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## **Engaging Business Customers Through Online Experiences in Different Cultures**

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## Engaging Business Customers Through Online Experiences in Different Cultures

### Abstract

Engaging customers online through effective customer experience design is critical, as practitioners and researchers agree that engaged customers contribute value to firms. However, in the multinational business-to-business (B2B) context—due to its complex decision-making processes, which involve various stakeholders—global marketers face challenges in their attempts to localize (versus standardize) the online experience across their regional websites to meet customer needs, which vary across cultures. Although standardization entails cost benefits, localization provides more culturally relevant customer experiences. Accordingly, to help global marketers solve this dilemma, this study examines how culture shapes the effectiveness of online customer experiences with regard to driving psychological and behavioral customer engagement in a B2B context. The study draws on survey and observed data collected from the business customers of a multinational firm who were located in 79 countries to demonstrate why global marketers should finetune such experiences in accordance with between-country cultural differences. The results show that different cultural factors can enhance or hamper engagement responses to cognitive and social online customer experiences and thus have actionable practical implications for prioritizing distinct localization strategies.

*Keywords:* online customer experience, customer engagement, business-to-business marketing, national culture, localization

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Practitioners and researchers agree that engaging business customers through online customer experience design is essential, as engaged customers both directly (e.g., transactions) and indirectly (e.g., referrals) contribute to firm value (e.g., Buscemi 2020; Pansari and Kumar 2017). However, global marketers face a dilemma in this context, which has been the subject of debate (eMarketer 2015): should they localize (i.e., adapt their online content to meet the needs and cultural values of their targeted customers) or standardize the online customer experience across their global websites? Notably, the localization of the online customer experience entails more than merely adapting to a country's main language (i.e., translation into the local language); rather, it involves creating a more culturally relevant and meaningful experience for each customer (Alcántara-Pilar et al. 2018; Entrepreneur 2018; Steenkamp 2020). Moreover, since standardization entails cost-benefits and localization is cost-intensive (Tokmakoglu 2018), global marketers must understand how culture shapes the role played by online customer experiences in driving engagement.

Empirical studies linking online customer experiences to engagement outcomes in an international context remain scarce. For instance, Bleier et al. (2019) demonstrate how and when online customer experiences effectively drive purchases, but their results are valid only in a particular local market. Complementing these findings, Bolton et al. (2021) suggest that the relationship between online customer experiences and customer satisfaction differs across disparate geographical markets. Most recent conceptual studies have highlighted the importance of examining the role played by cultural factors in the experience–engagement relationship, i.e., the void left by initial empirical studies on this topic. For instance, Hollebeek (2018) proposes that individual-level engagement styles are likely to differ in accordance with customers' cultural traits. Similarly, other authors argue that how customers respond to experiences is likely to be subject to cultural traits, as customers relate to societal

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norms and values that reflect their varying attitudes, cognitions, and behaviors (de Keyser et al. 2020; Gupta et al. 2018).

Furthermore, empirical insights into the effectiveness of online customer experience design for enhancing engagement in the business-to-business (B2B) context are nonexistent. This research gap is concerning, as the role played by experiences in fostering engagement in the B2B context likely differs from the role it plays in the business-to-customer (B2C) context for two reasons. First, the decision-making processes associated with B2B transactions are more complex than those associated with B2C transactions because the former involve diverse stakeholders (e.g., product/service users and decision-makers; Pansari and Kumar 2017). Second, business customers emphasize different experiential qualities in their decision-making than consumers. Thus, when interacting with online touchpoints, the former expect experiences that enhance their understanding of functional aspects, such as descriptive and trustworthy information, and they focus less on a website's entertaining or sensory-appealing aspects (Bolton et al. 2018; Lemke et al. 2011). Moreover, global B2B marketers consider driving engagement through customer experience design to be the backbone of integrated, multinational marketing strategies (Buscemi 2020; de Keyser et al. 2020). The goal of the present research is therefore to develop a better understanding of the B2B experience–engagement nexus.

To address the abovementioned knowledge gaps, the current study examines the impact of online customer experiences on psychological and behavioral customer engagement while taking into account the moderating role played by cultural factors in the B2B context. This study makes three substantial contributions to the research on customer experiences and engagement in the international B2B context (e.g., de Keyser et al. 2020). First, the present study examines how online customer experiences are translated into customer engagement among customers from different cultures, thus helping global marketers tackle the

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standardization versus localization dilemma. That is, the present research expands on the study conducted by Bleier et al. (2019)—which has provided initial guidance regarding how online customer experiences manifest in consumer purchases in a domestic market—by demonstrating how to adapt online customer experience design for the benefit of visitors from disparate cultures most effectively. Given that culture determines how one interprets and responds to brand touchpoint interactions, such as websites, declaring that online customer experiences are equally effective across disparate cultures is myopic (de Keyser et al. 2020; Shavitt and Barnes 2020). However, although the website content and design elements that facilitate various experiences can be readily targeted at distinct segments, global marketers continue to lack an understanding of how culture-related factors may enhance or even hamper the impact of such experiences on engagement (Entrepreneur 2018; Steenkamp 2020). Accordingly, the present study's findings can help global marketers solve this localization dilemma, as they provide useful implications for online experience design localization strategies that are contingent on culture.

Second, the current study provides novel insights into the engagement-related outcomes of online customer experience design in the B2B context. For two reasons, customer engagement is a critical outcome for B2B marketers. First, the long and complex sales cycles associated with the B2B context render engagement a key nontransactional metric when gauging the return of marketer initiatives, such as customer experience design, with the aim of collecting information regarding prospective customers (versus tracking direct sales; Buscemi 2020; Gill et al. 2017). Second, the B2B context is characterized by decision processes that involve various firm stakeholders (e.g., the employees who use a relevant product or service or decision authorities, such as managers and executives; Kumar and Pansari 2016a). Engaging these business customers online through the “right” customer experience design is essential in the tasks of bonding with them, and supporting their ability

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to make educated purchase decisions, thereby delivering information, knowledge, and assistance regarding a particular offering (Gill et al. 2017; Lemon and Verhoef 2016). The present study thus focuses on the key qualities of business customers' evaluations of touchpoint interactions (Lemke et al. 2011; Lemon and Verhoef 2016) by examining cognitive (e.g., the website is perceived to be helpful with regard to acquiring descriptive information concerning product features and usage) and social online customer experiences (i.e., the website conveys a perceived social presence in terms of human contact or warmth; Bleier et al. 2019). Since the findings suggest that the effectiveness of these two online experiences with regard to driving engagement depends on various cultural factors, they can help global B2B marketers optimize the engagement outcomes of their customer experience design.

Third, the findings provide insights into psychological and behavioral engagement as immediate outcomes of online customer experience management in B2B settings. Indeed, recent research has called for more insights into the impact of B2B digital marketing initiatives on customer engagement (Vieira et al. 2019). In response to this call, the present study examines how customer experience design leads to psychological (e.g., emotional and cognitive resource investments in a brand relationship) and behavioral customer engagement with a firm's global website (i.e., behavioral resource investments) and thus focuses on business customers' engagement outside the context of core transactions per se (Harmeling et al. 2017; van Doorn et al. 2010). That is, the study differentiates two *immediate* engagement outcomes from digital brand touchpoint interactions that indicate fostered bonds and strengthened relationships between customers and a firm (Gill et al. 2017). This fact distinguishes the present study from B2B engagement research that has focused on engagement behaviors that either directly (i.e., purchase) and/or indirectly contribute (e.g.,

knowledge transfer) value to a firm (Kumar and Pansari 2016a; Pansari and Kumar 2017) and are therefore *temporally separated* from touchpoint interactions.

Specifically, the present research combines survey and behavioral data regarding 519 visitors to the global website of a German Fortune 500 B2B firm. These visitors were located in 79 countries across six regions, thus allowing the moderating role played by Hofstede's (2001) cultural factors in the relationship between perceived customer experience and customer engagement to be considered. Notably, this study reveals and discusses both expected and unexpected results in terms of the moderating effects of such cultural factors, thus highlighting the relevance of this research.

### **Conceptual Framework**

Figure 1 depicts the conceptual model of this research, which is based on the touchpoints, context, and qualities (TCQ) framework introduced by de Keyser et al. (2020). This framework is used to link the cognitive and social online customer experiences that occur at a firm-controlled touchpoint—key qualities in a B2B context—to psychological and behavioral customer engagement. In addition, our framework takes into account the moderating role played by cultural factors, i.e., uncertainty avoidance, power distance, individualism, masculinity, and long-term orientation.

[Insert Figure 1 about here]

### *Customer Engagement in the B2B Context*

A vast body of conceptual (Brodie et al. 2011; Hollebeek et al. 2020) and empirical research (Brodie et al. 2013; Meire et al. 2019) has focused on customer engagement in the B2C context. This research has focused on identifying and examining such engagement's antecedents (e.g., van Doorn et al. 2010), measurements (e.g., Hollebeek et al. 2014), conceptualizations (e.g., Hollebeek et al. 2019), or direct and indirect outcomes that are



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beneficial to the firm (e.g., Pansari and Kumar 2017). However, the specific understanding of customer engagement in a B2B setting remains underdeveloped, although some notable exceptions have focused on business customers' engagement in social media (e.g., Gruner and Power 2018; Hollebeek 2019; Pitt et al. 2018) or have compared the relationship between employee engagement and customer engagement across B2C and B2B firms (Kumar and Pansari 2016a). Nevertheless, the complex nature and variety of the stakeholder involved in B2B buying processes comprise the specific reason for this research gap (Nyadzayo et al. 2020).

Hollebeek et al. (2019) define customer engagement as “a customer’s motivationally driven, volitional investment of focal operant resources (including cognitive, emotional, and behavioral knowledge and skills), and operand resources (e.g., equipment) into brand interactions in service systems” (p. 167). Although some research has suggested that such resource investments should be conceptualized in terms of these three subdimensions of customer engagement (e.g., Hollebeek et al. 2014), other research (e.g., Harmeling et al. 2017) has advocated distinguishing between psychological (i.e., cognitive and emotional resource investments) and behavioral engagement (i.e., behavioral resource investments). Lemon and Verhoef (2016) further suggest that considering psychological and behavioral engagement separately is appropriate when examining digital touchpoint interactions to understand the consequences of customer experiences.

*Psychological customer engagement* captures a customer’s degree of positive brand-related cognitive and emotional resource investments in a particular customer–firm interaction (Brodie et al. 2011; Harmeling et al. 2017; Hollebeek et al. 2014). Thus, psychological customer engagement can pertain to a customer’s positive emotions toward a firm that are associated with the *intention* to engage in firm-related behaviors, such as interacting with firm touchpoints. These intentions might also relate to cognitive processes,

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such as knowledge-sharing with other customers or spreading positive word-of-mouth (WOM; Hollebeek and Macky 2019).

*Behavioral customer engagement* is used as the dependent variable in the present study and is defined as "... a customer's behavioral manifestations that have a brand or firm focus, beyond purchase, resulting from motivational drivers" (van Doorn et al. 2010, p. 254). Notably, the inclusion versus exclusion of customer behaviors that are more or less directly related to transactions is an ongoing debate in customer engagement research (Pansari and Kumar 2017). In the B2B context, firm–customer interactions are typically transaction-related but do not represent a core transaction. Thus, this study adopts the understanding of behavioral engagement developed by van Doorn et al. (2010) and Harmeling et al. (2017), which includes behaviors beyond a purchase but excludes the core transaction itself; this focus differentiates behavioral engagement from transaction-oriented constructs, such as behavioral loyalty.

It is essential to be aware of the fact that customer engagement behaviors take various forms in online channels and help business customers make decisions through information-seeking, decision-making, and customer learning (Hollebeek et al. 2019; Lemon and Verhoef 2016). Thus, in the current study, visits and downloads are viewed as two engagement behaviors that correspond to different intensities of behavioral resource investment (Hollebeek et al. 2019; van Doorn et al. 2010). For instance, prospective and existing business customers may *visit* a firm's website to collect general information regarding the firm's offerings from its different product pages to decide whether to, for instance, make an initial purchase or renew a contract. As such, website visits and clicks can indicate a customer's engagement (Bruce et al. 2017). Furthermore, business customers who need precise information may download product-specific documents or subscribe to newsletters, which require a higher investment than browsing different pages in terms of time and effort

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(Kumar et al. 2014; Mallapragada et al. 2016). More precisely, B2B firms provide online documents usually in the form of so-called gated content, whereby users must disclose sensitive information on a lead-capture form—e.g., their email address, phone number, company size, or the reason for their interest—to access a document (Buscemi 2020; Kumar et al. 2014). Focusing on these two behaviors—site visits and gated document downloads—is therefore germane in the B2B context and highly indicative of the development of bonds and interactive relationships between business customers and a firm (Gill et al. 2017; Nyadzayo et al. 2020).

### *Cognitive and Social Online Customer Experiences in the B2B Context*

A customer experience is “a multidimensional construct focusing on a customer’s cognitive, emotional, behavioral, sensorial, and social responses to a firm’s offerings” (Lemon and Verhoef 2016, p. 71). Bleier et al. (2019) have transferred this conception to the experiences that typically occur at B2C online touchpoints (e.g., websites), highlighting four dimensions: informativeness (cognitive), social presence (social), entertainment (emotional), and sensory appeal (sensory). Given the present study’s focus on a B2B context, only cognitive and social experiences<sup>1</sup> are considered as drivers of customer engagement, as both facilitate understanding of and trust in the offering (i.e., beneficial outcomes for the customer as a consequence of firm-customer interaction; Lemke et al. 2011). Although cognitive experiences help business customers better understand value-in-use (e.g., providing useful information regarding the offering and its usage), social experiences build trust in the firm—

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<sup>1</sup> Notably, as the emotional and sensory dimensions are not germane to the establishment of B2B firm–customer relationships, they are not considered for the following reasons. First, business customers’ stronger emphasis on functional instead of hedonic values renders emotional experiences less relevant (Kumar-Kinney and Close 2010; Lemke et al. 2011). In B2C e-commerce, emotional experiences are used to create arousal, reduce shopping cart abandonment, and trigger impulse buying (Bleier et al. 2019), which are not helpful for business customers because of the thorough decision-making processes in which they typically engage. Second, sensory experiences are useful on websites when a decision-making process depends on the physical evaluation of a product (i.e., as a substitute for touch or haptic feedback), as in the cases of clothing and furniture (Heller et al. 2019). However, substituting for intangibility is less salient in B2B settings.

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customer relationship because they trigger human warmth (e.g., facilitating psychological closeness to an offering; Bolton et al. 2018; Darke et al. 2016).

The extant literature on this topic has identified various web design elements that evoke cognitive and social online customer experiences. For instance, the typical design elements that foster cognitive experiences involve high levels of descriptive product detail and bullet lists that summarize key product features (Bleier et al. 2019). These elements are typically used to evoke cognitive experiences through product or solution pages with which customers interact to find more information regarding an offering. In contrast, social experiences can be evoked by web copy that uses a conversational linguistic style or product pages that feature lifestyle pictures demonstrating product use (Ludwig et al. 2013; Song and Zinkhan 2008).

### *Moderating Variables: Hofstede's Cultural Factors*

To capture a customer's culture—defined here as the collective programming of an individual's mind that separates them from the members of other groups (Hofstede 2001)—the literature has often relied on Hofstede's country-level cultural factors to explain disparate behaviors across different countries at the country and individual levels. For instance, Cillo et al. (2018) show that when measured at the country level, all six cultural factors included in Hofstede's framework (i.e., uncertainty avoidance, power distance, masculinity, individualism, long-term orientation, and indulgence) moderate the relationship between a firm's innovativeness and stock holding (at the individual level) or stock returns (at the firm level). Furthermore, Song et al. (2020) provide consistent empirical evidence demonstrating that power distance beliefs at the country and individual levels moderate the relationship between user-designed or designer-designed products and product preferences.

Although numerous studies have shown that applying Hofstede's cultural country-level factors at the individual level produces consistent results, this approach has also been criticized (Kirkman et al. 2006; Taras et al. 2016). Most such concerns have focused on the

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disregard of any potential variability within a country when employing Hofstede's cultural factors, which are measured at the country level and at the individual level. This criticism is based on the ecological fallacy, which assumes that individual behavior can be inferred from an average group value. Nevertheless, the focus of this research is on customer experiences, which become manifest in customers' mindsets and are thus subject to processes of cultural socialization (Hofstede 1984). Hence, the role played by country-level cultural factors cannot be dismissed entirely, as experiences that occur during touchpoint interactions may activate different cultural notions in a customer's memory (Shavitt and Barnes 2020). Against this backdrop, it is essential to note that Hofstede (2001) argues that countries with higher scores on a specific cultural factor tend to have a higher proportion of customers who possess this trait than countries with lower scores. Therefore, as discussed in the hypothesis development below, customers who come from cultures with higher scores on a specific factor are considered to be more likely to exhibit that particular cultural trait than customers from cultures with lower scores. As such, country-level cultural factors should moderate the relationship between customer experience and customer engagement, as they pertain to a culture's predominant societal norms and values, which shape customers' psychological responses at firm touchpoints. This approach is in line with other individual-level research that has used Hofstede's cultural factors to explain different tendencies in customer behavior (Cillo et al. 2018; Kumar and Pansari 2016b; Mattison Thompson and Brouthers 2021; Song et al. 2020; Steenkamp and Geyskens 2006).

Specifically, the present study considers five of the six cultural factors developed by Hofstede (2001): uncertainty avoidance (i.e., the degree to which the members of a society avoid uncertain risks or ambiguities and feel uncomfortable with undefined situations), power distance (i.e., the degree to which the members of a society expect and accept power and status to be distributed unequally within the culture), individualism (i.e., the degree to which

the members of a society prioritize their wants and needs over those of their social group), masculinity (i.e., the degree to which the members of a society emphasize achievement and success versus nurturing), and long-term orientation (i.e., the degree to which members of a society take on a long-term versus short-term perspective when considering the consequences of their actions; Hofstede 2001; Hofstede et al. 2005). Notably, Hofstede's sixth dimension (i.e., indulgence versus restraint) is not included in this study because it is less suitable for explaining engagement outcomes pertaining to online customer experiences in a business context (Gupta et al. 2018; Mattison Thompson and Brouthers 2021).

### **Hypothesis Development**

This section develops the hypotheses of this research regarding the relationships included in the conceptual model. This research draws on various theories and conceptual work related to customer experience, engagement, and cultural factors.

#### *The Impact of Psychological Customer Engagement on Behavioral Customer Engagement*

Previous research has demonstrated that customers' emotional and cognitive resource investments (i.e., psychological engagement) in a brand at firm–customer touchpoints are the most critical attitudinal antecedents of engagement behaviors (e.g., Eisingerich et al. 2019; Hollebeek and Macky 2019; van Doorn et al. 2010). Evaluations of the behavior of business customers based on relationship marketing theories, such as commitment-trust theory (Morgan and Hunt 1994) as well as its extension, engagement theory (Pansari and Kumar 2017), suggest that the higher customers' psychological engagement is, the more likely they are to view touchpoint interactions as beneficial and meaningful, thus allowing them to make progress in their decision process or facilitating their product or service usage. Thus, in the context of online touchpoints, high levels of psychological customer engagement can reflect the psychological ownership of a touchpoint by producing a strengthened mental

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representation of its offering (Dong and Sivakumar 2017; Harmeling et al. 2017). This ownership can motivate customers to engage in further website-related consumptive engagement behaviors, such as visiting a site and accessing more information regarding the firm's offering (Harmeling et al. 2017; Hartmann et al. 2015; van Doorn et al. 2010). Thus:

**H<sub>1</sub>:** Psychological customer engagement has a positive effect on behavioral customer engagement.

### *The Impact of Cognitive and Social Online Customer Experiences on Psychological Customer Engagement*

Customer interactions and the resulting experiences at firm–customer touchpoints are critical factors that influence customer decisions and behaviors in B2B settings (de Keyser et al. 2020; Lemon and Verhoef 2016). Against this backdrop, this research focuses on how cognitive and social online customer experiences impact psychological customer engagement, the two most relevant dimensions in B2B decision-making processes (Lemke et al. 2011).

*Cognitive online customer experiences* refer to the extent to which a website is perceived as helpful by a customer when making a pending purchase decision during the prepurchase and purchase stages and acquiring more information regarding product features and usage during the postpurchase stage (Bleier et al. 2019; McColl-Kennedy et al. 2018). Thus, these cognitive experiences with a firm's website typically involve thinking and the conscious mental processes that support problem-solving (Gentile et al. 2007). According to the elaboration likelihood model, these processes enhance attitudes and the likelihood of persuasion (Petty et al. 1983). Cognitive online customer experiences can also increase the salience of value-in-use—for instance, the functional outcome of a firm's offering for a customer—which is meaningful for customers in the context of making decisions (Lemke et al. 2011). Because this functional or informational value of cognitive experiences is retained

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by customers and enhances their evaluations (de Keyser et al. 2020), it is likely to lead to favorable attitudinal relationship outcomes, such as psychological customer engagement with a firm's website (Hausman and Siekpe 2009; Hsieh et al. 2014).

In contrast, *social online customer experiences* refer to the perceived social presence on a firm's website that is induced by perceptions of human contact, warmth, and sociability (Bleier et al. 2019; Gefen and Straub 2003). As such, social response theory suggests that if a webpage successfully fosters social experiences via cues such as a conversational linguistic style or lifestyle pictures, such experiences should reduce perceptions of social distance and increase trust (Ludwig et al. 2013; Wang et al. 2007). From a commitment–trust theory perspective, social experience-induced trust is one foundation of positive long-term customer relationships, as it indicates customers' willingness to rely on their exchange partner (Morgan and Hunt 1994). Furthermore, based on engagement theory, a recent meta-analytic study has provided generalizable evidence showing that trust is a major driver of engagement in online channels (de Oliveira Santini et al. 2020).

In summary, favorable cognitive and social customer experiences allow customers to update their knowledge and beliefs regarding a firm's offering, which is likely to result in psychological attitudinal outcomes and to increase customers' desire to repeat such experiences (Brakus et al. 2009). Thus, in response to such favorable cognitive and social experiences, customers are likely to form intentions to use a firm's website further and to recommend it to their peers (Roy et al. 2019; Verhoef 2003). Thus:

**H<sub>2a</sub>:** Cognitive online customer experiences are positively related to psychological customer engagement.

**H<sub>2b</sub>:** Social online customer experiences are positively related to psychological customer engagement.



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## *The Moderating Role of Cultural Factors*

This section conceptualizes the moderating role played by cultural factors in the relationship between online customer experiences and psychological engagement.

*The moderating role of uncertainty avoidance.* Uncertainty avoidance pertains to whether the members of a society tend to be comfortable when facing risks and dealing with ambiguity and uncertain situations (Hofstede 2001; Hofstede et al. 2005). During the decision-making process, customers from uncertainty-avoidant cultures generally express more doubt in unknown situations and are likely to exhibit decreased trust in brands (Hofstede et al. 2005).

Because of their inherent drive to reduce perceived risks, uncertainty, and ambiguity, customers from uncertainty-avoidant societies often respond to cognitive experiences by overanalyzing their interactions with a firm (Hollebeek 2018). Given this tendency to overanalyze, in addition to their elevated baseline of mistrust, uncertainty-avoidant customers are more likely to make negative and critical evaluations of a firm's offering and website than are customers from societies with low uncertainty avoidance (Bowden et al. 2017; Hollebeek 2018). These negatively valenced thoughts regarding a firm and its website thus reduce psychological customer engagement.

Because customers from high uncertainty-avoidant cultures are more likely to favor familiar touchpoints (Gupta et al. 2018), they are likely to prefer social online customer experiences to establish feelings of social closeness (Bleier et al. 2019). Such feelings of closeness induce trust and help these customers reduce uncertainty, perceived risk, and ambiguity (Hollebeek 2018). Hence, they are more likely to explore webpages further and share positive WOM regarding those webpages (Mattison Thompson and Brouters 2021), which corresponds to increased psychological customer engagement. Thus:

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**H<sub>3a</sub>**: Uncertainty avoidance weakens the positive relationship between cognitive online customer experiences and psychological customer engagement.

**H<sub>3b</sub>**: Uncertainty avoidance strengthens the positive relationship between social online customer experiences and psychological customer engagement.

*The moderating role of power distance.* Customers from societies that emphasize power distance expect and accept an unequal distribution of power among their members (Hofstede 2001; Hofstede et al. 2005). These customers are more likely to exhibit a higher willingness to accept the opinions of others and an increased desire for social status (Daniels and Greguras 2014; Hollebeek 2018).

In response to cognitive online customer experiences, customers from cultures featuring higher power distance tend to spend less time analyzing and/or evaluating a firm's online content than those from cultures featuring less power distance (Hollebeek 2018). This tendency might be because they readily accept the information provided to them without questioning it, such as the information provided on a firm's website. Research showing that customers from cultures that feature greater power distance has reported reduced information-seeking behavior at touchpoints that those customers perceived to be impersonal, such as websites, thereby this view (Dawar et al. 1996). Consequently, these customers are less likely to obtain value from informative and cognitive experiences, thereby reducing their psychological engagement.

In contrast, customers from cultures that emphasize power distance exhibit an increased desire to be well connected to others, which is mainly due to the fact that maintaining high-quality relationships with others helps them reinforce their social status (Hohenberg and Homburg 2016). Meanwhile, they respond favorably to delightful and respectful social interactions due to the corresponding perceptions of human warmth (Gupta et al. 2018).

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These customers are thus likely to respond more positively to social online customer experiences on a firm's website and to strive to experience them again during future visits.

In summary, customers from cultures featuring high power distance are likely to reduce their psychological customer engagement in response to cognitive online customer experiences. These customers obtain less value from highly informative firm websites. Instead, they respond favorably to social online customer experiences, which help them build relationships with firms and increase their social status. Thus:

**H<sub>4a</sub>:** Power distance weakens the positive relationship between cognitive online customer experiences and psychological customer engagement.

**H<sub>4b</sub>:** Power distance strengthens the positive relationship between social online customer experiences and psychological customer engagement.

*The moderating role of individualism.* Members of individualistic (vs. collectivistic) cultures tend to prioritize their own goals, needs, and desires as well as those of their immediate family/social ties over those of socially distant others (Hofstede 2001; Hofstede et al. 2005). Thus, customers from individualistic cultures tend to be concerned with themselves and therefore to rank their own goal achievement and success above those of others.

As stated above, in contrast to customers in collectivist cultures, customers in individualistic cultures focus on own goal achievement when completing transactions and on fulfilling the specific purposes of social interactions instead of establishing long-term relationships (Gupta et al. 2018). As a result, they engage in relatively brief decision-making processes. In terms of online cognitive experiences, then, it is reasonable to assume that although the informational value drawn from a website may be instrumental in completing an immediate transaction or solving an underlying problem, it does not necessarily lead to an increased intention to intensify a customer–firm relationship, as the “goal” of this interaction

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has been achieved (Hollebeek 2018). Thus, increased online cognitive experiences reduce psychological engagement among customers from individualistic cultures.

In individualistic cultures, a customer's tendency to strive for success and goal achievement is also meaningful regarding understanding their responses to social online customer experiences. For customers from individualistic cultures, the quality of their social interactions and relationships at firm touchpoints is inferior to their pragmatic goal achievement. Therefore, although customers who display individualist traits may gain more trust due to social experiences—they are “more likely to trust others until they are given reasons not to do so” (Kumar and Pansari 2016b, p. 7)—their psychological customer engagement does not increase once the purpose of their website visit has been achieved. Thus, an ongoing relationship with and further consumption of online content are not required for such goal achievement. Additionally, individualistic customers are prone to emphasize their personal differences from others in social experiences, thus increasing social distance; this tendency is likely to be associated with lower psychological customer engagement (Darke et al. 2016; Hollebeek 2018). Thus:

**H<sub>5a</sub>:** Individualism weakens the positive relationship between cognitive online customer experiences and psychological customer engagement.

**H<sub>5b</sub>:** Individualism weakens the positive relationship between social online customer experiences and psychological customer engagement.

*The moderating role of masculinity.* Members of a masculine society prioritize assertiveness, achievement, and competitiveness over nurturing (Hofstede 2001; Hofstede et al. 2005). A likely trait among members of masculine societies is self-efficacy, i.e., an individual's belief in his or her own ability to complete tasks and reach goals (Hollebeek 2018).

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Because customers from masculine societies tend to be more self-reliant and autonomous (Steenkamp 2001), they are likely to respond more positively to cognitive online social experiences than are customers from feminine cultures. Cognitive experiences empower customers from masculine societies to achieve their goals, which is likely to increase their intention to revisit a firm's website (McColl-Kennedy et al. 2018). Moreover, the useful information that they draw from such experiences is likely to give them a competitive edge over their peers, thus motivating them to explore a firm's website further. However, for the same reasons, customers in masculine countries are less likely to invest resources in recommending a firm's website to others (Samaha et al. 2014); hence, the argument for a positive moderating effect on net can be made, as the cognitive experiences of such customers promote their self-efficacy, autonomy, and self-reliance.

In contrast to this reasoning, at the same level of social online customer experiences, customers from masculine cultures are likely to exhibit lower levels of psychological engagement because they tend to be less loyal (Gupta et al. 2018). In other words, customers from masculine cultures are likely to demonstrate less reciprocity in social exchanges than are customers from feminine cultures (Hollebeek 2018). Consequently, the social experiences of the former are less likely to lead to increased psychological customer engagement, as social closeness alone does not motivate such customers to invest emotional or cognitive resources. Thus:

**H<sub>6a</sub>:** Masculinity strengthens the positive relationship between cognitive online customer experiences and psychological customer engagement.

**H<sub>6b</sub>:** Masculinity weakens the positive relationship between social online customer experiences and psychological customer engagement.

*The moderating role of long-term orientation.* The members of long-term-oriented cultures typically foster virtues that are guided by future outcomes (Petersen et al. 2015).

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Given these expected future outcomes, they demonstrate higher levels of perseverance and investment in relationships that they perceive to be beneficial to themselves, even in settings in which gratification might be delayed (Donthu and Yoo 1998).

In line with this reasoning, the literature shows that long-term-oriented customers tend to establish and invest resources in long-term relationships with firms that they trust and from which they expect to benefit (Gupta et al. 2018). Thus, these customers are likely to demonstrate increased cognitive processing of a firm's online content in response to cognitive online customer experiences, for instance, by developing intentions to explore the firm's website further in the future (Mattison Thompson and Brouthers 2021). Likewise, from the perspective of social exchange theory, these customers are likely to demonstrate increased intentions to reciprocate in response to social online customer experiences on a firm's website (e.g., by referring the website to others) because they expect these investments to yield returns in the long term (Chandler and Lusch 2015). Consequently, regarding the same cognitive and social experience levels, long-term-oriented customers are more likely to increase their psychological customer engagement than are customers from short-term-oriented cultures. Hence:

**H<sub>7a</sub>:** Long-term orientation strengthens the positive relationship between cognitive online customer experiences and psychological customer engagement.

**H<sub>7b</sub>:** Long-term orientation strengthens the positive relationship between social online customer experiences and psychological customer engagement.

## Research Methodology

### *Data*

The data used in this study were collected from a German Fortune 500 B2B firm. Notably, the following data from multiple sources were matched to mitigate concerns regarding

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common method variance (Baumgartner and Weijters 2021; Hulland et al. 2018): survey data (to capture customer experiences, psychological customer engagement, and controls), behavioral data drawn from the focal firm's web analytics tool (to capture behavioral customer engagement), and data drawn from the Hofstede Insights program (to capture cultural factors). The data collection process proceeded as follows. In the first step, an online survey of visitors to webpages in the three most frequently visited industry categories<sup>2</sup> on the company's global website was conducted. These visitors were invited to participate via a pop-up window that was randomly displayed on different webpages. Initially, 1,688 responses were collected from the website between August 2020 and March 2021, and 835 incomplete responses were removed.

In the second step, the survey data were matched with each participant's actual behavioral engagement data, which were obtained from the firm's web analytics tool; this process was performed based on visitor IDs to maintain participants' anonymity. Using a rolling window approach, the counts of website visits and document downloads in the week following survey participation were merged. Four observations that could not be matched using visitor IDs and 311 responses from firm-internal visitors<sup>3</sup> were removed. The visitors to the webpage categories mentioned above were invited to participate in the survey via a pop-up window and did not receive an incentive to participate. Notably, visitors to both the German and English versions of the global website were invited to participate. However, apart from the language difference, the website and survey content remained the same. This process yielded a total of 538 usable responses.

In the third step, the data concerning five Hofstede dimensions (uncertainty avoidance, power distance, individualism, masculinity, and long-term orientation) were matched

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<sup>2</sup> All subpages of the three focal industries were used to invite participants to ensure sufficient variance in web elements, thus triggering cognitive and social online cognitive experiences.

<sup>3</sup> The present study focuses on customers and thus only on firm-external website visitors.

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according to each participant's country. Nineteen responses by participants from six different countries for which the Hofstede Insights program does not indicate values for the long-term orientation dimension of their cultural factors were removed. The final sample thus consisted of participants who collectively represented 79 countries across Europe (262 participants; 50.5%), Asia (108 participants; 20.8%), North America (80 participants; 15.4%), South America (27 participants; 5.2%), Africa (30 participants; 5.8%), and the Oceania region (12 participants; 2.3%). Each country was represented by seven participants on average. The sample was dominated by responses from Germany (116 participants), the United States (55 participants), and India (46 participants). Continent dummy variables were also included in the analysis to account for skewness.

### *Measures*

To capture the dependent variable—behavioral customer engagement—the counts of two different types of customer activities that represent behavioral manifestations pertaining to a firm's website were considered: site visits and gated document downloads. These variables captured each participant's behavioral engagement during the week after they participated in the survey. Adopting a moving time window of one week enabled the use of even time periods when measuring behavior across subjects to address concerns with right-censoring. Moreover, choosing one week of customer behavior facilitated the examination of the immediate impact of website perceptions on behavioral engagement. Notably, the results of this research were robust to taking the counts of webpage visits and document downloads that were collected two weeks after survey participation. To assess cultural factors, national-level indicators for uncertainty avoidance, power distance, individualism, masculinity, and long-term orientation were obtained from the Hofstede Insights program and coded on a 100-point scale.



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All items included in the survey were measured on a seven-point Likert scale (ranging from 1 = “strongly disagree” to 7 = “strongly agree”). Following Eisingerich et al. (2019), four items were adapted to capture psychological customer engagement, while cognitive and social online customer experiences were measured by adapting three items from Bleier et al. (2019). Table 1 lists the formulations of these items.

Regarding the control variables, the decision stage was taken into account by using dummy variables that indicated whether a participant stated that his or her firm considered itself to be in the prepurchase stage (“Our firm is considering buying a product or service by [brand] in the distant future and is currently searching for information about different offerings in that context”), the purchase stage (“Our firm will buy products or services by [brand] in the near future and is familiar with the offerings in that context”) or the postpurchase stage (“Our firm has recently bought products or services by [brand]. My website visit is related to that purchase”), with any indications of “None of the above” serving as the reference group (de Keyser et al. 2020; Lemon and Verhoef 2016). To control for perceptions of a firm’s customer journey design, nine items from the scale developed by Kuehnl et al. (2019) were used. This scale spans three touchpoint dimensions: thematic cohesion (e.g., “The [brand’s] webpages are thematically related”), consistency (e.g., “[brand] is consistent across different webpages”), and context sensitivity (e.g., “The different [brand] webpages match the specific needs of our firm”). Notably, as factor analysis revealed that items measuring thematic cohesion and consistency of touchpoints loaded on one single factor and that of context sensitivity on a second factor, the former were combined using a single factor score. Further controls included previous website visits, a dummy variable indicating whether the participant held a management position, the participant’s gender, and the category of the webpage from which the participant accessed the survey. Additionally, dummy variables for Europe, North America, South America, Africa, and

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Oceania, with Asia as the reference group, were included to account for the continent from which the participant accessed the website.

Cronbach's alphas and composite reliabilities (CRs) confirmed high reliability for all multi-item constructs ( $\alpha > .90$ ;  $CR > .90$ ), and all factor loadings were significant. For subsequent analysis, the factor score of each multi-item construct was computed. Web Appendix A provides the relevant summary statistics and correlations.

[Insert Table 1 about here]

Convergent validity is established for all multi-item construct measures because the average variances extracted (AVE) for each multi-item construct exceed .50 (Fornell and Larcker 1981). Support for discriminant validity is also provided by the heterotrait-monotrait (HTMT) method, which indicates whether all HTMT ratios for the multi-item constructs pass the threshold of .90 (Henseler et al. 2015). The HTMT ratios ranged from .681 to .859, and the upper limit of the 97.5% bias-corrected confidence intervals for all the constructs included in this research was .897.

#### *Measurement Invariance*

As noted above, the survey was distributed in German and English to visitors from 79 different countries. Thus, configural and metric invariance were tested across three country categories (Hohenberg and Homburg 2016; Steenkamp and Baumgartner 1998).<sup>4</sup> All participants from German-speaking countries (e.g., Germany, Austria;  $n = 138$ ) were included in the first group, participants from English-speaking countries (e.g., United Kingdom, Canada;  $n = 152$ ) were sorted into the second group, and participants from all other countries (e.g., Japan, Mexico;  $n = 229$ ) constituted the third group. Confirmatory factor analysis (CFA) was conducted on each group of observations to assess configural invariance. All three

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<sup>4</sup> Considering the sample size, it was infeasible to test for measurement invariance across all 79 countries contained in the sample.

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models exhibited acceptable fit, with CFI  $\geq .95$  and SRMR  $\leq .06$  (Hu and Bentler 1999), thus indicating that the proposed factor structure fit the data collected across the three groups well (see Table 1 for item loadings and CR). Subsequently, to examine metric invariance, the factor loadings were constrained to be equal across the three groups and then tested to determine whether they differed from an unconstrained model. The  $\chi^2$  difference test results suggested that the constrained model's fit did not differ significantly from the unconstrained model's fit, thus confirming metric invariance ( $\Delta(\chi^2) = 18.8$ ,  $\Delta(\text{d.f.}) = 14$ ,  $p = .173$ ). Collectively, these results indicate that measurement variance was not an issue in this study.

## Model

As mentioned above, behavioral customer engagement was measured in terms of a customer's website visits and gated document downloads. In addition, the count data observed in online environments typically follow a right-skewed distribution and are likely to be overdispersed and feature many zero observations (i.e., the variance largely exceeds its mean; Long and Freese 2014). Hence, the models used for site visits and gated document downloads assumed a negative binomial distribution for the count data. In contrast, the model for psychological customer engagement assumed a normal distribution for continuous data. Therefore, the following three equations were estimated simultaneously:

- (1) 
$$\text{SiteVisits}_i = \exp(\beta_0 + \beta_1 \text{CognitiveCX}_i + \beta_2 \text{SocialCX}_i + \beta_3 \text{PsychologicalEngagement}_i + \beta_4 \text{PrepurchaseStage}_i + \beta_5 \text{PurchaseStage}_i + \beta_6 \text{PostpurchaseStage}_i + \beta_7 \text{CohesiveConsistentTouchpoints}_i + \beta_8 \text{ContextSensitiveTouchpoints}_i + \beta_9 \text{Manager}_i + \beta_{10} \text{Female}_i + \beta_{11} \text{Category1}_i + \beta_{12} \text{Category2}_i + \zeta \text{Continent}_i + \varepsilon_i)$$
, and
- (2) 
$$\text{GatedDocumentDownloads}_i = \exp(\gamma_0 + \gamma_1 \text{CognitiveCX}_i + \gamma_2 \text{SocialCX}_i + \gamma_3 \text{PsychologicalEngagement}_i + \gamma_4 \text{PrepurchaseStage}_i + \gamma_5 \text{PurchaseStage}_i + \gamma_6 \text{PostpurchaseStage}_i + \gamma_7 \text{CohesiveConsistentTouchpoints}_i + \gamma_8 \text{ContextSensitiveTouchpoints}_i + \gamma_9 \text{Manager}_i + \gamma_{10} \text{Female}_i + \gamma_{11} \text{Category1}_i + \gamma_{12} \text{Category2}_i + \eta \text{Continent}_i + \varepsilon_{2i})$$
, and
- (3) 
$$\text{Psychological Engagement}_i = \delta_0 + \delta_1 \text{CognitiveCX}_i + \delta_2 \text{SocialCX}_i + \delta_3 \text{CognitiveCX} \times \text{UncertaintyAvoidance}_i + \delta_4 \text{SocialCX} \times \text{UncertaintyAvoidance}_i + \delta_5 \text{CognitiveCX} \times \text{PowerDistance}_i + \delta_6 \text{SocialCX} \times \text{PowerDistance}_i + \delta_7 \text{CognitiveCX} \times \text{Individualism}_i + \delta_8 \text{SocialCX} \times \text{Individualism}_i + \delta_9 \text{CognitiveCX} \times \text{Masculinity}_i + \delta_{10} \text{SocialCX} \times \text{Masculinity}_i + \delta_{11} \text{CognitiveCX} \times \text{Long-termOrientation}_i + \delta_{12} \text{SocialCX} \times \text{Long-termOrientation}_i$$

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$$\begin{aligned}
 &+ \delta_{13} \text{UncertaintyAvoidance}_i + \delta_{14} \text{PowerDistance}_i + \delta_{15} \text{Individualism}_i \\
 &+ \delta_{16} \text{Masculinity}_i + \delta_{17} \text{Long-termOrientation}_i + \delta_{18} \text{PrepurchaseStage}_i \\
 &+ \delta_{19} \text{PurchaseStage}_i + \delta_{20} \text{PostpurchaseStage}_i + \delta_{21} \text{CohesiveConsistentTouchpoints}_i \\
 &+ \delta_{22} \text{ContextSensitiveTouchpoints}_i + \delta_{23} \text{PriorVisits}_i + \delta_{24} \text{Manager}_i + \delta_{25} \text{Female}_i \\
 &+ \delta_{26} \text{Category1}_i + \delta_{27} \text{Category2}_i + \theta \text{Continent}_i + \varepsilon_{3i}.
 \end{aligned}$$

Where CX = customer experience;  $i$  = participant;  $\varepsilon$  = error term;  $\zeta$ ,  $\eta$ , and  $\theta$  are the vectors of fixed effects for the participant's continent as captured by a vector of dummy variables.

## *Heterogeneity*

Because the focal firm makes the contents of its global website available in German and English, the participants could select one of these two languages to participate in the survey according to their preference. There may therefore be systematic differences between participants who chose the English-language website and survey versus those who chose the German-language versions (Hulland et al. 2018). In particular, these two groups of customers might differ in terms of their online information processing (e.g., Alcántara-Pilar et al. 2018). To account for this potential heterogeneity during hypothesis testing, robust standard errors clustered by language (i.e., English versus German) were used.

## *Endogeneity*

The relationships modeled in the equation system may be subject to endogeneity, potentially leading to an underestimation of the standard errors and, consequently, an overestimation of the significance of the key variables' effect parameters (Papies et al. 2017). That is, omitted variables and simultaneity can be possible sources of endogeneity bias.

First, global marketers integrate their marketing communications to address complex decision-making processes in a multichannel environment. These unobserved variables, which capture the effects of a firm's cross-channel communication, may drive cognitive and social experiences and psychological engagement with respect to a brand-owned touchpoint,

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such as a firm's website. For example, the possibility that a customer's perceptions of other brand-owned touchpoints (e.g., social media accounts, display advertisements, direct communications) spill over to his or her perceptions of and attitude toward a firm's website cannot be ruled out (Kuehnl et al. 2019). Accordingly, controlling for the perceived cohesiveness, consistency, and context sensitivity of the focal firm's touchpoints should mitigate this concern.

Second, the decision process stage may shape psychological and behavioral customer engagement at the same time, resulting in simultaneity. For instance, Lemon and Verhoef (2016) classify certain psychological and behavioral engagements as typical during the prepurchase, purchase, and postpurchase stages. Hence, for example, the intention to disseminate WOM may be typical during the postpurchase stage. Additionally, customers might be more inclined to download gated documents during the prepurchase stage and less inclined to do so during the purchase or postpurchase stage since they have likely already obtained the necessary information at that point. In the models, the potential effects of the customer decision stage on psychological and behavioral customer engagement were therefore controlled for by using dummy variables (i.e., prepurchase stage, purchase stage, postpurchase stage versus none as the reference group).

Third, arguably, psychological engagement and behavioral engagement are mutually reinforcing. To rule out such reverse causality, the engagement behaviors serving as dependent variables were measured after participation in the survey to ensure that all the observed visits and downloads occurred *after* psychological engagement had been captured in the survey. In addition, this model controlled for previous visits via the psychological engagement equation.

Although the present study accounted for a considerable set of control variables and multisource data, the results might still be subject to endogeneity bias (Papies et al. 2017). To

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address this issue, Web Appendix B details the technical feasibility of implementing external instrument-based, internal instrument-based, and instrument-free approaches. In summary, none of these potential remedies could effectively address the remaining biases without potentially introducing additional biases (Papies et al. 2017). Thus, instead of implementing these approaches, this research aimed to avoid the introduction of additional biases by relying on the included controls.

### Results

Table 2 displays the unstandardized coefficient estimates and their standard errors. The results for the model of site visits (center panel) and gated document downloads (right panel) indicate that psychological customer engagement has positive effects on site visits ( $\beta_3 = .724$ ,  $p < .001$ ) and on gated document downloads ( $\gamma_3 = .654$ ,  $p < .001$ ), thus lending support to H<sub>1</sub>.

The results of the psychological customer engagement model (left panel) indicate that cognitive ( $\delta_1 = .352$ ,  $p < .001$ ) and social online customer experiences ( $\delta_2 = .163$ ,  $p < .001$ ) increase psychological customer engagement, thus supporting H<sub>2a</sub> and H<sub>2b</sub>. It was also found that the interaction effect between cognitive experiences and uncertainty avoidance on psychological customer engagement is negative and significant ( $\delta_3 = -.111$ ,  $p < .001$ ), thus supporting H<sub>3a</sub>. The results also provide support for H<sub>3b</sub>, as the interaction effect between social experiences and uncertainty avoidance on psychological customer engagement is positive and significant ( $\delta_4 = .195$ ,  $p < .001$ ). Moreover, the results support H<sub>4a</sub>, as the effect of cognitive experiences on psychological customer engagement is significantly weaker in cultures that emphasize power distance ( $\delta_5 = -.492$ ,  $p < .001$ ). However, the effect of social experiences on psychological customer engagement is not strengthened in cultures that emphasize power distance ( $\delta_6 = -.101$ ;  $p > .1$ ), as postulated in H<sub>4b</sub>. Although the results support H<sub>5a</sub> since the interaction effect between cognitive experiences and individualism on psychological customer engagement is negative and significant ( $\delta_7 = -.185$ ,  $p < .05$ ), the

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interaction effect between social experiences and individualism is not ( $\delta_8 = -.193, p > .1$ ), thus failing to support H<sub>5b</sub>. Regarding the moderating role of masculinity in this context, the results support H<sub>6a</sub>, as the interaction effect between cognitive experiences and masculinity is positive and significant ( $\delta_9 = .029, p < .01$ ) but regarding H<sub>6b</sub>, the interaction effect between social experiences and masculinity was found to be nonsignificant ( $\delta_{10} = .036, p > .1$ ). Finally, H<sub>7a</sub> and H<sub>7b</sub> are not supported, as the interaction effects with cognitive ( $\delta_{11} = -.048, p < .001$ ) and social experiences ( $\delta_{12} = -.166, p < .001$ ) are negative and significant, contrary to the postulated positive effects (the discussion section provides an alternative reasoning for these counterintuitive results).

[Insert Table 2 about here]

### *Additional Analyses*

*Floodlight analyses.* Floodlight analyses are useful for obtaining further insights into significant interaction effects. In this context, they were used to test the marginal effects of the online customer experience variables on psychological engagement for different values across the observed range of moderating variables (Spiller et al. 2013). Figure 2 depicts the estimated marginal effects of cognitive and social experiences for the full range of mean-centered values of the various cultural factors in increments of .05 alongside the corresponding 95% confidence interval bands.

Figure 2 therefore illustrates the fact that cognitive experience has a significant (i.e., the confidence intervals do not include zero) positive effect on psychological customer engagement across the entire range of uncertainty avoidance (Panel A), power distance (Panel B), individualism (Panel C), masculinity (Panel D), and long-term orientation (Panel E). However, this positive effect is enhanced by higher values of masculinity but attenuated by higher values of the remaining moderating variables. Regarding social experiences, this

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analysis demonstrated their positive effect on psychological engagement, which is greater in the face of higher levels of uncertainty avoidance (Figure 3, Panel A). However, this effect is not significant for values of uncertainty avoidance below approximately  $-47.4$ , i.e., the so-called Johnson–Neyman point (Spiller et al. 2013). Finally, Panel B in Figure 3 shows that the positive effect of social experience on psychological engagement is significant for the entire range of values of the long-term orientation variable but decreases in the face of higher values of this moderator. A critical insight from these floodlight analyses was thus that although the majority of Hofstede’s cultural factors attenuate the positive effects of cognitive and social experience on psychological engagement, they do not become negative across all the observed values. Hence, culture may decrease the effectiveness of customer experiences, but overall, it does not lead to adverse net effects.

*Robustness check.* Following previous conceptual (e.g., Gupta et al. 2018) and quantitative marketing research (Mattison Thompson and Brouthers 2021; Song et al. 2020), Hofstede’s multidimensional framework was applied at the individual level to examine cultural differences. Although previous empirical work has found mainly consistent effects when using Hofstede’s dimensions at the country and individual levels (Cillo et al. 2018), some initial evidence has indicated that these country-level cultural factors may be subject to within-country variance (Kirkman et al. 2006). Thus, the application of Hofstede’s framework at the individual level has been criticized because this approach may lead to the ecological fallacy, that is, the fallacy of drawing an inference about individuals based on the average of the group to which they belong (Taras et al. 2016).

Following recent research (Mattison Thompson and Brouthers 2021), to examine whether the results of this research concerning the moderating effects were affected by within-country variance, the tightness/looseness framework developed by Gelfand et al. (2011) and Uz (2015) was employed as a robustness check. This framework is helpful for addressing this



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issue, as its tightness/looseness score measures the tolerance of a country's individuals when a behavior diverges from country-level cultural norms. In this context, the scores for cultural tightness reported in Uz (2015) could be matched for 54 of the 79 focal countries. Uz (2015) does not provide cultural tightness/looseness scores for the remaining countries. The equation system presented above was thus estimated while controlling for cultural tightness regarding the subsample where these data were available ( $n = 419$ ). Including each culture's tightness/looseness score as a control variable should explain at least part of the within-country variance resulting from cultural tightness (and thereby approximate within-country variance). It was found that the hypothesized effects remain consistent in terms of both direction and significance (the only exception being the interaction effect between cognitive experiences and masculinity, which is weakly significant;  $p = .094$ ; Web Appendix C lists these results).

### **Discussion**

This research has shown that the effectiveness of online customer experiences regarding driving engagement outcomes strongly depends on customers' national culture. Most previous empirical research on customers' behavioral responses to online experiences has focused on local settings. In contrast, the findings of this study advance the literature on the online experience–engagement nexus by accounting for the cultural diversity of digital environments in a B2B setting.

#### *Overview of the Findings*

Given that most firms with a global online presence expect to conduct business with nonlocal customers (Steenkamp 2020; Steenkamp 2019), research should provide insights into customer experience design across online channels on a global scale. The present study thus demonstrated how cognitive and social online customer experiences impact

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psychological customer engagement and various engagement behaviors (i.e., site visits and gated document downloads). The TCQ framework was used to assess the effectiveness of customer experience management, and the findings of this research are thus discussed in accordance with the three building blocks of experience management (i.e., touchpoints, context, and qualities; de Keyser et al. 2020).

Focusing on a firm's corporate website makes it possible to examine experiences at the critical firm-controlled *touchpoints* of B2B digital marketing initiatives (Shavitt and Barnes 2020; Verhoef et al. 2009; Vieira et al. 2019). The findings of this study therefore suggest that cognitive and social experiences are essential in driving psychological and behavioral customer engagement at such touchpoints. Second, as the present study focuses on the B2B *context*, these findings hold for firm–customer relationships that are characterized by complex decision-making involving numerous stakeholders (e.g., decision-makers and users). Both dimensions of experience are as essential in driving the behavior of business customers at online touchpoints as they are in the context of B2C consumers (Bleier et al. 2019; Bolton et al. 2021). Third, by considering the moderating role played by cultural factors, an improved understanding of how customers from different cultures appreciate the various *qualities* of a customer experience is obtained. The results of this research demonstrate that the effectiveness of online customer experiences depends on five cultural factors: uncertainty avoidance, power distance, individualism, masculinity, and long-term orientation. While these findings have confirmed some of the expected relationships, they have also revealed some unexpected and counterintuitive relationships.

In particular, the counterintuitive finding of this research regarding the negative moderating role played by long-term orientation in the relationship between the focal experience dimensions and customer engagement warrants further discussion. In the feedback provided by the survey participants, several participants indicated that the firm should

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provide even more depth regarding the product's features instead of advertising the breadth of their offering. From a regulatory focus theory perspective, this preference for in-depth product details is related to the prevention focus that is typical of customers from a long-term-oriented culture (Petersen et al. 2015). Thus, gaining greater insight into this matter requires considering the differences in the role of prevention- and promotion-focused online communications in shaping responses to online experiences in short- versus long-term-oriented cultures.

Another possible explanation for the counterintuitive negative interactions between cognitive/social experiences and long-term orientation may be the ways in which individuals from a long-term (versus short-term) culture foster the virtues that they exhibit. Individuals from a long-term-oriented culture nurture virtues aimed at obtaining future benefits, while individuals from a short-term-oriented culture foster virtues related to the past and present (Hofstede 2001). This difference suggests that long-term-oriented individuals extract all their information and trust cues during individual online touchpoint interactions, thus decreasing their need for further psychological or behavioral engagement. A short-term orientation, on the other hand, implies valuing traditions and fulfilling obligations during touchpoint interactions, which could explain why such individuals demonstrate higher psychological engagement than long-term-oriented individuals.

### *Theoretical Implications*

The theoretical implications of this study are threefold. First, extending Bleier et al. (2019), by examining how *online customer experiences translate to engagement across customers from different cultures*, this research contributes to scholarly understanding of how online customer experiences shape engagement among customers who vary significantly in terms of their societal norms and values. The current study found strong variations in how customers respond to online customer experiences. These results are particularly meaningful,

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as the scope of the focal countries extends beyond Western cultures (e.g., Germany, United States) to include non-Western cultures such as Japan and India (de Keyser et al. 2020).

Other scholars could thus extend these findings by comparing the experience–engagement relationship between Western and non-Western cultures.

Second, the findings of this study provide initial insights into the engagement-related outcomes of *online customer experience design* in the *B2B context*, which is characterized by different modes of decision-making (i.e., a long duration and the involvement of multiple stakeholders). Guided by the literature (e.g., Lemke et al. 2011), this research focused on cognitive and social online experiences to account for the key qualities associated with business customers' evaluations of touchpoint interactions. Because the results of this research indicate that the engagement outcomes of both experiences are contingent on culture, they provide insights into B2B customer experience design. Further research on customer experience design should therefore consider these contingencies while contrasting the moderating role of culture in this context with its role in B2C settings.

Finally, this study extends previous B2B engagement research (e.g., Kumar and Pansari 2016a) by demonstrating that it is meaningful to distinguish between *psychological and behavioral engagement* beyond the context of the engagement behaviors that either directly (e.g., purchases) or indirectly (e.g., referrals) contribute value to a firm. Accordingly, the findings of this study should be used to guide future B2B engagement research to examine psychological and behavioral engagement in further detail, as these forms of engagement become emanate from business customers' experiences at firm touchpoints and are not temporally distinct in the context of B2B transactions.

### *Managerial Implications*

*Culture-aware customer experience management helps B2B firms build relationships.* Customers' cultures determine the values they hold, the goals they pursue, and how they

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respond to environmental stimuli (de Keyser et al. 2020). As such, globally active companies can boost relational outcomes and expand their business internationally through their online touchpoints by adapting their regional websites to foster online customer experiences based on the general preferences associated with a particular region. For instance, regional websites aimed at cultures with a strong long-term orientation (e.g., Germany or China) must consider the fact that cognitive and social online customer experiences exhibit impaired effectiveness. In contrast, cognitive experiences are particularly effective for relationship building in highly individualistic cultures (e.g., the United States or Australia).

*Localization is not just a “nice-to-have” feature in international online marketing.*

Against the backdrop of an emerging global customer culture (Steenkamp 2019), firms are tempted to cut costs in their integrated marketing communication campaigns simply by translating their online content while investing little effort in localizing customer experiences (HubSpot 2021; Kingpin 2021). However, based on the findings of this study, global marketers' decision to neglect cultural factors in their online customer experience design can backfire, leading to customer disengagement. With the aim of providing actionable insights, Table 3 thus describes the recommended localization strategies that depend on a predominant cultural factor. Each strategy's criticality is based on the observed marginal effect range (i.e., maximum marginal effect – minimum marginal effect) of each experience across the relevant values of the various cultural factors that were identified in the floodlight analyses mentioned above (i.e., high criticality:  $[\cdot 2, \infty]$ ; medium criticality:  $[\cdot 1, < \cdot 2]$ ; low criticality:  $[0, < \cdot 1]$ ). For instance, the highest marginal effect range for cognitive experience on psychological engagement occurs across the values of power distance ( $\cdot 56 - \cdot 12 = \cdot 44$ ).

Specifically, the results of this study highlighted three different strategies for facilitating cognitive and social experiences (i.e., by implementing web design elements associated with the experience in question; Bleier et al. 2019) that are contingent on each cultural factor: (1)

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*Emphasis*: Implement design elements that facilitate a particular experience (a recommendation based on a significant *positive* interaction effect of a given experience). (2) *Scrutiny*: Perform user experience testing on different web design elements (e.g., by A/B testing; Johnson et al. 2017) before facilitating a focal experience due to the potentially adverse effects on engagement (a recommendation based on a significant *negative* interaction effect of a given experience). (3) *Standardization*: Do not localize and adapt the customer experience design using a global website (a recommendation based on a *nonsignificant* interaction effect of a given experience).

Certain localization strategies for the three countries that dominate the sample referenced in this research (i.e., Germany, the United States, and India) can also be inferred. For example, since Germany's culture is long-term oriented (83/100), firms could emphasize cognitive experiences but should perform thorough tests when aiming to foster social experiences on their websites. Because the United States' culture is individualistic (91/100), firms should carefully foster cognitive experiences but can standardize social experiences. The same recommendations hold for India, whose culture emphasizes power distance (77/100). However, global marketers must also carefully coordinate with firm-internal regional website owners and their specific budget restrictions, thereby determining whether a targeted country represents an attractive market in terms of its potential business customers' purchasing power; that is, does the expected revenue justify the increased localization costs?

[Insert Table 3 here]

Notably, the present study demonstrated that the net effects of cognitive and social online customer experiences do not become negative across the entire range of observed moderators. Accordingly, although ignoring focal groups' culture due to standardized customer experience design can decrease the effectiveness of cognitive and social experiences, the findings suggest that their deployment is unlikely to be rendered entirely ineffective. This

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points to a key aspect of the trade-offs involved in localization efforts, i.e., standardization remains a viable option if the localization costs exceed a targeted region's expected revenues.

*Does behavioral customer engagement increase the purchase intentions of business customers?* As mentioned above, behavioral customer engagement can be defined as the behavioral manifestations pertaining to a brand beyond the corresponding core transactions. However, a major stream of engagement research has notably conceptualized engagement as explicitly viewing nontransactional engagement behavior as an indicator of purchasing (e.g., Meire et al. 2019; Pansari and Kumar 2017). To validate the results of this study and provide more insights into their customer value-related implications with regard to engagement for B2B managers, two additional regressions were conducted to estimate the impact of prior behavioral customer engagement (i.e., site visits and document downloads before survey participation) on purchase intention. Two items adapted from Bleier et al. (2019) were used to measure purchase intention (e.g., "It is very certain that our firm will (continue to) buy products and services by [brand] in the future";  $\alpha = .95$ ). Both regressions accounted for the same set of control variables (e.g., stage in the decision process) in the main analysis and yielded positive and significant effect estimates regarding the impacts of site visits and document downloads on purchase intention (all  $p < .05$ ). Thus, behavioral customer engagement increases purchase intentions when competing predictors are included in the model, e.g., whether a customer is in the prepurchase, purchase, or postpurchase stage. These results therefore demonstrate the relevance of customer engagement behavior, highlighting its relevance for downstream customer behavior. These additional findings should increase the confidence of managers who rely on engagement metrics as key performance indicators.

*Limitations*

This study is novel, as it is the first to link customers' perceptions of online experiences to their actual engagement accounting for cultural factors. Its findings must be considered in light of some limitations, which also highlight fruitful avenues for future research:

First, cultural factors were measured at the country level, not the individual customer level. Although this approach has been used in international marketing research (e.g., Kumar and Pansari 2016b; Mattison Thompson and Brouthers 2021), it does not account for individual customers who deviate from their cultural profiles (Soares et al. 2007). Thus, the results of this study could be subject to within-country variance (Kirkman et al. 2006; Taras et al. 2016). For instance, business customers may be more cosmopolitan than regular consumers from a particular culture (Wang et al. 2008). Although the robustness check conducted for this study used the tightness/looseness score to capture within-country variation, thus demonstrating that the results remain consistent in terms of direction and significance, it may not have accounted for all possible bias. Future research should thus validate the findings of this study while capturing individual-level variables.

Second, Hofstede's cultural factors capture cultural variations via attitudinal surveys. This focus on attitudes has been put into question due to concerns regarding measurement validity, evaluating a culture's distinctive features, and capturing a culture's true core (Kitayama 2002). Future research should therefore consider alternative approaches to account for cultural contingencies, such as personal values, given that the extant literature has suggested that values (versus attitudes) are paramount when gauging a culture's core (e.g., Schwartz's human values; Gielens 2021; Schwartz 1999; Steenkamp 2001).

Third, in this study, the survey responses of business customers were matched to their actual behavior on the focal firm's website to demonstrate that customer experiences drive psychological and behavioral engagement. However, due to data restrictions, it was not



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possible to verify whether such purchase intentions resulted in actual transactions. The post hoc study offered initial evidence that—in line with studies on the B2C context (Manchanda et al. 2015; Meire et al. 2019)—a customer's engagement behavior indicates his or her actual purchase intention. Hence, future research should link a customer's actual engagement behavior with his or her actual transactions in a B2B context to complement these findings.

Fourth, the results of this research have implications regarding optimal decisions in online customer experience design. However, previous research has shown that whether a website's content is available in one's native language is an important factor in customer responses to online channels (e.g., Alcántara-Pilar et al. 2018). As the focal website, which was global, featured only two languages, and the participants in this study were drawn from 79 different countries, it was not possible to evaluate the match between the website and participants' native languages. Future research could therefore conduct field or lab experiments to contrast the effects of cognitive versus social online customer experiences across customer groups (visitor–website language match versus mismatch).

Finally, although the analyses conducted as part of this study accounted for a considerable number of control variables and relied on multisource data to address endogeneity concerns in part, the results of this research might still be subject to limitations due to omitted variables or simultaneity bias. The remedies that were considered—external-instrument-based, internal-instrument-based, and instrument-free approaches—did not represent viable options for mitigating any potential endogeneity bias that was not accounted for by the set of controls included in this study (see Web Appendix B). Thus, future research endeavors could deploy a longitudinal design (e.g., multi-wave surveys and mixed-effects growth-curve modeling; Kraemer et al. 2020) to capture the dynamic relationship between experiences and engagement and could employ rigorous approaches, such as the Hausman–Taylor model, to account for endogeneity (Hausman and Taylor 1981).

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**Table 1.** Multi-Item Construct Measurement and Measurement Invariance Testing.

Constructs	Measures	Standardized Factor Loadings				Composite Reliability			
		AVG	GER	ENG	OTH	AVG	GER	ENG	OTH
<b>Online Customer Experience</b>									
Cognitive (Bleier et al. 2019)	I think the information obtained from the [brand] webpages is useful.	.92	.86	.96	.94	.94	.89	.97	.96
	I think that I learned a lot from using the [brand] webpages.	.91	.84	.96	.92				
	I think the information obtained from the [brand] webpages is helpful.	.93	.88	.96	.95				
Social (Bleier et al. 2019)	I think there is a sense of human contact on the [brand] webpages.	.93	.93	.95	.92	.97	.96	.98	.96
	I think there is a sense of human warmth on the [brand] webpages.	.97	.97	.98	.95				
	I think there is a sense of human sensitivity on the [brand] webpages.	.97	.94	.99	.97				
<b>Psychological Customer Engagement</b>									
(Eisingerich et al. 2019)	I am willing to recommend the [brand] webpages to others.	.90	.85	.93	.92	.95	.93	.95	.96
	I am willing to explore different the [brand] webpages.	.87	.87	.85	.90				
	I will continue using the [brand] webpages.	.91	.88	.91	.94				
	I am motivated to keep visiting the [brand] webpages.	.94	.93	.97	.91				

Notes: AVG = average; GER = German-speaking countries; ENG = English-speaking countries; OTH = Other countries in which neither German nor English is the national language.



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**Table 2.** Parameter Estimates for Psychological Customer Engagement, Site Visits, and Gated Document Downloads Models.

Independent Variable	Psychological Customer Engagement		Behavioral Customer Engagement			
			Site Visits		Gated Document Downloads	
	Coefficient	SE	Coefficient	SE	Coefficient	SE
Intercept	.008	.011	1.074***	.115	1.781***	.218
Cognitive CX	.352***	.042	.207	.348	-.383	.239
Social CX	.163***	.035	-.093	.173	-.079	.096
Psychological customer engagement			.724***	.177	.654***	.052
<b>Interactions</b>						
Cognitive CX × Uncertainty avoidance <sup>a</sup>	-.111***	.023				
Social CX × Uncertainty avoidance <sup>a</sup>	.195***	.004				
Cognitive CX × Power distance <sup>a</sup>	-.492***	.048				
Social CX × Power distance <sup>a</sup>	-.101	.206				
Cognitive CX × Individualism <sup>a</sup>	-.185*	.074				
Social CX × Individualism <sup>a</sup>	-.193	.217				
Cognitive CX × Masculinity <sup>a</sup>	.029**	.011				
Social CX × Masculinity <sup>a</sup>	.036	.072				
Cognitive CX × Long-term orientation <sup>a</sup>	-.048***	.002				
Social CX × Long-term orientation <sup>a</sup>	-.166***	.022				
<b>Controls</b>						
Uncertainty avoidance <sup>a</sup>	-.018	.036				
Power distance <sup>a</sup>	.198	.200				
Individualism <sup>a</sup>	.218	.236				
Masculinity <sup>a</sup>	.140***	.013				
Long-term orientation <sup>a</sup>	.122***	.024				
Prepurchase stage	-.006	.020	.266	.149	.101	.097
Purchase stage	-.007	.049	.015	.267	.238	.173
Postpurchase stage	-.036	.056	1.194***	.353	1.399***	.144
Cohesive and consistent touchpoints	.296***	.037	-.459	.475	-.106	.397
Context-sensitive touchpoints	.407***	.080	-.336*	.153	-.097	.303
Prior webpage visits	.001***	.000				
Manager	-.059	.037	.078	.129	-.028	.032
Female	-.032	.017	-1.202***	.063	-1.452***	.053
Web page category dummies		included		included		included
Continent dummies		included		included		included
<i>R</i> <sup>2</sup>		.78		.01		.02

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

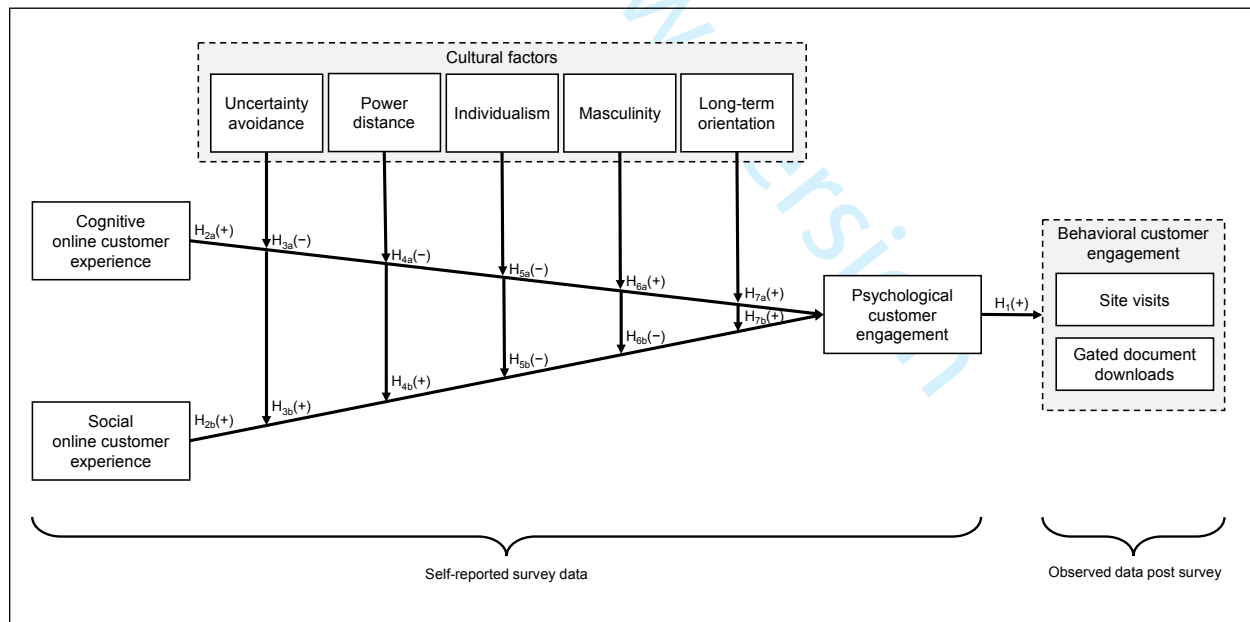
Notes:  $n = 519$ . CX = customer experience. Unstandardized coefficients are reported. <sup>a</sup>The cultural factors are measured on a 100-point scale using the Hofstede Insights program and therefore exhibit relatively low absolute values for the unstandardized coefficients of their main and interaction effects. Thus, the corresponding coefficients and standard errors are multiplied by 100 to improve interpretability. All variance inflation factors (VIF) are below the recommended cutoff of 5 (O'Brien 2007), with the exception of the factor for the Europe dummy variable, which is 7.18. All continuous variables contained in the interaction terms were mean-centered prior to model estimation.

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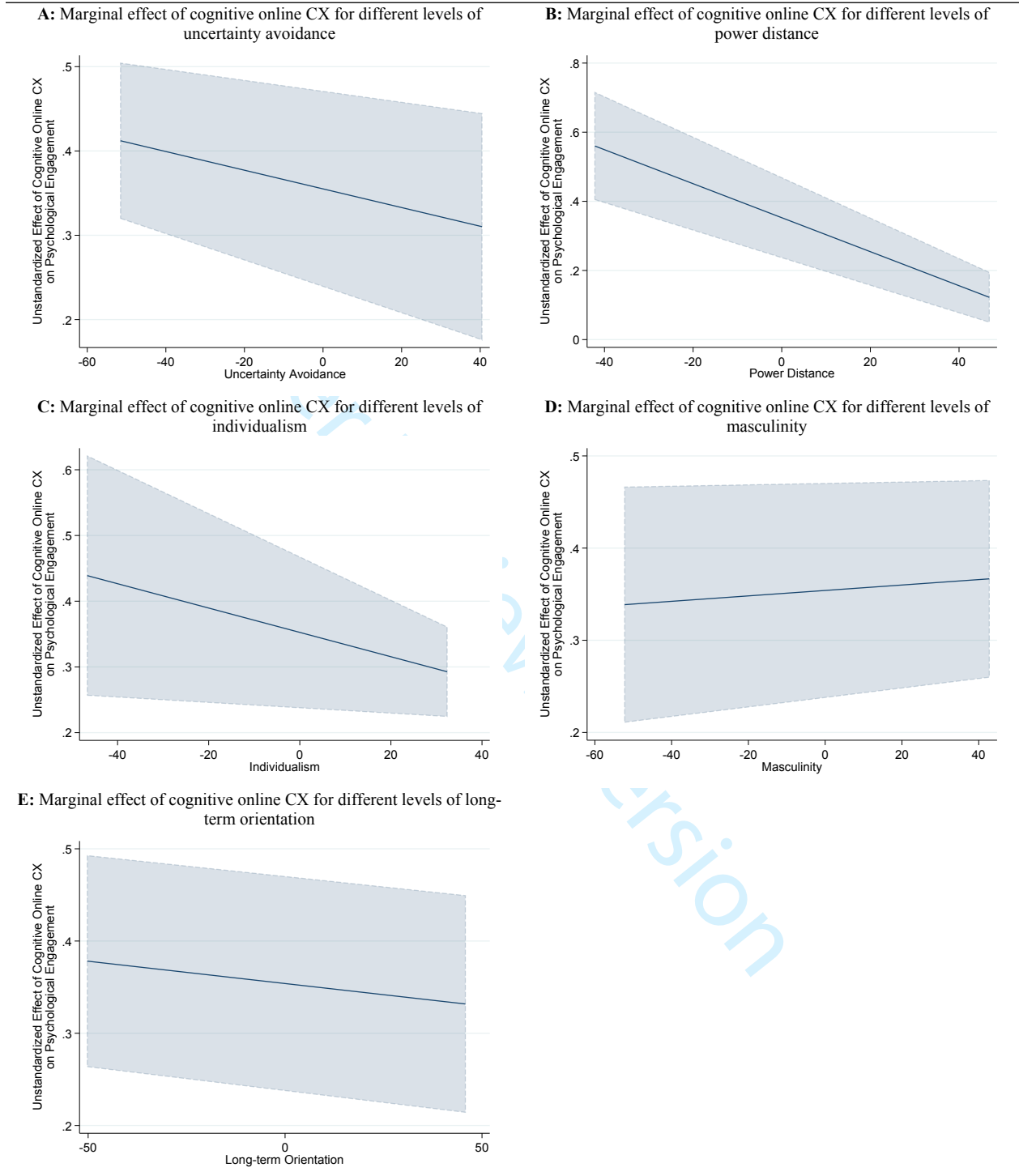
**Table 3.** Recommended Localization Strategies for B2B Online Customer Experience Design across Different Cultures.

Cultural Factor		Recommended Localization Strategy			
Type	Value	Cognitive CX	Criticality	Social CX	Criticality
Uncertainty avoidance	High	Scrutiny	Medium	Emphasis	Medium
	Low	Emphasis		Scrutiny	
Power distance	High	Scrutiny	High	Standardize	
	Low	Emphasis			
Individualism	High	Scrutiny	Medium	Standardize	
	Low	Emphasis			
Masculinity	High	Emphasis	Low	Standardize	
	Low	Scrutiny			
Long-term orientation	High	Scrutiny	Low	Scrutiny	Medium
	Low	Emphasis		Emphasis	

Notes: CX = customer experience. The criticality is determined by the observed marginal effect range (i.e., maximum marginal effect – minimum marginal effect) of each experience across the relevant values of different cultural factors in the floodlight analyses. High criticality:  $[.2, \infty]$ ; medium criticality:  $[.1, <.2]$ ; low criticality:  $[0, <.1]$ .

**Figure 1.** The Moderating Role Played by Cultural Factors in the Relationship between Online Customer Experiences and Customer Engagement

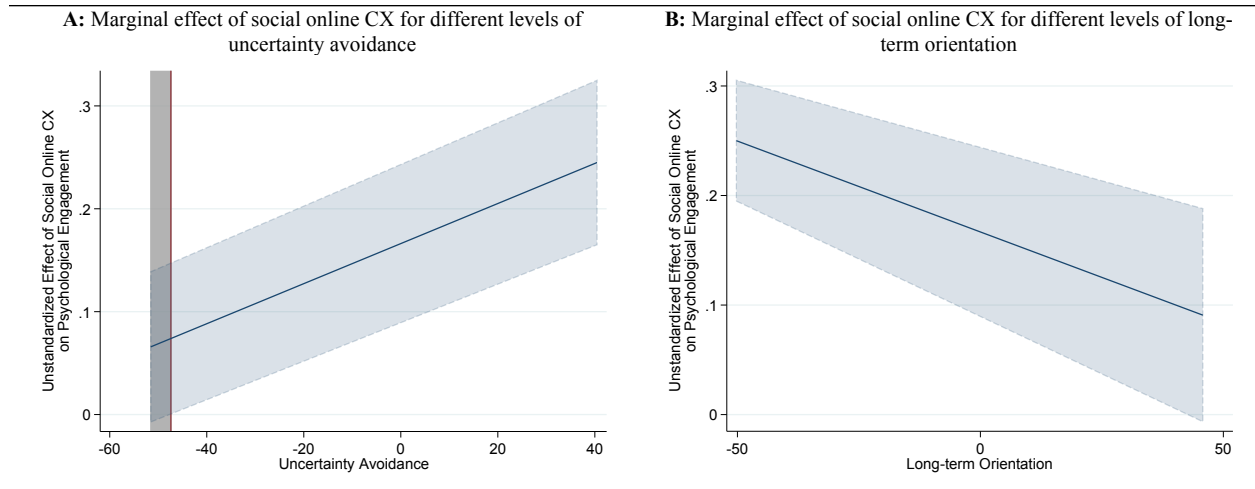
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**Figure 2.** Floodlight analysis: Effects of cognitive online customer experiences across various levels of the moderators

*Notes:* CX = customer experience. The shaded belt surrounding the line for the coefficient estimates represents the confidence band, indicating the 95% confidence intervals of the marginal effect of cognitive online CX at given values of the indicated moderator.

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**Figure 3.** Floodlight Analysis: Effects of Social Online Customer Experiences across Various Levels of the Moderators.

*Notes:* CX = customer experience. The shaded belt surrounding the line for the coefficient estimates represents the confidence band, indicating the 95% confidence intervals of the marginal effect of social online CX at given values of the indicated moderator. The shaded box indicates the range of values of uncertainty avoidance below the Johnson–Neyman point, where the marginal effect of social online CX becomes nonsignificant.

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## Engaging Business Customers Through Online Experiences in Different Cultures

### Web Appendix

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*These materials were supplied by the author to aid in the understanding of their paper. The AMA is sharing these materials at the request of the author.*

**Web Appendix A.** Descriptive statistics and correlations.

Measure	M/%	(SD)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. Site visits	6.08	(19.16)	1.00																		
2. Document downloads	10.22	(30.87)	.52	1.00																	
3. Psychological engagement	5.25	(1.81)	.06	.08	1.00																
4. Cognitive CX	5.19	(1.73)	.09	.05	.73	1.00															
5. Social CX	4.20	(1.93)	-.04	.00	.46	.06	1.00														
6. Uncertainty avoidance	60.30	(18.23)	.11	.08	.13	.12	.04	1.00													
7. Power distance	52.87	(20.74)	.02	-.02	.18	.03	.34	.17	1.00												
8. Individualism	57.77	(23.68)	-.04	-.01	-.23	-.13	-.28	-.34	-.75	1.00											
9. Masculinity	57.69	(14.20)	.01	-.05	-.05	-.04	-.14	-.04	-.23	.27	1.00										
10. Long-term orientation	53.67	(23.17)	.01	.01	.07	.14	-.17	.10	-.28	.02	.12	1.00									
11. Prepurchase stage	22%	-	-.02	-.09	.00	-.04	.09	.02	.13	-.12	.02	-.04	1.00								
12. Purchase stage	18%	-	.02	-.05	.02	.04	.00	.03	.10	-.07	-.06	-.08	-.24	1.00							
13. Postpurchase stage	24%	-	.09	.18	-.03	.02	-.11	.07	-.08	.03	-.06	.05	-.29	-.26	1.00						
14. Cohesive and consistent TP	4.81	(1.81)	.02	.01	.55	.47	.37	.06	.06	-.08	-.07	.04	-.06	.05	-.01	1.00					
15. Context-sensitive TP	5.17	(1.58)	.03	.05	.70	.55	.46	.13	.27	-.33	-.06	.01	.05	.00	-.04	.10	1.00				
16. Prior web page visits	32.05	(105.44)	.39	.54	.09	.04	-.04	.12	.04	-.06	.02	.05	-.06	.01	.17	.01	.06	1.00			
17. Manager	25%	-	-.03	-.04	-.13	-.10	-.09	-.01	.04	-.05	-.03	-.07	.03	.08	.00	-.05	-.11	.02	1.00		
18. Female	8%	-	-.06	-.07	-.03	-.05	.06	-.05	.00	.03	.03	-.11	-.05	.05	-.10	.01	-.03	-.07	.01	1.00	
19. English language	76%	-	-.03	-.06	.03	-.09	.32	-.16	.52	-.18	-.36	-.64	.05	.11	-.12	.05	.11	-.09	.07	-.13	1.00

Notes. Correlations greater than or equal to |.09| are statistically significant ( $p < .05$ , two-tailed). CX = customer experience; TP = touchpoints.

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## **Web Appendix B.** Methodological remedies for addressing potential endogeneity bias.

External-instrument-based, internal-instrument-based, and instrument-free approaches to address endogeneity were considered to further alleviate the endogeneity concerns unaccounted for by the included set of control variables. First, a conscientious examination of the available data did not yield an instrument both relevant and exogenous and, thus, appropriate for addressing endogeneity using the instrument-variable approach (Papies et al. 2017).

Second, when external instruments are unavailable, the approaches by Hausman and Taylor (1981) and Lewbel (2012) are recommended because they both rely on internal instruments. The former is suitable for addressing unobserved individual heterogeneity in panel regressions by integrating a time-invariant covariate (Hausman and Taylor 1981). The heteroskedasticity-based instrumental variable approach by Lewbel (2012) can be used for estimating simultaneous equation systems based on cross-sectional data. However, it does not allow for the specification of different distributions in a single equation system. Therefore, because of the cross-sectional nature of the present study's dataset and the differences in the distribution assumptions of the dependent variables in the current study's equation system (i.e., normal distribution for psychological engagement and negative binomial distribution for the behavioral engagement variables), the Hausman–Taylor and Lewbel approaches cannot be applied. Another alternative would be the latent instrumental variable approach introduced by Ebbes et al. (2005), in which a discrete latent variable is constructed to account for the correlation between the endogenous regressor and error term. However, the method only allows for one endogenous regressor (Gui et al. 2020), so it cannot be used for this model. Finally, it was assessed whether the utilization of Gaussian copulas as an instrument-free approach to account for endogeneity represented a viable alternative (Park and Gupta 2012). Although the nonnormality assumption holds for the

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potentially endogenous variables (cognitive experiences:  $W = .903, p < .001$ ; social experiences:  $W = .972, p < .001$ , psychological engagement:  $.925, p < .001$ ),<sup>1</sup> including the calculated copula terms in the model estimation leads to largely increased variance inflation factors because of multicollinearity. This also renders the Gaussian copula approach inapplicable (Becker et al. 2022).

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<sup>1</sup>Note that it is still appropriate to use OLS regression, despite the observed non-normality for the psychological engagement model, considering the relatively large sample size (Wooldridge 2015).



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**Web Appendix C.** Results for the robustness check considering the tightness/looseness score.

Independent variable	Behavioral customer engagement					
	Psychological customer engagement		Gated			
	Coefficient	SE	Site visits	SE	document downloads	SE
Intercept	-.038	.146	1.223***	.130	2.729***	.440
Cognitive CX	.368***	.043	.028	.274	-.542**	.182
Social CX	.153***	.033	-.135	.172	-.073	.088
Psychological customer engagement			.853*	.372	.815***	.052
<b>Interactions</b>						
Cognitive CX × Uncertainty avoidance <sup>a</sup>	-.157***	.008				
Social CX × Uncertainty avoidance <sup>a</sup>	.152***	.008				
Cognitive CX × Power distance <sup>a</sup>	-.579***	.065				
Social CX × Power distance <sup>a</sup>	-.135	.131				
Cognitive CX × Individualism <sup>a</sup>	-.403***	.102				
Social CX × Individualism <sup>a</sup>	-.250	.172				
Cognitive CX × Masculinity <sup>a</sup>	.100 <sup>w.s.</sup>	.060				
Social CX × Masculinity <sup>a</sup>	-.141	.092				
Cognitive CX × Long-term orientation <sup>a</sup>	-.067***	.010				
Social CX × Long-term orientation <sup>a</sup>	-.151***	.009				
<b>Controls</b>						
Uncertainty avoidance <sup>a</sup>	.323***	.055				
Power distance <sup>a</sup>	.180	.211				
Individualism <sup>a</sup>	.234	.341				
Masculinity <sup>a</sup>	.037	.028				
Long-term orientation <sup>a</sup>	.173***	.027				
Prepurchase stage	-.007	.088	-.012	.029	-.414***	.111
Purchase stage	-.006	.082	-.028	.326	.423	.078
Postpurchase stage	-.052	.059	1.170***	.358	1.459***	.152
Cohesive and consistent touchpoints	.285***	.007	-.433	.544	.056	.328
Context-sensitive touchpoints	.414***	.071	-.255	.216	-.034	.207
Prior web page visits	.001***	.000				
Manager	-.061	.056	.533 <sup>w.s.</sup>	.293	.187*	.090
Female	.020	.027	-1.227***	.019	-1.555***	.011
Tightness/looseness score	.002	.002	-.003***	.00	-.023***	.001
Web page category dummies	included		included		included	
Continent dummies	included		included		included	
<i>R</i> <sup>2</sup>		.78		.01		.04

<sup>w.s.</sup>  $p < .1$ , \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

Notes.  $n = 419$ . CX = customer experience. Unstandardized coefficients are reported. <sup>a</sup>The cultural factors are measured on a 100-point scale using the Hofstede Insights program and therefore exhibit relatively low absolute values for the unstandardized coefficients of their main and interaction effects. Thus, the corresponding coefficients and standard errors are multiplied by 100 to improve interpretability. All continuous variables contained in the interaction terms were mean-centered prior to model estimation

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