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The personalization–privacy paradox in the attention economy

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ABSTRACT

The personalization–privacy paradox persists because consumers appreciate the value of personalization, yet marketers' exploitation of consumers' personal information to provide such personalization raises privacy concerns. Consumers then may refuse to provide personal information, which limits personalization efforts. Attempts to rely on information technology (e.g., anonymizing techniques, peer-to-peer communication) to address privacy concerns largely have proven ineffective, often because they are overly sophisticated for consumers. Thus, even if the personalization–privacy paradox seemingly arose with mobile technologies, it must stem from a theoretical foundation. Prior information systems literature tends to adopt micro-oriented theories to understand the paradox, but this perspective article instead seeks to investigate the personalization–privacy paradox at a macro level, with an attention economy lens. By investigating the relationship among personalization, privacy, and attention, this study seeks to offer insights pertaining to the ecology of attention, choice architectures, and stylistic devices, as well as some relevant implications for research and practice.

1. Introduction

> "The more people use their addictive-by-design social media, the more attention social-media companies can sell to advertisers—and the more data about the users' behavior they can collect for themselves."
>
> *The Economist* (2017)

The personalization–privacy paradox refers to a continuous tension, between a firm's need for consumer information to personalize consumer experiences and a consumer's need for privacy. The tension has intensified with the rise of modern technology, such that consumers may allow firms to access their personal information through technology-based channels without fully understanding the conditions of this consent (Bornschein et al., 2020). Firms generally use the information to personalize consumers' online navigation and improve their online experience, but the risks of misuses also create privacy concerns. In the effort to find a balance—between gathering personal data to provide valuable, expedient consumer targeting and reducing consumers' privacy concerns—a more comprehensive theoretical framework may be necessary (Bélanger and James, 2020; Bleier et al., 2020). That is, the paradox clearly affects consumers' and firm behaviors, but the related trade-offs also have implications for platforms (Gal-Or et al., 2018), especially those that rely on the FAANG business model (referring to the model adopted by firms like Facebook, Amazon.com, Apple, Netflix, and Google) (Casadesus-Masanell and Hervas-Drane, 2020, 2015).

In efforts to deal with the challenging paradox, these FAANG-type firms have implemented various consumer privacy controls (Amazon, 2019; Apple, 2019; Facebook, 2019; Google, 2019; Microsoft, 2019). Researchers also have proposed options for addressing it, by leveraging advanced information and communication technologies (ICT) (e.g., anonymizing techniques, peer-to-peer communication) that tend to be highly sophisticated and thus less accessible to average consumers (Bleier et al., 2020; Sutanto et al., 2013). According to Sutanto et al. (2013) and Solove (2020) not only do these studies lead to solutions that lack sufficient ease of use, but their empirical analyses also suffer significant methodological limitations. For example, information systems literature that applies micro-oriented theories (e.g., privacy calculus, game, information boundary) ignores the macro-level, as might be represented by the attention economy. Such a view seems highly relevant though, especially for platform firms, for which personalization efforts inherently seek to capture consumers' attention, which they then can market to advertisers (*The Economist*, 2017). That is, in the attention economy, "a system of agents (senders) … try to attract the attention of subjects (receivers) by producing and distributing information packages (signals).... promoting products, persons or ideas" (Falkinger, 2007, p. 268). The attention economy requires a larger range of buyers that firms can reach through advanced ICT, such that the market reaches sufficient size at the international level, so that firms can attract global consumer attention, through media intermediation (Falkinger, 2008; Galperti and Trevino, 2020).

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In this pursuit for consumers' attention though, senders confront a limitation, in that people have limited resources to process information (Avoyan and Schotter, 2020), which "consumes the attention of its recipients [such that] a wealth of information creates a poverty of attention" (Simon, 1971, p. 40). Such issues become even more pressing in the presence of big data, leading economists and choice theorists to call for more research consideration of attention (Hefti and Heinke, 2015). In particular, they note that distraction is nearly ubiquitous for multiscreen users, who receive frequent notifications from various devices. Even without active notifications, almost 90% of students indicate that they feel "phantom vibrations" (Drouin et al., 2012); when they do receive them, 72% of teens and 48% of adults feel compelled to respond immediately to notifications (Common Sense Media, 2016; Pielot et al., 2014). The result of such distractions may also imply a general lack of attention to any source of information, as predicted by attention theories, which suggest that people manage different tasks simultaneously with varying degrees of attention. Their attention capacity also may shift, depending on the difficulty and degree of practice they have with a task (Avoyan and Schotter, 2020; Benlian, 2015). In relation to the ongoing personalization–privacy paradox, such predictions imply that as they gain experience with trading off their privacy for greater personalization, or when that effort becomes easier, consumers might adjust their views. In this sense, beyond affecting how consumers interact with or react to messages from sources, diminished attention likely determines their assessments of the personalization–privacy paradox. According to an enhanced Antecedents–Privacy Concerns–Outcomes (APCO) model (Dinev et al., 2015) (Fig. 1), the cognitive effort required to make privacy-related decisions requires attention, so the level of attention devoted to a decision moderates the impacts of various antecedents on information disclosure outcomes.

Such predictions highlight the need to include attention in investigations of the personalization–privacy paradox; Van Knippenberg et al. (2015, p. 655) effectively summarize this concern, noting that "the information age prompts management scholars to rethink and refresh insights and theories on how individuals and organizations operate and thrive in this new context" and cautioning that the lack of application of attention theories to the personalization–privacy paradox has caused theoretical advances to fall off businesses' and policymakers' agendas. Investigating personalization–privacy trade-offs through an attention lens thus offers a promising research avenue, with potentially related benefits for marketers that seek to capture consumers' attention through their personalization efforts (Aguirre et al., 2016; Kannan and Li, 2017). In marketing studies of the effects of privacy on stakeholders, including its societal implications (Martin and Murphy, 2017), researchers have addressed some relevant issues (e.g., ad effectiveness), yet the technology advances require continuous reassessment of privacy research (Grewal et al., 2020). Such an accounting may require a combination of economic theories (e.g., attention economy) (Avoyan and Schotter, 2020) with insights from marketing literature. This effort would reflect the general recommendation that economists and management scholars should adopt interdisciplinary approaches (Festré and Garrouste, 2015).

Therefore, for this article, the author draws on prior literature to derive a new conceptual framework that links the personalization–privacy paradox to attention, depending on the level of competition for attention and consumers' perceptions of manipulation. Using insights from an attention economy perspective, this article also compliments considerations of the personalization–privacy paradox with concepts pertaining to the ecology of attention, choice architecture, and stylistic devices. With this foundation, this study offers implications for research and stakeholders in practice, including consumers, managers, and policymakers.

2. Conceptual framework

Due to its pervasiveness, technology may seem intrusive; consumers constantly face the threat of interruptions and conflicting demands. As part of their business model, FAANG firms deploy innovative approaches to capture and retain their attention. For example, through personalization, they determine consumers' preferences, adapt the elements of their marketing mix accordingly, then confirm the effectiveness of each action (Wedel and Kannan, 2016). The three stages—capturing, adapting, and evaluating—together produce adaptive personalization systems, which enable automated attention analyses (Wedel and Kannan, 2016). This constant feedback helps ensure that personalization cues enhance users' enjoyment and intrinsic motivation; in turn, they capture and retain attention and facilitate information processing (Kamis et al., 2008). Features that increase such attention include the size of recommendation sets (Tsekouras et al.,

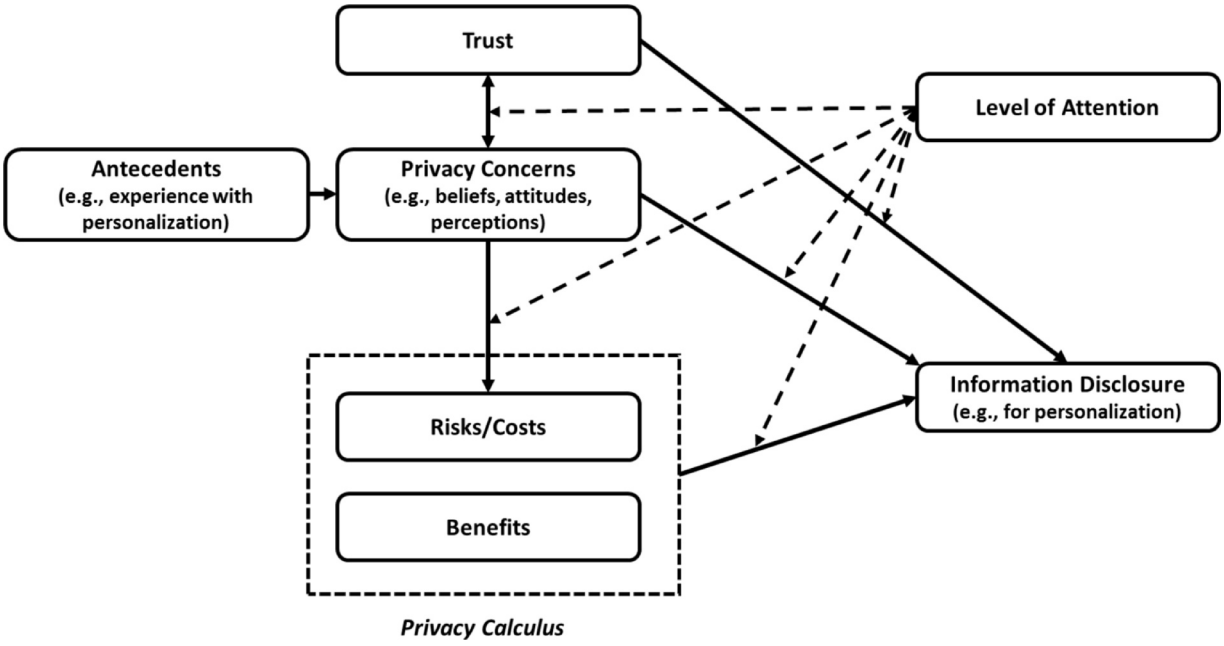

FIG. 1. Enhanced APCO Model (adapted from Dinev et al., 2015).

TABLE 1
– Theoretical Frameworks Related to the Personalization–Privacy Paradox.

THEORIES	ARTICLES	MAIN FINDINGS
Privacy calculus theory	Chellappa & Sin (2005)	The value of personalization has a positive effect on personalization use, contrary to privacy concerns.
	Chellappa & Shivendu (2007)	
	Sheng et al. (2008)	Giving consumers full rights and control over their personal information is beneficial for society.
	Xu et al. (2009)	Consumers more readily adopt personalized services in an emergency situation.
	Xu et al. (2011)	Personalization increases consumers' information disclosure, contrary to perceived risks.
	Li & Unger (2012)	The effect of personalization depends on the type of information systems.
		Personalization quality can outweigh privacy concerns for service use.
Game theory	Lee et al. (2011)	Protecting consumers' privacy is a competition-mitigating mechanism.
	Casadesus-Masanell & Hervas-Drane (2015)	Competition is less intense when consumers are heterogeneous in their privacy preferences.
	Gal-Or et al. (2018)	Providing consumers with control decreases targeting differentiation.
	Avoyan & Schotter (2020)	
	Hoffmann et al. (2020)	
Information boundary theory	Sutanto et al. (2013)	Personalization is more beneficial when privacy concerns are low.
	Karwatzki et al. (2017)	Privacy-safe applications lead to higher content gratification.
Utility maximization theory	Awad & Krishnan (2006)	Consumers' desire for information transparency leads to lower behavioral intentions.
Technology Acceptance Model	Albashrawi & Motiwalla (2019)	Privacy concerns moderate the effect of perceived usefulness on customer satisfaction, contrary to personalization

2020), as well as the accuracy of the personalized offer (Yoganarasimhan, 2020). Depending on the perspective taken, personalization thus might attract (selective) attention or constitute a distraction from another information source that also might evoke information overload (Bleier and Eisenbeiss, 2015).

2.1. Towards a better understanding of the personalization-privacy paradox

Researchers have used several theoretical frameworks to understand the central paradox, as detailed in Table 1.

Such theories are insufficient for understanding the personalization–privacy paradox though, because they largely ignore attention, even though gaining attention is central to any personalization effort and thus the resulting trade-off with privacy. For example, when a consumer encounters many competing signals (Falkinger, 2007; Galperti and Trevino, 2020), such as a range of personalized cues, it may be more difficult to evaluate and compare alternatives (Bettman et al., 1998) using cognitive heuristics (Dinev et al., 2015). Rather than process the pertinent information closely, many consumers agree to exchange their information for personalization or access, without fully understanding the associated conditions (Bornschein et al., 2020). Without sufficient attention paid to the transaction, consumers also cannot evaluate the trustworthiness of their exchanges of privacy for personalization (Rosenthal et al., 2019; Walker, 2016).

2.2. Competition for attention

With greater information (Tong et al., 2020), firms must vie fiercely for consumers' limited attention (Avoyan and Schotter, 2020; Falkinger, 2008; Galperti and Trevino, 2020; Hoffmann et al., 2020). The resulting competition is a feature of the attention economy, in which firms accrue costs (e.g., buying consumers' data from secondary markets) (Banerjee, 2019; Casadesus-Masanell and Hervas-Drane, 2015) to attract attention, by sending signals. In addition, consumers' perceptual filters inform this type of economic competition, as are determined by consumers' characteristics and the intensity of competition for each consumer. Furthermore, the environment might attract users' attention and influence their decision making (Taylor and Thompson, 1982). In particular, a market environment might establish which attributes (e.g., design) attract customers' attention (Tversky et al., 1988). Through their personalization efforts, firms compete in this environment, for consumer attention (Lee et al., 2011).

However, marketers that exploit consumer information for advertising reduce consumers' attention costs (Casadesus-Masanell and Hervas-Drane, 2015). When they focus on a particular object, people also must deal with interferences from competing, nonfocal objects (Janiszewski et al., 2013), so "The speed or efficiency of the processing is reduced when other stimuli are processed at the same time" (Pashler, 2002, p. 101). When competition for consumers' attention increases, it may result in lower prices (Anderson and de Palma, 2012; Hoffmann et al., 2020), because the competition for personalized pricing also intensifies as consumers actively search for information online (de Cornière, 2016).

On platforms (Casadesus-Masanell and Hervas-Drane, 2015), competition also increases with consumers' privacy concerns (Gal-Or et al., 2018). For example, intrusive personalization that interferes with consumers' cognitive processes and attention (Bleier and Eisenbeiss, 2015) tends to increase their privacy concerns and reactance. When personalization is highly visible or even obtrusive, it thus may be inefficient (Goldfarb and Tucker, 2011).

2.3. Perceptions of manipulation

In Lanier's opinion (2013), computer scientist at Microsoft Research, privacy is power, that is "the arbiter of who gets to be more in control" (p. 66) among the stakeholders. In the information age, firms seem to have an advantage, as highlighted by Zuboff (2019): "Every casual search, like, and click [is] claimed as an asset to be tracked, parsed, and monetized by some company" (p. 52). Zuboff call the frictions to opt-out from these practices the "dictatorship of no alternatives". Such inefficiencies may stem from consumers' sense that they are being manipulated. Personalization technologies offer more convenience for consumers but also more information for vendors. In their pursuit of such consumer information, firms also might turn to covert marketing practices (Slepchuk and Milne, 2020), as well as purchase or sell the information in secondary markets (Banerjee, 2019; Casadesus-Masanell and Hervas-Drane, 2015). Consider, as an example, advertising on social networks, which represents a relevant channel to target consumers and acquire new members. In studies of opt-in and opt-out privacy policies, researchers determine that asking consumers to provide their personal information helps them feel more in control, so they are easier to reach (Kumar et al., 2014). When consumers can set ad preferences, they also are more likely to grant access to their information to the set of vendors they choose, which represents a critical competitive advantage for those sellers (Gal-Or et al., 2018; Krafft et al., 2017; Kummer and Schulte, 2019). Another tactic to alleviate privacy concerns involves granting control over the use or flow of their personal information (Bleier et al., 2020; Brandimarte et al., 2013). Consumers value such privacy controls, as a form of empowerment (Martin et al.,

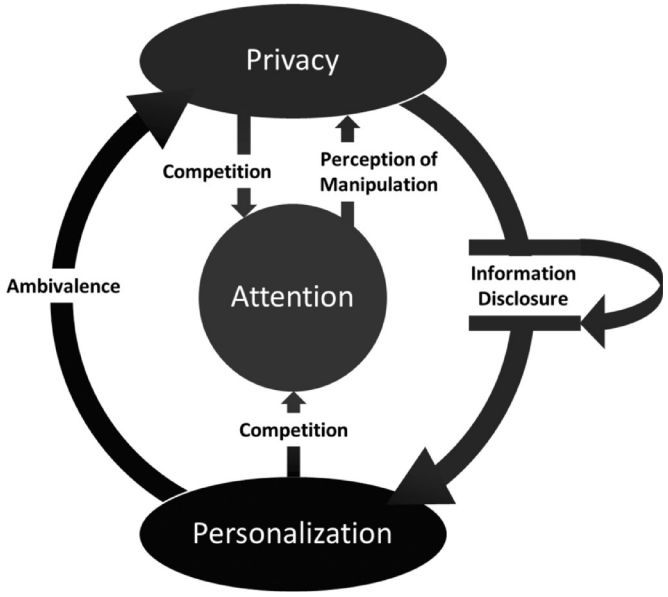

FIG. 2. – Proposed Framework for the Personalization-Privacy Paradox in the Attention Economy.

2017) that promises to reduce their vulnerability (Martin et al., 2017), feelings of violation (Kumar et al., 2014; Tucker, 2014), uncertainty, and perceptions of sneakiness (Martin et al., 2017).

But in many cases, these controls are perceptual; they do not genuinely change any access to people's focal data (Bleier et al., 2020; Brandimarte et al., 2013; Xu et al., 2012). In this sense, despite the huge financial implications of privacy controls (Palmatier and Martin, 2019), they have little impact on the level of protection of personal information (Brandimarte et al., 2013). In some cases, the persistent lack of protection results from consumers' failure to apply the necessary controls (Crossler and Bélanger, 2019; Klasnja et al., 2009), their inability to assess the substantial amount of privacy information (Temming, 2018), or their lack of motivation (Crossler and Bélanger, 2019). Ultimately though, privacy controls that give consumers a sense of empowerment can be harmful, according to a control paradox (Brandimarte et al., 2013), because these consumers tend to disclose personal information even in risky situations.

Fig. 2 represents the proposed personalization–privacy paradox framework, reflecting notions associated with the attention economy. People value personalization, but privacy concerns make them reluctant to disclose information in exchange for it, which strengthens the competition for their attention (e.g., firms devote more effort to reach a target consumer using an ad blocker). The more firms personalize, the stronger the competition for attention becomes, because the level of personalization exceeds the level of consumers' attention. If the competition for attention becomes obtrusive, consumers begin to feel manipulated, which increases their privacy concerns further.

3. Insights from the attention economy

3.1. Ecology of attention

At the interweaving of virtual and real worlds (Busca and Bertrandias, 2020), consumers already suffer attention deficiencies and ICT can further disrupt their life balance (Kao et al., 2020). This is made possible by the analysis of trajectory patterns (Ghose et al., 2019b, 2019a). Consider the example of public transportation. When more people move to cities, urban crowding increases, provoking anxiety. According to behavioral constraint theory (Blut and Iyer, 2019), they will seek strategies to avoid this discomfort (Milgram, 1970), so on crowded trains for example, people turn to their mobile devices, to achieve immersion and perceive an escape from the physical crowd. By turning inward and purposefully intensifying their attention to their device, they likely become more responsive to personalized ads (Andrews et al., 2016). However, the intense competition for such attention also can create congestion externality, as might be manifested in excessive advertising (Anderson and de Palma, 2012). While seeking distraction from an anxiety-inducing crowd for example, consumers might confront the additional anxiety of constant notifications that also divert their attention from their desired use of their mobile device (e.g., to consume entertaining content) (Citton, 2017; Sciandra et al., 2019). This fierce competition for their attention depletes consumers' overall attention and intellectual resources (Citton, 2017), which then can lead to uncertainty, vulnerability, and risk (Bornschein et al., 2020). Arguably then, behavioral constraint theory might provide insights for striking an attention balance, enabling consumers to regain self-control over their "thoughts, feelings, and behavior" (Petersen and Posner, 2012, p. 82) and avoid pathologies (e.g., burnout) (van Knippenberg et al., 2015). For marketers then, an appropriate goal might be to pursue better quality of consumers' attention, rather than more quantity (van Knippenberg et al., 2015).

3.2. Scarcity of attention and choice architecture

Information processing differs with the level of cognitive effort (Dinev et al., 2015). In the preattention stage, attention is at its lowest point. Then, in a focal attention stage, the consumer may be executing a secondary task but still receives some personalized messages. With low to moderate motivation, consumers pay attention to the message but still rely on heuristic assessments. Moderate motivation implies central processing; consumers use their prior knowledge and experience. Next, when they exhibit involvement, consumers relate their personal experiences to the message, and finally, consumers add their own attributes, even those not included in the message, when fully processing it.

Consumers' attention capacity together with the volume of appealing signals shape attention (Falkinger, 2008; Galperti and Trevino, 2020). That is, attention capacity defines a receiver (Falkinger, 2007), and it varies across individual receivers, their concentration abilities, and their psychological characteristics. Furthermore, the strength and volume of the signals exert impacts (Falkinger, 2007). Attention tends to be scarce if the receiver is exposed to many competing signals (Falkinger, 2007), all of which consume people's attention in their attempt to deal with those nonfocal signals, so they have fewer resources available to process information about focal items (Hong et al., 2004; Kahneman, 1973). Another description of attention specifies a spectrum, from experiencing (e.g., immediate physical environment) to mind-wandering (e.g., thoughts) (Rahinel and Ahluwalia, 2015). When stimuli change, they can alter people's judgment, by evoking an experiencing (vs. mind-wandering) mode to detect and understand the change (Rahinel and Ahluwalia, 2015).

Analyses of attention have appeared in some interdisciplinary research, such as integrations of psychology and economy concepts (Kahneman, 1973; Simon, 1971), yet it generally has been ignored by economists until relatively recently (Avoyan and Schotter, 2020; Falkinger, 2008, 2007; Galperti and Trevino, 2020). In contrast, researchers in marketing domains often note the conditional character of consumers' decision making (Hefti and Heinke, 2015). Attention accordingly is a core issue for marketers, who seek to orient consumers' limited attention in ways that enhance their choices of the marketed offering (Gardner, 1983; Jiang and Punj, 2010; Mackenzie, 1986; Wright and Rip, 1980).

3.3. Altering behavior through stylistic devices

According to Lanham (2006), the Internet "constitutes an economics of attention in its pure state," where "attention is everything" (p. 233). In online settings, consumers' data fuels firms' personalization, so the

personalization–privacy paradox triggers a feeling of surveillance (Acquisti et al., 2016; Plangger and Montecchi, 2020). In capitalism systems, surveillance claims "human experience as free raw material for translation into behavioral data" (Zuboff, 2019, p. 14). If "human attention is surely an aggregative, a social, event as well as an individual characteristic" (Lanham, 2006, p. 265), researchers should investigate the personalization–privacy paradox through the lens of Foucault's (1978) concept of governmentality. Governmentality refers to the manifold practices that organizations or governments use to govern populations, which themselves depend on the environment, which affects consumers' attention. In this sense, it offers a route to reconcile micro- and macro-level views. As Lemke (2001, p. 203) explains:

> The analysis of governmentality not only focuses on the integral link between micro- and macro-political levels (e.g. globalization or competition for "attractive" sites for companies and personal imperatives as regards beauty or a regimented diet), it also highlights the intimate relationship between "ideological" and "political-economic" agencies (e.g. the semantics of flexibility and the introduction of new structures of production).

By providing a means to manage stylized effects (Lanham, 2006), governmentality reveals how marketers might "build attention traps" and "create value by manipulating the ruling attention structures" (p. 53). Analyzing the personalization–privacy paradox from a governmentality lens then might enable researchers to integrate insights from economics and marketing.

4. Implications for privacy controls

Reports of misuses of personal information (e.g., Cambridge Analytica) have become common, but the personalization–privacy paradox remains an issue, especially because even as people grow more concerned about privacy, they do not change their privacy-related behaviors. According the economics literature on privacy, stakeholders (e.g., firms, consumers) often have conflicting objectives; privacy concerns are constantly evolving; and privacy regulation should be individualized to specific markets (Acquisti et al., 2016). Prior literature on the personalization–privacy paradox also provides some policy recommendations, related to both self-imposed and external regulations (Acquisti et al., 2016; Bleier et al., 2020; Hoffmann et al., 2020). Regarding self-imposed regulation, providing consumers with perceptual privacy controls benefits firms, with no negative effect on personalization effectiveness (Tucker, 2014). In addition to evoking consumer positive responses (e.g., higher click-through rates), perceptual privacy controls increase social and personal interactions (Tucker, 2014). As noted previously, more perceived control over personal information leads to increased willingness to disclose sensitive information (see also Mothersbaugh et al., 2012; Brandimarte et al., 2013). In the resulting control paradox, consumers divulge more sensitive information, because their willingness to disclose increases with their (sometimes inaccurate) sense of control. Cavusoglu et al. (2016) also note an effect of privacy controls on content sharing, following an exogenous policy change by Facebook in December 2009. Specifically, they find that privacy controls increase the number of messages on newsfeeds but decrease the number of private messages. Leveraging permission marketing thought, Krafft et al. (2017) identify, in a survey of German consumers, two boundary conditions on the negative relationship between privacy concerns and granting permission: the level of entertainment value and personal relevance. In their event study, Martin et al. (2017) find that after data breaches, privacy controls limit the negative effects of perceived consumer vulnerability. Furthermore, Gal-Or et al. (2018) investigate platform competition with a two-stage game model that reveals that privacy controls reduce the capacity to use personalization as a differentiation advantage between platforms. According to Crossler and Bélanger (2019), personal motivation is essential to encourage consumers to use privacy controls.

A major limitation of these previous studies is that they are reactive (Walker, 2016). Dealing with the personalization–privacy paradox and attention management requires educating consumers (Karwatzki et al., 2017; Walker, 2016). In this sense, granting consumers control over their personal information may function like a relationship tool that reduces consumer reactance to marketing practices (Martin et al., 2017). It also might give firms a means to exploit a persistent consumer behavior; despite its substantial financial value (Palmatier and Martin, 2019), consumers do not really protect their personal information (Brandimarte et al., 2013). Some might not know how (Crossler and Bélanger, 2019; Klasnja et al., 2009), whether due to their varying levels of digital literacy or their limited attention resources. Others may feel overwhelmed by the amount of information or the range of possible choices (Temming, 2018), or have insufficient motivation (Crossler and Bélanger, 2019).

This assessment represents a dark side view; providing consumers with increased privacy controls also could constitute sincerely valuable empowerment. Equipped with appropriate tools, individual consumers might be enabled to choose how to share their data with firms, according to the type of information, its granularity, and its frequency. New regulations, such as the EU's General Data Protection Regulation, require platforms to enable users to configure their privacy settings, sometimes in great detail. To ensure they truly empower consumers in the attention economy, such approaches must do more than provide an illusion of privacy control; in particular, transparency is critical. At the same time, policymakers could implement effective, dedicated attention management policies to decrease the attention-related pressures stemming from the personalization–privacy paradox (Ayyagari et al., 2011).

In line with bounded rationality theory, Brandimarte et al., 341) note that

> people often fail to engage in conditional thinking. To the degree that people fail to do so (i.e., not asking themselves the question of what might happen to information if they were to release it), they may focus on the most proximate level of control they have—control over release—at the expense of contemplating the actual consequences of information access and usage.

Yet with more privacy education, consumers might feel better equipped to control the personalized cues they received. Such attention management would benefit not just consumers but also the senders of personalized advertising messages. It would support an effective balance. That is, if consumers grow too reluctant to enter into online exchanges, they lose access to their benefits. As privacy research in a context of limited attention indicated (Anderson and de Palma, 2012; Armstrong et al., 2009; Hoffmann et al., 2020; Johnson, 2013; Van Zandt, 2004), a "prisoner's dilemma" can arise (Acquisti et al., 2016; Kummer and Schulte, 2019; Montes et al., 2019): If all consumers opt out of personalization–privacy trade-offs completely, price competition diminishes, so costs rise for all consumers.

5. Conclusion

The pursuit of a better understanding of the trade-off between personalized advertising effectiveness and consumer privacy in the attention economy remains critical. Prior research on privacy controls focus on their direct effects on consumers' decision making. Continued empirical research should examine the relationship between more education about privacy controls and satisfaction with personalized ads. In relation to attention management, additional research also might investigate how and why giving consumers control over their personal information has beneficial effects on advertising performance. Most studies explain the effect according to a cognitive-based mechanism, but research into the link between social media and affective constructs, such as happiness or well-being (Munzel et al., 2018b, 2018a), suggests another perspective. Consumer's own attention

management efforts also require consideration, because their choice or effort to limit their attention can hamper online social exchanges by leaving them unable to exert full control over all aspects of their privacy.

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