Confirmation Bias in Police Decision Making

Bridget Greenhalgh

Coastal Carolina University

Abstract

Conformation bias is the phenomenon in which individuals seek and interpret information that confirms their existing beliefs. Police investigators can experience confirmation bias in the form of a guilt bias. This occurs when Investigators believe a suspect is guilty and seek evidence that confirms the suspect is guilty. The present study investigated the factors that may influence confirmation bias such as years of investigator experience and eye-witness confirmatory evidence. Results indicated a significant direct effect of a positive eye-witness identification and likelihood of commission $\beta = 0.30$, $\rho < 0.001$ and a significant indirect effect of years of experience on a positive eyewitness identification $\beta = -0.22$, $\rho = 0.045$.

Introduction

A 2008 study found that investigators when given confirmatory vs disconformity evidence rated confirmatory evidence as more reliable. Suggesting that evidence strength can vary in elasticity, such as the extent to which different perceptions of evidence strength can be justified (Ask, et al., 2008).

Eye-witness evidence can vary in elasticity depending on investigator bias. Eye-witness evidence is usually perceived as less reliable and credible than other forms of evidence when determining a suspect's culpability (Jang et al., 2020). However, a study done by Ask et al., (2008) found that investigators find eye-witness evidence as reliable and credible as D.N.A, fingerprint, and CCTV (surveillance) evidence when determining suspect's culpability when the eye-witness evidence supports their confirmation bias.

Years of investigator experience may have an effect on guilt bias. For example, a 2002 study found that years of investigator experience increased the likelihood of finding a suspect as deceitful as opposed to telling the truth (Meissner & Kassin, 2002). Another study found that police officers have a stronger tendency for guilt bias than college students (Kassin et al., 2005). Investigators however, indicated higher confidence levels in their decision than college students (Kassin et al., 2005)

Through a path model design, the present study investigated the relationship between years of experience for police officers and guilt bias and how this relationship impacts perceived reliability of eye-witness evidence when an eyewitness positively identifies a suspect or fails to do so.
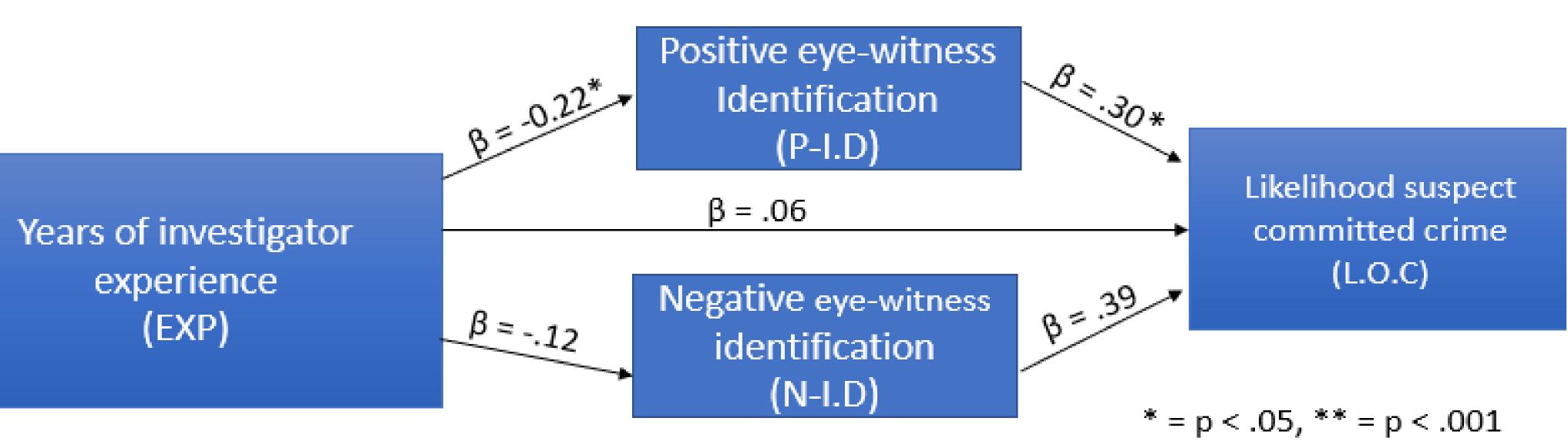
Materials and Methods

Data was collected from 59 participants (N = 59). Participants consisted of police investigators and detectives. Data and materials were utilized from Dr. Woestehoff's 2018 study.

❖ 56.9% of which were detectives
❖ 43.1%. were other types of police investigators.
❖ Participants were 75.4% white, aged 21 to 72 (M = 38.62). Participants were mostly male consisting of 75.4% males and 21.3% females.

Variables

❖ Years of investigator experience
❖ Likelihood the suspect committed the crime (confirmation bias)
❖ Positive eye-witness identification
❖ Negative eye-witness suspect identification

Investigators were instructed to read relevant case materials about a crime involving the murder of a local businessman Elliot Mark. Including a list of potential suspects.

Investigators were given the first half of case materials adapted from O'Brien (2009). That suggested suspicion towards the suspect Bill Briggs.

Investigators were instructed to rate the likelihood of suspect commission, scores from this test were used to measure confirmation bias.

Investigators then received the second half of the case materials that included evidence suggesting Briggs innocence. Such as there was no incriminating evidence found at Briggs apartment and an eyewitness failed to identify Briggs at a lineup.

Investigators were then asked on a ten-point scale, to rate the likelihood Briggs committed the crime, make decision whether to arrest Briggs, rate the reliability of each piece of evidence, and the degree to which the evidence indicated Brigg's innocence or guilt (Woestehoff, 2018).

The degree to which investigators rated eyewitness evidence as an indicator to Brigg's guilt, when an eyewitness identified or failed to identify Briggs at the scene of the crime was analyzed in a regression test to investigate the relationship between confirmation bias and the reliability of eye-witness evidence.

Results

Data from the path model design was run through a regression test to analyze the direct and indirect effects of the variables. Data was analyzed using the data program M-plus. Results indicated,

❖ **Significant** direct effect of a positive eye-witness identification and likelihood of commission $\beta = 0.30$, $\rho = 0.001$.

❖ **Not Significant** direct effect of years of experience on likelihood the suspect committed the $\beta = .06$, $\rho = 0.653$.

❖ **Not Significant** direct effect of a negative eye-witness identification on likelihood the suspect committed $\beta = 0.39$, $\rho = 0.859$.

❖ **Not Significant** indirect effect of years of experience on a negative eye-witness identification $\beta = -0.12$, $\rho = 0.237$

❖ **Significant** indirect effect of years of experience on a positive eyewitness identification $\beta = -0.22$, $\rho = 0.045$.

Discussion

The hypothesis was partially accepted. Results suggest the more likely an investigator believes a suspect is guilty of a crime influences how the investigator views the reliability of eye-witness evidence, when the witness testimony implicates the suspect. The cause of this outcome may be a result of evidence malleability due to subjective bias. For example, investigator expectations of the eye-witness evidence have an effect on perceived evidence strength (Kassin, 2013).

Years of investigator experience also indirectly influenced a positive eye-witness identification. Meaning, years of investigator experience also influences the likelihood the suspect committed the crime only when there is a positive eye-witness identification on the suspect. Years of investigator experience however, did not have an effect on the perceived likelihood the suspect committed the crime.

Investigator confirmation bias has a strong psychological influence, however it can be remedied through education, as well as the removal of weak confirmatory evidence (Kassin, 2013). For example, Saul Kassin believes if judges and juries are better educated about confirmation bias, they may look harder at conclusions drawn by forensic science that supports eye-witness identification, because such evidence may be influenced by previously collected forms of evidence (Kassin, 2013).

A potential way to decrease confirmation bias in this study includes introducing an investigator blind to positive eye-witness identification. Doing so, may result in a decrease of confirmation bias due to the absence of confirmatory evidence.

Path model diagram: Years of investigator experience (EXP) → Positive eye-witness Identification (P-I.D) $\beta = -0.22^*$; Positive eye-witness Identification (P-I.D) → Likelihood suspect committed crime (L.O.C) $\beta = .30^*$; Years of investigator experience (EXP) → Likelihood suspect committed crime $\beta = .06$; Years of investigator experience (EXP) → Negative eye-witness identification (N-I.D) $\beta = -.12$; Negative eye-witness identification (N-I.D) → Likelihood suspect committed crime $\beta = .39$. * = p < .05, ** = p < .001