Examining the Impact of Deterrence on the Willingness to Commit Politically Motivated Cyber Attacks

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Scholars have raised concerns about potential significant physical and financial damages that can be caused from attacks committed against critical infrastructure by attackers living in the United States and abroad. Cybercrime scholars in the United States, however, have spent a majority of their efforts studying either crimes against persons (e.g., online harassment) rather than crimes against entities, or simpler forms of cybercrime (e.g., digital piracy) rather than more complex forms (e.g., hacking, use of malicious software, etc.). The field has also focused heavily on applying traditional criminological theories to a wide variety of cybercrimes, but surprisingly few studies empirically examine the utility of deterrence theory in cyberspace rather than merely speculate on its deficiencies. In one of the few studies that empirically examined motivations to commit attacks against critical infrastructure, Holt and Kilger (2012) focused on views of nationalism, patriotism, and out-group anonymity, but did not include concepts tapping into traditional criminological theories, such as deterrence theory. In this study, we built upon the work of Holt and Kilger (2012) by administering a survey that included measures of motivation to commit politically motivated attacks against critical infrastructure, formal deterrence, informal deterrence, perceptions of online anonymity, online and physical deviance, definitions supportive of online deviance, and demographics to 775 college students at a large regional university in the United States. Results indicate that formal deterrence did not have a significant impact on willingness to participate in either website defacement or compromises against critical infrastructure. Similar to the traditional literature, informal deterrence, however, was important in our understanding of these types of attacks. Implications for policy and theoretical development will be discussed.