



Ruprecht-Karls-Universität Heidelberg
Medizinische Fakultät Mannheim
Dissertations-Kurzfassung

**Brain activity and implicit measures of affective associations in
memory as indicators for implicit attitudes towards euthanasia in
Germany**

Autor: Martin Enke
Institut / Klinik: Zentralinstitut für Seelische Gesundheit Mannheim (ZI)
Doktormutter: Prof. Dr. H. Flor

The political regulation of euthanasia is a highly debated issue. Results from investigations of euthanasia acceptance were ambiguous as they were predominantly based on self-report measures, which are susceptible to social conformity. According to dual process theories of attitude guided behavior, the attitudinal response can be driven by automatic or implicit associations, which might be intentionally modulated with respect to norms and culture. Such biases might play a role in the sensitive issue of euthanasia. Thus, indirect measures of attitudes (implicit attitudes), which reflect automatic associations in implicit memory, were assessed and compared to self-report measures (explicit attitudes).

In the first study, 30 medical students and 25 physicians completed a unipolar implicit association test and questionnaires on their attitude towards euthanasia. It was assumed that a possible negative attitude towards euthanasia might be based on historical knowledge of malpractices in National Socialism. The results suggest an ambivalence of the students and a discrepancy between implicit and explicit attitudes in older physicians. The latter show negatively valenced implicit associations in memory and a tendency to express positive statements in the questionnaire data. Furthermore, they possess semantic associations between National Socialism and euthanasia, which might contribute to the negative connotations in memory.

To test whether the attitudinal response differs with respect to the time frame in which the response is assessed, event-related potentials and reaction time measures of 25 medical students were quantified during an affective priming paradigm and were compared to explicit measurements. The event-related potential at about 400 ms revealed implicit negative associations to euthanasia. This was not present in later indirect measures (from 900 ms and later), which revealed connotations concordant with the explicit attitude. The results suggest that early negative associations may be regulated to an explicit more socially conformable attitude.

We suggest that indirect measurements in the evaluation of euthanasia acceptance are useful and can be compared to explicit attitudes in order to detect the entire evaluative process. Self-report measures possibly reveal a self-presentational bias.