

## **Abstract Intended Behavior Task**

One of the main goals of experimental psychology is to understand and predict behaviors. These types of investigation allow experimenters to measure the behavior of volunteers, both explicitly and implicitly. However, measuring a behavior is time consuming, and as a result, experimental studies generally measure only a single type of behavior. Another way consists into questioning volunteers on their intention to have a certain behavior. But the major problem is that such approach mostly relies on questionnaires focusing on explicit reports only, which are more sensitive to social bias compared to implicit measurements. The present paradigm aims at presenting a novel method to measure intended behaviors both at the explicit (i.e., which behavior volunteers report they are willing to do) and at the implicit level (i.e., the cognitive conflict elicited by these intended behaviors). Using this method, we investigated intended prosociality in the context of the Rwandese genocide.

Studying how intergroup prosociality evolves in war-torn societies is critical for understanding better the perpetuation of conflict. Rwanda is a unique example of how two groups have to reconcile and manage their intergroup biases after a genocidal process. In the present study, we used a novel Intended Behaviors Task to measure intergroup prosociality between former perpetrators, survivors and their children in Rwanda. Participants had to decide between different individuals representing their own ingroup or their outgroup who would be the recipient of their prosocial intentions. We measured how frequently they selected the ingroup or outgroup individuals and to what extent choosing each individual induced a cognitive conflict, as measured with reaction times (RT) and mid-frontal theta activity (FM $\theta$ ). Results indicated that survivors and their children selected less frequently former perpetrators and their offspring. Further, selecting them involved a higher cognitive conflict, as indexed by longer RT and a higher FM $\theta$ , compared to choosing their own ingroup. For the group composed of former perpetrators and their children, we observed a dissociation. They selected more frequently the outgroup individuals, perhaps as compensating behavior for their past wrongdoings. Nonetheless, selecting the outgroup individuals involved a higher cognitive conflict than selecting their own ingroup. Importantly, we observed a similar intergroup prosociality bias in children of survivors and of former perpetrators as their parents. Results are important to understand how past conflicts influence the intergroup prosociality bias, and to what extent this bias is diffused to the next generation individuals. In summary, we presented a new EEG-based paradigm to measure intended behavior that can reveal dissociations between explicit and implicit measurements. Further studies need to explore how these measurements of intended behaviors could predict real behaviors.