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Sexual assault and the doctrine of chances in the courtroom

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I. Introduction

Sexual assault can have devastating and long-lasting effects on victims, but many assailants get away with their crime without being prosecuted.

The doctrine of chances is a rule of evidence allowing evidences of past crimes, wrongs, or acts to show it is unlikely a defendant would be repeatedly and innocently involved in similar, suspicious circumstances.

Figure 1 – The process of prosecuting rape

Given that about 63.3% of assailants are repeat offenders, the doctrine of chances could effectively be used in sexual assault cases.

The main objective is to determine a precise probabilistic threshold for allowing the use of the doctrine of chances in sexual assault cases such that more evidence may be admissible in cases of a repeat offender.

II. Methods

The general model used in this study was constructed using the statistics compiled by RAINN stating that 32% of rapes are reported, 3% are prosecuted, and 2% are imprisoned (figure 1).

Data compiled in the Lisak and Miller study was used as a basis for how many rapists are repeat offenders.

This data was compiled into directed graphs in order to create formulas yielding the probabilities of a person going to jail, being prosecuted at least once, and being prosecuted more than once for any amount of offenses (figure 2).

Also, using Bayes' Theorem and similar graphical constructions, the probability of an innocent person being prosecuted was calculated.

III. Results

It is extremely unlikely that any innocent person is prosecuted for rape more than once even when using the highest reasonable probabilities in the calculations. This being the case, if a person is being prosecuted for two similar, independent instances of rape, the doctrine of chances should be applicable to allow the presentation of evidences for the previous instances.

If the doctrine of chances may be used in such cases, it will increase the possible evidence accessible to the prosecution. Since lack of evidence is a major obstacle in carrying out such a prosecution, this evidence could allow the prosecution of more repeat offenders and prevent them from committing additional rapes in the future.

IV. Conclusions

The probability of an innocent person being prosecuted more than once is at most 0.0083% given that the prosecutions are completely independent of one another. This number decreases for more than 2 prosecutions.

P(Pr|I) = P(I|Pr)P(Pr) / P(I) = (0.26)(0.03) / 0.0091 = 0.91%

Pr = A person being prosecuted
I = A person is innocent

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