, $N = 24$) = 9.50 and 4.00, $p < 0.10$, $p > 0.20$ respectively). These data provide scant evidence for an effect of witness race on the distribution of mock-witness decisions, however, to the extent that any cross-race effect was found, it was in the direction of our expectations.

Measurement of lineup fairness was influenced by the race of the mock witness but not by the race of the witness for Black lineups. These results replicate the finding by Brigham *et al.* (1990) that Black–White mock-witness differences can, but do not always, occur when lineup fairness is measured for Black lineups. The data suggest that in cross-race situations involving a Black suspect and White witness, the mock witnesses should match the race of the suspect rather than the race of the witness.

White lineups

For two of the White lineups, the pattern of mock-witness choices was significantly different from chance regardless of whether the mock witnesses were Black or White (χ^2 (5 df, $N = 24$) = 35.50 and 14.00 for one lineup and 33.0 and 31.5 for the other, $p < 0.01$). The remaining White lineup was marginally different from chance for Black mock witnesses (χ^2 (5 df, $N = 24$) = 11.00, $p = 0.051$) but not for White mock witnesses (χ^2 (5 df, $N = 24$) = 8.50, $p > 0.10$). None of the differences in pattern between Black and White mock witnesses were significant. In this case, the direction of the effect, even though not significant, was consistently counter to the hypothesis.

For two of the White lineups, the pattern of mock-witness choices deviated significantly from chance regardless of whether the descriptions provided were obtained from Black or White witnesses (χ^2 (5 df, $N = 24$) = 30.50 and 16.50 for one lineup and 33.0 and 31.5 for the other, $p < 0.01$). For the third lineup, choices differed from chance for descriptions from Black witnesses ($\chi^2 = 11.00$, $p < 0.05$) but not for descriptions from White witnesses ($\chi^2 = 8.50$, $p > 0.01$). Again, these results are in the opposite direction of our hypothesis.

The results suggest that Black mock witnesses are as, or more sensitive than White mock witnesses to deviations in lineup fairness regardless of the race of the lineup members. However, caution is advised. Our results with regard to White lineups do not indicate significant differences and only three lineups were evaluated. Matching the race of mock witness to the race of the suspect remains reasonable and intuitively more sensible than using only Blacks as mock witnesses.

Race of witness by race of mock witness

Next we compared across the four groups of participants: Black and White mock witnesses making judgments based on descriptions provided by Black versus White witnesses. Selection of a lineup member by 17 (0.354) or more of the 48 mock witnesses exceeds chance expectation ($p < 0.05$).

A member of one Black lineup was selected significantly more often than chance (17 selections). Consistent with expectations, Black mock witnesses (0.46) were more likely than White mock witnesses (0.25) to select this lineup member, but not significantly so, $Z = 1.51$, $p < 0.07$ one-tailed. The most selected members of the other two Black lineups were not selected significantly more often than chance expectation (13 and 14 selections); nor were they selected more often by Black than White mock witnesses (0.29 versus 0.29 and 0.29 versus 0.21).

Two of the White lineups contained members selected significantly more than would be expected by chance (24 and 27 choices) while the third White lineup contained a member selected marginally more than chance expectation (16 times). Clearly, the pattern of choices across race of witness and mock witness did not support expectation. For two of the three White lineups, the rate of cross-race selections of the most selected lineup member was greater than the rate of same-race selections (0.58 versus 0.42 and 0.38 versus 0.29). For the third lineup the rates were very similar (0.54 versus 0.58). None of these differences was statistically significant. The rates of choice seem similar rather than dissimilar.

The data so far provide little evidence for serious concern about the race of mock witnesses used to evaluate lineup fairness. Examining the rate of choice of Black and White members of six lineups revealed that neither race was consistently

choosing one lineup member while the other race chose another as the most selected person. Our final analysis examined the pattern of mock witness choices across all lineup members as a function of the race of the criminal, witness, and mock witness.

We correlated the frequency of mock-witness choices of each of the 36 lineup members across the four between-participant conditions: Black versus White witnesses and mock witnesses. The correlations also were calculated separately for the 18 faces in each of the Black and White lineups (see Table 1).

Initially the correlations seem to indicate a reasonable level of agreement across the groups with overall correlations ranging from 0.55 to 0.73 (all significant at the 0.01 level). However, when the Black and White lineups are analysed separately, a different picture emerges. The correlations for the White lineups remain high and significant, varying from 0.73 to 0.90. The correlations for the Black lineups are highly variable and indicate considerable effects of race on choice patterns. The correlations that compared the number of choices of the 18 members of Black lineups made by White mock witnesses based on White descriptions with the number of selections of the same faces by the other race of witness and mock witness combinations were consistently low and not significant. This was true for the correlation with the data from Black mock witness based on Black descriptions (0.03), Black mock witnesses based on White descriptions (0.11), and White mock witnesses based on Black descriptions (0.22). This is the strongest evidence obtained to date indicating that race of mock witnesses and witnesses may influence measures of lineups fairness.

Given that the results are based on responses to only three lineups, we remained cautious at this point. The results could reflect peculiarities of the lineups rather than a general tendency for race of witness and mock witness to matter when measuring lineup fairness. If the patterns described could be replicated, the data would be much more convincing.

Table 1. Correlation of number of mock-witness choices as a function of witness race (source of description) and mock witness race (Experiment 1 Blacks and Whites)

Line race*		Race of mock witness/description			
Black and White lineups		B/B	B/W	W/B	W/W
	B/B	–	0.73	0.63	0.57
	B/W	–	–	0.58	0.62
	W/W	–	–	–	0.55
Black only**		B/B	B/W	W/B	W/W
	B/B	–	0.60	0.44	0.03
	B/W	–	–	0.36	0.11
	W/W	–	–	–	0.22
White only**		B/B	B/W	W/B	W/W
	B/B	–	0.79	0.73	0.86
	B/W	–	–	0.70	0.90
	W/W	–	–	–	0.75

*$p < 0.05$ if $r \geqslant 0.28$.
**$p < 0.05$ if $r \geqslant 0.40$.

EXPERIMENT 2

Method

Witnesses

Witnesses observed a similar brief, videotaped, staged crime and then provided an open-ended description of the criminal. Descriptions were obtained from 25 Asian and 25 White witnesses for each of three Asian and three White confederates resulting in a total of 300 descriptions. All witnesses were introductory psychology students who participated for extra course credit.

Mock Witnesses

Each description was presented to one White and one Asian mock witness accompanied by a target-absent, six-person, simultaneous photo-array. The mock witnesses were asked to select the lineup member who seemed most likely to be the person described. This procedure resulted in 600 mock-witness decisions. The mock witnesses were students recruited in public areas on campus and asked to volunteer a few minutes of their time. Anyone who had participated as a witness was excluded as a mock witness. Each mock witness provided six mock-witness decisions, one for each confederate. the order of presentation of the description and lineup combinations was randomized.

Results and discussion

Overall

Again, mock witnesses showed strong preferences for some lineup members over others. Significant deviations from chance distribution of mock-witness choices existed for four of the six lineups: Asian lineups χ^2 (5 df, $N = 100$) = 4.94, 9.56, 17.60 (n.s., $p < 0.10$, $p < 0.01$); White lineups χ^2 (5 df, $N = 100$) = 11.80, 20.96, and 102.90 (all $p < 0.01$).

Asian lineups

For two of the Asian lineups, the distribution of mock-witness choices was non-random if the mock witnesses were White (χ^2 (5 df, $N = 50$) = 15.28, 12.40, $p < 0.01$), but not if the mock witnesses were Asian (χ^2 (5 df, $N = 50$) = 7.12, 2.32, $p > 0.10$). However, the pattern of mock-witness decisions by Asian versus White participants was not significantly different (χ^2 (5 df, $N = 100$) = 5.43, 7.05, $p > 0.10$). The remaining Asian lineup produced a pattern of mock-witness choices for both Asian and White mock witnesses that did not differ significantly from chance (χ^2 (5 df, $N = 50$) = 2.56, 8.80, $p < 0.10$), nor from each other (χ^2 (5 df, $N = 100$) = 3.12, $p > 0.10$).

Race of witness (source of description) did not result in a significant difference in the pattern of mock-witness decisions for any of the Asian lineups. However, for one lineup, White descriptions resulted in patterns significantly different from chance (χ^2 (5 df, $N = 50$) = 17.88, $p < 0.01$) but Asian descriptions did not (χ^2 (5 df, $N = 50$) = 5.20). For the other two Asian lineups, neither Asian nor White descriptions resulted in patterns different from chance (χ^2 (5 df, $N = 50$) = 4.00 versus 4.00 and 7.84 versus 9.04, $p > 0.10$).

These data provide even less evidence of an effect of witness race on the distribution of mock-witness decisions than demonstrated in Experiment 1. Furthermore, to the extent that any cross-race effect was found, it was in the direction opposite to our expectations; i.e. same-race witnesses were less discriminating than cross-race witnesses.

White lineups

For two of the White lineups, the pattern of mock-witness choices was significantly different from chance regardless of whether the mock witnesses were Asian or White (χ^2 (5 df, $N = 50$) = 44.58 versus 122.56 and 47.92 versus 65.44, $p < 0.01$). The remaining White lineup was not significantly different from chance for Asian mock witnesses (χ^2 (5 df, $N = 50$) = 9.04, $p > 0.10$) but was significantly different for White mock witnesses (χ^2 (5 df, $N = 50$) = 16.73, $p > 0.01$). None of the differences in pattern between Asian and White mock witnesses were significant. In this case, the direction of the effect, even though not significant, was consistent with the hypothesis; i.e. same-race mock witnesses indicated greater deviation from chance than cross-race mock witnesses.

For two of the White lineups, the pattern of mock-witness choices deviated significantly from chance regardless of whether the descriptions provided were obtained from Asian or White witnesses (χ^2 (5 df, $N = 50$) = 54.16 versus 50.08, and 52.72 versus 60.64, $p < 0.01$). For the third lineup, choices differed from chance for descriptions from White witnesses but not for descriptions from Asian witnesses (χ^2 (5 df, $N = 50$) = 11.92 versus 10.48, $p < 0.05$, 0.10). Clearly these values of chi square are very similar and it would be inappropriate to conclude that a meaningful difference has been demonstrated. There were no significant differences in the obtained patterns for Asian versus White descriptions.

Race of witness by race of mock witness

Again we compared across the four groups of participants: Asian and White mock witnesses making judgments based on descriptions provided by Asian and White witnesses. Selection of a lineup member by 23 (0.23) or more of the 100 mock witnesses exceeds chance expectation ($p < 0.05$).

The most selected members of the Asian lineups were selected by 22, 24, and 28 mock witnesses. One was selected slightly more often by Asian than White mock witnesses (0.24 versus 0.20, $Z = 0.57$). The other two were selected non-significantly less often by Asian than White mock witnesses (0.20 versus 0.28 and 0.24 versus 0.32). Again, these differences seem trivial as well as not significant.

The most selected members of the White lineups were selected by 27, 49, and 52 mock witnesses. Asian and White mock witnesses selected these three men at similar rates regardless of the race of witness providing the description (0.24, 0.28, 0.24, 0.32; 0.48, 0.52, 0.36, 0.60; 0.44, 0.56, 0.52, 0.56). Clearly, the pattern of choices across race of witness and mock witness did not support expectation. None of the differences in these patterns was significantly different from chance.

Finally, we correlated the frequency of mock-witness choices of each of the 36 lineup members across the four between-participant conditions: Asian versus White witnesses and mock witnesses. The correlations also were calculated separately for the 18 faces in each of the Asian and White lineups (see Table 2).

Table 2. Correlation of number of mock-witness choices as a function of witness race (source of description) and mock witness race (Experiment 2, Asians and Whites)

Line race		Race of mock witness/description			
All lineups*		A/A	A/W	W/A	W/W
	A/A	–	0.79	0.68	0.74
	A/W	–	–	0.72	0.82
	W/W	–	–	–	0.66
Asian lineups only**		A/A	A/W	W/A	W/W
	A/A	–	0.55	−0.07	0.02
	A/W	–	–	0.22	0.64
	W/W	–	–	–	0.26
White lineups only**		A/A	A/W	W/A	W/W
	A/A	–	0.84	0.86	0.92
	A/W	–	–	0.85	0.87
	W/W	–	–	–	0.81

*$p < 0.05$ if $r \geqslant 0.28$.
**$p < 0.05$ if $r \geqslant 0.40$.

The correlations indicate a reasonable level of agreement across the groups with overall correlations ranging from 0.66 to 0.82 (all significant at the 0.01 level). However, when the Asian and White lineups are analysed separately, again a different picture emerges. The correlations for the White lineups remain high and significant, varying from 0.81 to 0.92. The correlations for the Asian lineups, similar to the pattern for the Black lineups in Experiment 1, are highly variable and indicate effects of race on choice patterns (see Table 2). The correlation of the number of choices of the 18 members of Asian lineups by White mock witnesses based on White descriptions was consistently low and non-significant when compared with results based on Asian descriptions. This was true regardless of whether the Asian descriptions were examined by Asian or White mock witness (0.02, 0.26). However, frequency of choices based on White descriptions correlated well for Asian and White mock witnesses (0.64).

Once again, the correlational evidence strongly suggests that race of mock witnesses and race of witnesses may influence measures of lineup fairness. The unusual pattern found with a study using Black and White criminals, witnesses, and mock witnesses in Experiment 1 was replicated with Asian and White criminals, witnesses, and mock witnesses in Experiment 2. Not only were different races used in the two experiments, but they were conducted in different countries. These data indicate that the race of mock witness influences relative preference for lineup members in the mock witness task, particulary when the race of witness and mock-witness are different from the race of the criminal.

GENERAL DISCUSSION

Our results can be summarized as follows. Most of our results support the conclusion that race has relatively little impact on the mock-witness task and thus measures of lineup fairness. If a lineup member stands out based on eyewitness descriptions, the same lineup member seems to stand out regardless of whether the suspect is Black,

White, or Asian; the witness was Black, White, or Asian; and regardless of whether the mock witnesses were Black, White, or Asian. This is reasonably consistent with the data from Brigham *et al*. (1990) who found limited effects of race (applied only to Black lineups and across their two Black lineups the target was selected more often by Blacks from one and by Whites from the other). These results indicate that cross-race issues may be ignored when measuring lineup fairness.

The correlational data lead to quite a different conclusion. Those data suggest potentially important effects of race of both witness and mock witness. Clearly the pattern of response to the mock-witness task is influenced by the race of the person seen, the race of the person providing the description, and the race of the person choosing in the mock-witness task. In particular, White mock witnesses involved in measures of lineup fairness for non-White suspects may provide different results than would same-race mock witnesses.

Why do the two sets of analyses lead to such different conclusions? One reason appears to be that the non-correlational analyses focus on the single lineup member most selected while the correlations consider the entire pattern of mock-witness responses to lineups. If only the most selected person is of interest, this is not a problem. However, as stated earlier, the innocent suspect need not be the lineup member most similar to the true criminal. Furthermore, our second most selected lineup members often were chosen only slightly less often than the most selected member. Indeed, two were selected more often than would be expected by chance. The correlations suggest that non-White lineups may produce dramatic differences in the order of mock-witness preference for various lineup members other than the most selected individual.

Research in this area presents a number of challenges. To the extent that the researcher must represent the variability in witness descriptions, large numbers of witnesses are required just to produce the stimuli to be presented to mock witnesses. Large numbers of mock witnesses also are required. A third factor that neither Brigham *et al*. (1990) nor the present work have addressed is target variability. Brigham *et al*. employed two Black and three White targets while we used three of each race in our studies. Obviously, such small numbers do not begin to capture the variability that exists within these racial groups. We have no knowledge of how target distinctiveness influences lineup-fairness measures and whether this factor interacts with race. We do not even know if the effects we have obtained to date will replicate with a larger sample of targets. Adding this variable to the research requires extremely large data sets that may prevent individual researchers from pursuing this work.

One potential solution to this issue is for researchers in the eyewitness area to pool their data by collecting same versus cross-race measures of lineup fairness whenever possible and reporting them in work designed for other purposes. It is not uncommon for researchers to report measures such as Functional Size or Effective Size as descriptions of the lineups. If descriptions of the race of witness and mock witness were included, and different races participated in the research, we could gradually accumulate data on the impact of measures of race on lineup fairness.

More research is needed to explore these issues and to determine under what conditions race of witness and mock witness will be critical when measuring lineup fairness. For now, matching the race of mock witnesses to the race of the suspect seems most reasonable in real-world cases. Finally, and perhaps of greater importance than any of the issues discussed so far, we need data on the relative postdictive

power of lineup fairness measures based on descriptions from same- versus cross-race witnesses and same- versus cross-race mock witnesses (Lindsay *et al*., 1999).

ACKNOWLEDGEMENTS

This research was supported by a grant from the Social Sciences and Humanities Research Council of Canada.

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