Enhancing Criminological Theories with AI: A New Approach to Combat Human Trafficking

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Abstract

This study attempted to bring on board the use of AI in countering human trafficking utilizing the criminological theories to enhance the effectiveness of the methods being employed in the fight against this heinous crime. Applying the Routine Activity Theory (RAT), Social Learning Theory (SLT), and Strain Theory (ST) the study attempted to illustrate the directions where AI can improve the architecture applied in the detection, prevention, and intervention of the trafficking activities. The study used the systematic literature review framework to evaluate the current literature and case studies relevant to AI in human trafficking. According to the analysis, the application of AI which includes Machine Learning (ML), Natural Language Processing (NLP), and Social Network Analysis (SNA) enhances the strength of policing and decision-making organizations. Firstly, it can target some aspects of the problem by tracing where it is most likely to occur and can track it endlessly, both of which will improve resource management and early response. However, the study also highlighted that the utility of AI has to be backed by ethical aspects such as privacy, bias, and accountability. Therefore, it should be noted that the integration of AI with the principles of the criminological theory can present ways of combating human trafficking, but such a process must be accompanied by the investigation of attainable problematic elements and the development of strategies to enforce the positive impacts of integrating AI while minimizing detrimental effects.

Keywords: *artificial intelligence (AI), human trafficking, criminological theories*