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From Tradition to Evidence: Rethinking the Law on Eye- witness Identification in Estonia

Abstract. Eyewitness identification is a procedural act that is influenced by various psychological factors. Scientific research has demonstrated that the way identification procedures are conducted and administered affects witnesses' identification decisions and their confidence in those decisions. Research into these variables has also led to best-practice guidelines for conducting eyewitness identification. However, the legal system in Estonia, as have those in many other places, has been slow to adopt the recommendations and has adhered to traditional principles instead, which is reflected in the law on eyewitness identification. This article analyses whether Estonia's law governing eyewitness identification is consistent with evidence-based recommendations. It first presents an overview of variables related to the reliability of identification evidence over which the criminal-justice system has control, and then compares the most important findings from scientific literature (and the resulting best practices) with the current law. Finally, it highlights specific areas of law wherein adjustments could produce better alignment with the findings from scientific research. The authors conclude that the law today, leaving many decisions up to law-enforcement entities, displays a need for additional official guidelines. The article highlights the importance of using scientific research to inform legal practices.

Keywords: eyewitness identification, lineups, evidence-based guidelines, legal safeguards, identification accuracy, eyewitness recommendations

1. Introduction

When a crime is observed, a witness may be asked to identify the culprit or an object^{*1} from a lineup^{*2}, typically composed of a suspect, who may or may not be guilty^{*3}, and 'fillers', who are known to be innocent. The witness's task is to determine and state, based solely on their memory of the

¹ Identification of persons is the focus throughout this article.

² In this article, we use the term 'lineup' to refer to presentations via all media (photo, video, and live lineups) except where stating otherwise.

³ The guilty suspect is the individual who committed the crime, and 'innocent suspect' denotes an individual whom the police incorrectly suspect of committing the crime.

crime⁴, whether or not the culprit is in the lineup. The witness might identify the suspect (thus producing either a correct or a false identification, depending on whether the suspect is the culprit), identify a filler, or reject the lineup as not featuring the culprit (rejection accuracy naturally depends on whether the suspect is the culprit). The justice system uses these eyewitness decisions as evidence to establish the identity of the culprit.

Irrespective of their significance for the criminal-justice system, eyewitness identifications can be quite unreliable as evidence. Scientific research going back many decades has found that memory is fragile, its contents can be forgotten, or they may be altered at any of several stages – even through procedures intended to collect and preserve eyewitnesses' identification evidence.⁵ Additionally, the identification process involves social interaction, which can affect witnesses' decision-making behaviour and their choices from the lineup.⁶ Although identification decisions are easily influenced, witnesses are not always aware that they have been influenced, let alone of the extent of the influence.⁷

Inaccurate identification during the identification procedure can dramatically affect the subsequent criminal investigation. Law-enforcement officials are subject to bias, just as witnesses are.⁸ Research has shown that officers' prior beliefs about a suspect's guilt can affect their evaluations of witness evidence,⁹ leading to cumulative bias in the assessments.¹⁰ Furthermore, when officers strongly believe a suspect is guilty, they may overlook alternative investigations aimed at establishing innocence,¹¹ despite those being one of the goals of the criminal investigation.¹² Erroneous decisions are one potential result. For example, believing a suspect to be guilty can lead officers to evaluate an ambiguous identification decision as consistent with their belief. This can drive them to seek additional incriminating evidence, further reinforcing their initial belief in the suspect's guilt. Thus, eyewitness identification can affect subsequent steps in a criminal investigation, including the trial.

Given that eyewitnesses' identification decisions are easily influenced but can have a significant role in setting the direction of the police investigation, it is essential that criminal-justice system officials (e.g., police officers, attorneys, and judges) know of the various factors that affect eyewitness identification accuracy. These factors can be divided into two main categories: estimator and system variables.¹³ While estimator variables¹⁴ – among which are factors associated with the witness, crime event, and perpetrator – influence identification decisions, the investigative authorities have no control over them. System variables, on the other hand, are related to conducting and administering an identification

⁴ Eerik Kergandberg and Meris Sillaots, *Kriminaalmenetlus* (Juura 2006) 176; Gary L Wells, Nancy K Steblay, and Jennifer E Dysart, 'Eyewitness Identification Reforms: Are Suggestiveness-Induced Hits and Guesses True Hits?' (2012) 7 *Perspectives on Psychological Science* 264. – DOI: <https://doi.org/10.1177/1745691612443368>.

⁵ National Research Council, *Identifying the Culprit: Assessing Eyewitness Identification* (The National Academies Press 2014) 69–70. – DOI: <https://doi.org/10.17226/18891>.

⁶ Margaret Bull Kovera and Andrew J Evelo, 'Eyewitness Identification in Its Social Context' (2021) 10 *Journal of Applied Research in Memory and Cognition* 313. – DOI: <https://doi.org/10.1016/j.jarmac.2021.04.003>; Brian Cahill, 'Eyewitness Choosing Behavior: The Role of Euphoric Experience and Non-Memorial Cues' [2015]. – DOI: <https://doi.org/10.25148/etd.fidc000163>.

⁷ Steve D Charman and Gary L Wells, 'Can Eyewitnesses Correct for External Influences on Their Lineup Identifications? The Actual/Counterfactual Assessment Paradigm' (2008) 14 *Journal of Experimental Psychology: Applied* 5. – DOI: <https://doi.org/10.1037/1076-898x.14.1.5>.

⁸ Vanessa Meterko and Glinda Cooper, 'Cognitive Biases in Criminal Case Evaluation: A Review of the Research' (2022) 37 *Journal of Police and Criminal Psychology* 101. – DOI: <https://doi.org/10.1007/s11896-020-09425-8>.

⁹ Karl Ask, Anna Rebelius, and Pär Anders Granhag, 'The "Elasticity" of Criminal Evidence: A Moderator of Investigator Bias' (2008) 22 *Applied Cognitive Psychology* 1245. – DOI: <https://doi.org/10.1002/acp.1432>; Steve D Charman, Melissa Kavetski, and Dana Hirn Mueller, 'Cognitive Bias in the Legal System: Police Officers Evaluate Ambiguous Evidence in a Belief-Consistent Manner' (2017) 6 *Journal of Applied Research in Memory and Cognition* 193. – DOI: <https://doi.org/10.1016/j.jarmac.2017.02.001>; Steve Charman, Amy Bradfield Douglass, and Alexis Mook, 'Cognitive Bias in Legal Decision Making' in Neil Brewer and Amy Bradfield Douglass (eds), *Psychological Science and the Law* (Guilford 2019).

¹⁰ Charman, Douglass, and Mook (n 9).

¹¹ Eric Rassin, Anita Eerland, and Ilse Kuijpers, 'Let's Find the Evidence: An Analogue Study of Confirmation Bias in Criminal Investigations' (2010) 7 *Journal of Investigative Psychology and Offender Profiling* 231. – DOI: <https://doi.org/10.1002/jip.126>.

¹² Kergandberg and Sillaots (n 4) 12–13.

¹³ Gary L Wells, 'Applied Eyewitness-Testimony Research: System Variables and Estimator Variables' (1978) 36 *Journal of Personality and Social Psychology* 1546.

¹⁴ For an overview of several estimator variables, see Jennifer L Beaudry, Christina L Bullard, and Jennifer R Dolin, 'Estimator Variables and Eyewitness Identification' in Gerben Bruinsma and David Weisburd (eds), *Encyclopedia of Criminology and Criminal Justice* (Springer 2014). – DOI: https://doi.org/10.1007/978-1-4614-5690-2_668.

procedure; these **can** be controlled by the investigative authorities. Although both categories of variables should be considered in evaluating the reliability of identification evidence (i.e., the likelihood that the suspect identified is guilty)^{*15}, knowledge from research on system variables is especially beneficial, in that it helps law enforcement to implement identification procedures that increase discriminability (the ability to distinguish the guilty party from an innocent suspect)^{*16} and thereby increases the reliability of eyewitness evidence.

Research into system variables has informed best practices for obtaining and preserving eyewitness identification evidence, with numerous practices validated by experimental laboratory and field studies. This work has led to several science-based recommendations^{*17} and guidelines to practitioners^{*18}, beginning with a set of guidelines set forth by Gary Wells and colleagues on behalf of the Executive Committee of the American Psychology-Law Society in 1998.^{*19} An updated version featuring five additional recommendations and an expanded rationale for all of the suggestions was published in 2020.^{*20} Legal psychologists agree that, to guarantee the reliability of eyewitness identification evidence, it is necessary to conduct the identification procedure in accordance with research-based recommendations. However, law-enforcement agencies have been slow to implement these recommendations^{*21}, on account of both a need to increase suspect-identification rates^{*22} and practitioners' limited knowledge of factors that influence eyewitness identification.^{*23} This situation has led to discrepancies in many locales between science-based recommendations and actual lineup practices. Estonia is no exception.^{*24}

The last decade's immense advances in scientific understanding of eyewitness identification call for more thorough analysis of the guidelines on how to conduct the eyewitness identification procedure. In Estonia, handling of the procedure for eyewitness identification is guided by the Code of Criminal Procedure (CCP), which has not changed since its adoption, in 2004. Therefore, a key aim behind this article was to examine whether the guidelines on eyewitness identification in Estonia's CCP are in accordance with best practices that stem from scientific research and whether they promote reliable eyewitness identification practices. Our discussion begins with an overview of system variables associated with constructing and conducting the identification procedure and how and why these variables affect eyewitness identification. Secondly, we ask to what extent the guidelines presented in the CCP as it stands today are in line with current science-based recommendations and best practices.

¹⁵ Laura Mickes and Scott D Gronlund, 'Eyewitness Identification' in John H Byrne (ed), *Learning and Memory: A Comprehensive Reference* (2nd edn, Academic Press 2017) 531. – DOI: <https://doi.org/10.1016/c2015-1-01759-8>.

¹⁶ Ibid. This type of accuracy is informative in deciding which identification procedures are superior.

¹⁷ National Research Council (n 5).

¹⁸ The International Association of Chiefs of Police, 'Model Policy. Eyewitness Identification' (September 2016) <<https://www.theiacp.org/sites/default/files/2018-08/EyewitnessIDPolicy2016.pdf>> accessed 27 June 2023; National Institute of Justice, Technical Working Group for Eyewitness Evidence, 'Eyewitness Evidence: A Guide for Law Enforcement' (US Department of Justice 1999) 178240, available via <<https://nij.ojp.gov/library/publications/eyewitness-evidence-guide-law-enforcement>> accessed 16 June 2023.

¹⁹ Gary L Wells and others, 'Eyewitness Identification Procedures: Recommendations for Lineups and Photospreads' (1998) 22 *Law and Human Behavior* 603.

²⁰ Gary L Wells and others, 'Policy and Procedure Recommendations for the Collection and Preservation of Eyewitness Identification Evidence' (2020) 44 *Law and Human Behavior* 3. – DOI: <https://doi.org/10.1037/lhb0000359>.

²¹ Ryan J Fitzgerald, Eva Rubinová, and Stefana Juncu, 'Eyewitness Identification around the World' in Andrew M Smith, Michael P Togli, and James Michael Lampinen (eds), *Methods, Measures, and Theories in Eyewitness Identification Tasks* (Routledge 2021). – DOI: <https://doi.org/10.4324/9781003138105-16>.

²² Graham Pike and others, 'Eyewitness Identification Procedures: Do Researchers and Practitioners Share the Same Goals?' (2021) 23 *International Journal of Police Science & Management* 17. – DOI: <https://doi.org/10.1177/14613557211004625>.

²³ Richard A Wise, Martin A Safer, and Christina M Maro, 'What U.S. Law Enforcement Officers Know and Believe about Eyewitness Factors, Eyewitness Interviews and Identification Procedures' (2011) 25 *Applied Cognitive Psychology* 488. – DOI: <https://doi.org/10.1002/acp.1717>; Kristjan Kask, 'Comparison of Knowledge of Law Enforcement and Lay People Regarding Eyewitness Testimony' (2011) 18 *Juridica International* 161.

²⁴ Kristjan Kask and Regiina Lebedeva, 'Identification Parades in Estonia: The State of the Art' (2015) 14 *Proceedings: Estonian Academy of Security Sciences* 25.

2. System variables associated with constructing the lineup

2.1. The pre-lineup interview

For construction of a lineup, witnesses need to be interviewed before the identification procedure.^{*25} The main purpose of the pre-lineup interview is to obtain details specific to the culprit that are useful for selecting fillers for the lineup.^{*26} As witnesses tend to provide vague descriptions of people^{*27}, officers need to use evidence-based procedures, such as the cognitive interview, that have been shown to enhance the quality of such descriptions.^{*28} It should be noted, however, that even if the witness is not able to describe the culprit in detail, this does not imply inability to identify the culprit from a lineup. The relationship between descriptions of people and the accuracy of identification is weak^{*29}: the two are facilitated by separate cognitive processes^{*30}. Holistic processing facilitates identification of faces, while verbal retrieval is based on features.

The pre-lineup interview also presents a good opportunity for the officer to get more information about the event, specifically the conditions under which the witness observed or interacted with the culprit.^{*31} This information is useful for assessing the reliability of the witness's memory, as well as for ascertaining whether conducting an identification procedure is reasonable. Furthermore, the pre-lineup interview allows the officer to instruct the witnesses not to discuss the event with other people and not to attempt to identify the culprit on their own – for instance, from social-media content^{*32} – since both impair later identification.^{*33} Because witnesses tend to talk to each other,^{*34} it might be useful also to warn the witness about the possible presence of misinformation, to reduce the negative effect it can have on memory.^{*35}

²⁵ Wells and others, 'Policy and Procedure Recommendations for the Collection and Preservation of Eyewitness Identification Evidence' (n 20) 9.

²⁶ Rebecca Tyler and others, 'Let's Talk about Faces: Identifying Faces from Verbal Descriptions' (2023) 114 *British Journal of Psychology* 262. – DOI: <https://doi.org/10.1111/bjop.12610>.

²⁷ Christian A Meissner, Siegfried L Sporer, and Jonathan W Schooler, 'Person Descriptions As Eyewitness Evidence' in RCL Lindsay and others (eds), *The Handbook of Eyewitness Psychology, Volume II: Memory for People* (Lawrence Erlbaum 2007). – DOI: <https://doi.org/10.4324/9780203936368>.

²⁸ Geri E Satin and Ronald P Fisher, 'Investigative Utility of the Cognitive Interview: Describing and Finding Perpetrators' (2019) 43 *Law and Human Behavior* 491. – DOI: <https://doi.org/10.1037/lhb0000326>.

²⁹ Christian A Meissner, Siegfried L Sporer, and Kyle J Susa, 'A Theoretical Review and Meta-Analysis of the Description-Identification Relationship in Memory for Faces' (2008) 20 *European Journal of Cognitive Psychology* 414. – DOI: <https://doi.org/10.1080/09541440701728581>; Gary L Wells, 'Verbal Descriptions of Faces from Memory: Are They Diagnostic of Identification Accuracy?' (1985) 70 *Journal of Applied Psychology* 619. – DOI: <https://doi.org/10.1037/0021-9010.70.4.619>; Siegfried L Sporer, 'Psychological Aspects of Person Descriptions' in Siegfried L Sporer, Roy S Malpass, and Guenter Koehnken (eds), *Psychological Issues in Eyewitness Identification* (Lawrence Erlbaum 1996). – DOI: <https://doi.org/10.4324/9781315821023>.

³⁰ Jonathan W Schooler, 'Verbalization Produces a Transfer Inappropriate Processing Shift' (2002) 16 *Applied Cognitive Psychology* 989. – DOI: <https://doi.org/10.1002/acp.930>.

³¹ Wells and others, 'Policy and Procedure Recommendations for the Collection and Preservation of Eyewitness Identification Evidence' (n 20) 10.

³² *Ibid* 11.

³³ Rachel Zajac and Nicola Henderson, 'Don't It Make My Brown Eyes Blue: Co-Witness Misinformation about a Target's Appearance Can Impair Target-Absent Line-up Performance' (2009) 17 *Memory* 266. – DOI: <https://doi.org/10.1080/09658210802623950>; Mitchell L Eisen and others, "'I Think He Had a Tattoo on His Neck": How Co-Witness Discussions about a Perpetrator's Description Can Affect Eyewitness Identification Decisions' (2017) 6 *Journal of Applied Research in Memory and Cognition* 274. – DOI: <https://doi.org/10.1016/j.jarmac.2017.01.009>; Wesley Santos Sousa and Antônio Jaeger, 'Memory Conformity for High-Confidence Recognition of Faces' (2022) 50 *Memory & Cognition* 1147. – DOI: <https://doi.org/10.3758/s13421-022-01325-y>; Heather M Kleider-Offutt, Beth B Stevens, and Megan Capodanno, 'He Did It! Or Did I Just See Him on Twitter? Social Media Influence on Eyewitness Identification' (2022) 30 *Memory* 493. – DOI: <https://doi.org/10.1080/09658211.2021.1953080>.

³⁴ Elin M Skagerberg and Daniel B Wright, 'The Prevalence of Co-Witnesses and Co-Witness Discussions in Real Eyewitnesses' (2008) 14 *Psychology, Crime & Law* 513. – DOI: <https://doi.org/10.1080/10683160801948980>.

³⁵ Hartmut Blank and Céline Launay, 'How To Protect Eyewitness Memory against the Misinformation Effect: A Meta-Analysis of Post-Warning Studies' (2014) 3 *Journal of Applied Research in Memory and Cognition* 77. – DOI: <https://doi.org/10.1037/h0101798>.

2.2. Evidence-based suspicion

Before the suspect is placed in a lineup, there should be ‘articulable evidence that leads to a reasonable inference that a particular person, to the exclusion of most other people, likely committed the crime in question’.^{*36} A mere hunch or the suspect fitting a general description of the culprit is not evidence-based suspicion.^{*37} Carrying out lineup procedures without evidence-based reasons for suspecting the individual in question – as investigative authorities have demonstrated that they are willing to do^{*38} – can be a risk factor for mistaken identifications. When eyewitnesses choose someone from the lineup, around 63% of the time it is the suspect,^{*39} who may or may not be the culprit. The behaviour of witnesses overall stays the same in terms of the frequency of the suspect, whether guilty or innocent, getting selected. Thus, the police more commonly putting suspects in a lineup **without prior evidence** connecting them to the crime brings a greater chance of the suspect – and hence a witness-identified suspect – not being the culprit. That is, an overall increase in the rate of culprit-absent lineups results in an increase in false identifications (and known-innocent filler identifications,^{*40} which undermine eyewitnesses’ credibility in any identification further down the line since there is evidence that witnesses who initially identified a filler make more errors in subsequent lineups^{*41}). In summary, implementing the lineup after establishing evidence-based suspicion (but still as soon as possible, because memory tends to deteriorate as the retention interval increases^{*42}) increases the probability that the suspect is the culprit and, hence, of correct identification.^{*43} In turn, the reliability of eyewitness-identification-based evidence increases.

2.3. Lineup structure

Regardless of the number of culprits involved in the crime and irrespective of the number of suspects the police have pinpointed, a lineup should always contain only one suspect.^{*44} Firstly, if multiple suspects are placed in a single lineup, there is a higher chance of one of them standing out, as selecting fillers who match both the descriptions of all the culprits and the appearance of all the suspects in the lineup is difficult. Secondly, having fillers in a lineup facilitates detecting unreliable witnesses who choose fillers: nearly 37% of all identifications are filler identifications.^{*45} Were the lineup to consist of only suspects, those unreliable witnesses would pick out one of the suspects.^{*46} Given that suspect-only and multiple-suspect lineups increase the number of false identifications by unreliable witnesses, there should be a separate lineup for each suspect.

³⁶ Wells and others, ‘Policy and Procedure Recommendations for the Collection and Preservation of Eyewitness Identification Evidence’ (n 20) 12.

³⁷ See Wells and others, ‘Policy and Procedure Recommendations for the Collection and Preservation of Eyewitness Identification Evidence’ (n 20) 12–13 on what constitutes evidence-based suspicion.

³⁸ Jacqueline Katzman and Margaret Bull Kovera, ‘Evidence Strength (Insufficiently) Affects Police Officers’ Decisions To Place a Suspect in a Lineup’ (2022) 46 *Law and Human Behavior* 30. – DOI: <https://doi.org/10.1037/lhb0000476>.

³⁹ Wells and others, ‘Policy and Procedure Recommendations for the Collection and Preservation of Eyewitness Identification Evidence’ (n 20) 5.

⁴⁰ Andrew M Smith and others, ‘Mistaken Eyewitness Identification Rates Increase When Either Witnessing or Testing Conditions Get Worse’ (2019) 43 *Law and Human Behavior* 358. – DOI: <https://doi.org/10.1037/lhb0000334>.

⁴¹ Laura Smalarz and others, ‘Identification Performance from Multiple Lineups: Should Eyewitnesses Who Pick Fillers Be Burned?’ (2019) 8 *Journal of Applied Research in Memory and Cognition* 221. – DOI: <https://doi.org/10.1016/j.jar-mac.2019.03.001>.

⁴² Kenneth A Deffenbacher and others, ‘Forgetting the Once-Seen Face: Estimating the Strength of an Eyewitness’s Memory Representation’ (2008) 14 *Journal of Experimental Psychology: Applied* 139. – DOI: <https://doi.org/10.1037/1076-898x.14.2.139>.

⁴³ Gary L Wells, Yueran Yang, and Laura Smalarz, ‘Eyewitness Identification: Bayesian Information Gain, Base-Rate Effect Equivalency Curves, and Reasonable Suspicion’ (2015) 39 *Law and Human Behavior* 99. – DOI: <https://doi.org/10.1037/lhb0000125>.

⁴⁴ Gary L Wells and John W Turtle, ‘Eyewitness Identification: The Importance of Lineup Models’ (1986) 99 *Psychological Bulletin* 320. – DOI: <https://doi.org/10.1037/0033-2909.99.3.320>; Wells and others, ‘Policy and Procedure Recommendations for the Collection and Preservation of Eyewitness Identification Evidence’ (n 20) 17.

⁴⁵ Wells and others, ‘Policy and Procedure Recommendations for the Collection and Preservation of Eyewitness Identification Evidence’ (n 20) 5.

⁴⁶ *Ibid* 19.

2.4. Lineup media

The medium used to present lineup members varies between and within countries; it may be live or video- or photo-based.^{*47} Research has found no evidence to suggest that any of these forms is better than the others at improving eyewitness identification performance.^{*48} In general, photo lineups are the most practical option. However, care should be taken with choosing the photos. The photo of a suspect should depict the suspect at the age that person was at the time of the crime.^{*49} Older photos should not be used, since age-related changes in faces have been shown to increase mistaken identifications.^{*50} Furthermore, it should be guaranteed that none of the photos stands out due to contextual factors (clothing, background, brightness, etc.), as these too can increase the likelihood of a mistaken identification.^{*51} Live lineups might be preferred when a witness has described something distinctive about the body or gait of the culprit.^{*52} However, it is recommended to use separate lineups for each distinct aspect (e.g., face *versus* voice or face *versus* clothing), since studies show that the diagnostic value of the information obtained increases if the witness identifies these aspects independently of each other.^{*53}

2.5. The lineup size and suspect position

The recommended minimum number of lineup members ranges from three to 10.^{*54} If a witness sees a three-person lineup, the chance of randomly selecting the suspect, who may or may not be innocent, is 25%. The figure drops to 14% for a six-person lineup and to 9% in the 10-person case. In theory, then, increasing the lineup size should reduce false identifications as fillers draw false identifications away from an innocent suspect. However, it also makes finding a set of fillers who match the culprit's description more difficult.^{*55} The academic literature has yet to reach a uniform decision as to the optimal number of lineup members. Although some authors have found that increasing the lineup size beyond three members has no benefit,^{*56} others have concluded that expanding the lineup to six members increases discriminability of guilty and innocent suspects.^{*57} To be on the safe side, practitioners are recommended to increase the number of fillers to at least five, though it is more important to focus on the quality of the fillers.^{*58}

⁴⁷ Fitzgerald, Rubínová, and Juncu (n 21) 305.

⁴⁸ Eva Rubínová and others, 'Live Presentation for Eyewitness Identification Is Not Superior to Photo or Video Presentation' (2021) 10 *Journal of Applied Research in Memory and Cognition* 167. – DOI: <https://doi.org/10.1016/j.jarmac.2020.08.009>; Ryan J Fitzgerald, Heather L Price, and Tim Valentine, 'Eyewitness Identification: Live, Photo, and Video Lineups' (2018) 24 *Psychology, Public Policy, and Law* 307. – DOI: <https://doi.org/10.1037/law0000164>.

⁴⁹ Wells and others, 'Policy and Procedure Recommendations for the Collection and Preservation of Eyewitness Identification Evidence' (n 20) 20.

⁵⁰ Ahmed M Megreya, Adam Sandford, and A Mike Burton, 'Matching Face Images Taken on the Same Day or Months Apart: The Limitations of Photo ID' (2013) 27 *Applied Cognitive Psychology* 700. – DOI: <https://doi.org/10.1002/acp.2965>.

⁵¹ Catriona Havard, Stephanie Richter, and Martin Thirkettle, 'Effects of Changes in Background Colour on the Identification of Own- and Other-Race Faces' (2019) 10(2) *i-Perception* 2041669519843539. – DOI: <https://doi.org/10.1177/2041669519843539>.

⁵² Wells and others, 'Policy and Procedure Recommendations for the Collection and Preservation of Eyewitness Identification Evidence' (n 20) 7.

⁵³ Sean Pryke and others, 'Multiple Independent Identification Decisions: A Method of Calibrating Eyewitness Identifications' (2004) 89 *Journal of Applied Psychology* 73. – DOI: <https://doi.org/10.1037/0021-9010.89.1.73>.

⁵⁴ Fitzgerald, Rubínová, and Juncu (n 21) 303.

⁵⁵ Wells and others, 'Policy and Procedure Recommendations for the Collection and Preservation of Eyewitness Identification Evidence' (n 20) 19.

⁵⁶ Alex R Wooten and others, 'The Number of Fillers May Not Matter As Long As They All Match the Description: The Effect of Simultaneous Lineup Size on Eyewitness Identification' (2020) 34 *Applied Cognitive Psychology* 590. – DOI: <https://doi.org/10.1002/acp.3644>; Melisa Akan and others, 'The Effect of Lineup Size on Eyewitness Identification' (2021) 27 *Journal of Experimental Psychology: Applied* 369. – DOI: <https://doi.org/10.1037/xap0000340>.

⁵⁷ Stefana Juncu and Ryan J Fitzgerald, 'A Meta-Analysis of Lineup Size Effects on Eyewitness Identification' (2021) 27 *Psychology, Public Policy, and Law* 295. – DOI: <https://doi.org/10.1037/law0000311>.

⁵⁸ Wells and others, 'Policy and Procedure Recommendations for the Collection and Preservation of Eyewitness Identification Evidence' (n 20) 19.

Irrespective of lineup size and medium, the suspect should be placed in the lineup randomly. According to some studies, having a ‘favourite position’ for suspects^{*59} can lead to the suspect’s position in the lineup influencing the witness’s identification decision.^{*60}

2.6. Lineup fillers

When constructing the lineup, the most important principle is that the suspect must not stand out from the fillers (fair lineup).^{*61} Research attests that unfair lineups impair witnesses’ ability to distinguish between guilty and innocent suspects.^{*62}

There are two strategies for constructing a lineup: selecting fillers who match the description of the culprit and choosing ones who resemble the suspect in appearance. Matching fillers to the suspect may lead to a lineup in which all individuals are too similar, which hampers witnesses’ ability to discriminate between guilty and innocent suspects.^{*63} Lineups with description-matched fillers have been shown to yield higher discriminability than lineups with suspect-matched fillers.^{*64} Accordingly, selecting fillers who match the culprit’s description is generally recommended. That said, when the suspect noticeably differs from the witness’s description or that description is very vague, an exception might be necessary.^{*65} Vague descriptions could lead to the use of low-similarity fillers, thereby increasing the chance of both innocent- and guilty-suspect identifications.^{*66} In addition, law enforcement must consider distinctive features of the culprit/suspect (tattoos, scars, etc.). These features (or the relevant body parts) can be covered/obscured in all lineup members or, in photo lineups, digitally duplicated for or removed from all individuals. There is evidence that all approaches are equally effective.^{*67} Overall, one can conclude that, while the optimal suspect–filler similarity in lineups has yet to be determined, the most important requirement is that the suspect not stand out in any way. Finally, in every case, the process of selecting the fillers should be documented.^{*68}

⁵⁹ Kask and Lebedeva (n 24).

⁶⁰ Matthew A Palmer, James D Sauer, and Glenys A Holt, ‘Undermining Position Effects in Choices from Arrays, with Implications for Police Lineups’ (2017) 23 *Journal of Experimental Psychology: Applied* 71. – DOI: <https://doi.org/10.1037/xap0000109>; Curt A Carlson, Scott D Gronlund, and Steven E Clark, ‘Lineup Composition, Suspect Position, and the Sequential Lineup Advantage’ (2008) 14 *Journal of Experimental Psychology: Applied* 118. – DOI: <https://doi.org/10.1037/1076-898x.14.2.118>. For results that contradict these, see Julia Meisters, Birk Diedenhofen, and Jochen Musch, ‘Eyewitness Identification in Simultaneous and Sequential Lineups: An Investigation of Position Effects Using Receiver Operating Characteristics’ (2018) 26 *Memory* 1297. – DOI: <https://doi.org/10.1080/09658211.2018.1464581>.

⁶¹ Wells and others, ‘Policy and Procedure Recommendations for the Collection and Preservation of Eyewitness Identification Evidence’ (n 20) 17.

⁶² Melissa F Colloff, Kimberley A Wade, and Deryn Strange, ‘Unfair Lineups Make Witnesses More Likely To Confuse Innocent and Guilty Suspects’ (2016) 27(9) *Psychological Science* 1227. – DOI: <https://doi.org/10.1177/0956797616655789>.

⁶³ Carmen A Lucas and Neil Brewer, ‘Could Precise and Replicable Manipulations of Suspect–Filler Similarity Optimize Eyewitness Identification Performance?’ (2022) 28 *Psychology, Public Policy, and Law* 108. – DOI: <https://doi.org/10.1037/law0000329>; Curt A Carlson and others, ‘Lineup Fairness: Propitious Heterogeneity and the Diagnostic Feature–Detection Hypothesis’ (2019) 4 *Cognitive Research: Principles and Implications* 1. – DOI: <https://doi.org/10.1186/s41235-019-0172-5>.

⁶⁴ Carlson and others (n 63).

⁶⁵ Wells and others, ‘Policy and Procedure Recommendations for the Collection and Preservation of Eyewitness Identification Evidence’ (n 20) 18.

⁶⁶ Ryan J Fitzgerald and others, ‘The Effect of Suspect–Filler Similarity on Eyewitness Identification Decisions: A Meta-Analysis’ (2013) 19 *Psychology, Public Policy, and Law* 151. – DOI: <https://doi.org/10.1037/a0030618>.

⁶⁷ Alyssa R Jones and others, ‘“All I Remember Is the Black Eye”: A Distinctive Facial Feature Harms Eyewitness Identification’ (2020) 34 *Applied Cognitive Psychology* 1379. – DOI: <https://doi.org/10.1002/acp.3714>; Colloff, Wade, and Strange (n 62).

⁶⁸ Wells and others, ‘Policy and Procedure Recommendations for the Collection and Preservation of Eyewitness Identification Evidence’ (n 20) 18.

3. System variables associated with presenting the lineup

3.1. The number of witnesses

An identification procedure should be conducted with each witness individually, without other witnesses being present. Numerous studies show that interactions with co-witnesses influence eyewitness reports,^{*69} the accuracy of identification decisions,^{*70} and confidence in those decisions.^{*71} In addition to hearing about a co-witness's decision,^{*72} the behaviour of another witness (e.g., speed of identification^{*73}) could influence one's pick from the lineup. Therefore, to guarantee that the identification decision is based solely on one's memory of the culprit, it is essential to separate co-witnesses throughout the procedure. Furthermore, recording the responses of all witnesses, not just the one who identified the suspect, is necessary.^{*74}

3.2. Presentation method

Most commonly, lineups are presented either simultaneously (all members are shown at once) or sequentially (members are shown one by one). Debate in the academic literature on which method should be preferred is still ongoing. While several studies have demonstrated an advantage of sequential lineups over simultaneous ones, showing that sequential lineups lead to more correct rejections without affecting the rate of correct identifications,^{*75} more recent research indicates that simultaneous lineups are superior, because they lead to higher discriminability.^{*76} A third group of studies have found no significant differences between the two methods.^{*77} Clearly, researchers have not reached consensus on which lineup procedure is recommended.

Another common procedure is the 'showup', where the witness is presented with a single suspect, without fillers. Showups are highly suggestive, in that the witness expects the person presented, having been chosen for the showup, to be the culprit. Research has shown that witnesses make more mistaken identifications from showups, relative to lineups, and are overconfident in their decisions.^{*78} There are two

⁶⁹ Daniel B Wright and others, 'When Eyewitnesses Talk' (2009) 18 *Current Directions in Psychological Science* 174. – DOI: <https://doi.org/10.1111/j.1467-8721.2009.01631.x>.

⁷⁰ Zajac and Henderson (n 33); Eisen and others, "I Think He Had A Tattoo On His Neck" (n 33).

⁷¹ Sousa and Jaeger (n 33).

⁷² Lora M Levett, 'Co-Witness Information Influences Whether a Witness Is Likely To Choose from a Lineup' (2013) 18 *Legal and Criminological Psychology* 168. – DOI: <https://doi.org/10.1111/j.2044-8333.2011.02033.x>; *ibid*.

⁷³ Amy Bradfield Douglass, Carmen A Lucas, and Neil Brewer, 'Cowitness Identification Speed Affects Choices from Target-Absent Photospreads' (2020) 44 *Law and Human Behavior* 474. – DOI: <https://doi.org/10.1037/lhb0000420>.

⁷⁴ Steven E Clark and Gary L Wells, 'On the Diagnosticity of Multiple-Witness Identifications' (2008) 32 *Law and Human Behavior* 406. – DOI: <https://doi.org/10.1007/s10979-007-9115-7>.

⁷⁵ Nancy K Steblay, Jennifer E Dysart, and Gary L Wells, 'Seventy-Two Tests of the Sequential Lineup Superiority Effect: A Meta-Analysis and Policy Discussion' (2011) 17 *Psychology, Public Policy, and Law* 99. – DOI: <https://doi.org/10.1037/a0021650>; Gary L Wells, Nancy K Steblay, and Jennifer E Dysart, 'Double-Blind Photo Lineups Using Actual Eyewitnesses: An Experimental Test of a Sequential versus Simultaneous Lineup Procedure' (2015) 39 *Law and Human Behavior* 1. – DOI: <https://doi.org/10.1037/lhb0000096>.

⁷⁶ Laura Mickes, Heather D Flowe, and John T Wixted, 'Receiver Operating Characteristic Analysis of Eyewitness Memory: Comparing the Diagnostic Accuracy of Simultaneous versus Sequential Lineups' (2012) 18 *Journal of Experimental Psychology: Applied* 361. – DOI: <https://doi.org/10.1037/a0030609>; Karen L Amendola and John T Wixted, 'Comparing the Diagnostic Accuracy of Suspect Identifications Made by Actual Eyewitnesses from Simultaneous and Sequential Lineups in a Randomized Field Trial' (2015) 11 *Journal of Experimental Criminology* 263. – DOI: <https://doi.org/10.1007/s11292-014-9219-2>.

⁷⁷ Joanna D Pozzulo and others, 'Simultaneous, Sequential, Elimination, and Wildcard: A Comparison of Lineup Procedures' (2016) 31 *Journal of Police and Criminal Psychology* 71. – DOI: <https://doi.org/10.1007/s11896-015-9168-3>; Matthew Kaesler and others, 'Do Sequential Lineups Impair Underlying Discriminability?' (2020) 5 *Cognitive Research: Principles and Implications* 35. – DOI: <https://doi.org/10.1186/s41235-020-00234-5>.

⁷⁸ Mitchell L Eisen and others, 'Comparing Witness Performance in the Field versus the Lab: How Real-World Conditions Affect Eyewitness Decision-Making' (2022) 46 *Law and Human Behavior* 175. – DOI: <https://doi.org/10.1037/lhb0000485>; Scott D Gronlund and others, 'Showups versus Lineups: An Evaluation Using ROC Analysis' (2012) 1 *Journal of Applied Research in Memory and Cognition* 221. – DOI: <https://doi.org/10.1016/j.jarmac.2012.09.003>; Jeffrey S Neuschatz and others, 'A Comprehensive Evaluation of Showups' in Monica K Miller and Brian H Bornstein (eds), *Advances in Psychology and Law* (Springer International 2016). – DOI: https://doi.org/10.1007/978-3-319-29406-3_2.

possible reasons for the superiority of lineups here: the known-innocent fillers attract some of the inaccurate choices that in showups always fall on the innocent suspect,^{*79} and a lineup gives witnesses an opportunity to compare facial features across people.^{*80} In conclusion, avoiding showups is strongly recommended.^{*81}

3.3. Double-blind testing

The identification procedure is a social interaction between a witness and an administrator; therefore, it is not free of influences arising from that interaction.^{*82} Often, lineups are conducted by officers who know which person in the lineup is the suspect; i.e., a single-blind procedure.^{*83} Studies attest that this administrator knowledge has a suggestive effect on witnesses' behaviour, identifications from lineups, and even lineup records.^{*84}

Compared to conditions wherein administrators are unaware of the identity of the suspect (double-blind procedure), administrators who know which lineup member is the suspect are more likely to convey verbal cues (e.g., asking the witness to take another look or repeating the identification choice)^{*85} and non-verbal signals (smiling when the witness looks at the suspect or after a suspect identification, intonation, eye contact, emphasis on certain words, etc.)^{*86} that steer the witness away from fillers and toward identifying the suspect, whether or not that suspect is actually the culprit.^{*87} Furthermore, these cues act as confirmatory feedback to the witness, inflating their confidence in the identification decision^{*88} and potentially distorting their memory of the culprit.^{*89}

Also, administrator knowledge can influence how the lineup outcome is interpreted and recorded. Administrators aware of the suspect's identity are more likely to interpret ambiguous statements about suspects (but not fillers) as identifications,^{*90} interpret witnesses' confidence in the identification of a

⁷⁹ Andrew M Smith and others, 'Fair Lineups Are Better Than Biased Lineups and Showups, but Not Because They Increase Underlying Discriminability' (2017) 41 *Law and Human Behavior* 127. – DOI: <https://doi.org/10.1037/lhb0000219>.

⁸⁰ Melissa F Colloff and John T Wixted, 'Why Are Lineups Better Than Showups? A Test of the Filler Siphoning and Enhanced Discriminability Accounts' (2020) 26 *Journal of Experimental Psychology: Applied* 124. – DOI: <https://doi.org/10.1037/xap0000218>.

⁸¹ Wells and others, 'Policy and Procedure Recommendations for the Collection and Preservation of Eyewitness Identification Evidence' (n 20) 26; Neuschatz and others (n 78).

⁸² Kovera and Evelo, 'Eyewitness Identification in Its Social Context' (n 6).

⁸³ Fitzgerald, Rubínová, and Juncu (n 21) 298.

⁸⁴ Margaret Bull Kovera and Andrew J Evelo, 'The Case for Double-Blind Lineup Administration' (2017) 23 *Psychology, Public Policy, and Law* 421. – DOI: <https://doi.org/10.1037/law0000139>; Margaret Kovera and Andrew J Evelo, 'Improving Eyewitness-Identification Evidence Through Double-Blind Lineup Administration' (2020) 29 *Current Directions in Psychological Science* 563. – DOI: <https://doi.org/10.1177/0963721420969366>.

⁸⁵ Steven E Clark and others, 'Lineup Administrator Influences on Eyewitness Identification and Eyewitness Confidence' (2013) 2 *Journal of Applied Research in Memory and Cognition* 158. – DOI: <https://doi.org/10.1016/j.jarmac.2013.06.003>; David M Zimmerman and others, 'Memory Strength and Lineup Presentation Moderate Effects of Administrator Influence on Mistaken Identifications' (2017) 23 *Journal of Experimental Psychology: Applied* 460. – DOI: <https://doi.org/10.1037/xap0000147>; Mitchell L Eisen and others, 'Does Anyone Else Look Familiar? Influencing Identification Decisions by Asking Witnesses To Re-Examine the Lineup' (2018) 42 *Law and Human Behavior* 306. – DOI: <https://doi.org/10.1037/lhb0000291>; Mitchell L Eisen and others, 'Variations in the Encoding Conditions Can Affect Eyewitnesses' Vulnerability to Suggestive Influence' (2022) 36 *Applied Cognitive Psychology* 1188. – DOI: <https://doi.org/10.1002/acp.4000>.

⁸⁶ Steve D Charman and Vanessa Quiroz, 'Blind Sequential Lineup Administration Reduces Both False Identifications and Confidence in Those False Identifications' (2016) 40 *Law and Human Behavior* 477. – DOI: <https://doi.org/10.1037/lhb0000197>; Lynn Garrioch and CA Elizabeth Brimacombe, 'Lineup Administrators' Expectations: Their Impact on Eyewitness Confidence' (2001) 25 *Law and Human Behavior* 299. – DOI: <https://doi.org/10.1023/a:1010750028643>.

⁸⁷ Sarah M Greathouse and Margaret Bull Kovera, 'Instruction Bias and Lineup Presentation Moderate the Effects of Administrator Knowledge on Eyewitness Identification' (2009) 33 *Law and Human Behavior* 70. – DOI: <https://doi.org/10.1007/s10979-008-9136-x>; Zimmerman and others (n 85); Charman and Quiroz (n 86).

⁸⁸ Nancy K Steblay, Gary L Wells, and Amy Bradfield Douglass, 'The Eyewitness Post Identification Feedback Effect 15 Years Later: Theoretical and Policy Implications' (2014) 20 *Psychology, Public Policy, and Law* 1. – DOI: <https://doi.org/10.1037/law0000001>; Jennifer E Dysart, Victoria Z Lawson, and Anna Rainey, 'Blind Lineup Administration As a Prophylactic against the Postidentification Feedback Effect' (2012) 36 *Law and Human Behavior* 312. – DOI: <https://doi.org/10.1037/h0093921>; Garrioch and Brimacombe (n 86).

⁸⁹ Laura Smalarz and Gary L Wells, 'Confirming Feedback Following a Mistaken Identification Impairs Memory for the Culprit' (2014) 38 *Law and Human Behavior* 283. – DOI: <https://doi.org/10.1037/lhb0000078>.

⁹⁰ Steve D Charman, Kureva Matuku, and Alexis Mook, 'Non-Blind Lineup Administration Biases Administrators' Interpretations of Ambiguous Witness Statements and Their Perceptions of the Witness' (2019) 33 *Applied Cognitive Psychology* 1260. – DOI: <https://doi.org/10.1002/acp.3579>.

suspect as higher than their confidence in that of a filler,^{*91} and record fewer filler identifications. Records by administrators who are unaware of the suspect's identity are more objective and thorough.^{*92} Although administrator knowledge can have severe repercussions, generally neither administrators nor witnesses are aware of the effect that administrator knowledge has on either party.^{*93}

In summary, while the single-blind procedure increases both guilty- and innocent-suspect identification counts relative to the double-blind procedure^{*94}, the additional identifications do not hold any value, since they arise from the suggestive nature of the procedure and are not based on memory.^{*95} To prevent the administrator from intentionally or inadvertently influencing the witness, researchers advocate using a double-blind procedure and informing the witness about it.^{*96}

The double-blind procedure implies that any administrator should handle a given lineup only once. Research has revealed that having already administered the lineup procedure to a witness can bias the decisions of subsequent witnesses, potentially leading to false identifications.^{*97} Although a double-blind lineup therefore may create some practical concerns, it is necessary, because simply instructing the administrator to refrain from any feedback^{*98} or telling the witness that the lineup administrator does not know the identity of the suspect (i.e., creating presumed-blind conditions)^{*99} has not been found effective. Minimising contact between administrators and witnesses can help reduce false identifications,^{*100} but it does not always do so.^{*101} A more effective alternative would be computer-based administration of the identification procedure or allowing the eyewitnesses to self-administer the procedure by means of an envelope method.^{*102}

⁹¹ Jesse H Grabman and Chad S Dodson, 'Prior Knowledge Influences Interpretations of Eyewitness Confidence Statements: "The Witness Picked the Suspect, They Must Be 100% Sure"' (2019) 25 *Psychology, Crime & Law* 50. – DOI: <https://doi.org/10.1080/1068316x.2018.1497167>.

⁹² Dario N Rodriguez and Melissa A Berry, 'The Effect of Line-up Administrator Blindness on the Recording of Eyewitness Identification Decisions' (2014) 19 *Legal and Criminological Psychology* 69. – DOI: <https://doi.org/10.1111/j.2044-8333.2012.02058.x>; Dario N Rodriguez and Melissa A Berry, 'Administrator Blindness Affects the Recording of Eyewitness Lineup Outcomes' (2020) 44 *Law and Human Behavior* 71. – DOI: <https://doi.org/10.1037/lhb0000352>.

⁹³ Garrioch and Brimacombe (n 86); Clark and others (n 85); Amy Bradfield Douglass, Caroline Smith, and Rebecca Fraser-Thill, 'A Problem with Double-Blind Photospread Procedures: Photospread Administrators Use One Eyewitness's Confidence To Influence the Identification of Another Eyewitness' (2005) 29 *Law and Human Behavior* 543. – DOI: <https://doi.org/10.1007/s10979-005-6830-9>.

⁹⁴ Dario N Rodriguez and Melissa A Berry, 'Eyewitness Science and the Call for Double-Blind Lineup Administration' (2012) 2013 *Journal of Criminology*. – DOI: <https://doi.org/10.1155/2013/530523>; Kovera and Evelo, 'The Case for Double-Blind Lineup Administration' (n 84); Kovera and Evelo, 'Improving Eyewitness-Identification Evidence through Double-Blind Lineup Administration' (n 84).

⁹⁵ Wells, Steblay, and Dysart (n 4); Kovera and Evelo, 'The Case for Double-Blind Lineup Administration' (n 84).

⁹⁶ Wells and others, 'Policy and Procedure Recommendations for the Collection and Preservation of Eyewitness Identification Evidence' (n 20) 14; National Research Council (n 5) 106.

⁹⁷ Douglass, Smith, and Fraser-Thill (n 93); Nicole A McCallum and Neil Brewer, 'Can Lineup Administrators Blind to the Suspect's Identity Influence Witnesses' Decisions?' (2018) 25 *Psychiatry, Psychology and Law* 93. – DOI: <https://doi.org/10.1080/13218719.2017.1347937>.

⁹⁸ Garrioch and Brimacombe (n 86).

⁹⁹ Laura Smalarz, Hussein Ireri, and Jacob A Fink, 'Presumed-Blind Lineup Administrators Can Influence Eyewitnesses' Identification Decisions and Confidence' (2021) 27 *Psychology, Public Policy, and Law* 466. – DOI: <https://doi.org/10.1037/law0000317>.

¹⁰⁰ Ryann M Haw and Ronald P Fisher, 'Effects of Administrator-Witness Contact on Eyewitness Identification Accuracy' (2004) 89 *Journal of Applied Psychology* 1106. – DOI: <https://doi.org/10.1037/0021-9010.89.6.1106>,

¹⁰¹ Jesse N Rothweiler, Kerri A Goodwin, and Jeff Kukucka, 'Presence of Administrators Differentially Impacts Eyewitness Discriminability for Same- and Other-Race Identifications' (2020) 34 *Applied Cognitive Psychology* 1530. – DOI: <https://doi.org/10.1002/acp.3733>.

¹⁰² Wells and others, 'Policy and Procedure Recommendations for the Collection and Preservation of Eyewitness Identification Evidence' (n 20) 16.

3.4. Pre-lineup instructions

When asked to view a lineup, witnesses usually approach it with the presumption that the culprit is one of the people shown.^{*103} In consequence, they may feel pressured to choose the suspect or responsible for ensuring the continuation of the investigation, which might lead them to select a person who seems in some way familiar (instead of rejecting the lineup) despite doubts. Therefore, paying attention to how witnesses are instructed before the identification procedure is essential.

One of the instructions studied most is whether the witness is told that the perpetrator may or may not be present in the lineup (unbiased instructions). When no such warning is provided or when the witness is discouraged from giving a ‘no-choice’ response, the instructions are biased. By leading to an increase in both innocent- and guilty-suspect identifications,^{*104} biased warnings promote low discriminability, alongside increased confidence in false identifications.^{*105} Therefore, an explicit ‘not present’ response option should accompany the presentation of lineup members.

Furthermore, researchers have recommended that the witness be presented with an explicit ‘don’t know’ option, to decrease guessing. Although the frequency of ‘don’t know’ responses varies between studies,^{*106} research shows that the presence of this option generally decreases false identifications without reducing correct ones.^{*107} Moreover, there is strong evidence that poor memory of the culprit leads to more opting out.^{*108} Hence, making this option available seems not to undermine identification performance.^{*109}

In conclusion, it is recommended to present the witness with, in addition to verbal instructions, explicit ‘not present’ and ‘don’t know’ options both, to reduce guessing.^{*110} What is more, the recommendation to give unbiased instructions extends to how the witness is asked to come to the station (e.g., ‘Come and see whether you can identify the perpetrator’ *versus* ‘Come and look at the lineup’), as this is another factor that can affect the likelihood of a false identification, irrespective of unbiased instructions received later.^{*111} Researchers also recommend informing the witness that the lineup administrator does not know which

¹⁰³ Amina Memon, Fiona Gabbert, and Lorraine Hope, ‘The Ageing Eyewitness’ in Joanna Adler and Jacqueline Gray (eds), *Forensic Psychology: Concepts, Debates and Practice* (Willan 2004) 107; Neil Brewer and Gary L Wells, ‘Obtaining and Interpreting Eyewitness Identification Test Evidence: The Influence of Police–Witness Interactions’ in Ray Bull, Tim Valentine, and Tom Williamson (eds), *Handbook of Psychology of Investigative Interviewing: Current Developments and Future Directions* (Wiley–Blackwell 2009) 208. – DOI: <https://doi.org/10.1002/9780470747599.ch12>.

¹⁰⁴ Nancy Mehrkens Steblay, ‘Social Influence in Eyewitness Recall: A Meta-Analytic Review of Lineup Instruction Effects’ (1997) 21 *Law and Human Behavior* 283. – DOI: <https://doi.org/10.1023/a:1024890732059>; Steven E Clark, ‘A Re-Examination of the Effects of Biased Lineup Instructions in Eyewitness Identification’ (2005) 29 *Law and Human Behavior* 575. – DOI: <https://doi.org/10.1007/s10979-005-7121-1>; Nancy K Steblay, ‘Lineup Instructions’ in Brian L Cutler (ed), *Reform of Eyewitness Identification Procedures* (American Psychological Association 2013). – DOI: <https://doi.org/10.1037/14094-004>; James Michael Lampinen and others, ‘Comparing Detailed and Less Detailed Pre-Lineup Instructions’ (2020) 34 *Applied Cognitive Psychology* 409. – DOI: <https://doi.org/10.1002/acp.3627>.

¹⁰⁵ Steve D Charman, Rolando N Carol, and Shari L Schwartz, ‘The Effect of Biased Lineup Instructions on Eyewitness Identification Confidence’ (2018) 32 *Applied Cognitive Psychology* 287. – DOI: <https://doi.org/10.1002/acp.3401>; Michael R Leippe, Donna Eisenstadt, and Shannon M Rauch, ‘Cueing Confidence in Eyewitness Identifications: Influence of Biased Lineup Instructions and Pre-Identification Memory Feedback under Varying Lineup Conditions’ (2009) 33 *Law and Human Behavior* 194. – DOI: <https://doi.org/10.1007/s10979-008-9135-y>.

¹⁰⁶ Carmen A Lucas and others, ‘The Effects of Explicit “Not Present” and “Don’t Know” Response Options on Identification Decisions in Computer-Administered Lineups’ (2020) 34 *Applied Cognitive Psychology* 1495. – DOI: <https://doi.org/10.1002/acp.3728>; Nathan Weber and Timothy J Perfect, ‘Improving Eyewitness Identification Accuracy by Screening Out Those Who Say They Don’t Know’ (2012) 36 *Law and Human Behavior* 28. – DOI: <https://doi.org/10.1037/h0093976>; Shaela T Jalava, Andrew M Smith, and Simona Mackovichova, ‘Providing Witnesses with an Option To Say “I’m Not Sure” to a Showup Neither Improves Classification Performance nor the Reliability of Suspect Identifications’ (2021) 45 *Law and Human Behavior* 68. – DOI: <https://doi.org/10.1037/lhb0000434>.

¹⁰⁷ Weber and Perfect (n 106); Timothy J Perfect and Nathan Weber, ‘How Should Witnesses Regulate the Accuracy of Their Identification Decisions: One Step Forward, Two Steps Back?’ (2012) 38 *Journal of Experimental Psychology: Learning, Memory, and Cognition* 1810. – DOI: <https://doi.org/10.1037/a0028461>; Nancy K Steblay and Jonathan D Phillips, ‘The Not-Sure Response Option in Sequential Lineup Practice’ (2011) 25 *Applied Cognitive Psychology* 768. – DOI: <https://doi.org/10.1002/acp.1755>; However, Jalava, Smith, and Mackovichova (n 106) unexpectedly found that an opt-out option led to a large reduction in correct identifications.

¹⁰⁸ Jalava, Smith, and Mackovichova (n 106); Steblay and Phillips (n 107).

¹⁰⁹ Lucas and others (n 106).

¹¹⁰ Wells and others, ‘Policy and Procedure Recommendations for the Collection and Preservation of Eyewitness Identification Evidence’ (n 20) 20; National Research Council (n 5) 107.

¹¹¹ Deah S Quinlivan and others, ‘Do Pre-Admonition Suggestions Moderate the Effect of Unbiased Lineup Instructions?’ (2012) 17 *Legal and Criminological Psychology* 165. – DOI: <https://doi.org/10.1348/135532510x533554>.

lineup member is the suspect, that the witness will be asked to state the level of confidence in their decision after making it, and that the investigation will continue regardless of the decision of the witness.^{*112} Since the level of detail of these instructions varies in practice, more research is required for ascertaining which form is the most effective.^{*113} The crucial element is that all of these instructions are meant as a safeguard against suggestion-induced identifications, which do not hold any diagnostic value.

3.5. The immediate confidence statement

When witnesses provide a confidence statement (specifying how confident they are that they have made a correct decision) immediately after making a lineup decision under pristine conditions (i.e., in a setting of a fair lineup with double-blind administration and unbiased instructions), their initial confidence can be predictive of accuracy.^{*114} When confidence is not obtained straight away, it becomes susceptible to post-decision events. Research has consistently shown that confirming feedback and positive comments inflate eyewitnesses' confidence in the accuracy of their decision,^{*115} especially among inaccurate witnesses,^{*116} and can even alter one's memory of the initial confidence.^{*117} In consequence, a confidence statement delayed by only a mere few minutes post-identification is not reliable anymore. Following this logic, confidence expressed at a trial in a courtroom is not a reliable indicator of eyewitness accuracy either^{*118}; the fact that the case has proceeded to trial confirms to the witness that the prior identification must have been correct.^{*119} Therefore, as soon as a decision is made from the lineup, a confidence statement should be asked and recorded. This is true of all lineup decisions, filler identifications and rejections included.^{*120} A witness who says that he or she does not know should be asked to state the basis for that decision.^{*121} Confidence statements should be documented on a graded scale (numerical or verbal) or in the witness's own words. Although all are predictive of accuracy, witnesses' words might be challenging for administrators to interpret^{*122} and can lead to mistakes in protocolling the statements.^{*123}

High confidence generally indicates increased likelihood of accuracy when collected immediately after the identification decision is made under pristine conditions. However, confidence is not always predictive of accuracy in individual real-world cases: eyewitnesses can still make high-confidence misidentifications.^{*124} There are various factors with potential to affect the confidence–accuracy relationship. More research is needed before scholars can uncover when confidence can aid in assessment of the reliability of identification

¹¹² Wells and others, 'Policy and Procedure Recommendations for the Collection and Preservation of Eyewitness Identification Evidence' (n 20) 20–21.

¹¹³ Lampinen and others (n 104).

¹¹⁴ John T Wixted and Gary L Wells, 'The Relationship between Eyewitness Confidence and Identification Accuracy: A New Synthesis' (2017) 18 *Psychological Science in the Public Interest* 10. – DOI: <https://doi.org/10.1177/1529100616686966>.

¹¹⁵ Steblay, Wells, and Douglass (n 88); Dysart, Lawson, and Rainey (n 88).

¹¹⁶ Amy L Bradfield, Gary L Wells, and Elizabeth A Olson, 'The Damaging Effect of Confirming Feedback on the Relation between Eyewitness Certainty and Identification Accuracy' (2002) 87 *Journal of Applied Psychology* 112. – DOI: <https://doi.org/10.1037/0021-9010.87.1.112>.

¹¹⁷ Rachel Leigh Greenspan and Elizabeth F Loftus, 'Eyewitness Confidence Malleability: Misinformation As Post-Identification Feedback' (2020) 44 *Law and Human Behavior* 194. – DOI: <https://doi.org/10.1037/lhb0000369>.

¹¹⁸ Brandon Garrett, 'Eyewitnesses and Exclusion' (2012) 65 *Vanderbilt Law Review* 451; John T Wixted and others, 'Test a Witness's Memory of a Suspect Only Once' (2021) 22 *Psychological Science in the Public Interest* 1S.

¹¹⁹ Wells and others, 'Policy and Procedure Recommendations for the Collection and Preservation of Eyewitness Identification Evidence' (n 20) 23.

¹²⁰ National Research Council (n 5) 108; *ibid* 21.

¹²¹ Wells and others, 'Policy and Procedure Recommendations for the Collection and Preservation of Eyewitness Identification Evidence' (n 20) 21.

¹²² Jamal K Mansour, 'The Confidence–Accuracy Relationship Using Scale Versus Other Methods of Assessing Confidence' (2020) 9 *Journal of Applied Research in Memory and Cognition* 215. – DOI: <https://doi.org/10.1016/j.jarmac.2020.01.003>; Andrea Arndorfer and Steve D Charman, 'Assessing the Effect of Eyewitness Identification Confidence Assessment Method on the Confidence–Accuracy Relationship' (2022) 28 *Psychology, Public Policy, and Law* 414. – DOI: <https://doi.org/10.1037/law0000348>.

¹²³ Charman, Matuku, and Mook (n 90).

¹²⁴ James D Sauer, Matthew A Palmer, and Neil Brewer, 'Pitfalls in Using Eyewitness Confidence To Diagnose the Accuracy of an Individual Identification Decision' (2019) 25 *Psychology, Public Policy, and Law* 147. – DOI: <https://doi.org/10.1037/law0000203>.

decisions. Furthermore, confidence should not be considered in isolation, and recent research indeed suggests that it is not the sole predictor of accuracy; some evidence exists that, for example, confidence and decision time together give some indication of accuracy.^{*125}

We can summarise the state of knowledge by saying that, although eyewitnesses' initial confidence in their first identification decision may be informative in some contexts, it is not a guarantee of accuracy in evaluating individual identifications in real-world cases.^{*126}

3.6. Non-repetition of the identification procedure

In repeated identifications, the same suspect or fillers are presented to the same witness again, whether in identification procedures performed after an initial lineup or showup, after viewing of mugshots^{*127} or photo arrays, or in connection with identification carried out outside any police procedure (e.g., from a self-directed search of social media^{*128}). In-court identification settings are by no means an exception. Irrespective of the nature of the first procedure, that first identification leaves the witness's memory now containing traces of faces additional to those from the memories of the actual event and suspect.^{*129} These contaminate any subsequent identification and confidence in that identification. Researchers have found that although repeated identifications increase the likelihood of identifying the suspect, they do not improve the likelihood of **guilty**-suspect identifications.^{*130}

There are three main reasons for prior identification decisions' effect on subsequent identifications.^{*131} The first is misplaced familiarity: the suspect seems familiar to the witness, who incorrectly links that familiarity to the witnessed event instead of associating it with the initial procedure that included the suspect (this phenomenon is known as source confusion or unconscious transference).^{*132} This exposure to an innocent suspect increases the probability of misidentifying that innocent suspect.^{*133} Secondly, the witness might select the suspect/filler a second time due to staying committed to their initial identification of that suspect/filler even if the initial identification was wrong (this is called the commitment effect).

¹²⁵ Travis M Seale-Carlisle and others, 'Confidence and Response Time As Indicators of Eyewitness Identification Accuracy in the Lab and in the Real World' (2019) 8 *Journal of Applied Research in Memory and Cognition* 420. – DOI: <https://doi.org/10.1016/j.jarmac.2019.09.003>; Adele Quigley-McBride and Gary L Wells, 'Eyewitness Confidence and Decision Time Reflect Identification Accuracy in Actual Police Lineups' (2023) 47(2) *Law and Human Behavior* 333. – DOI: <https://doi.org/10.1037/lhb0000518>.

¹²⁶ Shari R Berkowitz and others, 'Convicting with Confidence? Why We Should Not Over-Rely on Eyewitness Confidence' (2022) 30 *Memory* 10. – DOI: <https://doi.org/10.1080/09658211.2020.1849308>.

¹²⁷ Kenneth A Deffenbacher, Brian H Bornstein, and Steven D Penrod, 'Mugshot Exposure Effects: Retroactive Interference, Mugshot Commitment, Source Confusion, and Unconscious Transference' (2006) 30 *Law and Human Behavior* 287. – DOI: <https://doi.org/10.1007/s10979-006-9008-1>.

¹²⁸ C Havard and others, 'From Witness to Web Sleuth: Does Citizen Enquiry on Social Media Affect Formal Eyewitness Identification Procedures?' (2023) 38(2) *Journal of Police and Criminal Psychology* 309. – DOI: <https://doi.org/10.1007/s11896-021-09444-z>; Kleider-Offutt, Stevens, and Capodanno (n 33); Camilla Elphick and others, 'Digital Detectives: Websleuthing Reduces Eyewitness Identification Accuracy in Police Lineups' (2021) 12 *Frontiers in Psychology*. – DOI: <https://doi.org/10.3389/fpsyg.2021.640513>.

¹²⁹ HL Roediger, 'Reconstructive Memory, Psychology Of' in Neil J Smelser and Paul B Baltes (eds), *International Encyclopedia of the Social & Behavioral Sciences* (Pergamon 2001). – DOI: <https://doi.org/10.1016/b0-08-043076-7/01521-7>.

¹³⁰ Ryan D Godfrey and Steven E Clark, 'Repeated Eyewitness Identification Procedures: Memory, Decision Making, and Probative Value' (2010) 34 *Law and Human Behavior* 241. – DOI: <https://doi.org/10.1007/s10979-009-9187-7>; Nancy K Steblay and Jennifer E Dysart, 'Repeated Eyewitness Identification Procedures with the Same Suspect' (2016) 5 *Journal of Applied Research in Memory and Cognition* 284. – DOI: <https://doi.org/10.1016/j.jarmac.2016.06.010>; Nancy K Steblay, Robert W Tix, and Samantha L Benson, 'Double Exposure: The Effects of Repeated Identification Lineups on Eyewitness Accuracy' (2013) 27 *Applied Cognitive Psychology* 644. – DOI: <https://doi.org/10.1002/acp.2944>.

¹³¹ Wells and others, 'Policy and Procedure Recommendations for the Collection and Preservation of Eyewitness Identification Evidence' (n 20) 25; Steblay and Dysart (n 130); Wixted and others (n 118); Godfrey and Clark (n 130).

¹³² Elizabeth F Loftus, 'Unconscious Transference in Eyewitness Identification' (1976) 2 *Law and Psychology Review* 93; David R Ross and others, 'Unconscious Transference and Mistaken Identity: When a Witness Misidentifies a Familiar but Innocent Person' (1994) 79 *Journal of Applied Psychology* 918. – DOI: <https://doi.org/10.1037/0021-9010.79.6.918>; JD Read and others, 'The Unconscious Transference Effect: Are Innocent Bystanders Ever Misidentified?' (1990) 4 *Applied Cognitive Psychology* 3. – DOI: <https://doi.org/10.1002/acp.2350040103>; Ryan J Fitzgerald, Chris Oriet, and Heather L Price, 'Change Blindness and Eyewitness Identification: Effects on Accuracy and Confidence' (2016) 21 *Legal and Criminological Psychology* 189. – DOI: <https://doi.org/10.1111/lcrp.12044>.

¹³³ Tiffany Hinz and Kathy Pezdek, 'The Effect of Exposure to Multiple Lineups on Face Identification Accuracy' (2001) 25 *Law and Human Behavior* 185. – DOI: <https://doi.org/10.1023/a:1005697431830>.

Commitment can lead to lineup errors.^{*134} Even repeated identical procedures have been shown to produce commitment effects and misplaced familiarity, with witnesses choosing more but not more accurately.^{*135} The third reason is that the repeated identification procedure might seem to suggest what choice the witness is expected to make. For example, changing only the fillers or only the suspect in a lineup implies that the police suspect the only person not changed or the only person changed, respectively.^{*136}

In sum, identifications from repeated procedures, not least in-court identifications, cannot be reasonably considered reliable evidence. Therefore, the eyewitness's memory should be tested only once, regardless of the fairness of the lineup procedure and the decision of the witness.^{*137}

3.7. Video-recording of the identification procedure

Both witnesses and police officers can be biased in their decisions.^{*138} The memories of both are susceptible to suggestion and subject to error,^{*139} and the errors that arise can seep into police reports.^{*140} To prevent discrepancies in police reports or even potential misconduct, it is recommended to video-record the entire identification procedure (including the interaction preceding and following the lineup itself, along with the pre-lineup interview).^{*141} A video recording aids in preserving a more complete and precise picture of the lineup, the administration of the identification procedure, and the interaction between the lineup administrator and the witness. Furthermore, video-recording might promote adherence to best practices among lineup administrators^{*142}, and the recording can be introduced as evidence and used by the court to evaluate the quality of the conditions and any suggestiveness of the procedure, in aims of determining the credibility of the identification decision.^{*143}

4. Estonia's regulation of the identification procedure

The procedural act of the identification lineup, which covers presenting 'a person or thing, or any other object for identification to the suspect, accused, victim or witness'^{*144}, is regulated in the CCP's Section 81. To our knowledge, Estonian law enforcement has no further official guidelines that regulate the identification

¹³⁴ Deffenbacher, Bornstein, and Penrod (n 127); Charles A Goodsell, Jeffrey S Neuschatz, and Scott D Gronlund, 'Effects of Mugshot Commitment on Lineup Performance in Young and Older Adults' (2009) 23 *Applied Cognitive Psychology* 788. – DOI: <https://doi.org/10.1002/acp.1512>; Amina Memon and others, 'Eyewitness Recognition Errors: The Effects of Mugshot Viewing and Choosing in Young and Old Adults' (2002) 30 *Memory & Cognition* 1219. – DOI: <https://doi.org/10.3758/bf03213404>.

¹³⁵ Wenbo Lin, Michael J Strube, and Henry L Roediger, 'The Effects of Repeated Lineups and Delay on Eyewitness Identification' (2019) 4 *Cognitive Research: Principles and Implications* 16. – DOI: <https://doi.org/10.1186/s41235-019-0168-1>.

¹³⁶ Steblay, Tix, and Benson (n 130); Wells and others, 'Policy and Procedure Recommendations for the Collection and Preservation of Eyewitness Identification Evidence' (n 20) 26.

¹³⁷ Steblay and Dysart (n 130); Wells and others, 'Policy and Procedure Recommendations for the Collection and Preservation of Eyewitness Identification Evidence' (n 20) 25; Wixted and others (n 118).

¹³⁸ Meterko and Cooper (n 8); Charman, Matuku, and Mook (n 90).

¹³⁹ Annelies Vredeveldt and Peter J van Koppen, 'The Thin Blue Line-Up: Comparing Eyewitness Performance by Police and Civilians' (2016) 5 *Journal of Applied Research in Memory and Cognition* 252. – DOI: <https://doi.org/10.1016/j.jar-mac.2016.06.013>.

¹⁴⁰ Stefan Schade and Markus M Thielgen, 'Problems with Police Reports As Data Sources: A Researchers' Perspective' (2022) 13 *Frontiers in Psychology* 873235. – DOI: <https://doi.org/10.3389/fpsyg.2022.873235>; Nancy K Steblay, 'All Is Not As It Seems: Avoidable Pitfalls in the Interpretation of Lineup Field Data' (2018) 24 *Psychology, Public Policy, and Law* 292. – DOI: <https://doi.org/10.1037/law0000171>; Saul M Kassin and others, 'Police Reports of Mock Suspect Interrogations: A Test of Accuracy and Perception' (2017) 41 *Law and Human Behavior* 230. – DOI: <https://doi.org/10.1037/lhb0000225>; Rodriguez and Berry, 'The Effect of Line-up Administrator Blindness on the Recording of Eyewitness Identification Decisions' (n 92).

¹⁴¹ Wells and others, 'Policy and Procedure Recommendations for the Collection and Preservation of Eyewitness Identification Evidence' (n 20) 23; National Research Council (n 5) 108.

¹⁴² Saul M Kassin, 'Eyewitness Identification Procedures: The Fifth Rule' (1998) 22 *Law and Human Behavior* 649. – DOI: <https://doi.org/10.1023/a:1025702722645>.

¹⁴³ Karima Modjadidi and Margaret Bull Kovera, 'Viewing Videotaped Identification Procedure Increases Juror Sensitivity to Single-Blind Photo-Array Administration' (2018) 42 *Law and Human Behavior* 244. – DOI: <https://doi.org/10.1037/lhb0000288>.

¹⁴⁴ From here on, we use the term 'witness' to refer to all individuals to whom the lineup can be presented.

procedure. Although the conditions for preparing and conducting this procedure are prescribed in a somewhat sparse manner in Section 81 of the CCP, at least four essential rules can be deduced. We present these rules here in aims of analysing the extent to which they correspond to the findings from empirical research comprehensively summarised above.

First, as a rule, an identification lineup has to consist of at least **three similar members**.^{*145} The Supreme Court of Estonia has bound this requirement with a need to avoid influencing witnesses and to ensure that they consider all characteristics of the lineup members presented in the course of deciding on identification.^{*146} If the members are not similar – i.e., if two (or more) fillers do not match the description previously given by the witness about the person perceived – there is a high probability of the witness selecting the person presented to them for identification and discarding the fillers *ab initio*. When, in effect, only one person is presented to the witness for identification, the witness may conclude that the administrator expects identification of this very person.

In this respect, the law is aligned with the main scientific findings, but it also displays some shortcomings. It sets a threshold of three members, which empirical research approves, but is unclear on the similarity aspect. As noted above, empirical studies on eyewitness identification suggest that three is the minimum number of members for a proper lineup. To reduce mistaken identifications, it is recommended to increase the lineup to six members (one suspect and five fillers). However, the quality of fillers is also crucial, with the key rule being that the suspect should never stand out. The problem is that the law does not specify the procedure for selecting fillers. Here, research recommends selecting them primarily on the basis of the culprit's description while considering similarity to the suspect. Furthermore, special care should be taken in the construction of photo lineups, with attention to factors such as using a photo of the suspect that is reasonably contemporaneous with the crime and making sure that none of the photos stands out because of contextual factors.

The law is vague regarding whether these three or more similar members must be presented for identification simultaneously. The Supreme Court has not touched on this question. Still, what scholarly literature addresses it expresses the opinion that the wording of the CCP (§81(2)'s 'with at least two other similar objects') indicates simultaneity.^{*147} Current scientific knowledge suggests that simultaneous lineups are not inferior to sequential lineups and, hence, that they serve the purpose of obtaining a reliable identification decision well.

The law is not clear on how many witnesses and suspects shall be present for one identification. Since its language uses a singular form to refer to the one(s) to whom the person for identification is presented ('to the suspect, accused, victim or witness'), it can be argued that an identification procedure has to be conducted with each witness individually, without the presence of other witnesses. Scientific evidence suggests that this is necessary for reducing the likelihood of suggestion-induced identification decisions. The singularity argument ('A person, thing or any other object is presented for identification') can be applied likewise for claiming that only one suspect should be in a lineup at a time and that all-suspect lineups hence are ruled out. We would remind the reader here that the scientific literature and also the procedural-tactics textbook by Herbert Lindmäe^{*148} recommend that a separate lineup be used for each suspect, to decrease the number of false identifications by unreliable witnesses. Furthermore, the position for the suspect should be picked randomly every time. That is another factor not addressed by Estonian law.

It is clear from the law that the rule of similar members must never be transgressed. Still, the law does state that the rule of three may be deviated from if the lineup is objectively impossible to organise due to the nature of the object or person (e.g., a corpse or a building), or due to the peculiarity of the object or person (e.g., an extremely tall person).^{*149} These exceptions are closely related to the requirement, dealt with above, that the lineup be composed of similar members. If objectively exceptional circumstances make it impossible to fulfil this requirement but an identification lineup as a procedural act remains vital, the procedure may still be arranged, just without accompanying members. Of course, in this case, the identification lineup is actually a showup, but the law uses the same term as for settings with three similar members.

¹⁴⁵ CCP, s 81(2).

¹⁴⁶ Judgement of the Criminal Chamber of the Supreme Court of Estonia 3-1-1-33-06 [6.2].

¹⁴⁷ Eerik Kergandberg and Priit Pikamäe (eds), *Kriminaalmenetluse seadustik. Kommenteeritud väljaanne* (Juura 2012) s 81, comment 3 (by M Sillaots); Kergandberg and Sillaots (n 4) 278.

¹⁴⁸ Herbert Lindmäe, *Menetlustaktika* (Juristide Täienduskeskus 1995) 93.

¹⁴⁹ CCP, s 81(3) [1–3].

While the law permits showups under some exceptional circumstances, scientific literature strongly advises against their use, for the above-mentioned reason of suggestibility: if a single person is presented to the witness, the witness automatically (and correctly) assumes that this is the suspect and might feel pressured into an identification. Conducting a lineup procedure is all the more challenging when the suspect has distinctive or peculiar features (or when the object is a building), so a showup might well be tempting; however, a photo lineup could serve as a viable alternative in these instances. Distinctive features or peculiarities can be digitally removed from the suspect's photo, duplicated, or covered in all photos of lineup members. Furthermore, certain peculiarities (e.g., height, weight, and gait) do not prevent constructing a photo lineup for identification of faces. According to the scientific review paper by Wells and colleagues, an exception to the requirement for a lineup is to be made only when immediate identification is necessary and a lineup is not feasible, particularly if a detained suspect fits the description of the culprit and is near the crime scene but there are insufficient grounds for prolonged detention.^{*150} Importantly, all procedural safeguards apart from the inclusion of fillers (e.g., unbiased instructions) must be in place in these cases, to reduce the suggestiveness inherent to showups.^{*151} To conclude, in light of the difficulty of evaluating whether a witness's identification from a showup was based on memory or, instead, was due to the suggestiveness of the procedure, it should be standard practice not to conduct an identification procedure if a lineup cannot be constructed.

Estonian law enables a person to be presented for identification by means of a photograph, or an audio or video recording if the necessity arises,^{*152} but it does not specify whether the rule of three members (with the associated strict restrictions) applies to said situations. The Supreme Court, in judgements from earlier years, considered presenting one photo permissible in principle, explaining that there is no reason to assume that submitting one photo for identification would always lead to a different result than submitting at least three photos of similar persons for identification. According to the Supreme Court, if the witness has been presented with only one photo for identification, it is necessary to assess the likelihood of the witness having made an objective decision. Above all, examining the justification of the witness's decision is required – how many features were pointed out during identification, and which ones?^{*153} However, in a later judgement, the Supreme Court explained that in a situation wherein the investigator wants to determine whether the victim or the witness recognises the person shown in a photo captured in a printout from a security-camera recording rather than ascertain whether the suspect can be recognised on the basis of three or more similar photos, the procedural act described cannot be considered an identification lineup.^{*154} It is not possible to assess definitively whether the court overturned its previous practice with this decision. Still, it would undoubtedly be more logical in view of the purpose of an identification lineup if the requirement of three similar members were to apply also to the submission of photos, audio, and video recordings. Significantly, empirical research has not found any evidence that live lineups are better at improving identification performance than photo or video lineups are. Therefore, the same standards should apply to all lineups, regardless of their medium. In that light, presenting just one photo for identification, accepted by the case law of the Supreme Court on the basis of the argument that presenting three would not lead to a different result, should be heavily opposed. Although presenting one person or photo (in a live or photo showup setting) to a witness does not **always** lead to a result different from what presenting three or more (i.e., a lineup) would produce, decades of research has found that showups result in more false identifications. What is more, Wells and colleagues have weighed in on the matter, emphasising that photo showups should never be employed.^{*155} There is no justification for not taking the time to arrange a proper photo lineup if the investigators already have a photo of the suspect.

The second essential rule that can be derived from the law is that an identification lineup must be **a one-time operation**.^{*156} Empirical findings demonstrate that only one uncontaminated opportunity

¹⁵⁰ Wells and others, 'Policy and Procedure Recommendations for the Collection and Preservation of Eyewitness Identification Evidence' (n 20) 26.

¹⁵¹ Ibid 27.

¹⁵² CCP, s 81(4).

¹⁵³ Judgement of the Criminal Chamber of the Supreme Court of Estonia 3-1-1-33-06 [6.2]; also see that chamber's judgement 3-1-1-98-07 [9].

¹⁵⁴ Judgement of the Criminal Chamber of the Supreme Court of Estonia 3-1-1-36-15 [9.2].

¹⁵⁵ Wells and others, 'Policy and Procedure Recommendations for the Collection and Preservation of Eyewitness Identification Evidence' (n 20) 7.

¹⁵⁶ CCP, s 81(5).

exists for a given witness to identify a particular suspect. Therefore, a decision emerging from a subsequent identification procedure should not be considered reliable evidence, for it is always influenced by the first identification (be that an identification from a lineup, perusing a mugbook, or simply encountering the suspect in a corridor). In-court identification is not exempt from this principle. Whatever the rationale behind conducting a repeated identification procedure, the effect is the same, so researchers strongly recommend testing the memory of the eyewitness only once. However, the CCP permits two exceptions to the rule. Firstly, the lineup may be repeated under the same circumstances if the initial lineup was conducted using photographs or video recordings.^{*157} It must be emphasised at this point again that scientific research has not uncovered any differences in eyewitnesses' identification performance between lineup media. Accordingly, there appears to be no reason to arrange a second lineup in live form. Secondly, according to the law, the lineup may be repeated if there is reason to believe that changes in the subject's appearance led to non-recognition, and restoration of the subject's former appearance is possible.^{*158} Here, one could well ask why the former appearance of the suspect was not restored for the first identification procedure. Since the decision from the second lineup is biased irrespective of the reasons for the failure in the first identification procedure, investigators should take more care to conduct a fair and unbiased lineup procedure the first time around.^{*159}

The third essential rule is that the identification process must be **documented**,^{*160} and the person or lineup presented for identification must be photographed or video-recorded accordingly,^{*161} step by step, in a clear and easy-to-follow manner. This rule encompasses the following requirements. Firstly, the material features of the person on the basis of which the lineup was formed have to be presented in the report of any identification lineup.^{*162} Secondly, a person is to be presented to the witness for identification only after the latter has been questioned about the recognisable features of said person.^{*163} Under the Supreme Court's interpretation, this is a rule without any exceptions^{*164}, and the scientific literature agrees. In the opinion of the Supreme Court, the purpose of the requirement of previous questioning is to evaluate the reliability of the conclusions made by the witness later, in the identification-lineup setting, so the sequence of procedural acts – questioning, then lineup – is paramount. Also, the preceding questioning of the witness is necessary for preparing the identification lineup in that the witness explains the features of the culprit, alongside the perception of conditions, during this pre-lineup interview.^{*165} Additionally, the pre-lineup interview should function as a means to determine the feasibility of conducting an identification procedure in the first place. If the investigator concludes from the statements of the witness that the circumstances during the crime make it almost impossible for the witness to identify the culprit, a lineup should not be conducted. Not conducting an identification procedure when the fundamental prerequisites for reliable identification are unmet (see the ADVOKATE factors in the Turnbull Guidelines^{*166}) reduces mistaken identifications and prevents any negative impact that these could have on the subsequent investigation. Finally, the pre-lineup interview allows the investigator to instruct the witness to avoid looking up the culprit independently and discussing the crime event with other witnesses.

The third documentation-related requirement is that the witness, if recognising the person from the lineup, is invited to name the characteristic features that constitute the basis of the identification decision and to explain the relationship between the person and the event.^{*167} A witness who does not recognise the person shall be invited to explain in what respect the person or persons presented differ from the person related to the event.^{*168} The Supreme Court has explained that requiring the report of an identification lineup to include an explanation by the witness has a substantive meaning for ensuring the right to a defence

¹⁵⁷ CCP, s 81(5).

¹⁵⁸ Ibid.

¹⁵⁹ Kergandberg and Sillaots (n 4) 278.

¹⁶⁰ See the CCP, s 82.

¹⁶¹ CCP, s 81(7).

¹⁶² See the CCP, s 82(1) [1–2].

¹⁶³ CCP, s 81(1).

¹⁶⁴ Judgement of the Criminal Chamber of the Supreme Court of Estonia 3-1-1-52-09 [11.2].

¹⁶⁵ Judgement of the Criminal Chamber of the Supreme Court of Estonia 3-1-1-21-09 [10]; *ibid* [11.2].

¹⁶⁶ *R v Turnbull* [1976] 3 All ER 549.

¹⁶⁷ CCP, ss 81(6) and 82(1) [4–5].

¹⁶⁸ Ibid.

– a right that can only be exercised if there is a possibility of the defence comparing the statements made in the lineup setting with the statements given previously (during questioning) and material for assessing whether and to what extent the characteristics through which the person was recognised are the same as those that the witness had previously stored in memory in connection with the crime event and on the basis of which they had hoped to recognise the person.^{*169} If, during the pre-lineup interview, the witness does not describe the features from which they hope to recognise the person, it is impossible to assess the basis for the witness's later conclusion as to the person's identity or differences detected during the identification-lineup procedure. Therefore, there is no substantive difference between a situation wherein the witness could not describe the features enabling recognition of the person and one in which the witness was not questioned about the features of the person at all.^{*170} That said, the witness not detailing the characteristics from which identification of the person from the lineup followed does not automatically render the identification unreliable.^{*171} The latter stance of the Supreme Court is consistent with research showing that even if the witness cannot describe the culprit in detail, it does not mean that they will not be able to identify the culprit from the lineup. Furthermore, the above-mentioned weak relationship between descriptions of individuals and identification accuracy suggests that it is ill-advised to assess the reliability of identification evidence solely in terms of how many and which features the witness mentioned after the identification.

Another possibility to evaluate the reliability of the identification decision that the CCP does not regulate is the option of asking the witness to state their confidence in their decision immediately after it is made. This initial confidence can be predictive of accuracy. Confidence statements obtained later on (even under oath at trial) are not good indicators of eyewitness memory and accuracy. As discussed above, they may have been influenced by several post-decision events. For this reason, confidence should be obtained before the witness is requested to specify the features behind the identification. It is important also that the confidence statement provided by the witness be recorded as objectively as possible, since witnesses may later have trouble remembering how confident they were during the identification procedure.

While the CCP articulates a requirement to protocol the whole identification procedure and that the lineup presented to the witness be recorded (this can aid the court in assessing whether the lineup fulfils the requirements set forth in the CCP), studies have shown that reports do not always represent the entire procedure objectively. After all, being compiled by investigators, they may be biased. A more objective method than recording merely the lineup, as is required by law, would be to video-record the entire identification procedure.

The fourth requirement is related to the explanations a person gives for the identification carried out during the lineup procedure. They are considered **statements** for purposes of the CCP. This means that during the court proceedings, upon request by a party to the matter, the court may disclose the statements from the report of the identification lineup so as to verify the reliability of those statements during cross-examination in court.^{*172} It follows also that the hearsay prohibition provided for in the CCP's Section 66(2¹) applies to statements made during the identification-lineup procedure (see the CCP's §81(8)). According to Section 81(8) of the CCP, the procedural rules applicable to witness examination provided for in Section 68's 2–6 likewise apply. This raises several concerns. Firstly, the CCP's Section 81(8) precludes the applicability of Section 68(1), which directs the investigator to provide witnesses with an explanation of their rights and obligations. One might ask, therefore, whether the rights and obligations and the nature and purpose of the procedural act should not be explained to witnesses before the lineup procedure. A question arises also as to whether leading questions are allowed during the identification-lineup procedure (see also the CCP's §68(4)). Legal scholars have argued that such questions may be allowed only when the witness explains the connection between the person and the event under investigation, not when the witness cites features of the person recognised.^{*173}

The previous section illustrates that the law does not regulate the interaction between the witness and the lineup administrator before and during the identification procedure at a satisfactory level. This is

¹⁶⁹ Judgement of the Criminal Chamber of the Supreme Court of Estonia 3-1-1-21-09 [10].

¹⁷⁰ Judgement of the Criminal Chamber of the Supreme Court of Estonia 3-1-1-84-11 [15].

¹⁷¹ Judgement of the Criminal Chamber of the Supreme Court of Estonia 3-1-1-98-07 [9].

¹⁷² Judgement of the Criminal Chamber of the Supreme Court of Estonia 3-1-1-52-09 [9]; judgement of the Criminal Chamber of the Supreme Court of Estonia 3-1-1-62-07 [12.3–12.4].

¹⁷³ Kergandberg and Pikamäe (n 127) s 81, comment 10 (by M Sillaots).

especially problematic, as law-enforcement officials underestimate the impact of their actions on lineup outcomes,¹⁷⁴ even though there is ample scientific evidence that the interaction between the administrator and the witness can have a detrimental effect on the behaviour of witnesses and on the accuracy of their decisions (this is true especially in respect of the administrator's knowledge of the identity of the suspect, the pre-lineup instructions administered, and feedback given to the witness). The associated suggestive influences, which can be exacerbated by leading questions, lead to decisions that are not based on the uncontaminated memory of witnesses. Therefore, for greater reliability of eyewitness evidence, it is strongly recommended that unbiased pre-lineup instructions be presented to the witness during a double-blind identification procedure.

The four rules presented above are the essential requirements that Estonian law states for an identification lineup. Interestingly, the law does not set any specific requirements as to **when** this procedural act may be conducted, stating only that it can be done 'where this is needed'. Because the law permits presenting any 'person' for identification, one may conclude that this person need not be a suspect in the meaning of the CCP's Section 33(1).¹⁷⁵ From the empirical findings surveyed, we argue this to be a significant shortcoming of the law. As eyewitnesses' identification decisions are affected by both memory-related and non-memorial factors, it is imperative to conduct the identification procedure only when there are evidence-based grounds to suspect that the suspect is truly guilty of the crime.

5. Conclusions

Several variables that affect eyewitness identification evidence can be controlled by the criminal-justice system. Although many still need further research, quite a few practices have a solid scientific basis. Above, we presented a review of those variables: we explained their influence on eyewitnesses' decisions and introduced recommendations originating from research. Based on that review, we analysed whether the guidelines for eyewitness identification in Estonia, specifically those in the CCP, follow best practices stemming from scientific research.

That research supports several aspects of what the law articulates. The recommendation that the suspect should not stand out is regulated solidly via the rule that all lineup members are to be similar. Furthermore, the law specifies that conducting a pre-lineup interview is a must. This interview serves evaluation of the conditions under which the witness observed the event and the culprit, thus assisting in determining whether it is justified to proceed with an identification procedure. Standard practice should be for a lineup procedure not to be conducted if the conditions of the event do not allow for reliable identification. Furthermore, the pre-lineup interview should guarantee, firstly, that the lineup fillers are chosen on the basis of the description of the culprit and, secondly, the opportunity to assess whether the characteristics the witness named when describing the culprit match those the witness later relied upon to identify a member of the lineup. However, the features named after the identification decision should not be regarded as the sole indicator of the identification decision's reliability. In addition, we encourage lineup administrators to record how confident the witness is in their lineup decision. If obtained immediately after the decision, a confidence statement can add to the information about the accuracy of that decision.

The law establishes the requirement of at least three lineup members; however, lineups of six might ensure better discriminability and reduce the likelihood of picking the suspect by chance. Moreover, the law is vague on whether the rule of three applies to photo lineups as well. This is especially problematic as photo lineups have become more common. Given that decisions from photo lineups are as accurate as decisions from live lineups when the foundational principles are followed, the same requirements, including that 'rule of three', should apply across all lineup media. Consequently, showups should be avoided, whatever the medium.

Although the law states that an identification procedure should be conducted once, it allows exceptions. Research consistently shows that decisions from repeated identification procedures, including in-court identification of the defendant, are unreliable. Furthermore, the exceptions specified in the CCP are not

¹⁷⁴ Kask (n 23).

¹⁷⁵ According to this provision, the suspect 'is a person who has been arrested on suspicion of having committed a criminal offence, or a person in respect of whom there is sufficient cause to suspect them of having committed a criminal offence and who is subjected to a procedural operation'.

supported by scientific evidence, and any need for them can be prevented by focusing on conducting the identification procedure properly the first time. Therefore, it might be time to review the law whereby repeated identification procedures are permitted.

Of special concern is that there are no guidelines at present regulating **when** and **how** the identification procedure shall be administered. This could have a detrimental effect on identification evidence. Firstly, the procedure should be carried out only when there are evidence-based grounds for suspicion. Secondly, we propose requiring the use of a double-blind procedure. Our third recommendation is that witnesses be presented with unbiased instructions. The purpose of these measures is to safeguard the identification process from intentional and unintentional biases.

Finally, the law states that the identification procedure should be thoroughly documented. We would emphasise that all lineup decisions by all witnesses should be subject to protocols, not just the incriminating evidence. Additionally, because the reports are compiled by police officers, they might not be objective enough to enable the court to assess whether the identification evidence was secured through an appropriate procedure. For these reasons, we encourage lineup administrators to video-record the entire identification procedure and recommend that courts use this recording in assessing the reliability of identification evidence.

It has become clear that, with no other official guidelines on how to conduct the identification procedure, the CCP leaves many decisions up to law enforcement. On account of law-enforcement officials' lack of knowledge about eyewitness factors, identification procedures may not adhere to scientific recommendations, potentially impacting investigations. To ensure the reliability of identification evidence, it is crucial to follow evidence-based best practices.

In conclusion, we believe that, along with a review of the law, Estonian law enforcement needs additional official guidelines for arranging and conducting fair lineup procedures. These guidelines can be regularly updated for closer alignment with science-based recommendations. Also, lawyers and courts would benefit from such guidance when assessing the reliability of eyewitness identification evidence. We urge the criminal-justice system to collaborate with researchers and implement evidence-based practices, since memory can be truly tested only once. Reliable eyewitness identification evidence can be an asset but only when acquired through a procedure that is grounded in scientific findings.