Impacts of Evidence on Decision-making in Police Investigation

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Avhandlingen för avläggande av filosofie doktorsexamen i psykologi, som med vederbörligt tillstånd av samhällsvetenskapliga fakultetsstyrelsen vid Göteborgs universitet kommer att offentligen försvaras torsdagen den 10 juni 2021, klockan 10:00, Psykologiska institutionen, Haraldsgatan 1, Göteborg.

Fakultetsopponent: Marko Jelicic professor of Neuropsychology and Law, Faculty of Psychology & Neuroscience, and Faculty of Law, Maastricht University, The Netherlands.

Föreliggande uppsats grundar sig på följande artiklar:

- I. Jang, M., Luke, T. J., Granhag, P. A., & Vrij, A. (2020). The impact of evidence type on police investigators' perceptions of suspect culpability and evidence reliability. *Zeitschrift für Psychologie*, 228, 188–198. https://doi.org/10.1027/2151-2604/a000411
- II. Jang, M., Luke, T. J., Granhag, P. A., Vrij, A., & Lee, W. (2021). Impacts of the type of available evidence on police interrogators' selection of tactics. Manuscript.
- III. Jang, M., Luke, T. J., Granhag, P. A., Vrij, A., & Kim, M. (2021). How Police Tactics Affect Prisoners' and Laypersons' Perception of Evidence. Manuscript.



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In conducting an investigation, police officers collect evidence from various sources (e.g., humans, objects, areas). The type of evidence (i.e., physical vs. personal) can affect the investigators' beliefs about the suspect and how the evidence can be used. In turn, how the evidence is used during the interrogation can impact the suspect's perception of how much evidence the police hold. To date, no study has systematically examined the extent to which types of collected evidence affect investigative decision-making and suspects' perceptions of evidence. This thesis examined the effects of evidence on the two parties (i.e., police investigators and suspects). In Study I, police officers in South Korea (N = 202) read four crime reports naming one suspect and mentioning one piece of critical evidence. The critical evidence was manipulated according to four different evidence types (DNA, CCTV, fingerprint, and eyewitness evidence). Then, they rated the suspect's culpability and the reliability of the critical evidence. Significant differences were found between the conditions in the predicted directions, such that eyewitness testimony (vs. DNA, CCTV, and fingerprint evidence) significantly decreased officers' ratings of the suspect's culpability and the reliability of critical evidence. Moreover, experienced (vs. inexperienced) officers tended to perceive most types of criminal evidence as less reliable. Study II was designed to examine the effects of available evidence on interrogators' selection of specific tactics to use when interrogating a suspect. Police interrogators (N = 106) were randomly allocated to one of five homicide scenarios in each of which only one type of critical evidence (DNA, CCTV, fingerprint, eyewitness, or no evidence) identified a suspect. Officers were then asked to imagine what tactics they would use when interrogating a suspect. A list of 27 tactic names and descriptions was given for their selection, which was classified into five types of tactics. No significant differences were observed between the conditions – that is, the evidence type did not affect the type of interrogation tactics chosen. Study IIIa was conducted with prisoners (N = 59) to examine how suspects' perceptions of the evidence would vary depending on the type of interrogation tactics applied to them. Participants rated their perceived evidence for five interrogation tactic types. Prisoners tended to infer that the interrogator held more evidence when they employed tactics unrelated to using substantiated (reliable) evidence. Study IIIb surveyed laypersons with no prior criminal experience (N = 117). The same design, procedure, and materials were adopted. As with prisoners, laypersons' ratings were significantly higher for the tactics with substantiated evidence than for the other four types. Additional group comparisons in evidence perception show that prisoners' ratings fluctuated much more across the 27 individual interrogation tactics than did laypersons' ratings. In summary, the results suggest that evidence appears to be influential with respect to investigators' judgments about the culpability of a suspect before interrogation. Also, some of the interrogation tactics may be more effective than others in affecting the suspect's perception of the evidence; further research is needed into factors associated with diverse police tactics affecting the perception of evidence. The present findings supplement our understanding of the effects of evidence on investigators' and suspects' decision-making in a police investigation.

Keywords: perceptions of evidence, police interrogation tactics, interviewer's perceived knowledge, investigative decision-making, evidence types

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