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The role of situational and environmental factors in sexual crime lethal outcome: an integrated probabilistic framework

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ABSTRACT

This study investigates the factors influencing lethal outcomes in sexual assaults, with a particular focus on situational and environmental factors. Using a sample of 182 extrafamilial sexual homicide cases and a control group of 400 sexual assault cases, the research aims to identify key elements that differentiate lethal from non-lethal sexual crimes. Bivariate analyses, sequential binary logistic regression, and artificial neural network were conducted to examine the predictive power of situational and environmental factors related to the sexual homicide offenders and victim. Results highlight significant distinctions between lethal and non-lethal cases, particularly concerning weapon presence, evidence destruction, and the choice of a familiar setting for the perpetrator. These findings support the integration of situational and environmental factors into theoretical models, offering a more comprehensive framework for understanding the escalation to lethal outcomes in sexual violence. These findings have practical implications for investigations, helping refine suspect profiles, prioritise leads based on situational and environmental risk indicators, and improve the identification of high-risk cases.