

Perceived risks and benefits of online self-disclosure: affected by culture? A meta-analysis of cultural differences as moderators of privacy calculus in person-to-crowd settings

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Self-disclosure



Self-disclosure is defined as what individuals verbally communicate about themselves, including thoughts, feelings, and experiences.

People disclose information for a variety of purposes:

- establishing legitimacy
- authentication,
- trust,
- providing personalized services,...



Online self-disclosure



**important in electronic commerce
and online relationship building:**

- signifies **trust** and **acceptance** of the privacy assurance
- in absence of face-to-face interaction companies have to rely on such feedback behavior



Online self-disclosure



is of particular interest in
human-computer interaction

e.g.,

- personalized recommender systems
- “one click” purchasing
- e-recruitment





However, not all users are willing to disclose personal information.

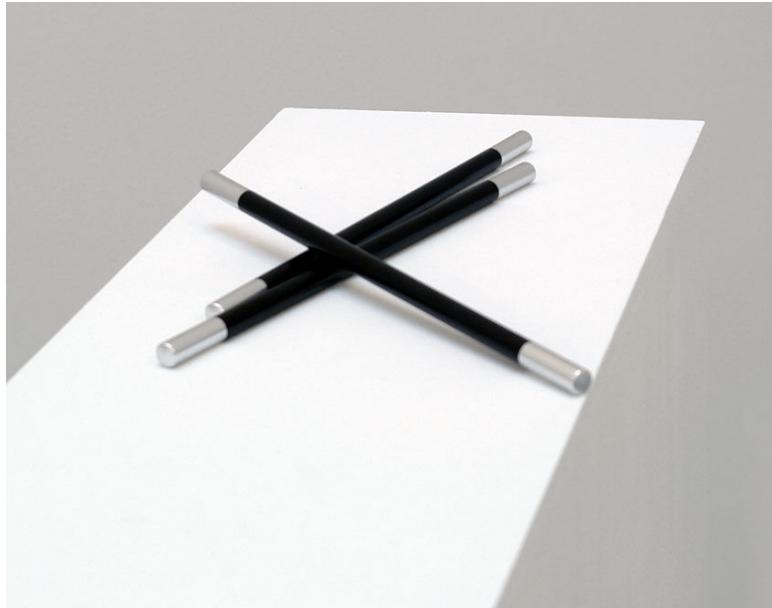
Major barrier: privacy concern





Still, paradoxically...

...many users appear to provide personal information abundantly in the online setting



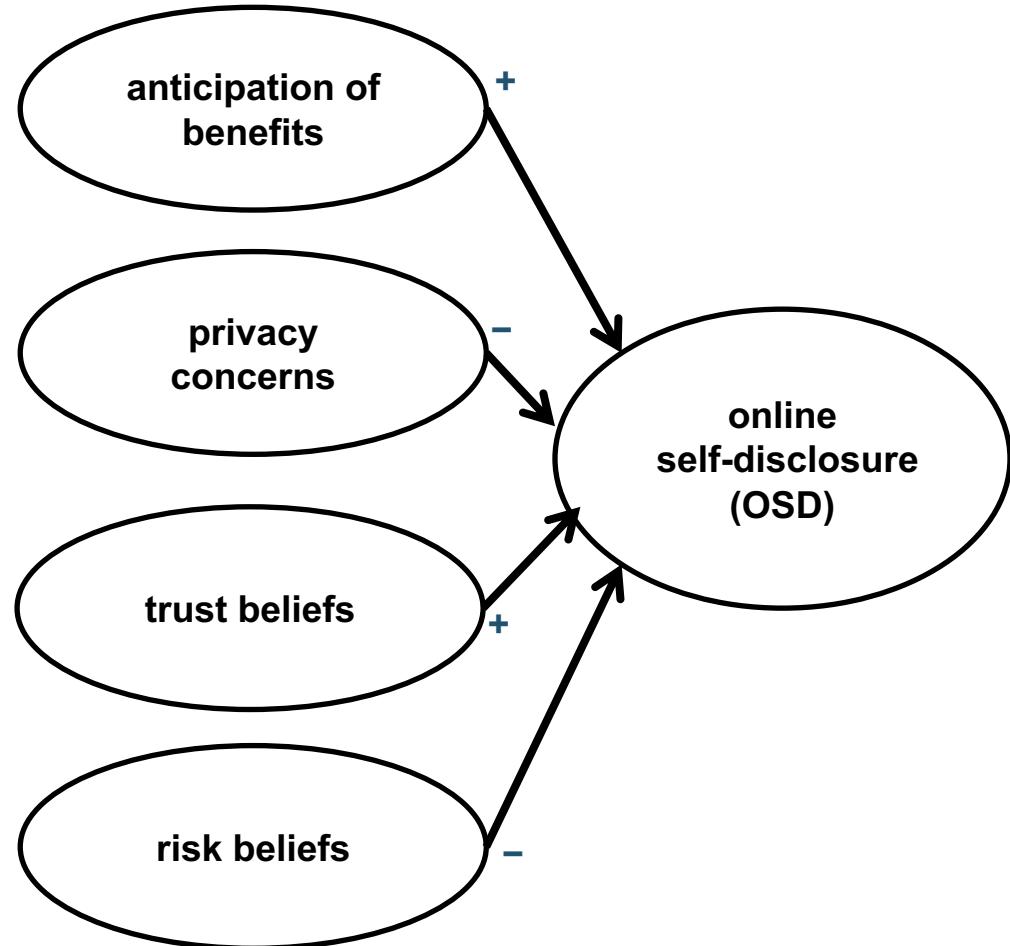
particularly in the context of online social networks





Privacy Calculus Theory

People attempt “to manage the level of privacy that they wish to maintain” (Shibchurn and Xiang Bin, 2014).





However, online self-disclosure differs across cultures/countries

Question:

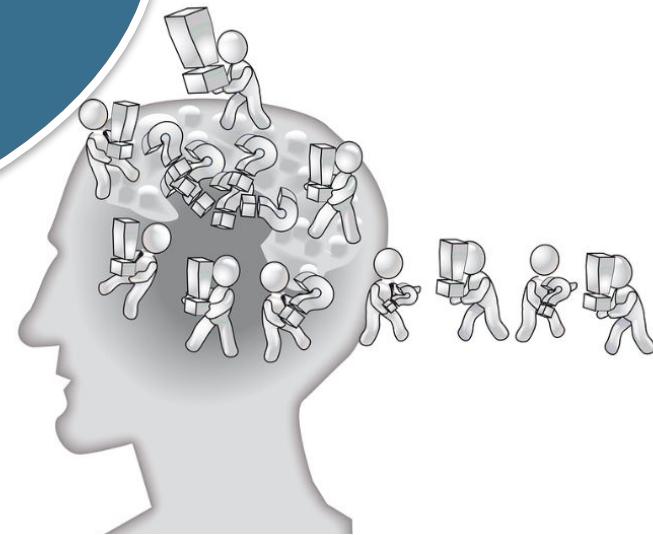
Does culture might moderate the effect of the privacy calculus aspects on OSD?

Existing studies typically rely on a comparison of two countries, which offers valuable insights but does not provide a comprehensive picture.



The specific objective – a comprehensive picture

Analyzing the role of
cultural differences for
the impact of the privacy
calculus predictors on
online self-disclosure.

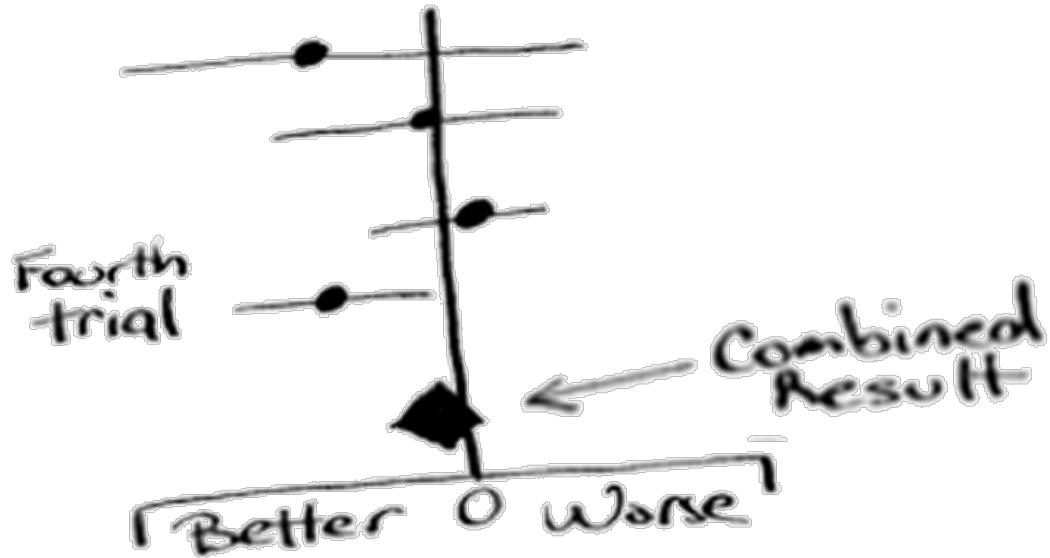


Statistical meta-analysis



A statistical meta-analysis represents a systematic aggregation of the findings of previous studies regarding the extent to which one or several predictors affect a dependent variable, based on so-called effect sizes.

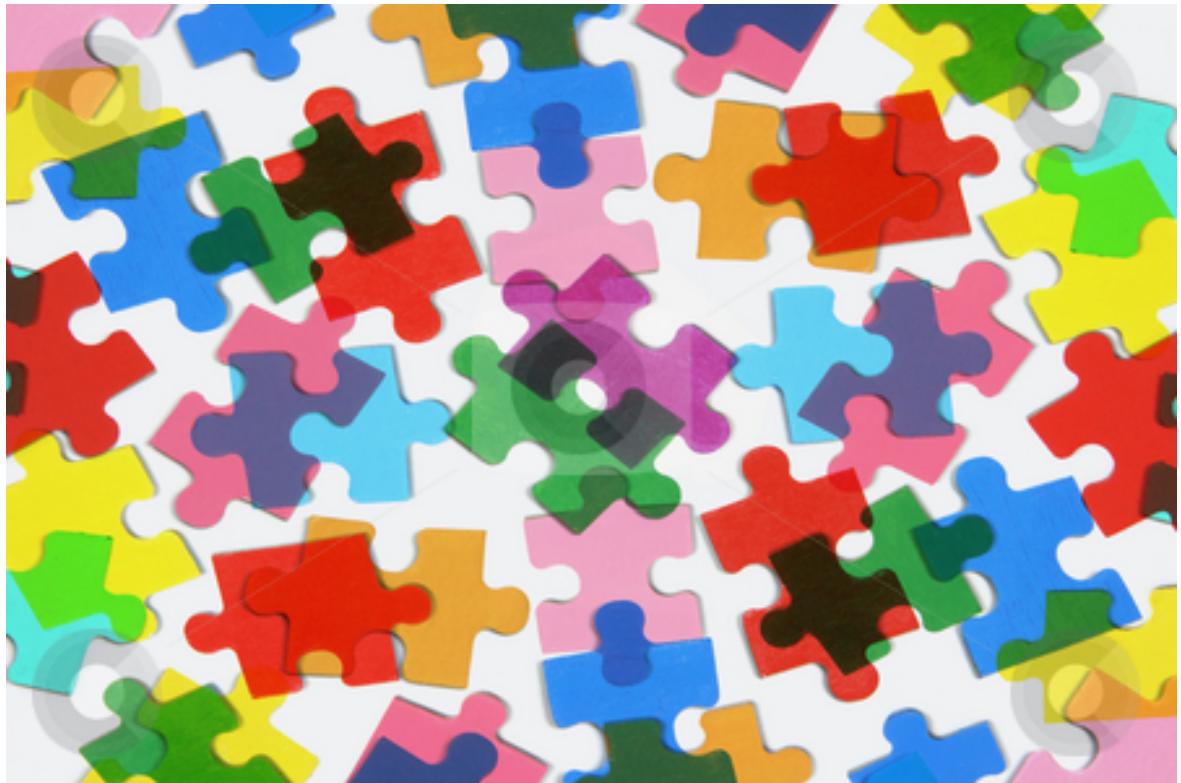
online self-disclosure





Sample

**38 studies on online self-disclosure
in person-to-crowd settings
in 13 countries
with 148 effect sizes**

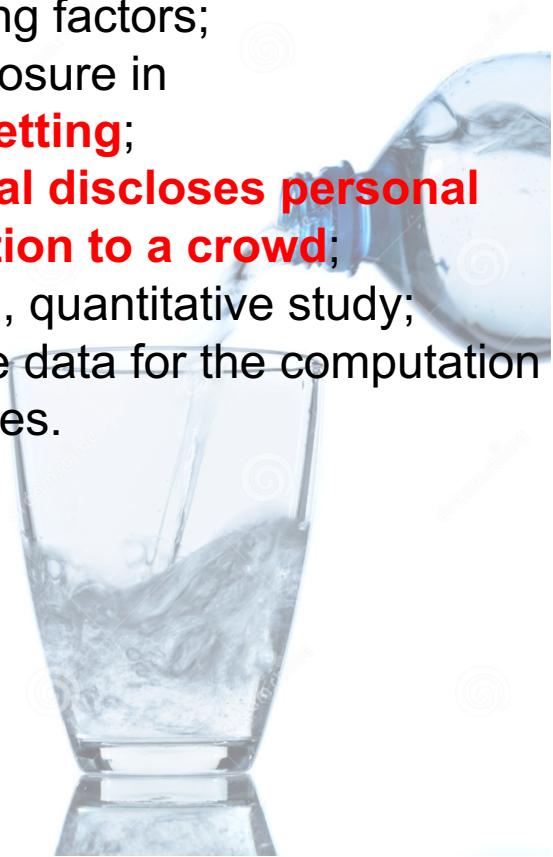




Criteria for inclusion/exclusion

A study was included if it fulfilled all of the following criteria:

- disclosure as a result of one or more influencing factors;
- self-disclosure in **online setting**;
- **individual discloses personal information to a crowd**;
- empirical, quantitative study;
- adequate data for the computation of effect sizes.



A study was excluded if at least one of the following criteria were met:

- investigated solely the effects of disclosure on other factors or outcomes;
- disclosure of **health issues**;
- disclosure in the field of **dating**;
- **religion**; or
- **sexual orientation**;
- **corporate disclosure**;
- so-called “**privacy disclosures**”;
- disclosure in offline settings;
- **person-to-researcher** disclosure;
- **person-to-company** disclosure;
- disclosure in **dyads**;
- qualitative study;
- mixed or undefined culture/country of sample;
- data for computing effect sizes not available.



Hofstede's cultural dimensions, explaining the differences in beliefs and behaviour across national cultures

power distance

individualism

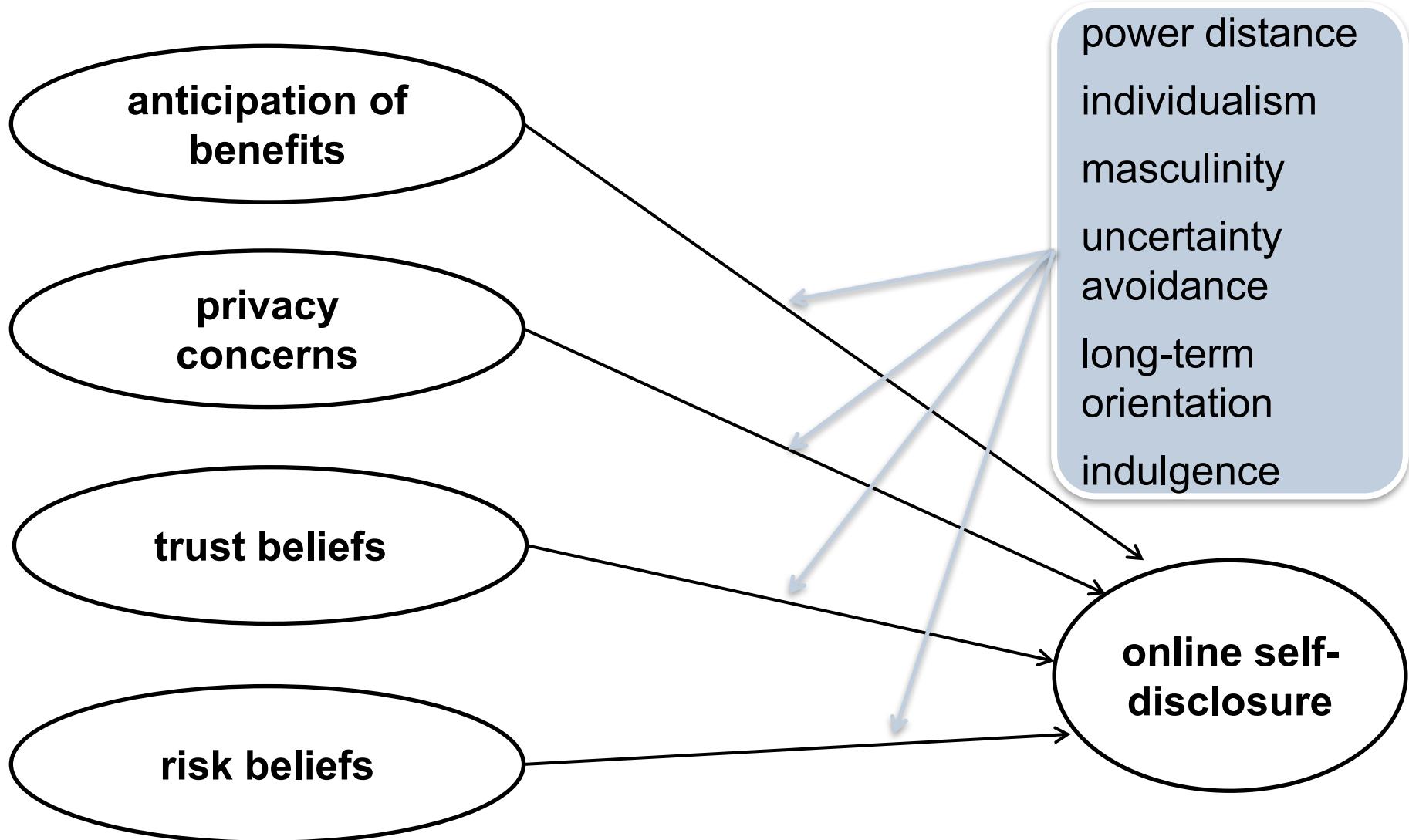
masculinity

uncertainty avoidance

long-term orientation

indulgence

Research model



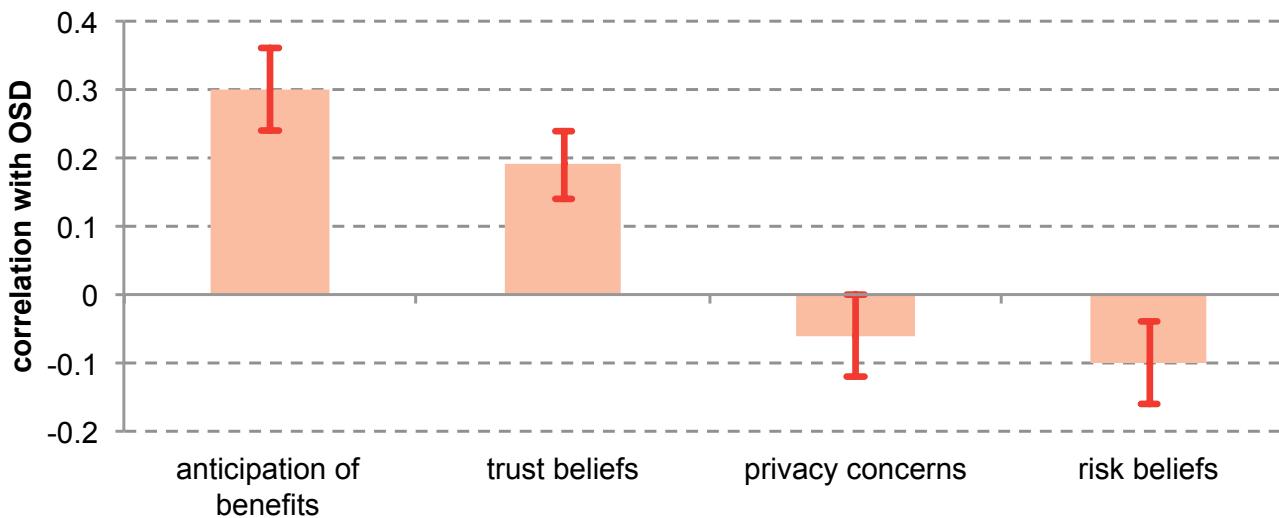
Findings

Finding 1

support for privacy calculus theory for online self-disclosure



- applicability to the person-to-crowd context stands on solid ground
- predicted direction
- effect of anticipation of benefits on OSD is largest, followed by trust beliefs
- mitigating effects of risk beliefs and privacy concerns on OSD are considerably smaller



All are statistically significant.

Finding 2

most important predictors are influenceable



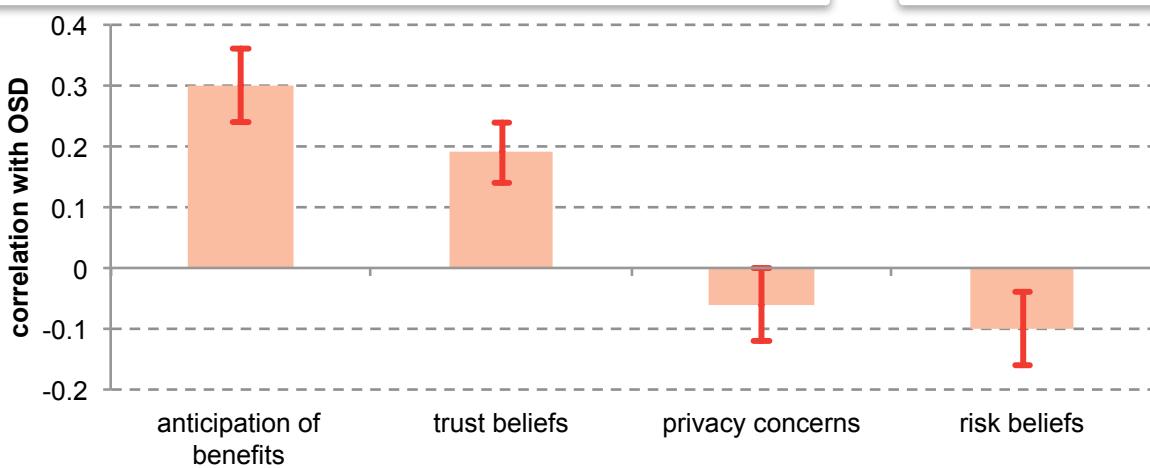
privacy concerns

– the least important predictor –
is most innate to the user

→ least influenceable

all other elements may be manipulated to a certain extent externally

- most influential: “extrinsic” benefits
- in contrast: slow and consistent buildup necessary for trust beliefs or its “counterpart” risk beliefs



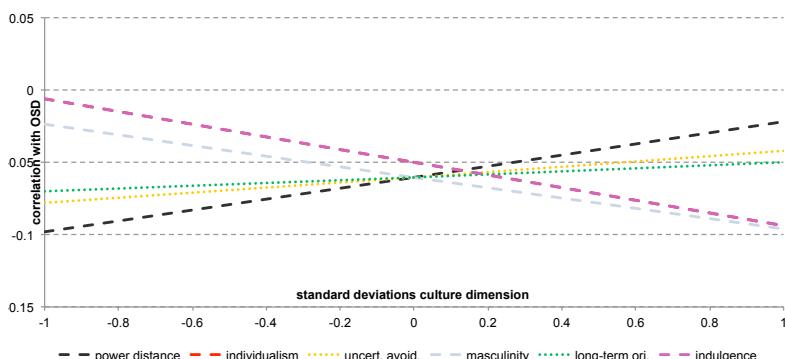
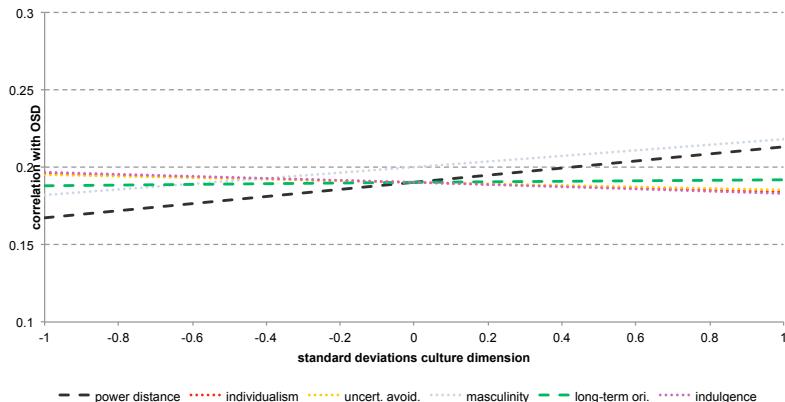


Finding 3

results challenge the universal nature of privacy calculus for OSD

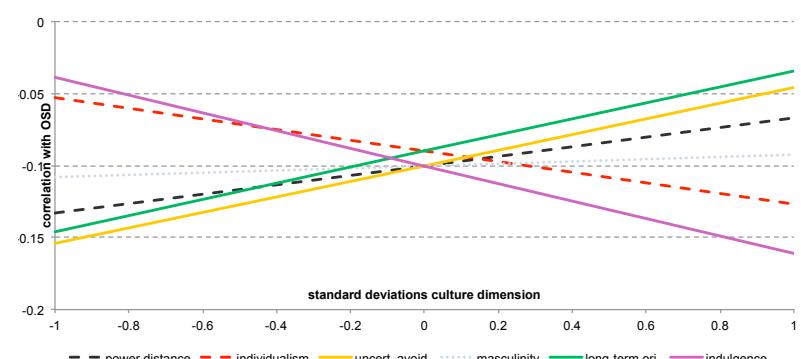
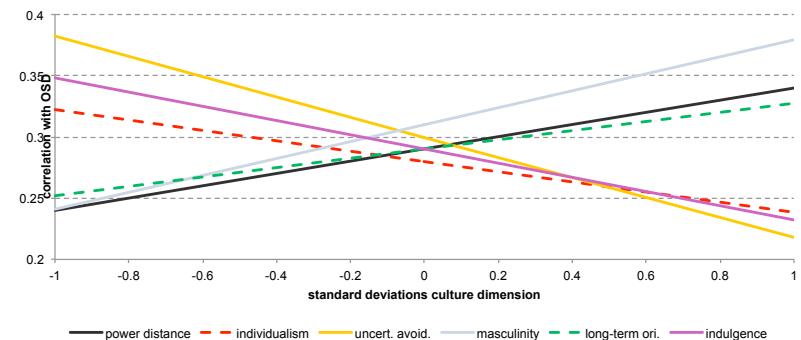
trust beliefs and privacy concerns appear to be “culturally universal” in their effect on OSD

- ◆ mean R² of merely 0.02 and 0.01



anticipation of benefits and risk beliefs for users' OSD depend on culture to a considerable extent

- ◆ mean R² of about 0.1



Finding 4



**uncertainty avoidance
and
indulgence**
are the most influential
cultural dimensions



Finding 4:

uncertainty avoidance

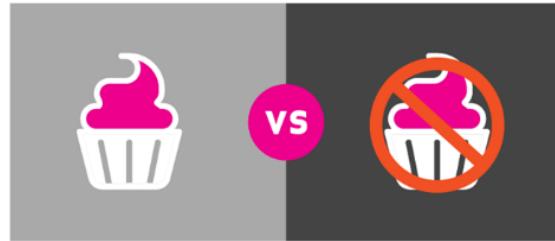
counterintuitive: higher uncertainty avoidance reduces the negative effect of risk beliefs on OSD



- speculative explanation → substitution effect:
 - cultures high in uncertainty avoidance are inclined towards establishing strict rules → safeguards against misuse of personal information → risk beliefs might lose their relevance as an OSD barrier

Finding 4:

indulgence



reduces the incentive to disclose of anticipation of benefits + moderating effect on privacy concerns and risk beliefs

- speculative explanation → indulgence may also represent “control over one’s life” → indulgence amplifies negative effect of privacy concerns and risk beliefs and reduces the effect of anticipation of benefits

Next steps



further theoretical development in intercultural OSD research

more cultural dimensions than the two most prominent ones in extant research,
i.e., individualism/collectivism and uncertainty avoidance

especially individualism/collectivism seems quite far from being the most important culture-related moderator of OSD



Take away messages

support for privacy calculus theory for online self-disclosure

still: challenges for its “universal” nature → anticipation of benefits and risk beliefs considerably depend on culture

uncertainty avoidance and indulgence are the most influential cultural dimensions

online service providers might benefit from targeting users differently depending on their cultural background

from OSD perspective, a culturally universal “Internet user” seems to be a delusion



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