Why does the Simultaneous Lineup Produce Less Mistaken Identifications than the Showup? The 48-person Lineup

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Abstract

Two competing theories have been proposed to account for less mistaken identifications in the show up than in the six-person simultaneous lineup, diagnostic feature detection and filler siphoning. However, the former predicts that as lineups grow larger mistaken choices in lineups should decease, while the latter predicts that they should increase, while in fact the remain constant. The 48-person or even larger lineups should be given more attention.

Introduction

Why does the simultaneous lineup produce less mistaken identifications than the showup? Two prominent theories have been posited to explain this fact. Diagnostic feature detection theory Wixted, Mickes [1] posits that lineups enhance Witnesses' ability to discriminate between innocent and guilty suspects, because facial features can be compared across lineup members. Filler siphoning Wells, Smalarz, Smith [2,3] posits that the presence of other lineup members siphons some of the incorrect identifications that would otherwise land on the innocent suspect. Levi, Lindsay [4] proposed testing large lineups to produce less identifications than the six-person simultaneous lineups. They reasoned that large lineups could substantially reduce mistaken identifications simply because, since the chance of the innocent suspect being chosen was no greater than any other lineup member, when a witness would mistakenly choose someone the chance of mistakenly identifying the innocent suspect is 1/N, where N is lineup size.

This reasoning has a similarity to the filler siphoning theory, except that the mechanism is not "siphoning" but simply probability, and most, not only some, of the choices will be fillers. The difference could become quite substantial as the large lineup grows, for example to size 48. Levi [5-8] tested ever larger lineups, reaching a lineup size of 120. He found that even as lineup size grew to 120, the number of successful identifications in target-present lineups and the number of mistaken choices in target-absent lineups remained constant. How do large lineups relate to the diagnostic theory of detection and the filler siphoning theory? The diagnostic theory predicts that more fillers should enhance the ability of witnesses to discriminate between innocent suspects, and therefore larger lineups should result in fewer witnesses mistakenly choosing someone. However, Levi's experiments with large lineups found that no matter what the size of the lineup, the number of witnesses mistakenly choosing someone remained constant.

The filler siphoning explanation is faced with a similar problem. With more fillers, more witnesses should mistakenly choose someone who is not the suspect, and again these conflicts with Levi's results. Rather, it seems to make more sense to interpret Levi's results as indicating a certain response bias: a consistent number of witnesses are uncertain enough of the identity of the suspect and want to choose someone, and this is independent of lineup size. Collof, Wixted [9] argue that response bias is a confounding factor that their method eliminates from the analysis. However, response bias clearly is present in real world lineups, and ignoring them seems quite counterproductive when our goal is to produce the best possible lineup. Levi [10-15] has experimented with a 48-person lineup. The results indicate that the decrease in identifications is more than compensated by the decrease in mistaken identifications. If eyewitness researchers are interested in exploring better lineups, it would seem wise to turn their attention to 48-person lineups and even larger ones [16-18].

References

1. Wixted JT, Mickes L (2014) A signal-detection- based diagnostic-feature-detection model of eyewitness identification. Psychological Review 121(2): 262-276.

2. Wells GL (2001) Eyewitness lineups: Data, theory, and policy. Psychology, Public Policy, and Law 7: 791-801.

3. Wells GL, Smalarz L, Smith AM (2015) ROC analysis of lineups does not measure underlying discriminability and has limited value. Journal of Applied Research in Memory and Cognition 4(4): 313-317.

4. Levi AM, Lindsay RCL (2001) Issues concerning policy recommendations: The example of lineups and photospreads. Psychology, Public Policy, & Law 7: 776-790.

5. Levi AM (2006) A comparison between large simultaneous lineups and MSL lineups, with photos viewed in sets of six. In K Nixon (Eds.), Forensic recall and eyewitness testimony London: IA-IP publishing, pp. 91-101.

6. Levi AM (2007) Evidence for moving to an 84-person lineup. Journal of Experimental Criminology 3: 377-391.

7. Levi AM (2018a) The 48-person lineup. Scholarship Press.

8. Levi AM (2012) Much better than the sequential lineup: a 120-person lineup. Psychology, Crime & Law 18(7): 631-640.

9. Collof M, Wixted J (2019) Why are lineups better than showups? A Test of the Filler Siphoning and Enhanced Discriminability Accounts. Journal of Experimental Psychology Applied.

10. Levi AM (under review) Testing partial memory using the British lineup clinical and experimental psychology.

11. Levi AM (in press) Partial memory: Another reason for using large lineups? Legal and criminological psychology.

12. Levi AM (2019) Comparing 48-person lineups with a 96-person lineup. Scholarly Journal of Psychology and Behavioral Sciences 2(2): 131-132.

13. Levi AM (2018b) Can We increase identifications in 48-person lineups by asking for ratings of all lineup members? Psychology and Behavioral Science 8(4): 1-5.

14. Levi AM, Menasheh D (2017) Evidence for the superiority of the 48-person lineup. Journal of Psychology and Cognition 2: 231-236.

15. Levi AM (2015) When the relative judgment theory proved to be false. Psychology and Law 5: 141-149.

16. Levi AM (in press b) Partial memory: Another reason for using large lineups? Legal and criminological psychology.

17. Levi AM (2017) Comparing the English Video Lineup with the 48-Person Lineup. Universal Journal of Psychology 5(6): 239-243.

18. Levi AM (in press a) Comparing the 48-person lineup with the sequential lineup, Journal of Forensic and Crime Investigation 2(1).

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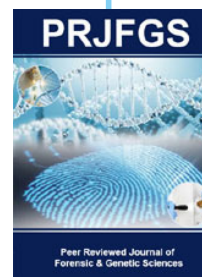
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