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## Background

Predicting the onset of a suicidal mode is a complex task due to the limited reliability of conventional self-report methods. From a neuropsychological perspective, it has been confirmed that individuals with suicide attempts share unconscious cognitive biases that link multiple thoughts to the concept of death. The Death Implicit Association Test (D-IAT) uncovers unconscious self-death links. However, it does not measure the emotional valence of death. Supplementing the D-IAT with emotional attitudes may provide insights into implicit evaluations of death. This is particularly significant as the assessment of death and life holds great importance in the two prominent theories, namely the Interpersonal Theory of Suicidal Behavior and the Integrative Motivational-Volitional Model.

## Aim

The objective is to investigate whether the **implicit emotional valence of death** measured with a personalized D-IAT is **stronger** in **patients with recent suicide attempts** compared to non-suicidal patients.

## Methods

Our study was based on the Identity D-IAT by Nock et al. (2010) and its validated, suicide-specific German version by Rath et al. (2018). In addition to the Identity D-IAT, we added a new version exploring the emotional evaluation of death. This version is informed by models derived from social psychology and addiction research (Houben & Wiers, 2007; Olson & Fazio, 2004) and called Emotional D-IAT. Our study employed a **single measurement point**. A total of 90 patients were examined and divided into **two groups**:

1. Patients with a recent (last month) suicide attempt (SA, n = 45)
2. Non-suicidal patients (CLIN, n = 45)

We analysed associations between “death” / “life” and Identity D-IAT: “me” / “not me” and Emotional D-IAT: “I like” / “I don’t like”. Participants were asked to match the words presented with these categories as quickly as possible. D-scores, derived from reaction times, represented the strength **of the implicit connection between the patient’s self-concept and the concept of death**, as well as the implicit emotional evaluation of death. A positive D-score indicated stronger self-death associations and a more positive emotional evaluation of death than life. Additionally, the Beck Suicide Ideation Scale (BSS) was conducted.

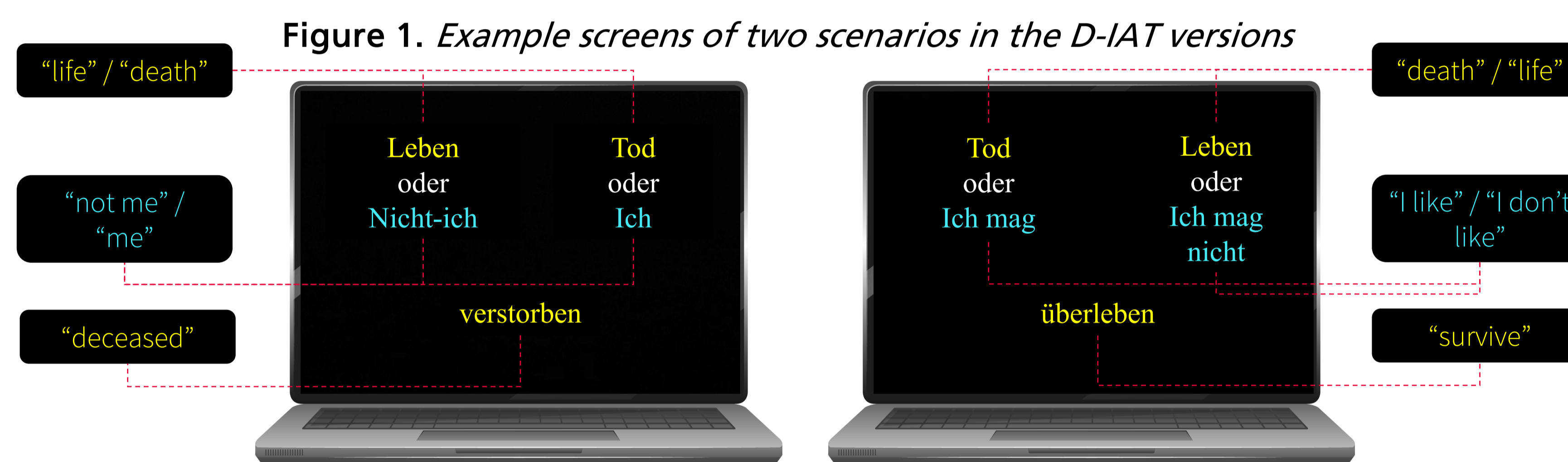
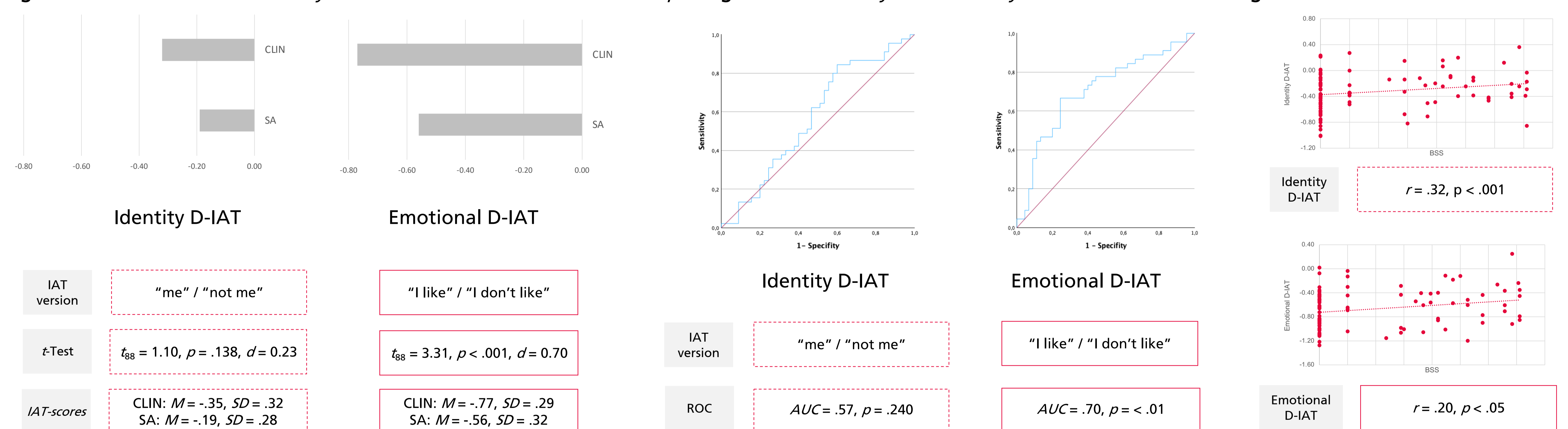


Figure 1. Example screens of two scenarios in the D-IAT versions

## Results

Figure 2. Mean D-scores of Identity and Emotional D-IAT over both Groups Figure 3. ROC-Analysis for Identity and Emotional D-IAT Figure 4. Correlation BSS and D-IAT



## Conclusion

- With the implicit emotional valence, the study aligns with extended findings from suicide research that explore implicit associations with death.
  - Using a personalized D-IAT, we captured a weaker negative implicit emotional association with death in recent suicide attempters compared to non-attempters.
  - The novel variant also outperformed the conventional D-IAT in the discriminative ability of the two groups.
  - The Emotional D-IAT emerges as a valuable tool for refining implicit emotional assessments in suicide research, prompting further exploration of its clinical utility and generalisability.
- Further research: Analysing further groups (e.g., suicide ideators and a healthy control group). Increasing the total sample to N = 280.