

Poster

Abstract Thoughts or Concrete Experiences: Darkness Triggers Cognitive and Affective Preferences

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Light and darkness produce mixed cognitive and emotional *outcomes* but it is rather unclear whether and how it changes our *ways* of thinking and feeling. The present paper addresses this question from a construal-level perspective (CLT; Trope & Liberman, 2010) because it has recently been demonstrated that darkness triggers a more abstract information processing style and is associated with high-level construals (Steidle et al., 2011). Cognitive and affective preferences or general tendencies can also differ in their construal levels. Based on CLT (Trope & Liberman, 2010), low-construal preferences involve a focus on details and concrete experiences within a given context, whereas high-level preferences involve abstraction, transforming the known and transcending the here and now. Hence, due to the association between darkness and construal level, we argue that darkness should lead to affective and cognitive preferences associated with a higher construal level than brightness.

Studies 1A and B tested our hypothesis on an implicit, associative level using a very general distinction between high-level and low-level preferences: thinking and feeling. Hence, darkness should lead to a preference of thinking and brightness to a preference for feeling. This assumption was confirmed by an Implicit Association Test showing that darkness is implicitly associated with thinking rather than with feeling and by a priming study. In this priming study, participants primed with brightness identified words related to feeling faster than participants primed with darkness. On an implicit level, the two studies support our assumption that darkness triggers cognitive

and affective preferences of a higher construal level than brightness.

Experiments 2A and 2B aimed at replicating the previous findings on a perceptual level using room lighting as a manipulation of darkness and investigating specific preferences associated with different construal levels: need for cognition (high level cognitive) vs. the need for closure (low level cognitive); sensation seeking (high level affective) vs. the need for affect (low level); preference for deliberation (high level decision making) vs. preference for intuition (low level decision making). As explained above, we expected that darkness should lead to affective and cognitive preferences of a higher construal level than brightness. This assumption was confirmed by a correlational study using a subjective measure of darkness and by an experiment manipulating darkness (1500 vs. 150 lx).

Across four studies, darkness was related to high-level preferences and brightness was related to low-level preferences. This is in line with previous findings showing that darkness promotes an abstract information processing style (Baron et al., 1992; Steidle et al., 2011) and with CLT (Trope & Liberman, 2010). Darkness appears to work as an environmental signal of abstraction and distance which influences our way of thinking and feeling. This adds to the notion of procedural embodiment stating that perception and body experiences influence the processing rather than the content level (Förster & Denzler, 2012). In sum, this research offers a starting point to investigate the possibly wide-ranged impact of basic environmental conditions on the way we feel, think and decide.