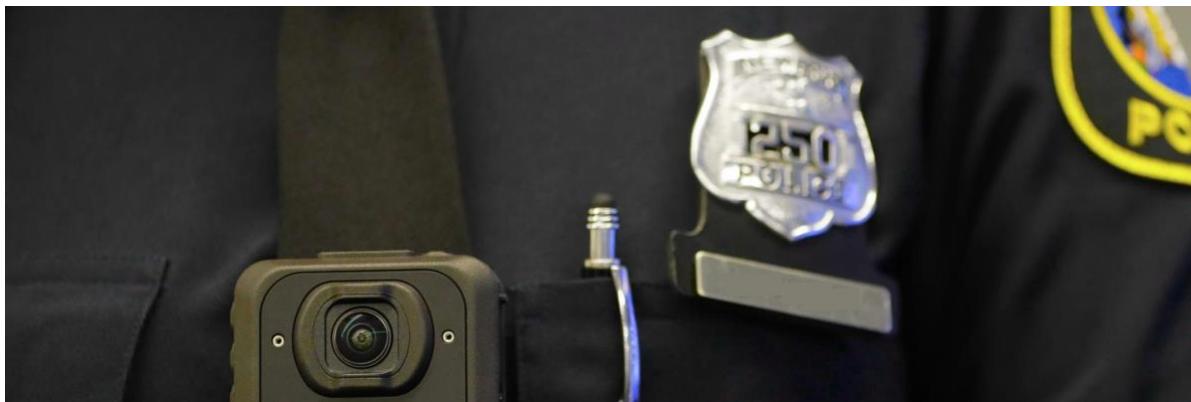


# Scripting Police Escalation of Use of Force Through Conjunctive Analysis of Body-Worn Camera Footage: A Systematic Social Observational Pilot Study

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## Key Takeaways

- Body-camera footage and video data analysis enable the in-depth observation of officer, suspect, and by-stander behavior
- Conjunctive analysis of case configurations is a promising method for script analysis
- Dominant police officer action configurations include procedurally just interactions
- Evidence of suspect impairment was an important contributor to risk of force escalation
- Presence of a victim may inflame the situation
- Non-antagonistic bystanders may civilize the situation
- The highest risk configurations include older police officers

### Research Summary:

Crime scripts organize crime events into sequential stages leading to a specifiable goal. This creates a *procedural script* that provides a *functional explanation* of the behavior in question. More recent research has broadened script analysis to include subject actions, targets of such actions, as well as the totality of the relevant environment, situation or setting.

This exploratory study uses script analysis to describe a series of varying dominant configurations of choice-structuring properties related to escalation of police use of force. We rely on systematic social observation (SSO) of police use of force cases captured on police body-worn cameras to identify actions and environmental characteristics present during the use of force event. We then use conjunctive analysis of case configurations (CACC) to identify dominant case configurations of police officer and suspect actions, demographic characteristics, and environmental characteristics. CACC was also used to determine the relative risk of use of force escalation from soft empty-hand force to more severe forms of force based on case configuration.

The study sample consists of 91 use of force events recorded by BWCs between December 2017 through the end of 2018. Use of force events include a period of time preceding and following the use of force incident(s), beginning when the officers are first visibly seen interacting with any involved parties (e.g., suspects, bystanders, or victims). The end of the use of force event can be described as the time at which full suspect compliance is secured, making the likelihood of physical force minimal. We classified 18 variables across three classifications: officer action points, suspect actions points, and environmental characteristics. Video data was supplemented by NPD arrest records to ascertain gender, ethnicity, and age of officers and suspects.

Results indicate that the overall escalation risk (from open hand use of force to more serious use of force) was 63.74%. Two of the dominant officer action configurations surpass this overall risk substantially and both include officers giving a shout command, with and without also giving a calm command. The officer action profile with lowest risk of force escalation is also the profile containing the most actions indicative of a procedurally just interaction. These results point to the efficacy of officer use of persistent calm commands and behaving in a procedurally just manner for reducing risk of escalation.

Evidence of drug or alcohol impairment of the suspect appears to be one of the most important contributors to risk of escalation. Suspect physical antagonism does not predict escalation when elements such as weapon, suspect flee, and suspect drug or alcohol impairment are also absent. While daytime may elevate risk of escalation, such an effect may be mitigated by the presence of a non-antagonistic bystander. These results suggest that certain types of bystanders can have a civilizing effect on suspects.

The highest risk configurations include older officers and the lowest risk profiles include younger officers. Older or more experienced officers may be resistant or not exposed to cultural shifts in policing, as well as procedural justice and crisis intervention training. However, although older officers increase risk of escalation, when those officers are white, the risk decreases to below the overall risk of escalation.