Anger and cognition. Identifying associations and underlying mechanisms in psychometric and experimental studies

Anger is a negatively valenced affect embedded in a specific situational context, such as personal insult, provocation or frustration in response to having one's goals blocked. Frequent and intense experiences of anger (i.e., trait anger) have a number of adverse consequences including health problems, an increased likelihood of aggression, and relationship difficulties. Several studies also reported poorer cognitive functioning of individuals exhibiting a high level of state or dispositional anger. However, recent data suggest that anger might also have positive outcomes. For instance, in comparison to other negative affects, anger increases one's sense of control and helps to accurately perceive risk of threat. Furthermore, cognitive functioning may benefit from some specific aspects of anger, such as such as increased arousal, approach motivation, and even positive affect observed among individuals experiencing anger or exhibiting high trait anger. These factors may enhance response speed, attentional processes or attaining goals. Therefore, the angercognition association might be more complex than was typically assumed. The aim of the present project is deeper understanding of the relationship between trait anger (although state anger will be also controlled) and cognitive functioning. The project will study simple cognitive processes, such as the speed of simple reactions, selective attention and the breadth of cognitive scope, as well as higher order cognition related to executive functions, planning and goal striving, fluid intelligence and cognitive strategies of emotion regulation. In the second part, possible mechanisms will be tested. As a result, a more complete model of the cognitive underpinnings of anger is hoped to be described. This may allow to understand the complexity of trait anger and potential problems characteristic for high trait anger individuals (e.g. specific cognitive biases etc.).

The results of the current project will extend our knowledge on anger as an emotion and as a tendency to react angry (trait anger). Systematic studies of the anger - cognition relationship will help to understand the unique function that anger plays in everyday life. Moreover, it will also provide knowledge on the cognitive underpinnings of anger, which may be used in the anger management trainings and interventions.