

# UX Design for Privacy Policy and Trust: the case of Cookie Banners

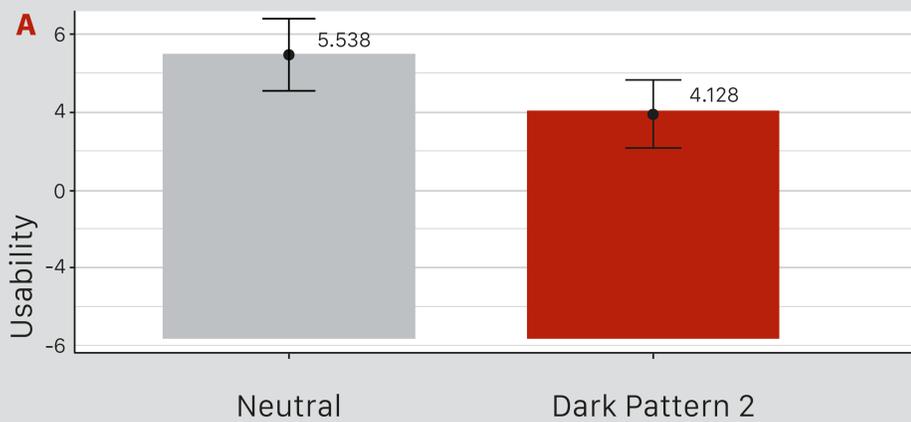
V. Hoth, M. Ivanova, T. Nguyen, S. Brandenburg

Since the adoption of the General Data Protection Regulation (GDPR) in 2018 more than 60 % of popular websites in Europe display cookie consent notices to their visitors. These often apply dark patterns to reduce interruption to the user flow and to nudge users into giving consent to data tracking. Dark Patterns (Dp) are design nudges integrated into user interfaces that benefit an online service by leading users into

making decisions in the interest of the provider. White Patterns (Wp) lead users into making decisions that are in the interests of the user (Brignull, 2010).

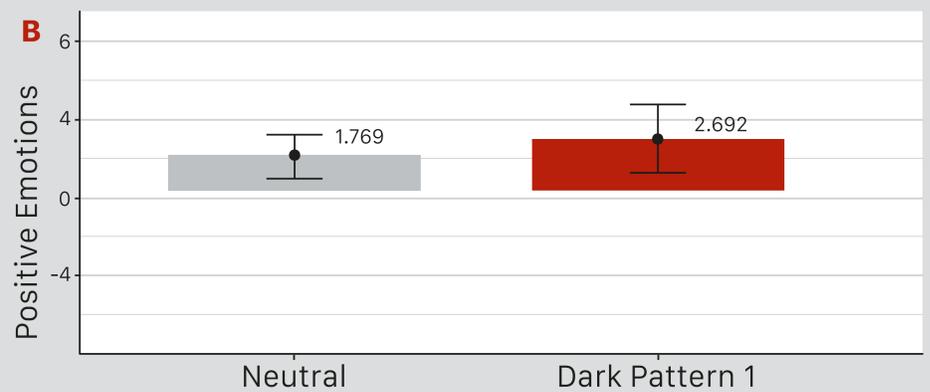
Do Dark and White Patterns used in cookie banners influence the perceived Usability, User Experience (UX) and Trustworthiness of websites?

## Effect on Perceived Usability



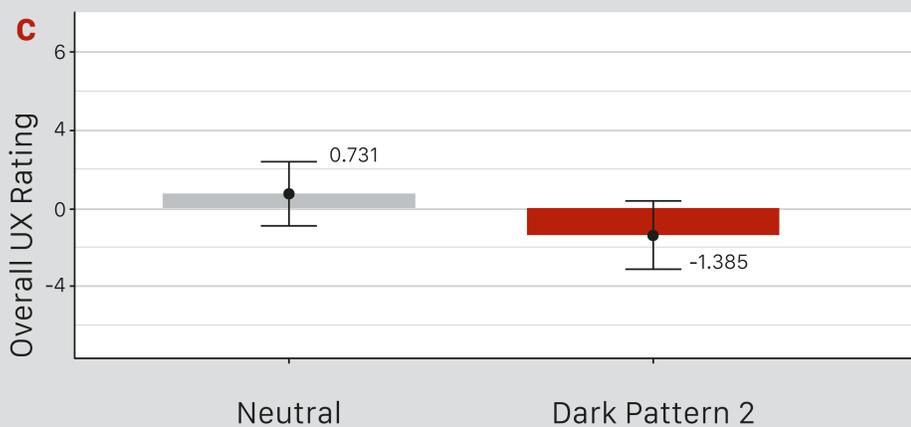
(A) Higher usability score for the neutral design than for Dp2.

## Effect on Positive Emotions



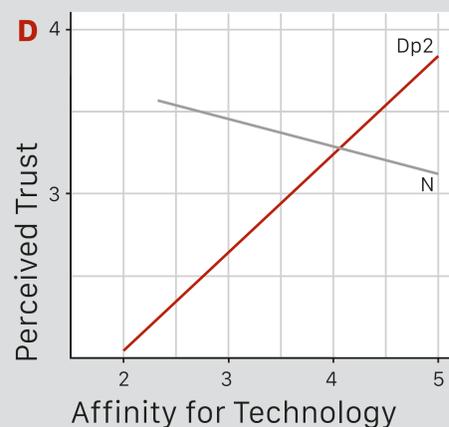
(B) Dp1 was rated higher in positive emotions than the neutral design.

## Effects on Perceived UX



(C) Lower Overall UX ratings score for Dp2 than for the neutral design.

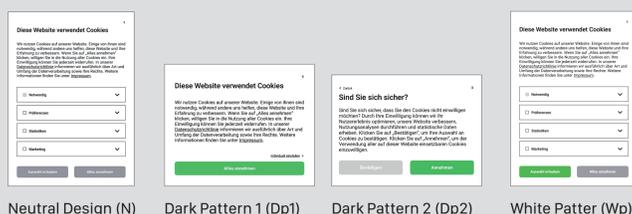
## Effect on Trust



(D) Trust increased in the group of users with an affinity for technology, that interacted with Dp2 and decreased in the group that interacted with the neutral design.

## Method

- Online survey, between-subject design with 56 participants
- Interaction with four different cookie banners: Neutral Design (N), light Dark Pattern (Dp1), strong Dark Pattern (Dp2), White Pattern (Wp) randomly shown and two questionnaires
- Evaluation of user experience: meCUE-questionnaire (Minge & Riedel, 2013)
- Evaluation of online trust: SCOUT-questionnaire (Bär, 2014)



## Discussion

The perceived Usability and the overall UX was rated lower on the cookie banner with strong Dark Patterns, than with Neutral Design (A and C). Dark Patterns are being used to cause fewer user flow interruptions, which is why they probably rated higher in positive emotions than the neutral design (B). This shows, that Design Nudges in general are accepted. But users with high technological affinity rated trustworthiness higher when interacting with strong Dark Pattern than with neutral design (D). These two results (B and D) can be evidence for the invisible manipulation of Dark Patterns called Dark Patterns Blindness which raises the question: is it time to show more responsibility towards users and to create an ethical awareness amongst stakeholders and designers?