

Is revenge sweet? Usually, we expect that getting even will soothe our pain, improve our mood and bring us relief. But is this really happening? I will try to answer on this question in this research project.

Findings regarding the "sweetness" of revenge are contradictory. On the one hand, the results of self-report studies show that revenge *per se* does not evoke positive emotions. On the other hand, the results of studies using physiological and neuroscientific methods show that revenge is a pleasant experience. I suggest that both approaches can be true. The key to understanding the puzzle of the "sweetness" of vengeance may be the belief in its hedonistic function.

In this project I will examine whether people who believe in the hedonistic function of revenge, i.e. expecting retaliatory actions to make them feel good, are more aggressive in response to provocations. I will also examine whether they experience both immediate and prolonged hedonic response to revenge. This reaction will be measured in three ways. First, I will be measuring heart rate variability from the moment of provocation to retaliation. I expect a reduction in heart rate after engaging in retaliatory actions. Second, I will be asking participants to report their mood immediately after retaliation and after a ten-minute break. Third, I will be asking participants to complete word fragments that can be completed to form words pertaining to reward or not. The provocation will be manipulated in two ways: by punishing participants with aversive noise and by giving negative feedback. In this research project I will also examine whether cognitive reappraisal - changing the way one thinks about potentially emotion-eliciting events, reduces aggressive behavior especially among people who expect pleasure from revenge. I assume that the use of this technique will break the vicious circle of beliefs and behaviors.

The proposed research may fill in the important gap in our understanding of the consequences of the belief that revenge is sweet. It can advance our knowledge on motivational dynamics behind retaliatory aggression and intervention that may address this very dynamics. As such, the proposed project may have practical implications and help to reduce aggression.