Received: 30 October 2020 | Revised: 4 August 2021 | Accepted: 6 August 2021

DOI: 10.1002/mar.21587

RESEARCH ARTICLE

Psychology & Marketing WILEY

The personalization–privacy paradox at the nexus of social exchange and construal level theories

Julien Cloarec[1] | Lars Meyer-Waarden[2,3] | Andreas Munzel[4]

[1]iaelyon School of Management, Université Jean Moulin Lyon 3, Magellan, Lyon, France

[2]TSM-Research, Université Toulouse Capitole, CNRS, Toulouse, France

[3]Business Science Institute, Luxembourg

[4]University of Montpellier, Montpellier Research in Management, Montpellier Management, Montpellier, France

Correspondence
Julien Cloarec, iaelyon School of Management, Université Jean Moulin Lyon 3, Magellan, 1C, avenue des Frères Lumière - CS 78242 - 69372 Lyon Cedex 08, France.
Email: julien.cloarec@univ-lyon3.fr

Abstract

Marketing personalization requires firms to collect information that they can use to personalize their products or services, which might raise consumer privacy concerns. Prior studies on construal level theory suggest that happier Internet users would likely take future rewards in social exchanges (e.g., personalization–privacy trade-offs) into greater consideration. Building on both social exchange and construal level theories, this article investigates the extent to which happiness with the Internet drives the personalization–privacy paradox, as well as the moderating role of experience sharing frequency as a proxy for reciprocity. An online survey administered to a representative sample of French consumers ($n = 649$) largely confirms the predictions. Happiness with the Internet is the strongest driver of willingness to disclose information in exchange for personalization, surpassing conventional privacy-related constructs (e.g., trust and risk beliefs). In line with social exchange theory, reciprocity has an important influence on online social exchanges too.

KEYWORDS

construal level theory, happiness with the Internet, marketing personalization, personalization–privacy paradox, reciprocity, social exchange theory

1 | INTRODUCTION

With the development of the Internet and related information and communication technologies, marketers today can tap into the potential of many online channels when they communicate with consumers. The abundant availability of information collected from Internet users also enables brands to personalize their communication efforts in ways that would have been too complex to achieve before the Internet and mobile eras (Hayes et al., 2021; Johnson et al., 2020; Rafieian & Yoganarasimhan, 2021). Personalization, defined as the "ability to proactively tailor products to tastes of individual consumers based upon their personal and preference information" (Chellappa & Sin, 2005, p. 181), in turn has become a highly salient topic. As social exchange theory proposes (Blau, 1964), disclosing personal information to get personalized recommendations represents a social exchange, and marketing exchanges represent an estimated 70% of the economic impact of the data-driven economy (Deighton & Johnson, 2013). Yet these benefits are constrained by privacy concerns (Bright et al., 2021; Maseeh et al., 2021; Song et al., 2021), and consumers are skeptical about the benefits they receive in exchange for their personal profile data. These challenges create a personalization–privacy paradox (Awad & Krishnan, 2006; Cloarec, 2020; Sutanto et al., 2013).

Prior literature investigating disclosure willingness tends to rely on cognitive frameworks (Martin & Murphy, 2017), but we argue that marketers should attend to consumers' affective states, which often guide their decision making (Bagozzi & Nataraajan, 2000; Meyer-Waarden & Cloarec, 2021). Disclosing information in return for personalization is a social exchange, for which the reward (i.e., personalization) occurs after a time delay (Blau, 1964). This psychological distance causes the decision-making process to be construed at an abstract level (Trope & Liberman, 2000, 2003), which in turn implies that affective states likely have a central role (Chen & Wyer, 2015; Williams et al., 2014). In particular, the pursuit of happiness is essential (Lyubomirsky et al., 2005) and perceived

as more important than good health, being attractive, earning a high income, experiencing love, or finding a purpose in life (Diener & Oishi, 2004). Because it represents a universal goal (Diener, 2000; Diener et al., 1995), marketers indicate growing interest in determining how firms might affect consumers' happiness (Isen et al., 2004; Mogilner & Aaker, 2009). For example, consumers who engage more in experiences, rather than purchasing material goods, can increase their level of happiness (Carter & Gilovich, 2010, 2012; Dunn et al., 2011; Rosenzweig & Gilovich, 2012), because positive experiences have stronger effects on happiness than material purchases (Bhattacharjee & Mogilner, 2014; Hsee et al., 2009; Nicolao et al., 2009; Van Boven & Gilovich, 2003). Hedonic uses of information technologies (e.g., browsing the Internet) also can make people happier, by enabling them to pursue self-filling value (van der Heijden, 2004). In addition, the rise of empathetic artificial intelligence that can express and assess affect has enhanced service marketing capabilities (Huang & Rust, 2018), which also should contribute to consumers' happiness.

Reflecting these developments, we seek to combine social exchange theory (Blau, 1964) with construal level theory (Trope & Liberman, 2000, 2003) to gain a better understanding of personalization–privacy trade-offs (Marketing Science Institute, 2018). We know of no previous marketing or service management research that integrates these theories, but with a novel rationale based on both social exchange and construal level theory, we predict a positive effect of happiness with the Internet on willingness to disclose information in exchange for personalization. With this effort, we also contribute to the relatively limited stream of literature that studies the impact of happiness with the Internet on consumer choices (Mogilner et al., 2012) by examining the relationship between happiness with the Internet and high-level construal (Labroo & Patrick, 2009). We also integrate happiness with the Internet in a causal, cognitive, privacy-related model (Malhotra et al., 2004) that features a personalization–privacy trade-off (Awad & Krishnan, 2006). Accordingly, we identify happiness with the Internet as a key mediator in the privacy-related model, which represents a contribution to privacy literature, which usually focuses on cognitive mediators such as trust or risk beliefs (Bélanger & Crossler, 2011). Furthermore, in line with social exchange theory (Blau, 1964), we acknowledge the role of reciprocity, operationalized by a proxy (i.e., experience sharing frequency), and thereby respond to calls for research that addresses reciprocity in privacy contexts (Schumann et al., 2014). By integrating the moderating effects of experience sharing frequency in a model imported from information systems (IS) research, we contribute to e-marketing literature (Taylor & Strutton, 2010) by defining boundary conditions for an IS-based model.

2 | BACKGROUND AND HYPOTHESES DEVELOPMENT

2.1 | The personalization–privacy paradox as a social exchange

Marketing personalization requires firms to collect information that they can use to personalize their products or services, whether overtly (i.e., inform customers that their personal information is being collected) or covertly (Sundar & Marathe, 2010). They also might collect three types of data: behavioral (e.g., ratings, purchase history, cookies), social (e.g., friends' activities on Facebook), and geolocation (e.g., when the GPS is activated on smartphones or connected objects) (Toch et al., 2012). Such personal data represent resources for social exchanges (Foa & Foa, 1974), such that information is a social commodity (Jiang et al., 2013). Therefore, social exchange theory offers a relevant conceptual framework for investigating people's willingness to disclose information in exchange for personalization benefits (Martin & Murphy, 2017). Social exchange theory seeks to understand the rules that underlie exchanges (Emerson, 1981), and one of its main assumptions is that people try to maximize the benefits they receive by providing resources that lead to a net gain. They engage in social exchanges with the expectation that the other party will provide some notable benefits (Blau, 1964) and meet its obligations (Holmes, 1981). The resources exchanged might be tangible (e.g., commodities) or intangible (e.g., personal information) (Miller & Kenny, 1986), and the parties often do not know precisely when they will receive the reward for their contributions (Blau, 1964). Thus, social exchanges imply an open-ended, long-term relationship (Molm, 1997). Cost–benefit comparisons produce overall evaluations of the worth of social exchanges (Blau, 1964; Molm et al., 2000), which in turn determine if people take part: If the benefits exceed the costs, the social exchange can take place. White (2004) describes the personalization–privacy trade-off as a loss–benefit ratio, operationalized as perceived disclosure consequences. From a social exchange theory perspective, the process in which consumers disclose private information (cost) to receive personalization (benefit) also constitutes a social exchange (Blau, 1964).

To specify Internet privacy concerns, defined as "the degree to which an Internet user is concerned about website practices related to the collection and use of his or her personal information" (Hong & Thong, 2013, p. 276), Malhotra et al. (2004) propose a causal model, inspired by a risk–trust framework (Mayer et al., 1995; McKnight et al., 1998) and the reasoned action paradigm (Fishbein & Ajzen, 1975). In this causal model, Internet privacy concerns influence risk and trust beliefs, and those beliefs in turn affect users' intentions to share personal information. In an online marketing context, trust beliefs reflect the degree to which people believe that a firm is dependable and will protect consumers' personal information (Gefen et al., 2003; Grazioli & Jarvenpaa, 2000). Building trust appears more effective than reducing risk concerns (Aguirre et al., 2015; Bleier & Eisenbeiss, 2015; Milne & Boza, 1999). These risk beliefs reflect perceptions of a high potential for loss, associated with the release of personal information to a firm (Dowling & Staelin, 1994) or the degree to which people believe that a firm exploits and fails to protect their personal information, which can cause harm (Eastlick et al., 2006; White, 2004).

Malhotra et al.'s (2004) causal model has been influential in IS studies (Martin & Murphy, 2017) but rarely adapted to marketing settings. Consumers are becoming increasingly aware that, to use free online services, they must share their personal data, so the

tension between personalization and information privacy has grown, with considerable relevance for marketers and retailers. Internet privacy concerns increase risk beliefs but decrease trust beliefs (Malhotra et al., 2004), so they also affect consumers' willingness to disclose personal information in exchange for personalization. In consumers' privacy calculus, they compare the costs of providing personal information with the benefits that they receive from marketers that gain access to their personal data (White, 2004). That is, in line with Malhotra et al.'s (2004) model, risk beliefs should decrease disclosure willingness, whereas trust beliefs decrease risk beliefs and increase willingness to disclose. We add the condition that the personal information being shared then evokes the reward of personalized recommendations (Toch et al., 2012). Formally,

H1a: Trust beliefs increase consumers' willingness to disclose information in exchange for personalization.
H1b: Risk beliefs decrease consumers' willingness to disclose information in exchange for personalization.

Following recent calls for research (Aguirre et al., 2015), we focus on concerns about information collection, or "the degree to which a person is concerned about the amount of individual-specific data possessed by websites" (Hong & Thong, 2013, p. 278), as a key dimension of global Internet privacy concerns. Stronger information collection concerns about the amount of individual-specific data possessed by firms likely lowers trust beliefs in the company and raises risk beliefs that the data might be misused. Thus:

H2a: Information collection concerns decrease consumers' trust beliefs.
H2b: Information collection concerns increase consumers' risk beliefs.

Prior literature investigating disclosure willingness tends to rely on cognitive frameworks (Martin & Murphy, 2017), but marketers should attend to consumers' affective states, which often guide their decision making (Bagozzi & Nataraajan, 2000). To do so, we motivate the integration of happiness with the Internet in the previous causal, cognitive, privacy-related model (Malhotra et al., 2004) that features a personalization–privacy trade-off (Awad & Krishnan, 2006).

2.2 | Don't worry (about privacy), be happy (with the Internet)

In an online context, happiness derives from the virtual life experiences thus enabled (Ong et al., 2015). The more Internet users derive pleasure from their online experiences, the happier they are (Hoffman & Novak, 1996). It is not a transient emotion but rather entails powerful, long-term affect (Ong et al., 2015). In developed countries, access to the Internet is a social norm that partly explains the relationship between Internet use and happiness (Pénard et al., 2013), such that having a computer and Internet connection relate positively to well-being (Kavetsos & Koutroumpis, 2011). Browsing the Internet is an experience over time, as is necessary to affect happiness (Lyubomirsky, 2001), and addressing this impact is highly relevant for consumers who spend more and more time online. In turn, some researchers have investigated happiness related to specific websites and how those websites' features can stimulate Internet users' overall happiness (Ong et al., 2015). For example, well-designed web atmospherics can create positive affect that enhances consumers' positive responses, though they must capture people's attention first to be effective (Richard, 2005). Website designers and managers also consider usefulness and ease of use, in terms of their impact on Internet users' happiness (Lin et al., 2008). In hedonic online environments, perceived ease of use represents a strong antecedent of intentions to use (van der Heijden, 2004). Furthermore, we can operationalize happiness as a "how-do-I-feel-about-it" heuristic, characterized as a feelings-based inference (Homburg et al., 2006).

Another stream of literature investigates the dark side of Internet use in regard to happiness (e.g., see Munzel et al., 2018 for a synthesis). These studies examine the time displacement hypothesis (Valenzuela et al., 2009), which stipulates that Internet use hampers happiness because online social interactions do not fully replace offline social interactions, thus leading to alienation, loneliness, and depression (Kraut et al., 1998; Nie & Hillygus, 2002). In line with several prior studies (Greenfield, 2014; Putnam, 2000; Turkle, 2011), Wallsten (2015) showed that 1 min of online web browsing reduces offline social interactions by 0.05 min.

After years of offering digital applications and products specifically designed to capture and monetize attention, the tech giants are starting to consider the well-being of users. Google found that 70% of people wanted help with their digital well-being. Google has developed a set of useful tools for Android users who want to find the right balance with the technology. Google has described the tools as part of its new "digital well-being" initiative, in which it focuses on helping people be healthier in their real and digital lives. The literature shows that people can indicate their happiness in two ways: report on their current global happiness (Kahneman et al., 1999) or report their happiness related to a specific topic (Raghunathan & Irwin, 2001). With a simple word count analysis, researchers also can evaluate Internet users' happiness (Ludwig et al., 2013).

For example, if users feel more positive emotions than negative ones while browsing websites, their website-related happiness should increase their happiness with the Internet overall (Ong et al., 2015). Diener (2009) similarly argues that positive experiences lead to more happiness. Because different types of trust and happiness generally are positively related (Sirgy, 2012), we hypothesize that trust beliefs improve global affective evaluations of Internet experiences. In contrast, greater information collection concerns, pertaining to the amount of individual-specific data possessed by firms, likely increase risk beliefs, which should decrease global affective evaluations of Internet experiences. Thus:

H3a: Trust beliefs increase happiness with the Internet.
H3b: Risk beliefs decrease happiness with the Internet.
H3c: Information collection concerns decrease happiness with the Internet.

2.3 | Happiness with the Internet as a driver of the personalization–privacy paradox

According to construal level theory (Trope & Liberman, 2000, 2003), psychological distance changes the level of abstraction, such that events that take place in the near future are perceived as concrete, whereas those further distant in time are perceived as abstract. These levels of abstraction affect both attribute weights (Liberman & Trope, 1998; Soman, 1998) and decision processes (Förster et al., 2004; Malkoc et al., 2005). Greater psychological distance implies seeing a bigger picture (Bar-Anan et al., 2006; Liberman et al., 2002; Trope & Liberman, 2003; Trope et al., 2007). The construal level also might be related to happiness, because affective states shape the level at which people construe events too (Chen & Wyer, 2015; Williams et al., 2014). Being happier implies a focus on "why" (abstract level) rather than "how" (concrete level) to perform a task (Labroo & Patrick, 2009). For example, positive affect increases abstract thinking, whereas negative affect promotes immediate, concrete concerns (Labroo & Patrick, 2009). Being happier means increased abstract construal and reduced effort to process concrete information (Labroo & Patrick, 2009); happy people increase both their efforts to reach future well-being and their openness to information (Aspinwall, 1998; Bakamitsos, 2006; Bless et al., 1996; Isen, 2001; Roehm & Sternthal, 2001). They also focus less on details when processing information (Schwarz et al., 1991), keep important choice attributes in mind (Etkin & Ghosh, 2018), and process global information more easily (Gasper & Clore, 2002). Greater happiness reduces the cognitive resources devoted to information processing, implying more heuristically based decisions (Dinev et al., 2015). Finally, being happy creates a sense that situations are benign (Schwarz & Clore, 1983), and benign situations are perceived as psychologically distant (Herzog et al., 2007; Trope et al., 2007), so happier Internet users likely take future rewards in social exchanges (e.g., personalization) into greater consideration.

In turn, when they are functioning at an abstract level, people prefer to make decisions based on the desirability of the outcome, despite any imperfections, rather than on its feasibility (M. Zhao et al., 2007). This tendency may strengthen the weights of both benefits (personalization) and costs (privacy loss). However, when they are happy, people enjoy that pleasant state and perform tasks with little effort but a high level of confidence in the outcome (Briñol et al., 2007; C. A. Smith & Ellsworth, 1985); they do not perceive a need to devote substantial efforts to secure the beneficial outcomes of a decision (Ellsworth & Smith, 1988). According to construal level theory, such a sense of self-control encourages people to focus on abstract outcomes (Fujita et al., 2006), such as rewards of a social exchange. In turn, we hypothesize:

H4: Happiness with the Internet increases people's willingness to disclose information in exchange for personalization.

Furthermore, Malhotra et al. (2004) indicate that risk and trust beliefs mediate decision-making processes. Researchers in marketing have long established a key role of affect in decision making (Hirschman & Holbrook, 1982; Holbrook & Hirschman, 1982; Thompson et al., 1989). Therefore, we anticipate that happiness with the Internet is a mediator in our model.

H5: Happiness with the Internet mediates the effects of information collection concerns on consumers' willingness to disclose information in exchange for personalization.

In line with social exchange theory (Blau, 1964), we acknowledge the role of reciprocity, operationalized by a proxy (i.e., experience sharing frequency), to highlight the boundary conditions of our integrated model.

2.4 | Shaping the psychology of the personalization–privacy paradox via reciprocity

Studies of happiness also need to include individual variables (Mitchell et al., 2011). In particular, experience sharing (e.g., rating or reviewing products and services online) provides higher happiness (Chiu et al., 2006; Zheng et al., 2013); even the possibility of sharing experiences and their expected value for others relate to happiness (K. Zhao et al., 2013). For example, word of mouth represents a form of experience sharing that is critical to the flow of market information (Frenzen & Nakamoto, 1993) and also constitutes a form of social exchange (Gatignon & Robertson, 1986). Consumers who rate and review products or services are active contributors (Munzel & Kunz, 2014), and they expect social rewards in return (e.g., social approval, respect, increased status) (Wasko & Faraj, 2005). Firms rely on such user-generated content to develop more competitive market offerings (Netzer et al., 2012) and to provide better value to consumers (Chevalier & Mayzlin, 2006). Thus word-of-mouth creators engage in specific social exchanges with regard to personalization, prompting a sense of reciprocity (Blau, 1964). Reciprocal interdependence defines social relationships (Jones, 1976) by shaping the pattern of the social exchange (Gouldner, 1960). It is thus important for firms to mitigate the consequences of privacy concerns (Bleier et al., 2020). In our research model, as depicted in Figure 1, the paths from information collection concerns (consumer antecedent; Martin & Murphy, 2017) to willingness to disclose information in exchange for personalization (consumer outcome; Martin & Murphy, 2017) reflect the psychology of social exchange, in which a sense of reciprocity should have beneficial effects. Formally:

H6: Experience sharing frequency moderates the indirect effect from consumers' information collection concerns to their willingness to disclose information in exchange for personalization.

2.5 | Control variables

Based on the privacy literature (Malhotra et al., 2004; H. J. Smith et al., 1996), we control for demographics (i.e., gender, age, and

education) and digital literacy as they are key covariates in such model. To make sure that we robustly estimate the effect of happiness with the Internet, we also control for the overall subjective well-being of the consumers (i.e., positive and negative affects from the day before and life satisfaction) (Munzel et al., 2018).

3 | METHODOLOGY

3.1 | Sample

In a collaboration with a large consumer panel provider, we administered questionnaires online, in November 2014, to a representative pool of French consumers (Table 1). The resulting sample of 649 respondents is demographically representative, according to the French statistical office (INSEE, 2015, 2016), as well as with regard to their use of social networking sites (SNS) (We Are Social, 2014) and life satisfaction (Roser, 2016). Because experience sharing is a social activity (Munzel & Kunz, 2014), SNS use constitutes a relevant online social characteristic of respondents. Because happiness and life satisfaction relate strongly (Lucas et al., 1996), it also was relevant to assess life satisfaction.

3.2 | Measurement instruments

The measurement scales all came from prior literature. For information collection concerns (e.g., "It usually bothers me when websites ask me for personal information"), trust beliefs (e.g., "Websites in general would be trustworthy in handling my personal information"), and risk beliefs (e.g., "In general, it would be risky to give my personal information to websites"), we adapted measures from Hong and Thong (2013). For happiness with the Internet (e.g., "In general, the Internet contributes to my feeling happy"), we used a measure from Niedermeier (2015). The measure for Internet literacy (e.g., "I can shop online") came from Faurie and Leemput (2007), and that for willingness to disclose information in exchange for personalization was inspired by Toch et al.'s (2012) study. All the constructs were measured with multi-item Likert scales (1 = "strongly disagree" to 7 = "strongly agree"). In addition, to measure experience sharing, we used a frequency assessment ("How often do you use the Internet on computers, laptops, smartphones or tablets to share your experiences?"). Finally, similar to Munzel et al. (2018), we operationalize subjective

TABLE 1 Sample characteristics

	Percentage	France
Gender		
Male	51.2	49.0
Female	48.8	51.0
Age, years		
18–24	14.9	13.0
25–34	21.0	20.0
35–49	33.6	33.0
50–65	30.5	34.0
Level of education		
Secondary school diploma	22.5	35.0
A-level	22.5	24.0
University degree	55.0	41.0
SNS use		
Facebook	85.5	74.0
Twitter	24.5	24.0
Google+	37.8	35.0
Life satisfaction		
Cantril ladder (0–10)	6.53	6.47

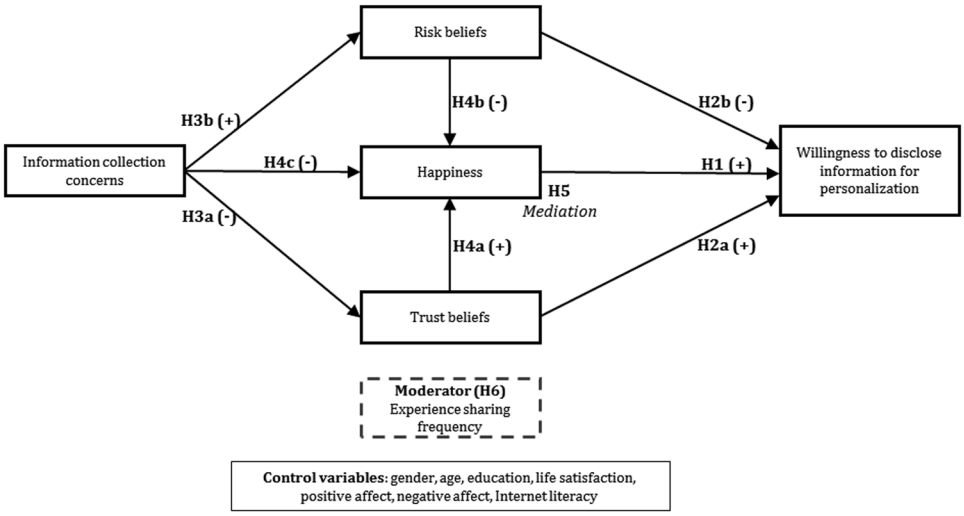

FIGURE 1 Research model

well-being by combining life satisfaction measures (Diener et al., 1985) with the Positive and Negative Affect Schedule (Watson et al., 1988).

3.3 | Assessment of the measurement model

As recommended in prior literature (Anderson & Gerbing, 1988), we assessed the measurement model by conducting a confirmatory factor analysis in AMOS. The model achieved good fit ($\chi^2 = 433.516$, $df = 154$, goodness-of-fit index = 0.937, adjusted goodness-of-fit index = 0.915, root mean square error of approximation = 0.053, Tucker-Lewis index = 0.968, confirmatory fit index = 0.974) (Bearden et al., 1993), and all the psychometric properties of the measures were satisfied: reliability (Joreskog's ρ greater than 0.7), convergent validity (ρvc around or above 0.5; Bagozzi & Yi, 1988) and discriminant validity (ρvc greater than squared correlation; Fornell & Larcker, 1981) (see Appendices A and B).

3.4 | Common method variance

As the data were collected from a single source, there was a risk of common method variance (Podsakoff et al., 2003). First, to reduce apprehension (Podsakoff et al., 2003), the respondents were told that we would maintain their anonymity and that their responses would be used for an academic purpose only. Second, the correlation matrix (Appendix B) shows that the constructs are not too highly correlated (Bagozzi et al., 1991). Third, we used a Harman single-factor test (Harman, 1967) by conducting an unrotated factor analysis with the items of the four latent constructs (i.e., happiness with the Internet, trust beliefs, information collection concerns, and willingness to disclose information for personalization). Based on the Kaiser criterion (i.e., eigenvalues above 1), the results showed the presence of four components. The variance explained by the first component represents 29.65% of the total variance. Thus, these considerations show that common method variance is unlikely to be an issue.

4 | RESULTS

4.1 | Model estimation

We estimated the model with the PROCESS macro (Hayes, 2017) in SPSS, using the percentile method and 5,000 bootstrap samples (X. Zhao et al., 2010). The syntax of the model is as follows:

```
processy = Disclosure/m = Trust Risk Happiness/x
         = Concerns/cov = Gender Age Education
           PosAffect NegAffect LifeSatisfaction DigitalLiteracy
           /conf = 95/bmatrix = 1, 1, 0, 1, 1, 1, 0, 1, 1, 1.
```

Table 2 contains the coefficients for the relationships among the model variables. The model explains 38% of the variance in willingness to disclose information in exchange for personalization.

In line with H1a and H1b, trust beliefs relate positively to a willingness to disclose information in exchange for personalization ($B = 0.26$, $p < 0.001$), whereas risk beliefs do not ($B = -0.16$, $p < 0.001$). The negative relationship between information collection concerns and trust beliefs is not significant ($B = -0.06$, $p > 0.05$), so we cannot confirm H2a. However, in support of H2b, information collection concerns significantly increase risk beliefs ($B = 0.62$, $p < 0.001$). As expected, the impact of trust beliefs on happiness with the Internet is positive and significant ($B = 0.19$, $p < 0.001$), in line with H3a, but risk beliefs have no significant impact ($B = 0.00$, $p > 0.05$), so we cannot confirm H3b. In support of H3c, information collection concerns have a negative effect on happiness with the Internet ($B = -0.11$, $p < 0.05$). As we predicted in H4, happiness with the Internet leads to a higher willingness to disclose information in exchange for personalization ($B = 0.33$, $p < 0.001$; Table 2).

We also find significant relationships between some control variables and willingness to disclose information in exchange for personalization: Life satisfaction ($B = 0.07$, $p < 0.05$) has a positive and significant impact, but Internet literacy is significantly and negatively related to this willingness ($B = -0.14$, $p < 0.01$). Willingness to disclose information is not significantly affected by gender ($B = 0.13$, $p > 0.05$), age ($B = -0.07$, $p > 0.05$), education ($B = 0.11$, $p > 0.05$), positive affect ($B = 0.01$, $p > 0.05$), or negative affect ($B = 0.02$, $p > 0.05$) though.

4.2 | Mediation analysis

To test H5, which stipulates that happiness with the Internet mediates the negative effects of information collection concerns on willingness to disclose information in exchange for personalization, we ran mediation analyses with the PROCESS macro (Hayes, 2017), without the moderating variable (i.e., experience sharing frequency). In addition to observing the total indirect effect, we can examine the specific indirect effects that run through the different paths of our research model.

The results in Table 3 show that the total indirect effect, from information collection concerns to willingness to disclose information, is negative and significant ($B = -0.19$, $p < 0.01$, 99% bootstrap confidence interval [CI] [−0.29, −0.10]). In particular, the indirect effects Ind3 ($B = -0.05$, $p < 0.05$, 95% bootstrap CI [−0.10, −0.01]) and Ind4 ($B = -0.01$, $p < 0.05$, 95% bootstrap CI [−0.02, −0.00]) that run through happiness with the Internet are significant, in support of H5. Happiness with the Internet thus mediates the effects of information collection concerns on consumers' willingness to disclose information in exchange for personalization.

4.3 | Moderated mediation analysis

We formulated a moderated mediation hypothesis (H6) and therefore also adopt the PROCESS macro (Hayes, 2017) to

TABLE 2 Model estimation results (H1–H4 and H6)

	Mediating variables			Dependent variable
	RB	TB	HAPPY	WDIP
Focal variables				
ICC	0.62***(H2b)	−0.06^{ns} (H2a)	−0.11* (H3c)	
RB			0.00^{ns} (H3b)	−0.16*** (H1b)
TB			0.19*** (H3a)	0.26*** (H1a)
HAPPY				0.33*** (H4)
ESF		0.20***	0.11***	0.17***
ICC*ESF		0.06** (H6)	0.04* (H6)	
HAPPY*ESF				0.05** (H6)
Control variables				
Demographics				
Gender	−0.05^{ns}	0.15^{ns}	−0.04^{ns}	0.13^{ns}
Age	0.12**	−0.04^{ns}	0.02^{ns}	−0.07^{ns}
Education	−0.02^{ns}	−0.20**	−0.05^{ns}	0.11^{ns}
SWB				
LS	0.04^{ns}	0.16***	0.05^{ns}	0.07*
PA	−0.04^{ns}	0.01^{ns}	0.00^{ns}	0.01^{ns}
NA	0.08**	0.06^{ns}	0.02^{ns}	0.02^{ns}
Internet literacy	−0.06^{ns}	0.00^{ns}	0.35***	−0.14**
R^2	0.39	0.14	0.19	0.38
ΔR^2		0.013 ($\Delta F(1, 638) = 9.21$, $p < 0.01$)	0.007 ($\Delta F(1, 636) = 5.41$, $p < 0.05$)	0.007 ($\Delta F(1, 636) = 7.49$, $p < 0.01$)

Abbreviations: ESF, experience sharing frequency; HAPPY, happiness; ICC, information collection concerns; LS, life satisfaction; NA, negative affect; PA, positive affect; RB, risk beliefs; SWB, subjective well-being; TB, trust beliefs; WDIP, willingness to disclose information in exchange for personalization.
***$p < 0.001$; **$p < 0.01$; *$p < 0.05$; ns, not significant.

investigate simultaneous effects. The syntax for the model is as follows:

```
process y = Disclosure/m = Trust Risk
Happiness/x = Concerns/w = SharingExp
              /cov = Gender Age Education PosAffect
NegAffect LifeSatisfaction DigitalLiteracy /center = 1/conf
                = 95/bmatrix
                = 1, 1, 0, 1, 1, 1, 0, 1, 1, 1/wmatrix
                = 1, 0, 0, 1, 0, 0, 0, 0, 0, 1.
```

Regarding H6, which stipulates that experience sharing frequency moderates the indirect effects that run from information collection concerns to willingness to disclose information for personalization, the analyses indicate the moderation of some direct effects. First, the negative effect of information collection on trust beliefs is significantly weakened when experience sharing frequency increases ($B = 0.06$, $p < 0.01$), as is its negative effect on happiness with the Internet ($B = 0.04$, $p < 0.05$). Second, the positive effect of happiness with the Internet on willingness to disclose information grows stronger when the level of experience sharing frequency is higher ($B = 0.05$, $p < 0.01$).

The bootstrap CI refer to three levels of the moderator: low (16th percentile), medium (50th percentile), and high (86th percentile). Regarding the four indirect effects that run from information collection concerns to willingness to disclose information, through either happiness with the Internet (i.e., Ind3, Ind4, and Ind5 in Table 4) or trust beliefs (Ind1), we find that when the level of experience sharing frequency is high, none is significant. The more people sense reciprocity in online social exchanges, the less information collection concerns affect their decision-making when it comes to personalization–privacy trade-offs.

5 | DISCUSSION

5.1 | Main findings

Extant literature has shown that happiness with the Internet is only one motivator among many when it comes to decision making

TABLE 3 Mediation analysis results (H5)

	Effect	95% CI Lower	95% CI Upper	99% CI Lower	99% CI Upper
Total (H5)	−0.19**	−0.27	−0.12	−0.29	−0.10
Ind1	−0.04*	−0.08	−0.00	−0.09	0.01
Ind2	−0.10**	−0.16	−0.04	−0.18	−0.03
Ind3	−0.05*	−0.10	−0.01	−0.11	0.01
Ind4	−0.01*	−0.02	−0.00	−0.02	0.00
Ind5	0.00ns	−0.02	0.03	−0.03	0.04

Note: Ind1: ICC → TRUST → WDIP.
Ind2: ICC → RISK → WDIP.
Ind3: ICC → HAPPY → WDIP.
Ind4: ICC → TRUST → HAPPY → WDIP.
Ind5: ICC → RISK → HAPPY → WDIP.
Abbreviations: CI, confidence interval; HAPPY, happiness; ICC, information collection concerns; RB, risk beliefs; TB, trust beliefs; WDIP, willingness to disclose information in exchange for personalization.
**$p < 0.01$; *$p < 0.05$; ns, not significant.

TABLE 4 Moderated mediation analysis results (H6)

Level of ESF	Effect	95% CI Lower	95% CI Upper	99% CI Lower	99% CI Upper
Ind1					
Low	−0.05**	−0.10	−0.01	−0.11	−0.00
Medium	−0.03*	−0.07	−0.00	−0.09	0.00
High	0.03ns	−0.02	0.08	−0.03	0.09
Ind2	−0.10**	−0.16	−0.04	−0.17	−0.03
Ind3					
Low	−0.04*	−0.09	−0.01	−0.11	0.00
Medium	−0.04*	−0.09	−0.01	−0.10	0.00
High	0.01ns	−0.07	0.08	−0.10	0.11
Ind4					
Low	−0.01**	−0.02	−0.00	−0.02	−0.00
Medium	−0.01*	−0.01	−0.00	−0.02	0.00
High	0.01ns	−0.01	0.03	−0.01	0.04
Ind5					
Low	0.00ns	−0.02	0.02	−0.02	0.02
Medium	0.00ns	−0.02	0.02	−0.02	0.03
High	0.00ns	−0.03	0.03	−0.04	0.05

Note: Ind1: ICC → TRUST → WDIP.
Ind2: ICC → RISK → WDIP.
Ind3: ICC → HAPPY → WDIP.
Ind4: ICC → TRUST → HAPPY → WDIP.
Ind5: ICC → RISK → HAPPY → WDIP.
Abbreviations: CI, confidence interval; ESF, experience sharing frequency; HAPPY, happiness; ICC, information collection concerns; RB, risk beliefs; TB, trust beliefs; WDIP, willingness to disclose information in exchange for personalization.
**$p < 0.01$; *$p < 0.05$; ns, not significant.

(Benjamin et al., 2012). We offer further insights by demonstrating that, in a privacy framework, happiness with the Internet is the strongest driver of consumers' willingness to disclose information in exchange for personalization, surpassing even the more widely used privacy-related constructs (i.e., trust and risk beliefs). In particular, we clarify that the positive effect of happiness with the Internet on willingness to disclose information in exchange for personalization is strengthened by reciprocity, captured as experience sharing frequency. That is, reciprocity increases the weight of a psychologically distant benefit (i.e., personalization) in the personalization–privacy trade-off.

The statistical analyses also highlight an unexpected non-significant relationship: The negative effect of information collection concerns on trust beliefs is not significant, due to the significant moderating effect of experience sharing frequency, as a proxy of reciprocity (Table 2). When the level of experience sharing frequency is low or moderate, the negative relationship exists and is significant. However, when the level is high (i.e., when users feel strong reciprocity online), the relationship is no longer significant. We thus show that reciprocity can undermine the negative effect of information collection concerns on trust beliefs, in line with social exchange theory's prioritization of the valuable role of reciprocity (Blau, 1964).

5.2 | Theoretical implications

To the best of our knowledge, this study is the first to combine social exchange theory (Blau, 1964) with construal level theory (Trope & Liberman, 2000, 2003) in a marketing context to investigate the central role of happiness with the Internet in the personalization–privacy trade-off. Disclosing information to obtain personalization benefits constitutes a social exchange (Martin & Murphy, 2017), in which the reward (i.e., personalization) is delayed in time. A social exchange inherently implies a long-term relationship, because of the psychological distance between entering into a social exchange and obtaining the reward. By leveraging construal level theory, we argue that affective states, such as happiness with the Internet, have powerful effects on the personalization–privacy trade-off, specifically due to this psychological distance (Chen & Wyer, 2015; Labroo & Patrick, 2009; Williams et al., 2014). With this study, we demonstrate that happiness with the Internet has a positive effect on willingness to disclose information, because happier consumers focus more on the desirability of an outcome, even if an imperfect one (M. Zhao et al., 2007).

For privacy literature, we also offer some novel insights. Happiness with the Internet might not be the sole motivator in a decision-making process (Benjamin et al., 2012), but consumers' happiness can strongly guide their decisions (Bagozzi & Nataraajan, 2000), so we integrate this notion with a privacy framework from IS literature

(Malhotra et al., 2004) that is valuable but limited to cognitive factors. That is, privacy literature often prioritizes trust and risk beliefs as mediators of privacy-related decision making (Bélanger & Crossler, 2011), and we add happiness with the Internet as another key mediator. This affect-related construct even emerges as a potentially stronger driver of personalization–privacy trade-offs than the conventional, cognitive constructs reflecting trust and risk beliefs.

Furthermore, by integrating experience sharing frequency as a moderator, to proxy for reciprocity in online exchanges, we contribute to e-marketing literature (Taylor & Strutton, 2010) and establish some boundary conditions for IS models (e.g., Malhotra et al. (2004). In line with social exchange theory, we identify a valuable role of reciprocity in privacy-related frameworks (Schumann et al., 2014). Privacy-related decision-making processes are less affected by privacy concerns when the level of reciprocity increases. Specifically, we find that reciprocity exerts beneficial effects on the social exchange (i.e., paths from information collection concerns to willingness to disclose information in exchange for personalization; (Martin & Murphy, 2017).

5.3 | Managerial implications

Since September 2019, manufacturers are required to integrate an addiction control application into smartphones. Google has put online the Digital Wellbeing Experiments platform, where designers and developers can share ideas and experimental tools to "help people find a better balance with technology." It is nothing less than an initiative to encourage designers and developers to incorporate digital well-being into their products. The unfair advantage of Google Wellbeing is that it collects more accurate and granular usage data than any third-party application. Indeed, embedded in the Android operating system, Wellbeing measures the screen time used for each application and shares it with the relevant developers. By making users aware of their consumption habits, Google intends to enable them to change their behavior.

Considering the significance of privacy concerns for determining buyers' purchase behaviors, managers must identify when and whether their firms' information collection methods and technologies are increasing consumers' privacy concerns. In particular, they should acknowledge that consumers engage in cost–benefit analyses and ensure that any information collection provides more benefits than costs associated with giving up personal data. If firms use IS that appear to invade buyers' privacy, without providing substantial benefits for shoppers in the form of personalized products and customer services that increase their happiness with the Internet, it likely will provoke stronger privacy concerns and limit purchase behaviors. If instead customers gain significant personalization benefits in exchange for their personal information, which enhance their happiness with the Internet, their privacy concerns may diminish (Inman & Nikolova, 2017). Ultimately, the extent to which consumers share their experiences online depends on the tension between their costs (privacy loss) and benefits (personalization). This important managerial implication for platform providers, which rely on long tails in their markets, can help them devise appropriate methods to gain access to more and higher quality data, to improve their recommender systems, and thus enhance customer satisfaction.

5.4 | Limitations and further research

The survey was administered to a representative sample, but behavioral data could provide further insights. Literature pertaining to the privacy paradox (Norberg et al., 2007) has shown that intentions do not necessarily correlate with information disclosure behaviors. In line with social exchange theory, we identify experience sharing frequency as a valuable moderator, so further research might investigate its potential moderating effect on the link between intentions and behaviors. In addition, though our model takes a further step toward understanding the tension between privacy and personalization, it may be overly general. More contextualized models might investigate happiness with the Internet and experience sharing frequency on different types of digital platforms (e.g., marketplaces, social networks, collaborative platforms). Finally, we call for further research that not only investigates the role of happiness with the Internet but also improves its measurement. It remains complex for researchers to capture consumer happiness with the Internet, and the measure we use might constitute a limitation of our study. Happiness obtained on the Internet is an evolving concept, especially as new digital technologies continue to emerge. One way to avoid potential methodological artifacts in further research might be to implement natural language processing. This would help researchers to use text mining to measure concepts such as trust/fear/joy (cf. https://www.saifmohammad.com/WebPages/NRC-Emotion-Lexicon.htm) or happiness (cf. www.hedonometer.org).

Further research should investigate the personalization based on sensitive data. According to Article 9 of the GDPR, the processing of personal data revealing racial or ethnic origin, political opinions, religious or philosophical beliefs or trade union membership, as well as the processing of genetic data, biometric data for the purpose of uniquely identifying a natural person, data concerning health, or data concerning the sex life or sexual orientation of a natural person, are prohibited. However, this did not prevent the Muslim Pro application, which claims 98 million users in more than 150 countries, to sell geolocation data, for marketing purpose, to a third-party broker, a supplier to the US military (Vice, 2020).

ORCID

Julien Cloarec http://orcid.org/0000-0002-9862-6137
Lars Meyer-Waarden http://orcid.org/0000-0001-7875-3481
Andreas Munzel https://orcid.org/0000-0003-4024-3923

REFERENCES

Aguirre, E., Mahr, D., Grewal, D., de Ruyter, K., & Wetzels, M. (2015). Unraveling the personalization paradox: The effect of information collection and trust-building strategies on online advertisement effectiveness. *Journal of Retailing*, *91*(1), 34–49. https://doi.org/10.1016/j.jretai.2014.09.005

Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, *103*(3), 411–423. https://doi.org/10.1037//0033-2909.103.3.411

Aspinwall, L. (1998). Rethinking the role of positive affect in self-regulation. *Motivation and Emotion*, *22*(1), 1–32.

Awad, N., & Krishnan, M. (2006). The personalization privacy paradox: An empirical evaluation of information transparency and the willingness to be profiled online for personalization. *MIS Quarterly*, *30*(1), 13–28.

Bagozzi, R. P., & Nataraajan, R. (2000). The year 2000: Looking forward. *Psychology & Marketing*, *17*(1), 1–11.

Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, *16*(1), 74–94. https://doi.org/10.1177/009207038801600107

Bagozzi, R. P., Yi, Y., & Phillips, L. W. (1991). Assessing construct validity in organizational research. *Administrative Science Quarterly*, *36*(3), 421–458. https://doi.org/10.2307/2393203

Bakamitsos, G. A. (2006). A cue alone or a probe to think? The dual role of affect in product evaluations. *Journal of Consumer Research*, *33*(3), 403–412. https://doi.org/10.1086/508525

Bar-Anan, Y., Liberman, N., & Trope, Y. (2006). The association between psychological distance and construal level: Evidence from an implicit association test. *Journal of Experimental Psychology: General*, *135*(4), 609–622. https://doi.org/10.1037/0096-3445.135.4.609

Bearden, W. O., Netemeyer, R. G., & Mobley, M. F. (1993). *Handbook of marketing scales: Multi-item measures for marketing and consumer behavior research*. Sage Publications.

Bélanger, F., & Crossler, R. E. (2011). Privacy in the digital age: A review of information privacy research in information systems. *MIS Quarterly*, *35*(4), 1017–1042.

Benjamin, D. J., Heffetz, O., Kimball, M. S., & Rees-Jones, A. (2012). What do you think would make you happier? What do you think you would choose? *American Economic Review*, *102*(5), 2083–2110. https://doi.org/10.1257/aer.102.5.2083

Bhattacharjee, A., & Mogilner, C. (2014). Happiness from ordinary and extraordinary experiences. *Journal of Consumer Research*, *41*(1), 1–17. https://doi.org/10.1086/674724

Blau, P. M. (1964). *Exchange and power in social life*. John Wiley & Sons, Inc.

Bleier, A., & Eisenbeiss, M. (2015). The importance of trust for personalized online advertising. *Journal of Retailing*, *91*(3), 390–409. https://doi.org/10.1016/j.jretai.2015.04.001

Bleier, A., Goldfarb, A., & Tucker, C. (2020). Consumer privacy and the future of fata-based innovation and marketing. *International Journal of Research in Marketing*, *37*, 466–480. https://doi.org/10.1016/j.ijresmar.2020.03.006

Bless, H., Schwarz, N., Clore, G. L., Golisano, V., Rabe, C., & Wölk, M. (1996). Mood and the use of scripts: Does a happy mood really lead to mindlessness? *Journal of Personality and Social Psychology*, *71*(4), 665–679. https://doi.org/10.1037//0022-3514.71.4.665

Bright, L. F., Lim, H. S., & Logan, K. (2021). "Should I Post or Ghost?": Examining how privacy concerns impact social media engagement in US consumers. *Psychology & Marketing*, *121*, 800. mar.21499 https://doi.org/10.1002/mar.21499

Briñol, P., Petty, R. E., & Barden, J. (2007). Happiness versus sadness as a determinant of thought confidence in persuasion: A self-validation analysis. *Journal of Personality and Social Psychology*, *93*(5), 711–727. https://doi.org/10.1037/0022-3514.93.5.711

Carter, T. J., & Gilovich, T. (2010). The relative relativity of material and experiential purchases. *Journal of Personality and Social Psychology*, *98*(1), 146–159. https://doi.org/10.1037/a0017145

Carter, T. J., & Gilovich, T. (2012). I am what I do, not what I have: The differential centrality of experiential and material purchases to the self. *Journal of Personality and Social Psychology*, *102*(6), 1304–1317. https://doi.org/10.1037/a0027407

Chellappa, R. K., & Sin, R. G. (2005). Personalization versus privacy: An empirical examination of the online consumer's dilemma. *Information Technology and Management*, *6*(2–3), 181–202.

Chen, F., & Wyer, R. S. (2015). The effects of affect, processing goals and temporal distance on information processing: Qualifications on temporal construal theory. *Journal of Consumer Psychology*, *25*(2), 326–332. https://doi.org/10.1016/j.jcps.2014.09.004

Chevalier, J. A., & Mayzlin, D. (2006). The effect of word of mouth on sales: Online book reviews. *Journal of Marketing Research*, *43*(3), 345–354. https://doi.org/10.1509/jmkr.43.3.345

Chiu, C.-M., Hsu, M.-H., & Wang, E. T. G. (2006). Understanding knowledge sharing in virtual communities: An integration of social capital and social cognitive theories. *Decision Support Systems*, *42*(3), 1872–1888. https://doi.org/10.1016/j.dss.2006.04.001

Cloarec, J. (2020). The personalization–privacy paradox in the attention economy. *Technological Forecasting and Social Change*, *161*, 120299. https://doi.org/10.1016/j.techfore.2020.120299

Diener, E. (2000). Subjective well-being: the science of happiness and a proposal for a national index, *American Psychologist 55*(1), pp. 34–43. https://doi.org/10.1037//0003-066X.55.1.34

Diener, E. (2009). Subjective well-being. In Diener, E. (Ed.), *The science of well-being: The collected works of Ed Diener* (pp. 11–58). Springer. https://doi.org/10.1007/978-90-481-2350-6_2

Deighton, J., & Johnson, P. (2013). *The value of data: Consequences for insight, innovation, and efficiency in the U.S. economy*. Data Driven Marketing Institute.

Diener, E., & Oishi, S. (2004). Are Scandinavians happier than Asians? Issues in comparing nations on subjective well-being? In F. Columbus (Ed.), *Asian economic and political issues* (pp. 1–25). Nova Science.

Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, *49*, 71–75. https://doi.org/10.1207/s15327752jpa4901_13

Diener, E., Suh, E. M., Smith, H., & Shao, L. (1995). National differences in reported subjective well-being: Why do they occur? *Social Indicators Research*, *34*, 7–32. https://doi.org/10.1007/BF01078966

Dinev, T., McConnell, A. R., & Smith, H. J. (2015). Informing privacy research through information systems, psychology, and behavioral economics: Thinking outside the "APCO" box. *Information Systems Research*, *26*(4), 639–655. https://doi.org/10.1287/isre.2015.0600

Dowling, G. R., & Staelin, R. (1994). A model of perceived risk and intended risk-handling activity. *Journal of Consumer Research*, *21*(1), 119–175. https://doi.org/10.1086/209386

Dunn, E. W., Gilbert, D. T., & Wilson, T. D. (2011). If money doesn't make you, then you probably aren't spending it right. *Journal of Consumer Psychology*, *21*(2), 115–125. https://doi.org/10.1016/j.jcps.2011.02.002

Eastlick, M. A., Lotz, S. L., & Warrington, P. (2006). Understanding online B-to-C relationships: An integrated model of privacy concerns, trust, and commitment. *Journal of Business Research*, *59*(8), 877–886. https://doi.org/10.1016/j.jbusres.2006.02.006

Ellsworth, P. C., & Smith, C. A. (1988). From appraisal to emotion: Differences among unpleasant feelings. *Motivation and Emotion*, *12*(3), 271–302. https://doi.org/10.1007/BF00993115

Emerson, R. M. (1981). Social exchange theory. In M. Rosenberg, & R. Turner (Eds.), *Social psychology: Sociological perspectives* (pp. 31–65). Basic Books.

Etkin, J., & Ghosh, A. P. (2018). When being in a positive mood increases choice deferral. *Journal of Consumer Research*, *45*(1), 208–225. https://doi.org/10.1093/jcr/ucx121

Faurie, I., & Leemput, C. vande (2007). Influence du Sentiment d'Efficacité Informatique sur les Usages d'Internet des Étudiants. *L'Orientation Scolaire et Professionnelle*, *36*(4), 533–552. https://doi.org/10.4000/osp.1549

Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention and behavior: An introduction to theory and research*. Addison-Wesley.

Foa, U. G., & Foa, E. (1974). *Societal structures of the mind*. Thomas.

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, *18*(1), 39–50. https://doi.org/10.2307/3151312

Förster, J., Friedman, R. S., & Liberman, N. (2004). Temporal construal effects on abstract and concrete thinking: Consequences for insight and creative cognition. *Journal of Personality and Social Psychology*, *87*(2), 177–189. https://doi.org/10.1037/0022-3514.87.2.177

Frenzen, J., & Nakamoto, K. (1993). Structure, cooperation, and the flow of market information. *Journal of Consumer Research*, *20*(3), 360–375. https://doi.org/10.1086/209355

Fujita, K., Trope, Y., Liberman, N., & Levin-Sagi, M. (2006). Construal levels and self-control. *Journal of Personality and Social Psychology*, *90*(3), 351–367. https://doi.org/10.1037/0022-3514.90.3.351

Gasper, K., & Clore, G. L. (2002). Attending to the big picture: Mood and global versus local processing of visual information. *Psychological Science*, *13*(1), 34–40. https://doi.org/10.1111/1467-9280.00406

Gatignon, H. A., & Robertson, T. S. (1986). An exchange theory model of interpersonal communication. In R. J. Lutz (Ed.), *Advances in consumer research* (pp. 534–538). Association for Consumer Research.

Gefen, D., Karahanna, E., & Straub, D. W. (2003). Trust and TAM in online shopping: An integrated model. *MIS Quarterly*, *27*(1), 51–90.

Gouldner, A. W. (1960). The norm of reciprocity: A preliminary statement. *American Sociological Review*, *25*(2), 161–178. https://doi.org/10.2307/2092623

Grazioli, S., & Jarvenpaa, S. L. (2000). Perils of Internet fraud: An empirical investigation of deception and trust with experienced internet consumers. *IEEE Transactions on Systems, Man, and Cybernetics—Part A: Systems and Humans*, *30*(4), 395–410. https://doi.org/10.1109/3468.852434

Greenfield, S. (2014). *Mind change: How digital technologies are leaving their mark on our brains*. Rider Books.

Harman, H. H. (1967). *Modern factor analysis*. University of Chicago Press.

Hayes, A. F. (2017). *Introduction to mediation, moderation, and conditional process analysis* (2nd ed.). Guilford Press.

Hayes, J. L., Brinson, N. H., Bott, G. J., & Moeller, C. M. (2021). The influence of consumer–brand relationship on the personalized advertising privacy calculus in social media. *Journal of Interactive Marketing*, *55*, 16–30. https://doi.org/10.1016/j.intmar.2021.01.001

Herzog, S. M., Hansen, J., & Wänke, M. (2007). Temporal distance and ease of retrieval. *Journal of Experimental Social Psychology*, *43*(3), 483–488. https://doi.org/10.1016/j.jesp.2006.05.008

Hirschman, E. C., & Holbrook, M. B. (1982). Hedonic consumption: Emerging concepts, methods and propositions. *Journal of Marketing*, *46*(3), 92–101. https://doi.org/10.2307/1251707

Hoffman, D. L., & Novak, T. P. (1996). Marketing in hypermedia computer-mediated environments: Conceptual foundations. *Journal of Marketing*, *60*(3), 50–68. https://doi.org/10.2307/1251841

Holbrook, M. B., & Hirschman, E. C. (1982). The experiential aspects of consumption: Consumer fantasies, feelings, and fun. *Journal of Consumer Research*, *9*(2), 132–140. https://doi.org/10.1086/208906

Holmes, J. G. (1981). The exchange process in close relationships: Microbehavior and macromotives. In M. J. Learner, & S. C. Lerner (Eds.), *The justice motive in social behavior* (pp. 261–284). Plenum.

Homburg, C., Koschate, N., & Hoyer, W. D. (2006). The role of cognition and affect in the formation of customer satisfaction: A dynamic perspective. *Journal of Marketing*, *70*(3), 21–31. https://doi.org/10.1509/jmkg.70.3.21

Hong, W., & Thong, J. Y. (2013). Internet privacy concerns: An integrated conceptualization and four empirical studies. *MIS Quarterly*, *37*(1), 275–298.

Hsee, C. K., Yang, Y., Li, N., & Shen, L. (2009). Wealth, warmth, and well-being: Whether happiness is relative or absolute depends on whether it is about money, acquisition, or consumption. *Journal of Marketing Research*, *46*(3), 396–409. https://doi.org/10.1509/jmkr.46.3.396

Huang, M.-H., & Rust, R. T. (2018). Artificial intelligence in service. *Journal of Service Research*, *21*(2), 155–172. https://doi.org/10.1177/1094670517752459

Inman, J. J., & Nikolova, H. (2017). Shopper-facing retail technology: A retailer adoption decision framework incorporating shopper attitudes and privacy concerns. *Journal of Retailing*, *93*(1), 7–28. https://doi.org/10.1016/j.jretai.2016.12.006

INSEE. (2015). *Diplôme le Plus Élevé selon l'Âge et le Sexe en 2015*. https://www.insee.fr/fr/statistiques/2416872

INSEE. (2016). *Population par Sexe et Âge au 1er Janvier 2016*. https://www.insee.fr/fr/statistiques/2012692

Isen, A. M. (2001). An influence of positive affect on decision making in complex situations: Theoretical issues with practical implications. *Journal of Consumer Psychology*, *11*(2), 75–85. https://doi.org/10.1207/153276601750408311

Isen, A. M., Labroo, A. A., & Durlach, P. (2004). An influence of product and brand name on positive affect: Implicit and explicit measures. *Motivation and Emotion*, *28*(1), 43–63. https://doi.org/10.1023/B:MOEM.0000027277.98917.9a

Jiang, Z. J., Heng, C. S., & Choi, B. C. F. (2013). Privacy concerns and privacy-protective behavior in synchronous online social interactions. *Information Systems Research*, *24*(3), 579–595. https://doi.org/10.1287/isre.1120.0441

Johnson, G. A., Shriver, S. K., & Du, S. (2020). Consumer privacy choice in online advertising: Who opts out and at what cost to industry? *Marketing Science*, *39*(1), 33–51. https://doi.org/10.1287/mksc.2019.1198

Jones, J. K. (1976). *Social exchange theory: Its structure and influence in social psychology*. Academic Press.

Kahneman, D., Diener, E., & Schwarz, N. (1999). *Well-being: The foundations of hedonic psychology*. Russell Sage Foundation.

Kavetsos, G., & Koutroumpis, P. (2011). Technological affluence and subjective well-being. *Journal of Economic Psychology*, *32*(5), 742–753. https://doi.org/10.1016/j.joep.2011.05.004

Kraut, R., Patterson, M., Lundmark, V., Kiesler, S., Mukophadhyay, T., & Scherlis, W. (1998). Internet paradox: A social technology that reduces social involvement and psychological well-being? *American Psychologist*, *53*(9), 1017–1031. https://doi.org/10.1037/0003-066X.53.9.1017

Labroo, A. A., & Patrick, V. M. (2009). Psychological distancing: Why happiness helps you see the big picture. *Journal of Consumer Research*, *35*(5), 800–809. https://doi.org/10.1086/593683

Liberman, N., Sagristano, M. D., & Trope, Y. (2002). The effect of temporal distance on level of mental construal. *Journal of Experimental Social Psychology*, *38*(6), 523–534. https://doi.org/10.1016/S0022-1031(02)00535-8

Liberman, N., & Trope, Y. (1998). The role of feasibility and desirability considerations in near and distant future decisions: A test of temporal construal theory. *Journal of Personality and Social Psychology*, *75*(1), 5–18. https://doi.org/10.1037//0022-3514.75.1.5

Lin, A., Gregor, S., & Ewing, M. (2008). Developing a scale to measure the enjoyment of web experiences. *Journal of Interactive Marketing*, *22*(4), 40–57. https://doi.org/10.1002/dir.20120

Lucas, R. E., Diener, E., & Suh, E. (1996). Discriminant validity of well-being measures. *Journal of Personality and Social Psychology*, *71*(3), 616–628. https://doi.org/10.1037//0022-3514.71.3.616

Ludwig, S., de Ruyter, K., Friedman, M., Brüggen, E. C., Wetzels, M., & Pfann, G. (2013). More than words: The influence of affective content and linguistic style matches in online reviews on conversion

rates. *Journal of Marketing*, *77*(1), 87–103. https://doi.org/10.1509/jm.11.0560

Lyubomirsky, S. (2001). Why are some people happier than others? The role of cognitive and motivational processes in well-being. *American Psychologist*, *56*(3), 239–249. https://doi.org/10.1037/0003-066X.56.3.239

Lyubomirsky, S., Sheldon, K. M., & Schkade, D. (2005). Pursuing happiness: The architecture of sustainable change. *Review of General Psychology*, *9*(2), 111–131. https://doi.org/10.1037/1089-2680.9.2.111

Malhotra, N. K., Kim, S. S., & Agarwal, J. (2004). Internet users' information privacy concerns (IUIPC): The construct, the scale, and a causal model. *Information Systems Research*, *15*(4), 336–355. https://doi.org/10.1287/isre.1040.0032

Malkoc, S. A., Zauberman, G., & Ulu, C. (2005). Consuming now or later?: The interactive effect of timing and attribute alignability. *Psychological Science*, *16*(5), 411–417. https://doi.org/10.1111/j.0956-7976.2005.01549.x

Marketing Science Institute. (2018). *2018–2020 research priorities*. http://www.msi.org/research/2018-2020-research-priorities/

Martin, K. D., & Murphy, P. E. (2017). The role of data privacy in marketing. *Journal of the Academy of Marketing Science*, *45*(2), 135–155. https://doi.org/10.1007/s11747-016-0495-4

Maseeh, H. I., Jebarajakirthy, C., Pentecost, R., Arli, D., Weaven, S., & Ashaduzzaman, M. (2021). Privacy concerns in e-commerce: A multilevel meta-analysis. *Psychology & Marketing*, *121*, 21493. https://doi.org/10.1002/mar.21493

Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *The Academy of Management Review*, *20*(3), 709–734. https://doi.org/10.2307/258792

McKnight, D. H., Cummings, L. L., & Chervany, N. L. (1998). Initial trust formation in new organizational relationships. *The Academy of Management Review*, *23*(3), 473–490. https://doi.org/10.2307/259290

Meyer-Waarden, L., & Cloarec, J. (2021). "Baby, you can drive my car": Psychological antecedents that drive consumers' adoption of AI-powered autonomous vehicles. *Technovation*, 102348. https://doi.org/10.1016/j.technovation.2021.102348

Miller, L. C., & Kenny, D. A. (1986). Reciprocity of self-disclosure at the individual and dyadic levels: A social relations analysis. *Journal of Personality and Social Psychology*, *50*(4), 713–719. https://doi.org/10.1037//0022-3514.50.4.713

Milne, G. R., & Boza, M.-E. (1999). Trust and concern in consumers' perceptions of marketing information management practices. *Journal of Interactive Marketing*, *13*(1), 5–24. https://doi.org/10.1002/(SICI)1520-6653(199924)13:1<5::AID-DIR2>3.0.CO;2-9

Mitchell, M. E., Lebow, J. R., Uribe, R., Grathouse, H., & Shoger, W. (2011). Internet use, happiness, social support and itroversion: A more fine grained analysis of person variables and internet activity. *Computers in Human Behavior*, *27*(5), 1857–1861. https://doi.org/10.1016/j.chb.2011.04.008

Mogilner, C., & Aaker, J. (2009). "The time vs. money effect": Shifting product attitudes and decisions through personal connection. *Journal of Consumer Research*, *36*(2), 277–291. https://doi.org/10.1086/597161

Mogilner, C., Aaker, J., & Kamvar, S. D. (2012). How happiness affects choice. *Journal of Consumer Research*, *39*(2), 429–443. https://doi.org/10.1086/663774

Molm, L. D. (1997). *Coercive power in social exchange*. Cambridge University Press.

Molm, L. D., Takahashi, N., & Peterson, G. (2000). Risk and trust in social exchange: An experimental test of a classical proposition. *American Journal of Sociology*, *105*(5), 1396–1427. https://doi.org/10.1086/210434

Munzel, A., Galan, J.-P., & Meyer-Waarden, L. (2018). Getting by or getting ahead on social networking sites? The role of social capital in happiness and well-being. *International Journal of Electronic Commerce*, *22*(2), 232–257. https://doi.org/10.1080/10864415.2018.1441723

Munzel, A., & Kunz, W. H. (2014). Creators, multipliers, and lurkers: Who contributes and who benefits at online review sites. *Journal of Service Management*, *25*(1), 49–74. https://doi.org/10.1108/JOSM-04-2013-0115

Munzel, A., Meyer-Waarden, L., & Galan, J.-P. (2018). The social side of sustainability: well-being as a driver and an outcome of social relationships and interactions on social networking sites. *Technological Forecasting and Social Change*, *130*, 14–27. https://doi.org/10.1016/j.techfore.2017.06.031

Netzer, O., Feldman, R., Goldenberg, J., & Fresko, M. (2012). Mine your own business: Market-structure surveillance through text mining. *Marketing Science*, *31*(3), 521–543. https://doi.org/10.1287/mksc.1120.0713

Nicolao, L., Irwin, J. R., & Goodman, J. K. (2009). Happiness for sale: Do experiential purchases make consumers happier than material purchases? *Journal of Consumer Research*, *36*(2), 188–198. https://doi.org/10.1086/597049

Nie, N. H., & Hillygus, D. S. (2002). Internet and society: A preliminary report. *IT & Society*, *1*(1), 1–20.

Niedermeier, A. (2015). *Customer happiness: Essays on happiness and its relation to consumption*. Fgm Fördergeschaft Marketing E.V.

Norberg, P. A., Horne, D. R., & Horne, D. A. (2007). The privacy paradox: Personal information disclosure intentions versus behaviors. *Journal of Consumer Affairs*, *41*(1), 100–126. https://doi.org/10.1111/j.1745-6606.2006.00070.x

Ong, C.-S., Chang, S.-C., & Lee, S.-M. (2015). Development of WebHapp: Factors in predicting user perceptions of website-related happiness. *Journal of Business Research*, *68*(3), 591–598. https://doi.org/10.1016/j.jbusres.2014.09.002

Pénard, T., Poussing, N., & Suire, R. (2013). Does the Internet make people happier? *The Journal of Socio-Economics*, *46*, 105–116. https://doi.org/10.1016/j.socec.2013.08.004

Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, *88*(5), 879–903. https://doi.org/10.1037/0021-9010.88.5.879

Putnam, R. D. (2000). *Bowling alone: The collapse and revival of American community*. Simon and Schuster.

Rafieian, O., & Yoganarasimhan, H. (2021). Targeting and privacy in mobile advertising. *Marketing Science*, *40*(2), 193–218. https://doi.org/10.1287/mksc.2020.1235

Raghunathan, R., & Irwin, J. R. (2001). Walking the hedonic product treadmill: Default contrast and mood-based assimilation in judgments of predicted happiness with a target product. *Journal of Consumer Research*, *28*(3), 355–368. https://doi.org/10.1086/323727

Richard, M.-O. (2005). Modeling the impact of Internet atmospherics on surfer behavior. *Journal of Business Research*, *58*(12), 1632–1642. https://doi.org/10.1016/j.jbusres.2004.07.009

Roehm, M. L., & Sternthal, B. (2001). The moderating effect of knowledge and resources on the persuasive impact of analogies. *Journal of Consumer Research*, *28*(2), 257–272. https://doi.org/10.1086/322901

Rosenzweig, E., & Gilovich, T. (2012). Buyer's remorse or missed opportunity? Differential regrets for material and experiential purchases. *Journal of Personality and Social Psychology*, *102*(2), 215–223. https://doi.org/10.1037/a0024999

Roser, M. (2016). *Happiness and life satisfaction*. http://ourworldindata.org/happiness-and-life-satisfaction

Schumann, J. H., von Wangenheim, F., & Groene, N. (2014). Targeted online advertising: Using reciprocity appeals to increase acceptance among users of free web services. *Journal of Marketing*, *78*(1), 59–75. https://doi.org/10.1509/jm.11.0316

Schwarz, N., Bless, H., & Bohner, G. (1991). Mood and persuasion: Affective states influence the processing of persuasive communications. *Advances in Experimental Social Psychology*, *24*, 161–199. https://doi.org/10.1016/S0065-2601(08)60329-9

Schwarz, N., & Clore, G. L. (1983). Mood, misattribution, and judgments of well-being: informative and directive functions of affective states. *Journal of Personality and Social Psychology*, *45*(3), 513–523. https://doi.org/10.1037//0022-3514.45.3.513

Sirgy, M. J. (2012). *The psychology of quality of life: Hedonic well-being, life satisfaction, and eudaimonia*. Springer Science+Business Media B.V.

Smith, C. A., & Ellsworth, P. C. (1985). Patterns of cognitive appraisal in emotion. *Journal of Personality and Social Psychology*, *48*(4), 813–838. https://doi.org/10.1037//0022-3514.48.4.813

Smith, H. J., Milberg, S. J., & Burke, S. J. (1996). Information privacy: Measuring individuals' concerns about organizational practices. *MIS Quarterly*, *20*(2), 167–196.

Soman, D. (1998). The illusion of delayed incentives: Evaluating future effort-money transactions. *Journal of Marketing Research*, *35*(4), 427–437. https://doi.org/10.2307/3152162

Song, Y. W. G., Lim, H. S., & Oh, J. (2021). "We think you may like this": An investigation of electronic commerce personalization for privacy-conscious consumers. *Psychology & Marketing*, *121*, 800. mar.21501 https://doi.org/10.1002/mar.21501

Sundar, S. S., & Marathe, S. S. (2010). Personalization versus customization: The importance of agency, privacy, and power usage. *Human Communication Research*, *36*(3), 298–322. https://doi.org/10.1111/j.1468-2958.2010.01377.x

Sutanto, J., Palme, E., Tan, C.-H., & Phang, C. W. (2013). Addressing the personalization–privacy paradox: An empirical assessment from a field experiment on smartphone users. *MIS Quarterly*, *37*(4), 1141–1164. https://doi.org/10.25300/MISQ/2013/37.4.07

Taylor, D. G., & Strutton, D. (2010). Has E-marketing come of age? Modeling historical influences on post-adoption era internet consumer behaviors. *Journal of Business Research*, *63*(9–10), 950–956. https://doi.org/10.1016/j.jbusres.2009.01.018

Thompson, C. J., Locander, W. B., & Pollio, H. R. (1989). Putting consumer experience back into consumer research: The philosophy and method of existential-phenomenology. *Journal of Consumer Research*, *16*(2), 133–146. https://doi.org/10.1086/209203

Toch, E., Wang, Y., & Cranor, L. F. (2012). Personalization and privacy: A survey of privacy risks and remedies in personalization-based systems. *User Modeling and User-Adapted Interaction*, *22*(1–2), 203–220. https://doi.org/10.1007/s11257-011-9110-z

Trope, Y., Liberman, N., & Wakslak, C. (2007). Construal levels and psychological distance: Effects on representation, prediction, evaluation, and behavior. *Journal of Consumer Psychology*, *17*(2), 83–95. https://doi.org/10.1016/S1057-7408(07)70013-X

Trope, Y., & Liberman, N. (2000). Temporal construal and time-dependent changes in preference. *Journal of Personality and Social Psychology*, *79*(6), 876–889. https://doi.org/10.1037//0022-3514.79.6.876

Trope, Y., & Liberman, N. (2003). Temporal construal. *Psychological Review*, *110*(3), 403–421. https://doi.org/10.1037/0033-295X.110.3.403

Turkle, S. (2011). *Alone together: Why we expect more from technlogy and less from each other*. Basic Books.

Valenzuela, S., Park, N., & Kee, K. F. (2009). Is there social capital in a social network site?: Facebook use and college students' life satisfaction, trust, and participation. *Journal of Computer-Mediated Communication*, *14*(4), 875–901. https://doi.org/10.1111/j.1083-6101.2009.01474.x

Van Boven, L., & Gilovich, T. (2003). To do or to have? That is the question. *Journal of Personality and Social Psychology*, *85*(6), 1193–1202.

van der Heijden, H. (2004). User acceptance of hedonic information systems. *MIS Quarterly*, *28*(4), 695–704. https://doi.org/10.2307/25148660

Vice. (2020). *How the U.S. military buys location data from ordinary apps*. https://www.vice.com/en/article/jgqm5x/us-military-location-data-xmode-locate-x

Wallsten, S. (2015). What we are not doing when we're online. In A. Goldfarb, S. Greenstein, & C. E. Tucker (Eds.), *Economic analysis of the digital economy*. University of Chicago Press.

Wasko, M. M., & Faraj, S. (2005). Why should I share? Examining social capital and knowledge contribution in electronic networks of practice. *MIS Quarterly*, *29*(1), 35–57.

Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, *54*(6), 1063–1070. https://doi.org/10.1037/0022-3514.54.6.1063

We Are Social. (2014). *Social, digital and mobile worldwide report*. https://www.slideshare.net/wearesocialsg/social-digital-mobile-around-the-world-january-2014

White, T. B. (2004). Consumer disclosure and disclosure avoidance: A motivational framework. *Journal of Consumer Psychology*, *14*(1–2), 41–51. https://doi.org/10.1207/s15327663jcp1401&2_6

Williams, L. E., Stein, R., & Galguera, L. (2014). The distinct affective consequences of psychological distance and construal level. *Journal of Consumer Research*, *40*(6), 1123–1138. https://doi.org/10.1086/674212

Zhao, K., Stylianou, A. C., & Zheng, Y. (2013). Predicting users' continuance intention in virtual communities: The dual intention-formation processes. *Decision Support Systems*, *55*(4), 903–910. https://doi.org/10.1016/j.dss.2012.12.026

Zhao, M., Hoeffler, S., & Zauberman, G. (2007). Mental simulation and preference consistency over time: the role of process- versus outcome-focused thoughts. *Journal of Marketing Research*, *44*(3), 379–388. https://doi.org/10.1509/jmkr.44.3.379

Zhao, X., Lynch, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of Consumer Research*, *37*(2), 197–206. https://doi.org/10.1086/651257

Zheng, Y., Zhao, K., & Stylianou, A. (2013). The impacts of information quality and system quality on users' continuance intention in information-exchange virtual communities: An empirical investigation. *Decision Support Systems*, *56*, 513–524. https://doi.org/10.1016/j.dss.2012.11.008

How to cite this article: Cloarec, J., Meyer-Waarden, L., & Munzel, A. (2021). The personalization–privacy paradox at the nexus of social exchange and construal level theories. *Psychology & Marketing*, 1–15. https://doi.org/10.1002/mar.21587

APPENDIX A

TABLE A1 Quality of the measurement instruments

	ρ	AVE	IR
Information collection concerns	0.86	0.68	
It usually bothers me when websites ask me for personal information.			0.76
When websites ask me for personal information, I sometimes think twice before providing it			0.84
I am concerned that websites are collecting too much personal information about me			0.88
Risk beliefs	0.91	0.77	
In general, it would be risky to give my personal information to websites.			0.89
There would be too much uncertainty associated with giving my personal information websites			0.94
Providing websites with my personal information would involve many unexpected problems			0.80
Trust beliefs	0.93	0.81	
Websites in general would be trustworthy in handling my personal information.			0.90
Websites would keep my best interests in mind when dealing with my personal information			0.94
Websites would fulfill their promises related to my personal information.			0.86
Happiness	0.91	0.77	
Using the Internet makes me feel well			0.90
In general, the Internet contributes to my feeling of happiness			0.93
Compared to other media (e.g., TV, radio, magazines), the Internet makes me feel happier			0.80
Internet literacy	0.95	0.80	
I can search information online			0.94
I can read news online			0.96
I can write and read e-mails			0.91
I can shop online			0.87
I can carry out banking operations online			0.79
Willingness to disclose information for personalization	0.85	0.66	
I intend to disclose my personal information if the company recommends me products or services that are based on…			
… my purchasing behavior and my search history performed on its website			0.78
… the brand preferences (Likes) of my Facebook friends			0.83
… my geolocation once activated on my smartphone, my computer or my tablet			0.82

Note: ρ, Joreskog's *ρ*.

Abbreviations: AVE, average variance extracted; IR, indicator reliability.

APPENDIX B

TABLE B1 Descriptive statistics and discriminant validity

	M	SD	ICC	RB	TB	HAPPY	IL	WDIP
ICC	5.39	1.33	0.68					
RB	5.07	1.33	0.48	0.77				
TB	3.71	1.54	0.01	0.00	0.81			
HAPPY	4.74	1.41	0.00	0.00	0.08	0.77		
IL	6.13	1.27	0.23	0.08	0.00	0.07	0.80	
WDIP	3.39	1.58	0.12	0.04	0.23	0.18	0.01	0.66

Note: Discriminant validity is reflected by the pvc values on the diagonal and squared correlations between constructs in the lower left angle.

Abbreviations: HAPPY, happiness; ICC, information collection concerns; IL, Internet literacy; RB, risk beliefs; TB, trust beliefs; WDIP, willingness to disclose information in exchange for personalization.