

Privacy Paradox Revised: Pre-Existing Attitudes, Psychological Ownership, and Actual Disclosure

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Research-in-Progress

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Abstract

Prior research has pointed to discrepancies between users' privacy concerns and disclosure behaviors, denoted as the privacy paradox, and repeatedly highlighted the importance to find explanations for this dichotomy. In this regard, three approaches have been proposed by prior literature: (1) use of actual disclosure behavior rather than behavioral intentions, (2) systematic distinction between pre-existing attitudes and situation-specific privacy considerations, and (3) limited and irrational cognitive processes during decision-making. The current research proposes an experiment capable to test these three assumptions simultaneously. More precisely, the authors aim to explore the contextual nature of privacy-related decisions by systematically manipulating (1) individuals' psychological ownership with regard to own private information, and (2) individuals' affective states, while measuring (3) pre-existing attitudes as well as situation-specific risk and benefit perceptions, and (4) intentions as well as actual disclosure. Thus, the proposed study strives to uniquely add to the understanding of the privacy paradox.

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Introduction

Investigating privacy-related phenomena, prior research has often pointed to discrepancies between users' privacy concerns and disclosing behaviors, denoted as the *privacy paradox* (Norberg et al. 2007; Xu et al. 2011). That is, users tend to disclose their data "as if they didn't care" (Dinev and Hart 2006, p. 76), even if they declare to be highly worried about their privacy. Empirical evidence on this dichotomy arises from numerous studies reporting small and non-significant correlations between stated privacy concerns and individual disclosing behaviors, e.g. in the context of online communication (Spiekermann et al. 2001), e-commerce transactions (Van Slyke et al. 2006), or location-aware marketing (Xu et al. 2011). In this regard, prior literature has suggested three approaches capable to guide further research on the privacy paradox: First, scholars have highlighted the role of real outcomes as opposed to behavioral intentions (Smith et al. 2011), given that most prior research in the field of information privacy relied on the measurement of behavioral intentions only (e.g. Anderson and Agarwal 2011; Dinev and Hart 2006). Second, some scholars (e.g. Hsu 2006; Li et al. 2011) proposed a systematic distinction between privacy attitudes, such as privacy concerns, and situation-specific constructs, arguing that situational cues and considerations may override pre-existing tendencies in a concrete data-requesting situation. Third, an increasing stream of literature investigates the role of bounded rationality in the context of information privacy (Acquisti 2009; Acquisti et al. 2012; Wilson and Valacich 2012), indicating individuals' capacities to take rational decisions to be limited, e.g. due to erroneous perceptions of control (Brandimarte et al. 2013) or low salience of own privacy concerns (John et al. 2011; Tsai et al. 2011).

Embracing these propositions, the current research aims to unfold the dynamics that underlie individuals' tendency to disclose information despite general worries by simultaneously (1) adopting a distinct view on privacy-related constructs, systematically distinguishing pre-existing privacy attitudes from situational factors, (2) exploring the contextual and bounded nature of privacy-related decision-making by investigating the dynamics of a well-known concept from consumer behavior, namely psychological ownership (Shu and Peck 2011), in the context of privacy decisions, and (3) designing and conducting an experiment capable to unfold these dynamics using both behavioral intentions and actual disclosing behavior. In the following, we will first review pertinent literature that underlies our research. Then, we will illustrate our conceptual model and the accompanying hypotheses, and introduce the intended methodology. Finally, we will briefly summarize possible implications and contributions of our study.

Theoretical Background

Exploring the nature of information privacy and its dynamics with regard to consumer decisions, scholars primarily built on a "commodity view" of privacy (Smith et al. 2011), implying users treat private information as an tradable economic good. From this point of view, personal information has been understood as a "currency" (Kuner et al. 2012) or a "property" (Schwartz 2004; Shivendu and Chellappa 2007) that is disbursed when acquiring privileges such as personalization (Xu et al. 2011), financial advantages (Xu et al. 2011), or pleasure (Hui et al. 2006). Building on this foundation, prior research on the privacy paradox has mostly adopted a *privacy calculus* view (Anderson and Agarwal 2011; Culnan and Armstrong 1999; Dinev and Hart 2006) to model the cognitive processes that underlie privacy-related decision-making. In this approach, users are expected to anticipate and rationally weigh the costs (or risks) and benefits related to information disclosure when requested to provide private information to a website (Dinev and Hart 2006) or a mobile application (Xu et al. 2009). Investigated extensively, the privacy calculus model has helped to clarify the role of numerous factors that enhance or mitigate users' risk and benefit perceptions, such as brand awareness (Li et al. 2013), information sensitivity (Mothersbaugh et al. 2012), the data-requesting stakeholder (Anderson and Agarwal 2011), or personalization (Xu et al. 2011). In this research, we essentially follow the basic assumption of the privacy calculus model. With regard to the privacy paradox, however, we embrace findings from prior research focusing actual outcome behavior rather than intentions, pre-existing attitudes, and irrational behavior.

Approaching the Privacy Paradox: Actual Disclosure and Pre-Existing Attitudes

Empirical research has repeatedly reported low and non-significant correlations between privacy concerns and behavioral outcomes, such as the frequency of past website registrations (Sheehan and Hoy 1999) or intentions to disclose private information to a website or service (Awad and Krishnan 2006;

Norberg et al. 2007; Phelps et al. 2000). Denoted as the *privacy paradox* (Norberg et al. 2007), this dichotomy raised increased attention by scholars, highlighting the importance to find explanations to these inconsistencies (Belanger and Crossler 2011; Smith et al. 2011).

In this regard, prior research has emphasized the need for studies that analyze actual behavioral outcomes rather than behavioral intentions (Smith et al. 2011). While most prior research in information privacy has investigated disclosing *intentions* as a main outcome variable (e.g. Anderson and Agarwal 2011; Awad and Krishnan 2006; Dinev and Hart 2006), research in psychology and human behavior found intentions to only fairly correlate with *actual behaviors* (Sheeran 2002). In the context of information privacy, a study by Norberg et al. (2007) reported users' willingness to disclose information to significantly differ from actual disclosure. Still, research investigating actual disclosure rather than behavioral intentions is scarce in information privacy research (Smith et al. 2011). Moreover, few studies have attempted to simultaneously analyze intentions and actual outcome behaviors in this context.

A second approach to the privacy paradox focuses on the distinction between pre-existing attitudes and situation-specific privacy constructs, proposing measured inconsistencies between privacy concerns and disclosing behaviors to be rooted in an attitude-intention gap (Hsu 2006; Kehr et al. 2013; Kim and Hunter 1993; Li et al. 2011; Wilson and Valacich 2012). Stated differently, a situation-specific privacy assessment, driven by situational cues such as website design, may override pre-existing attitudes, such as *general* privacy concerns, and encourage individuals to disclose private information despite general worries (Kehr et al. 2013). Following this approach, Li et al. (2011) found a situational privacy calculus to partially mediate the relationship between general privacy concerns and disclosing intentions, while Van Slyke et al. (2006) as well as Kehr et al. (under review) found evidence that pre-existing attitudes may be even fully overridden by situational factors. Besides privacy concerns, prior research has discussed institutional trust to constitute a second pre-existing attitude (Kehr et al. 2013). In a study by Anderson and Agarwal (2011), for example, pre-existing trust in an electronic medium was found to interact with situational scenario variables, such as intended data purpose or the data-requesting stakeholder. Given that scholars increasingly emphasize the "contextual nature of privacy" (Smith et al. 2011), a systematic distinction between pre-existing attitudes and situational factors may help to clarify the role of situation-specific, contextual cues in privacy-related decision-making. In this regard, a third approach to explain the privacy paradox has been proposed, highlighting psychological limitations and irrational behavior that may guide individual decision-making in a concrete data-requesting situation.

Situation-Specific Factors: Psychological Ownership and Affective States

As argued above, research on information privacy has largely assumed individuals to behave in a rational way when valuing the risks and benefits that underlie privacy-related decisions (Culnan and Armstrong 1999; Dinev and Hart 2006). With regard to the privacy paradox, however, scholars have recently challenged this basic assumption, suggesting rationality in privacy-related decision-making to be bounded by psychological limitations (Acquisti 2009; Acquisti and Grossklags 2008; Brandimarte et al. 2010; Kehr et al. 2013; Wilson and Valacich 2012). In line with this perspective, prior research revealed evidence that guiding users' salience or attention to different facets of privacy results in differential valuations of the data-requesting situation and entails diverse decisions. In a study by John et al. (2011), for example, salience of privacy concerns was primed prior to data request, resulting in more conservative disclosing behaviors among primed individuals. Similarly, privacy salience and decisions were found to be guided by default framing (Johnson et al. 2002; Knijnenburg et al. 2013) or benefit immediacy (Grossklags and Acquisti 2007), and Spiekermann et al. (2012) reported users to be more willing to pay a premium for privacy protection if they were aware that private information may be traded among enterprises.

In behavioral economics, such valuation changes due to shifting salience or attention are generally explained by foundations of prospect theory (Kahneman and Tversky 1984). In this perspective, individual value attribution is expected to depend on a reference point set by internal or external entities, with changes in the reference point entailing valuation shifts. Changes in ownership of an object, for example, shift reference points from "not mine" to "mine", typically entailing higher risk perceptions (Duxbury and Summers 2004; Kahneman 2003) as well as more risk-averse choices and decisions (e.g. Thaler et al. 1997) when requested to give up (or sell) that object. Recent observations, furthermore, suggest these effects to be independent from legal ownership or tangible goods (Shu and Peck 2011). Stated differently, differences in valuation between individuals were also found to occur if possession was

only anticipated (Ariely and Simonson 2003), imagined (Peck and Shu 2009), or referred to an immaterial good, such as music (Isaacs 1933). As a consequence, scholars suggested individuals' item valuation to be guided by feelings of ownership, or *psychological ownership*, rather than legal possession (Shu and Peck 2011). This is an important distinction, given that individuals may develop psychological ownership without legally owning an item (Shu and Peck 2011). Employees, for example, may regard a product as "theirs" although it legally belongs to their organization (van Dyne and Pierce 2004).

Building on these foundations, it is likely users may develop feelings of ownership with regard to the "intangible" good of private information. In the context of information privacy, however, the dynamics of psychological ownership have been largely neglected (Spiekermann et al. 2012). Prior studies investigating the effects of privacy statements or privacy seals, for example, have mostly focused on the legal rights of individuals (such as the right to be informed about who processes the data for which purpose, Berendt et al. 2005), or the trustworthiness of the data-requesting stakeholder (e.g. Hui et al. 2007). The concept of psychological ownership, in contrast, suggests that raising individuals' awareness on the *possession status*, e.g. by informing users that (1) they are the owners of their private information and that (2) they can freely choose whether they want to trade it in the given situation will drive individuals to attribute higher value to their own private information, resulting in more risk-averse cognitive valuation and decision-making processes.

Investigating the relationship between psychological ownership and subsequent decisions, moreover, recent research in consumer behavior suggests an individual's "gut feelings" to determine the extent to which individuals perceive giving up an item as risky and aversive (Shu and Peck 2011). In a study by Zhang and Fishbach (2005), for example, positive and negative affective states induced by a mood manipulation were carried over to an object trading task, resulting in higher differences of price claims between owners and non-owners of a pen in the negative mood condition than in the positive mood condition. Similarly, Lerner et al. (2004) as well as Shu and Peck (2011) showed affective states to impact object valuation, even if sources of affect were not directly connected to the characteristics of the item under consideration (e.g. its hedonic value). In this regard, feelings-as-information theory (Schwarz 1990; Schwarz 2011) predicts individuals to use a "how do I feel about it" heuristic when valuing choices and taking decisions. Positive affective states, for example, serve as a cue for inoffensive and non-intrusive situations, while negative affective states signalize potential danger. As a consequence, individuals tend to anticipate lowered risks and higher benefits when requested to give up an item in positive affective state, while the contrary is true for negative affective states (Finucane et al. 2000; Slovic et al. 2005).

Essentially, these findings correspond to research analyzing the role of affect and emotion in the context of information privacy. Studies by Li et al. (2011) as well as Wakefield (2013), for example, yielded positive relationships between feelings of joy resulting from website interaction and privacy protection beliefs or website trust, while negative affective states were found to increase risk perceptions and decrease website trust (ibid.). Still, little is known on the role of affective states in privacy valuation processes (Nyshadham and Castano 2012), and, in particular, no prior study has investigated how affective states shape privacy-related decisions in the presence of feelings of ownership.

Conceptual Model and Hypotheses

Our conceptual model is depicted in figure 1. Emanating from the basic assumption of the privacy calculus model, stating that disclosing behavior results from a cognitive assessment of risks and benefits, we systematically distinguish pre-existing attitudes from a situation-specific privacy calculus. Drawing from research in consumer behavior, we propose psychological ownership and affective states to constitute predictors to a situation-specific privacy assessment. Furthermore, we postulate actual disclosing behavior to depend on disclosing intentions.

The Privacy Calculus

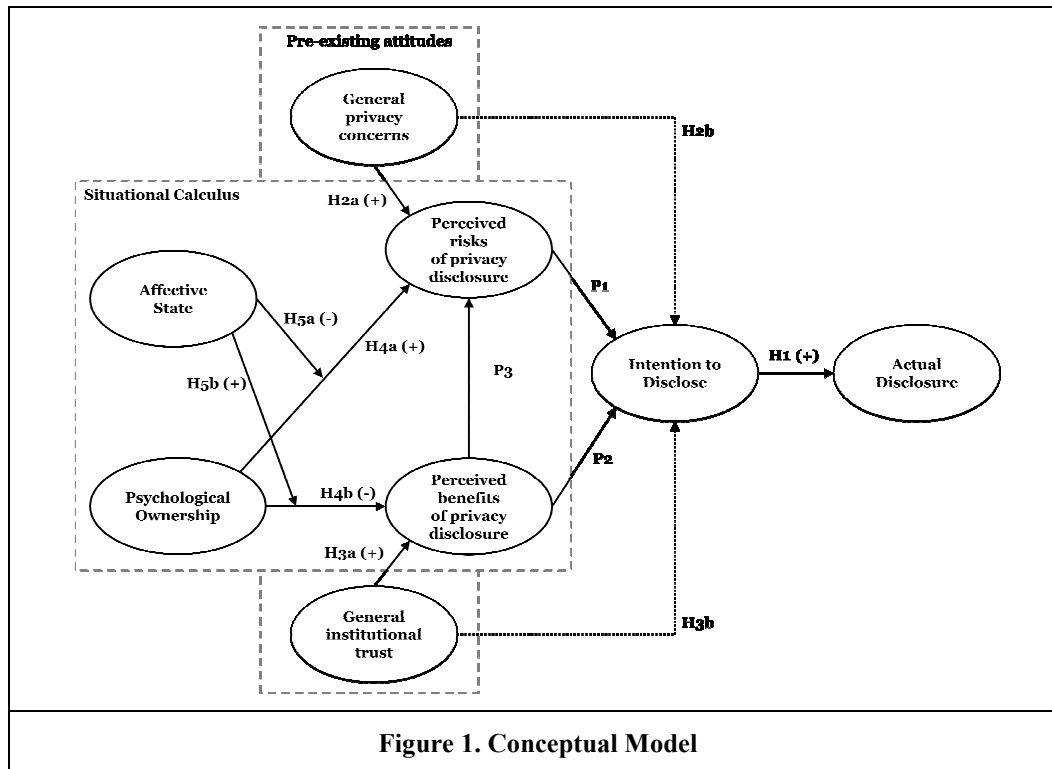
As argued above, research in the privacy calculus framework has typically regarded disclosing behavior as an outcome of a joint assessment of perceived risks and perceived benefits (Culnan and Armstrong 1999; Dinev and Hart 2006). Although risk and benefit perceptions have been mostly modeled as independent factors, recent works (Dinev et al. 2012; Kehr et al. 2013; Knijnenburg et al. 2013) suggest risk and benefit perceptions to be correlated, with benefit valuations guiding risk beliefs. Kehr et al. (2013) offered

insights from consumer behavior research as a theoretical explanation to this interdependency, arguing that users tend to think of risks and benefits as correlated, even if no relation is given in reality (Fischhoff et al. 1978). Valuing these recent findings, our research builds on the basic foundations of the privacy calculus model, determined as propositions one to three in our conceptual model:

Proposition 1 (P1): Perceived risks of privacy disclosure will be negatively associated with intention to disclose information.

Proposition 2 (P2): Perceived benefits of privacy disclosure will be positively associated with intention to disclose information.

Proposition 3 (P3): Perceived benefits of privacy disclosure will be negatively associated with perceived risks of privacy disclosure.



Actual Outcome Behavior and Pre-Existing Attitudes

As argued above, prior research has pointed to the scarce numbers of studies investigating actual outcome behavior as opposed to behavioral intentions, arguing intention-behavior gaps occur in manifold fields of behavior (Norberg et al. 2007; Smith et al. 2011). Other scholars, in contrast, have regarded the privacy paradox as an attitude-intention gap, discussing situation-specific considerations to potentially override pre-existing attitudes (e.g. Hsu 2006; Li et al. 2011). From this perspective, factors antecedent to the formation of situation-specific intentions account for inconsistencies between stated preferences and behavioral outcomes, while behavioral intentions should undoubtedly result in actual disclosure behavior (Wilson and Valacich 2012). In fact, psychological research showed the predictive power of behavioral intentions to enhance if intentions are tightly linked to personal beliefs rather than social norms (Sheeran 2002), while prior research in information privacy did not only report inconsistencies between stated preferences and *actual* outcomes (e.g. Hui et al. 2007), but also between stated preferences and disclosure *intentions* (e.g. Awad and Krishnan 2006; Van Slyke et al. 2006). Accordingly, we postulate the privacy paradox to be primarily driven by a dichotomy between pre-existing attitudes and situation-specific cues *prior* to intention formation, while actual behavior naturally follows intentions (Fishbein and Ajzen 1975). In contrast to most prior work, however, our research attempts to test this assumption by including both behavioral intentions and actual outcome behavior. Consequently, we hypothesize:

H1: Intentions to disclose will be positively associated with actual disclosure behavior.

Following this argumentation, prior studies proposed general privacy concerns and general institutional trust to constitute such pre-existing attitudes (Kehr et al. 2013) and found evidence situational valuation processes to partly or even fully mediate the relationship between pre-existing attitudes and disclosing behaviors (Li et al. 2011; Van Slyke et al. 2006). Following this distinct view, we expect general privacy concerns to primarily impact the risk side of a situational calculus, given that privacy concerns have been often identified as a risk-enhancing factor in prior work (Anderson and Agarwal 2011; Dinev and Hart 2006; Xu et al. 2011). Trusting beliefs, in turn, have been often associated with decreased risk and privacy concerns (Bansal et al. 2010; Dinev and Hart 2006; Kim et al. 2008; Malhotra et al. 2004). Consequently, we expect general institutional trust to constitute a protective factor primarily driving users' benefit perceptions. Furthermore, we postulate situation-specific risk perceptions to mediate the relationship between general privacy concerns and disclosing intentions, and benefit perceptions to mediate the relationship between general institutional trust and disclosing intentions, respectively. Although some prior findings (Li et al. 2011) suggest a situational calculus to only partially override these pre-existing attitudes, we believe situational cues to powerfully drive users' privacy assessment and thus follow prior research reporting on full mediation effects (Kehr et al. under review; Van Slyke et al. 2006).

H2a: General privacy concerns will be positively associated with perceived risks of privacy disclosure.

H2b: The effect of general privacy concerns on intention to disclose will be fully mediated by perceived risks of privacy disclosure.

H3a: General institutional trust will be positively associated with perceived benefits of privacy disclosure.

H3b: The effect of general institutional trust on intention to disclose will be fully mediated by perceived benefits of privacy disclosure.

Situation-Specific Factors: Psychological Ownership and Affective States

With regard to the cognitive processes guiding privacy-related risk and benefit assessment within a situation-specific privacy calculus, prior research has discussed the role of psychological limitations, such as salience of different facets of privacy (Acquisti 2009; Spiekermann et al. 2012). In this regard, previous work in consumer behavior suggests (1) reference point changes from "not mine" to "mine" to entail higher risk perceptions (Duxbury and Summers 2004; Kahneman 2003) as well as more risk-averse choices and decisions (Thaler et al. 1997), and (2) these relationships to be independent from legal possession or tangible objects, but rather guided by psychological ownership (Shu and Peck 2011). Adopted to the context of information privacy, these findings imply that (1) individuals may develop feelings of ownership with regard to the "intangible good" of their own private information, which may (2) in turn enhance risk perceptions in a situation-specific privacy calculus. Therefore, we hypothesize psychological ownership to increase perceived risks of privacy disclosure. Since, moreover, recent research revealed privacy-related risk and benefit perceptions to be interdependent (Dinev et al. 2012; Kehr et al. 2013; Knijnenburg et al. 2013), we also believe feelings of ownership to potentially alter benefit perceptions within a situation-specific privacy calculus. In this regard, we follow prior research showing that risk-enhancing factors typically mitigate benefit perceptions (Anderson and Agarwal 2011) and hypothesize:

H4a: Psychological ownership will be positively associated with perceived risks of privacy disclosure.

H4b: Psychological ownership will be negatively associated with perceived benefits of privacy disclosure.

Furthermore, prior research has discussed an individual's "gut feelings" to constitute an important trigger to these relationships (Shu and Peck 2011). As argued above, individuals tend to interpret their own current affective state as a cue for potential danger connected to the situation at hand (Schwarz 2011), resulting in differential anticipations of risks and benefits (Finucane et al. 2000; Slovic et al. 2005). In this regard, feelings-as-information theory (Schwarz 1990; Schwarz 2011) predicts positive affective states to lead individuals to interpret a situation as non-offensive, while the contrary is the case for negative affective states. As a consequence, individuals requested to give up an item tend to claim lower prices for

an object if in positive affective state than in negative affective state (Zhang and Fishbach 2005). In the context of privacy-related decision-making, we therefore postulate affective states to moderate the relationship between psychological ownership and risk and benefit perceptions. More precisely, we hypothesize positive affective states to lead individuals to anticipate lowered risks connected to data provision, mitigating the impact of feelings of ownership on perceived risks of privacy disclosure. In contrast, we postulate negative affective states to entail increased risk anticipation, raising the impact of feelings of ownership on perceived risks of privacy disclosure. In line with prior research (Finucane et al. 2000; Kehr et al. 2013; Slovic et al. 2005), we furthermore hypothesize these dynamics to equally apply to the benefit side of a situation-specific privacy calculus, with positive affective states raising the impact of feelings of ownership on perceived benefits of privacy disclosure, and negative affective states mitigating the influence of psychological ownership on perceived benefits of privacy disclosure:

H5a: The positive impact of psychological ownership on perceived risks of privacy disclosure will be stronger if individuals are in a negative affective state compared to a positive affective state.

H5b: The negative impact of psychological ownership on perceived benefits of privacy disclosure will be stronger if individuals are in a negative affective state compared to a positive affective state.

Proposed Methodology

The study will be conducted as a 2 (psychological ownership: high vs. low) x 2 (affective states: negative vs. positive) online experiment using a registration form of a website aiming to provide information on nutrition and physical activity to individuals. Given that (1) health-related information has been found to be perceived as highly sensitive (Bansal et al. 2010; Rohm and Milne 2004) and (2) the collection of such data is of increasing concern to both individuals and policymakers (Anderson and Agarwal 2011; Yasnoff 2014), this context may help to ensure both internal validity and relevance of our findings. Presenting the website to our study participants, we will systematically manipulate participants' (1) feelings of ownership with regard to the private information requested by the prototype and (2) affective states with regard to the website, while measuring pre-existing attitudes as well as behavioral outcomes.

Sample and experimental manipulation

Recruited via a marketing research firm, individuals will be invited to participate in a preliminary usability testing that focuses on the registration procedure of a new health website. More precisely, the website under consideration will consist of a header and a website registration form requesting for a set of increasingly sensitive pieces of information. Depending on the experimental condition, the header may or may not provide a privacy statement aiming to induce psychological ownership, and the website will be designed with pleasant or unpleasant appeal in order to induce positive or negative affective states.

With regard to the experimental material applied, prior research in consumer behavior suggests psychological ownership to be inducible by simply informing individuals on their possession status, even if the relevant item is intangible or just imagined (Shu and Peck 2011). Given that prior research in the context of information privacy revealed privacy statements to be an effective way to alter users' risk and benefit perceptions (Hui et al. 2007), we expect a privacy statement to be equally effective. In contrast to prior work, however, the concept of psychological ownership requires individuals to understand that (1) they are the owners of their private information and that (2) they can freely choose whether they want to trade it in the given situation. To this extent, we cannot draw on existing materials when designing the experimental material guiding feelings of ownership and thus plan to develop and pilot-test a set of privacy statements that aim to induce psychological ownership.

With regard to the induction of affective states, in contrast, research in software ergonomics revealed aesthetic appeals to be highly effective in raising feelings in individuals (Sonderegger and Sauer 2010). Images of people, for example, were found to entail positive affective reactions (Cyr et al. 2006), while dark colors (Kim et al. 2003) were associated with negative feelings. Relying on these insights, we will design and pilot-test a set of potentially affect-raising website versions to induce affective states.

Study procedure

After clicking on the survey link, participants will be randomly assigned to one of four experimental conditions. Then, they will receive information on the study procedure, consisting of two consecutive tasks. First, participants will be asked to briefly overview the website's registration form and rate their first impressions. In order to prevent erroneous inputs by the study participants in task 1, input fields of the registration form will be disabled. After regarding the site, participants will be requested to complete a questionnaire on their first impressions, comprising measures of risk and benefit perceptions, as well as intention to disclose information to the particular website. Furthermore, manipulation checks for psychological ownership, affective reaction, and a set of distractor items will be included. In a second, consecutive task, participants will be instructed to provide real data to the registration form. All participants will be told that data provision is voluntary, and that they can choose not to disclose a particular item if the requested data becomes too intrusive. However, only the participants in the ownership condition will see the additional privacy statement aiming to induce psychological ownership. After completing the second task, participants will be asked to complete a questionnaire requesting for demographical data and relevant control variables. In order to prevent priming effects, general privacy concerns and general institutional trust will be assessed some weeks before the actual study using a small pre-survey (DeCoster and Claypool 2004).

Measurement instruments

Wherever possible, scales from previous research will be used to ensure construct validity. General privacy concerns and general institutional trust will be assessed using scales from Malhotra et al. (2004) and Dinev and Hart (2006), respectively. Perceived risks and perceived benefits of privacy disclosure will be measured using scales from Xu et al. (2009), while items from Anderson and Agarwal (2011) will be adopted to assess intention to disclose information. Manipulation check measures for psychological ownership and affective states will be adapted from Shu and Peck (2011) and Kim et al. (1996), respectively. Moreover, relevant control and demographic variables such as age, gender, income, culture, personal interest, previous privacy experiences, pre-existing affect, and health status, will be included. Also, we will integrate a non-related scale to test for common method variance (Malhotra et al. 2006). Regarding actual outcome behavior, finally, we will adopt an approach employed by Joinson et al. (2008), proposing to count the number of non-disclosed items in a set of increasingly sensitive pieces of information. For this purpose, we will adapt a list of life experience and health status data from Joinson et al. (2008, e.g. "What is your weight?"), and conduct a pilot-test to ensure suitability for our context.

Conclusion and Contribution

Unifying literature streams attempting to advance the understanding of the cognitive processes that underlie the privacy paradox, our research may uniquely add to literature by (1) highlighting the dichotomy between pre-existing attitudes and situational cues in privacy valuation, (2) deepening the understanding on bounded rationality within a situational privacy calculus, and (3) investigating both behavioral intentions and actual behaviors simultaneously. Specifically, deepening the knowledge on bounded rationality in the context of information privacy has been highlighted as an important and valuable path for future research (Goes 2013). In this regard, our research adopts psychological ownership as an important driver to privacy-related decisions. Given that (1) most prior research has regarded personal information as a commodity (Smith et al. 2011) and (2) research in consumer behavior suggests feelings of ownership to determine value attributions of economic goods (Shu and Peck 2011), techniques that raise psychological ownership with regard to the own private information could substantially add to the knowledge on privacy protection techniques, i.e. strategies that support individuals in acting in accordance with their beliefs. In this regard, the hypothesized interaction between psychological ownership and affective reactions may provide important insights on the role of subtle design cues, such as colors, in altering privacy-related decisions. In addition to enhancing our understanding on the privacy paradox, therefore, the study at hand would make a valuable contribution to the scarce number of design and action approaches aiming to support privacy-protective decisions (Smith et al. 2011). From a practical viewpoint, we furthermore strive to (1) emphasize the value of accurate privacy statements and positive user experience for users, policymakers, and organizations, and (2) raise awareness on the irrational processes that guide users to disclose their data.

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