

The Preemptive Strike Game

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ABSTRACT

In this thesis, an overview of the studies which had led to the creation of the Pre-emptive Strike Game is presented. This game is conceptualized as an investigative tool meant to measure the participants' willingness to aggress against another player even without a clear incentive to do so, simply out of a perceived need for self-defence. It demonstrates that under certain circumstances people will be ready to pay a cost to protect their remaining assets, even though it is clearly a better choice, what is to say, the benefit-maximizing choice, to remain passive and refrain from attacking. That the mere presence of a threat, even if expecting that threat to come to fruition is unreasonable, can induce a person to act in self-defence is in itself an important clue as to how interpersonal, and more importantly, intergroup conflict is structured and promoted. It was our goal to show that this phenomenon can reliably be replicated in a laboratory setting.

The Pre-emptive Strike Game is a one-shot non-repetitive game. In it, two players who know nothing about each other have to decide whether or not to push a red button displayed in the middle of their computer screens during a certain time frame. Should neither player push the red button before the time expires, both players would receive the highest possible payoff. However, if one of the players pushes the red button, they would pay a certain cost, while the other player would pay a separate, higher cost, at the same time losing their ability to push the red button in turn.

In this way, pushing the red button constitutes a pre-emptive strike what is to say an act of aggression which has as its goal the annihilation of a potential enemy's aggressive power, in that way staving off a possible attack. We show that a significant portion of the population will aggress in this way even though there was no incentive for either player to engage in the pre-emptive strike themselves, and no reasonable expectation of the other party wanting to do so.

Further, we speculated that group membership might influence the attack rate. Typically, in-group members are judged to be more intelligent, kinder and more willing to assist than out-group members. Also, an imperative of mutual cooperation, fairness and reciprocity which exists within a group does not necessarily operate between groups. All of these beliefs have been previously shown to be applicable to minimal groups. For these reasons, we expected that we may observe positive in-group bias (what is to say, a lower attack rate toward in-group rather than out-group members) in the Pre-emptive Strike Game in which participants were divided into minimal groups. Furthermore, there was the possibility that a belief out-group should be treated aggressively pre-exists and would lead to a high attack rate when one is facing an out-group member. However, at least in the case of minimal groups, no bias was observed, with both in-group and out-group member being attacked in the same amount. We conclude that while the mere presence of an opponent who is capable of doing harm, even though they have no reasonable incentive to do so, is enough for a significant amount of the populations to engage in defensive aggression, this tendency is not influenced by a priori judgments about groups. We discuss how these findings apply to real-life conflict situations and the dynamics of war.