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Footprints in the Sands of Time: A Comparative Analysis of the Effectiveness of Customer Satisfaction and Customer–Company Identification over Time

Previous research has identified customer satisfaction and customer–company identification as two of the most important concepts in relationship marketing. Yet despite their proclaimed importance, research on their long-term effectiveness is surprisingly scarce. Furthermore, comparative research acknowledging the concepts' different theoretical roots and illuminating the differences in their long-term effectiveness is lacking. In addition, little is known about how competitive actions affect the long-term effectiveness of both concepts. This study makes a first attempt to address these research gaps and offers a comparative analysis of the effectiveness of customer satisfaction and customer–company identification in driving important customer outcomes over time. Latent growth analyses of rich longitudinal data from customers over nine measurement points spanning 43 weeks (n = 6,930) show that customer satisfaction and customer–company identification have positive initial effects on customers' loyalty and willingness to pay but differ in their ability to maintain these positive effects over time. Whereas the positive effects of customer satisfaction decrease more rapidly, the effects of customer–company identification are significantly more persistent. Analysis of the moderating effects of relative competitive advertising suggests that customer–company identification is more effective at immunizing customers against competitive actions.

Keywords: customer satisfaction, customer–company identification, customer loyalty, customer willingness to pay, latent growth modeling

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In recent decades, customer satisfaction has been a central construct in marketing literature (e.g., Luo and Homburg 2007; Szymanski and Henard 2001). Research has shown that customer satisfaction positively affects important customer outcomes such as customer loyalty (Oliver and Swan 1989; Seiders et al. 2005) and customer willingness to pay (Anderson 1996; Homburg, Koschate, and Hoyer 2005b). Thus, not surprisingly, customer satisfaction also plays a dominant role in marketing practice. Currently, most firms recognize managing customer satisfaction as a "strategic imperative" (Mittal and Kamakura 2001, p. 131) and make considerable investments to pursue customer satisfaction (Simester et al. 2000).

Accompanying firms' awareness of the undeniable benefits of increases in customer satisfaction are concerns that customer satisfaction is often not enough to ensure long-lasting and profitable customer relationships in today's competitive environments (Jones and Sasser 1995; Keiningham and Vavra 2001; Oliver 1999; Reichheld 1996). For example, Reichheld (1996) notes that 65%–85% of all satisfied customers still defect. Furthermore, Anderson, Fornell, and Mazvancheryl (2004) show that the link between customer satisfaction and profitability is weaker in highly competitive industries, suggesting that under intense competition, even satisfied customers become more price sensitive and difficult to retain. Against the background of these limits to customer satisfaction, scholars and practitioners are engaged in an ongoing quest for new ways to build deeper and more meaningful long-term relationships with customers.

A concept that promises such "relationship gold" and thus has received much attention in recent customer rela-

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tionship literature is that of customer–company identification (Bhattacharya and Sen 2003, p. 76; see also Ahearne, Bhattacharya, and Gruen 2005; Homburg, Wieseke, and Hoyer 2009). Research has shown that customer–company identification, conceptualized as the feeling of oneness or psychological belongingness to an organization (Bhattacharya and Sen 2003),[1] positively affects important customer outcomes, such as customers' in-role and extra-role behaviors (Ahearne, Bhattacharya, and Gruen 2005), loyalty intentions (Homburg, Wieseke, and Hoyer 2009), and spending (Lichtenstein, Netemeyer, and Maxham 2010; Netemeyer, Heilman, and Maxham 2012). Furthermore, because customer–company identification is an active, selective, and volitional psychological process in which the organization becomes self-referential and self-defining for the customer (Bhattacharya and Sen 2003), defection rates for identified customers should be low and competitors should have difficulty attracting highly identified customers.

Thus, the question arises whether customer–company identification is able, not to substitute, but to complement customer satisfaction in steering customer relationship management by overcoming its limits, especially in the long run. Surprisingly, comparative research addressing this question is scarce (see Table 1). Furthermore, marketing research has neglected to analyze how the competitive environment (e.g., competitive advertising) affects the differences between these two central relationship constructs.

The current study is a first attempt to fill these research gaps. Obtaining rich data from customers of an airline company over nine points of measurement across 43 weeks (n = 6,930) enabled us to explore the short- and long-term effects of customer satisfaction and customer–company identification on two key customer outcomes: customer loyalty and customer willingness to pay. Specifically, we employ a latent growth modeling approach (Bollen and Curran 2006; Palmatier et al. 2013) and show that although customer satisfaction has a stronger short-term effect on both customer outcomes, the effect of customer–company identification is more persistent over time.

Furthermore, we analyze how competition affects the differences between both central relationship constructs by exploring how the ratio of a company's own to competitive advertising spending affects the impact of customer satisfaction and customer–company identification on both outcomes. Relying on secondary data on advertising spending in the airline industry from Nielsen Media Research, we use a piecewise growth modeling approach and find that customer satisfaction is more susceptible to competitor advertising than customer–company identification.

The study contributes to academic marketing research in several ways. Among other contributions, it adds to research on relationship marketing by comparing two central marketing concepts, namely, customer satisfaction and customer–company identification. It reveals the theoretical differences between both relationship concepts and provides new insights into how these differences shape the short- and long-term effectiveness of both concepts.

Furthermore, the study contributes to relationship marketing research by offering new insights into the complex interrelationship between customer satisfaction and customer–company identification. Whereas previous research has mainly argued that customer satisfaction leads to stronger customer–company identification (e.g., Bhattacharya, Rao, and Glynn 1995), our study reveals that customer–company identification also has a positive effect on customers' satisfaction. Thus, the study extends previous research by showing that the link between customer satisfaction and customer–company identification is not unidirectional but bidirectional.

The study also contributes to research on the long-term effectiveness of customer satisfaction. Whereas previous longitudinal research on the consequences of customer satisfaction has focused on the effect of customer satisfaction on an outcome in two consecutive periods (e.g., LaBarbera and Mazursky 1983), the effectiveness of customer satisfaction to drive customer outcomes over multiple periods of time is less clear (e.g., Kumar, Pozza, and Ganesh 2013). The current study addresses this neglected area and offers a differentiated picture of the short- and long-term consequences of customer satisfaction. Thus, the study contributes to a better and more differentiated theoretical understanding of customer satisfaction's effectiveness.

Moreover, the current study contributes to research on customer–company identification. Although previous research has repeatedly shown the positive short-term consequences of customer–company identification (e.g., Homburg, Wieseke, and Hoyer 2009), little is known about its long-term consequences. We address this research gap and show that the power of customer–company identification to influence important customer outcomes is especially based on the stability of its positive effects over time. Thus, our findings add to the understanding of the long-term consequences of customer–company identification.

In addition, the study contributes to research on customer–company identification by investigating how its effectiveness is influenced by competitive actions. Specifically, the results show that the effectiveness of customer–company identification in driving important customer outcomes over time is far less sensitive to competitive actions (e.g., competitive advertising) than other relationship constructs (e.g., customer satisfaction). In this way, the study deepens the field's understanding of the long-term effectiveness of customer–company identification.

Conceptual Framework

In our research framework, we integrate customer satisfaction and customer–company identification and depict their effects on both loyalty and willingness to pay as relevant customer outcomes. In addition, we account for the competitive action of advertising, which previous research has neglected despite its relevance for marketing decisions (Kumar, Lemon, and Parasuraman 2006; Srinivasan, Vanhuele, and Pauwels 2010). Specifically, our research investigates how the effectiveness of customer satisfaction and customer–company identification differ over time and how competitive advertising mod-

[1]Note that this feeling of belongingness can occur without, and thus does not refer to, customers' formal membership in the organization (e.g., Cardador and Pratt 2006; Pratt 1998).

TABLE 1
Conceptual Differences Between Customer Satisfaction and Customer–Company Identification

	Customer Satisfaction	Customer–Company Identification	Comparison Between Customer Satisfaction and Customer–Company Identification[a]
Definition	"A customer's post-consumption evaluation of a product or service" determined by the perceived discrepancy between prior expectations and the actual performance (Mittal and Frennea 2010, p. 3; see also Day 1984; Oliver 1980; Tse and Wilton 1988)	"Perception of oneness with or belongingness to an organization, where the individual *defines* him or herself in terms of the organization(s)" (Mael and Ashforth 1992, p. 104; see also Bhattacharya and Sen 2003; Lichtenstein, Netemeyer, and Maxham 2010)	✗
Relevance	"Customer satisfaction management has emerged as a strategic imperative for most firms" (Mittal and Kamakura 2001, p. 131)	"Taken together, scholars ... see the benefits of ... identification and believe that organizations are realizing that to stay competitive, they must engender or 'manage' identification" (Cardador and Pratt 2006, p. 174)	✓
	"Customer satisfaction has come to represent an important cornerstone for customer-oriented business practices across a multitude of companies operating in diverse industries" (Szymanski and Henard 2001, p. 16)	"Identity is arguably more fundamental to the conception of humanity than any other notion.... I can think of no other concept that is so central to the human experience, or one that infuses so many interpretations and actions, than the notion of identity" (Gioia 1998, p. 17)	
Theoretical foundations			
Core theoretical roots	Confirmation/disconfirmation paradigm (e.g., Oliver 1980)	Social identity theory (Tajfel and Turner 1985)	✗
Basis of reference on customer side	Customer expectations	Customer identity	✗
Basis of reference on company side	Performance of products/services	Company identity	✗
Type of engenderment	Responsive	Active, selective, and volitional	✗
Process of engenderment	Functional comparative (expectation vs. performance)	Relational comparative (customer identity vs. company identity)	✗
Trigger of engenderment	Performance meets or exceeds expectations	Identification with the company helps fulfill one or multiple self-definitional needs (e.g., self-continuity, self-distinctiveness, self-enhancement)	✗
Bases of development			
Tie to real performance	Strong	Medium	✗
Temporal perspective	Past-oriented	Future-oriented	✗
Self-referentiality	Weak	Strong	✗
Previous empirical research			
Cross-sectional research on consequences	•Yim, Chan, and Lam (2012) •Gustafsson, Johnson, and Roos (2005) •Homburg, Koschate, and Hoyer (2005b) •....	•Homburg, Stierl, and Bornemann (2013) •Lichtenstein, Netemeyer, and Maxham (2010) •Ahearne, Bhattacharya, and Gruen (2005) •....	Research gap[b]
Longitudinal research on consequences	•Grewal, Chandrashekaran, and Citrin (2010) •Luo, Homburg, and Wieseke (2010) •Aksoy et al. (2008) •....	•Lam et al. (2010)[c]	Research gap
Research on moderating effects of competition	•Gruca and Rego (2005) •Seiders et al. (2005) •Anderson, Fornell, and Mazvancheryl (2004) •....	Research gap	Research gap

[a]✓ = similarity; ✗ = difference.
[b]Although some studies have included both constructs (e.g., Homburg, Wieseke, and Hoyer 2009; Lichtenstein, Netemeyer, and Maxham 2010), no study, to the best of our knowledge, has compared them empirically.
[c]Specifically, this study analyzes the longitudinal effects of customer–brand identification.

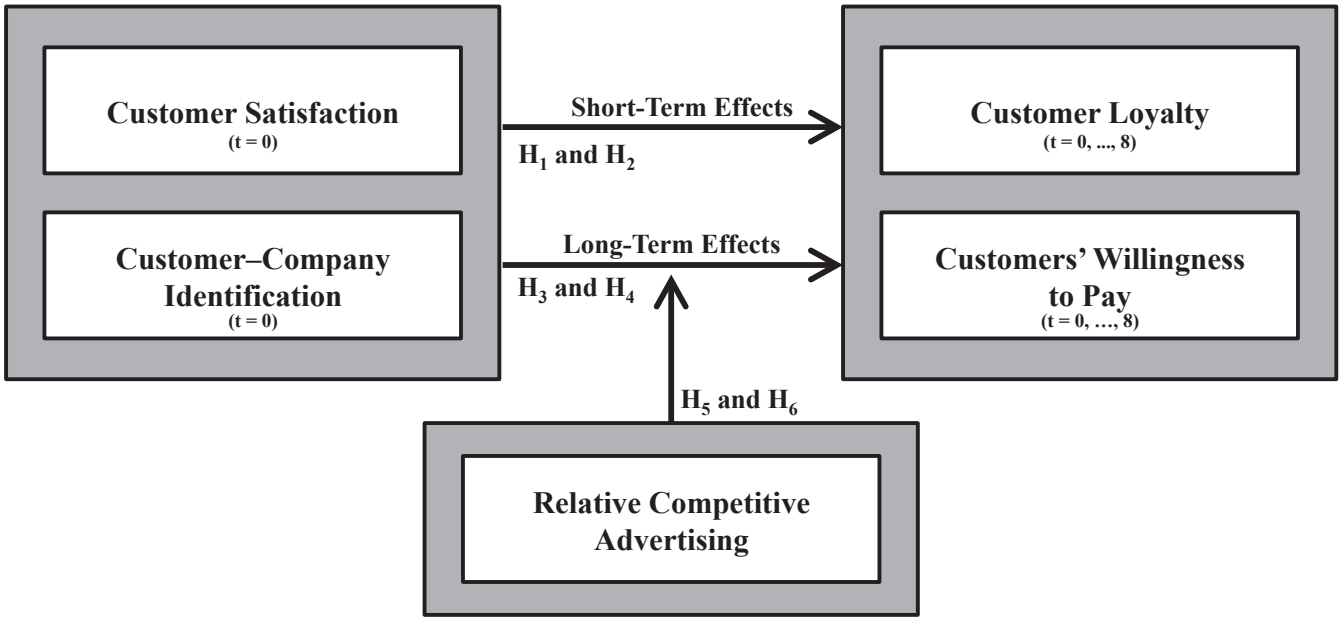
erates the impact of both relationship concepts on customer loyalty and customer willingness to pay (see Figure 1).

To explain the theoretical background of the study, we first define the two customer outcomes. We then define customer satisfaction and customer–company identification and derive analogical hypotheses regarding the short-term influence of both concepts on customer outcomes. Next, we elaborate important conceptual differences between customer satisfaction and customer–company identification. Drawing on these conceptual differences, we postulate divergent hypotheses on how customer satisfaction and customer–company identification influence both customer outcomes over time. Finally, we develop hypotheses about the extent to which advertising of the focal company relative to the advertising of competitors moderates the effects of customer satisfaction and customer–company identification on both customer outcomes over time.

Customer Outcomes

Customer loyalty. Customer loyalty broadly refers to customer behaviors that signal a motivation to enhance an ongoing relationship with a company (Palmatier et al.

FIGURE 1
Conceptual Framework



Control Variables: Customer age, gender, income, membership and status in the frequent flyer program (FFP) of the focal company, membership in FFP of major competitors, importance of amenities offered by the FFP of the focal company, importance of FFP for customer booking decision, number of enjoyed FFP benefits within the last three months, importance of overall travel time for booking decision, distance between customer home and next hub of focal company, number of carriers available at the airport closest to customer's home address, percentage of destinations at the airport closest to the customer's home served by the focal company, percentage of destinations at the airport closest to the customer's home served by major competitors, number of exclusive nonstop routes of the focal company at the airport closest to the customer's home, number of exclusive nonstop routes of major competitors at the airport closest to the customer's home, customer satisfaction (t = 1, ..., 8), customer–company identification (t = 1, ..., 8), average number of total previous flights per month between t and (t + 1) (t = 0, ..., 8).

2006). This propensity to remain in a relationship with a company could be manifested in several dispositions that demonstrate how much a customer is bound to a company, such as the customer's willingness to purchase again from the company, having a preference for the company, or recommending the company to others. Loyal customers are often worth the marketing effort, owing to their willingness to buy additional products and spread positive word of mouth as well as their reliability as a source of continuous revenues (Zeithaml, Berry, and Parasuraman 1996).

Customer willingness to pay. Willingness to pay refers to the maximum price customers are willing to accept before they stop buying the company's offering (Anderson 1996). Customer willingness to pay is directly linked to firm profitability because increasing customer willingness to pay implies that firms can charge higher prices (Homburg, Koschate, and Hoyer 2005b; Homburg, Wieseke, and Hoyer 2009). Thus, it is not surprising that willingness to pay is acknowledged as one of the most central customer outcomes in marketing research (e.g., Koschate-Fischer, Stefan, and Hoyer 2012; Miller et al. 2011).

Customer Satisfaction and Customer–Company Identification

Customer satisfaction. According to a widely accepted conceptualization, customer satisfaction is "a customer's post-consumption evaluation of a product or service" (Mittal and Frennea 2010, p. 3) that occurs if the perceived performance of a product or service meets or exceeds customers' prior expectations (e.g., Bearden and Teel 1983; Oliver 1980, 2010). Thus, overall customer satisfaction with a company's offerings is determined by comparisons between customers' expectations of the company's products or services and their perceptions of the products' or services' performance (e.g., Fornell et al. 1996; Oliver 1980, 2010). Although research continues to refine and extend this conceptualization of customer satisfaction (by, e.g., exploring its boundary conditions, suggesting new forms of satisfaction models, offering new modes of satisfaction; see, e.g., Fournier and Mick 1999; Szymanski and Henard 2001), scholars have repeatedly found support for its original conceptual foundation as referring to the comparison between expectations and performance (Fournier and Mick 1999; Szymanski and Henard 2001; for an overview of the theoretical foundations of the customer satisfaction concept, see Table 1).

Customer–company identification. Consistent with research on social identity theory, we define customer–company identification as a customer's "perception of oneness with or belongingness to an organization, where the individual defines him or herself in terms of the organization(s)" (Mael and Ashforth 1992, p. 104; see also Bhattacharya and Sen 2003; Lichtenstein, Netemeyer, and Maxham 2010). In line with this definition, customer–company

identification has been described as an "active, selective, and volitional act" motivated by the fulfillment of one or multiple self-definitional needs (Bhattacharya and Sen 2003, p. 77; see also Ashforth, Harrison, and Corley 2008; Homburg, Wieseke, and Hoyer 2009).

Central self-definitional needs that can be fulfilled by identifying with a company comprise customers' needs for (1) self-continuity, which refers to customers' need to maintain a stable and consistent sense of self over time and across situations; (2) self-distinctiveness, which is customers' need to distinguish themselves from others in social contexts; and (3) self-enhancement, which describes customers' need to maintain and affirm positive self-views (Ahearne, Bhattacharya, and Gruen 2005; Bhattacharya and Sen 2003). Thus, for example, customers are likely to identify with a company if it shares their values (Einwiller et al. 2006), thereby fulfilling their need for self-continuity. Moreover, customers may identify with companies that are perceived as highly prestigious because doing so can help them distinguish themselves from others by affirming positive self-views and enhancing their sense of self-worth. In this way, customers can fulfill their needs for self-distinctiveness and self-enhancement (Bhattacharya, Rao, and Glynn 1995).

Notably, previous research has shown that customers partly fulfill central self-definitional needs by identifying with diverse types of companies from different industries. For example, previous research has found that customers can identify with apparel retailers (Netemeyer, Heilman, and Maxham 2012), travel agencies (Homburg, Wieseke, and Hoyer 2009), fast-food restaurants (Karaosmanoglu, Bas, and Zhang 2011), and financial service companies (Einwiller et al. 2006). Although, these examples demonstrate the ubiquity of customer–company identification across companies and industries, the challenge for companies to address customers' self-definitional needs may vary between product/service types and industries.

Hypothesis Development

Short-Term Effects of Customer Satisfaction and Customer–Company Identification

Research has revealed the positive relationship of customer satisfaction with customer outcomes such as willingness to pay and loyalty (Anderson 1996; Homburg, Wieseke, and Hoyer 2009). Previous research has also suggested that customers' identification with a company is positively associated with loyalty and willingness to pay (Bhattacharya and Sen 2003; Lichtenstein, Netemeyer, and Maxham 2010). A customer who identifies with a company will want to maintain this relationship, leading to greater loyalty (Homburg, Wieseke, and Hoyer 2009; Mael and Ashforth 1992). In addition, the positive relationship between customer–company identification and willingness to pay has received empirical support (Homburg, Wieseke, and Hoyer 2009). Taking these findings together, we build on existing literature and empirical evidence that both customer satisfaction and customer–company identification have a positive short-term relationship with loyalty and willingness to pay:

H_1: Customer satisfaction has a positive short-term effect on (a) customer loyalty and (b) customer willingness to pay.

H_2: Customer–company identification has a positive short-term effect on (a) customer loyalty and (b) customer willingness to pay.

Conceptual Differences Between Customer Satisfaction and Customer–Company Identification and Their Implications for Long-Term Effects

Although both customer satisfaction and customer–company identification are recognized as important relationship concepts, they differ in their theoretical foundations (see Table 1). Specifically, customer satisfaction is based on the confirmation/disconfirmation paradigm (Oliver 1980) and is described as the result of a responsive comparison between customers' expectations and their perception of the performance of the company's offering (e.g., Bearden and Teel 1983; Oliver 1980, 2010). In contrast, customer–company identification is rooted in social identity theory and has been described as an active, selective, and volitional psychological process in which customers compare their own identity to that of a company and identify with the company if it can fulfill one or multiple self-definitional needs. Thus, customer–company identification leads to a deep and meaningful relationship in which the customer partly defines him- or herself in terms of the company (e.g., Bhattacharya and Sen 2003; Lichtenstein, Netemeyer, and Maxham 2010).

These different theoretical foundations do not mean that customer satisfaction and customer–company identification are competing customer mindset metrics, nor do they exclude a potential interrelationship between the concepts; rather, they imply that the concepts differ with respect to three central bases of development: (1) their tie to real performance, (2) their temporal perspective, and (3) their self-referentiality. These differences, which Table 1 summarizes, imply a differential impact on customer outcomes in the long term.

Tie to real performance and temporal perspective. As we have noted, customer satisfaction is an indicator of congruency between performance and customer expectations (Fornell et al. 1996). Accordingly, "customers require experiences with a product to determine how satisfied they are with it" (Anderson, Fornell, and Lehmann 1994, p. 54). This tie to real performance experiences makes customer satisfaction a "backward looking" concept (Gustafsson, Johnson, and Roos 2005, p. 211), leading customers to focus primarily on past experiences.

In contrast, customer–company identification is less tied to product or service experiences with the company. Rather, it reflects the extent to which customers consider a company's identity an integral part of their social identity. Therefore, real performance experiences are less important for customer–company identification (e.g., Einwiller et al. 2006).

Furthermore, because customers identify with a company to enhance both their current and future social identity, customer–company identification develops with a different temporal focus. Specifically, the development of customer–

company identification is driven by customers' wish to fulfill their self-definitional needs and to strive for an ideal or desired self-concept (Aaker 1999; Bhattacharya and Sen 2003; Van Knippenberg and Sleebos 2006). Consequently, identification includes "narratives [that] project into the future, containing identity aspirations" (Ashforth, Harrison, and Corley 2008, p. 345), making customer–company identification more future-oriented than customer satisfaction.

Self-referentiality. Self-referentiality is assumed to be high when perceptual concepts are strongly related to specific aspects of a person's self (Burnkrant and Unnava 1995; Escalas 2007). In this vein, self-referentiality is strongly related to the customer's self-concept (e.g., Ellemers, Spears, and Doosje 2002). With respect to customer satisfaction, although customers retrieve personal experiences when evaluating their current satisfaction with a company, these encounters are not likely to be integrated into the self-concept; thus, customer satisfaction is assumed to have a low level of self-referentiality.

In contrast, customer–company identification is a fundamental part of customers' self-concept because it directly contributes to customers' social identity (Ashforth, Harrison, and Corley 2008). Customers choose a specific company that fits with their social identity and/or enhances their image of themselves. That is, customers evaluate their relationships with companies by referring to their self-concept. Therefore, customer–company identification has a high level of self-referentiality.

Long-term effects of customer satisfaction. In line with the aforementioned conceptual differences, we assume that customer satisfaction's diminished effectiveness over time is mainly because of its strong tie to real performance and its low self-referentiality. Specifically, because customer satisfaction is strongly tied to real performance experiences, as determined by customers' comparison between expectations and performance, the positive effects of customer satisfaction on customer loyalty and customer willingness to pay are likely to decrease over time due to changes in customers' expectations and decaying memory traces of satisfactory experiences.

Changes in customers' expectations over time are likely because satisfactory experiences typically increase customers' future expectations (Boulding et al. 1993; Homburg, Wieseke, and Hoyer 2009; Rust and Oliver 2000), thereby not only making future satisfactory experiences less likely but also making past satisfaction experiences less relevant for future purchase decisions. Furthermore, customers' expectations may change over time if they discover a new competitor's offering (Kumar, Pozza, and Ganesh 2013), which may also undermine the positive effects of customer satisfaction on customer loyalty and willingness to pay over time.

Moreover, the strong tie to performance experience is likely to derogate the long-term effectiveness of customer satisfaction because customers' memory traces of satisfactory experiences are likely to become less accessible and therefore decay over time (Day 1984; Kumar, Pozza, and Ganesh 2013). Such a decay of memorial traces causes the positive effects of customer satisfaction on customer loyalty and willingness to pay to decrease over time. This decrease is especially likely because customer satisfaction, unlike customer–company identification, does not directly contribute to customers' self-concept. With no direct connection to the self-concept and a resulting low self-referentiality, customer satisfaction does not contribute to self-concept stability, thus making customer satisfaction–based long-term accessible memory traces unlikely. Given these consequences of customer satisfaction's strong tie to performance and weak self-referentiality, its effectiveness to drive important customer outcomes should decrease over time. Therefore, we propose the following:

> H_3: The positive effect of customer satisfaction on (a) customer loyalty and (b) customer willingness to pay decreases over time.

Long-term effects of customer–company identification. The development of customer–company identification is much more complex and implies a higher level of self-referentiality than the development of customer satisfaction. Whereas customer satisfaction can emerge from each service encounter, customer–company identification does not necessarily entail experiences with a company's products or services. Instead, identification requires an attractive, distinctive, and salient company identity (Bhattacharya and Sen 2003). Three factors determine customer–company identification: the personal perception of the company's attractiveness, the evaluation of opinions from relevant others about the company, and the perception of the firm personnel's appearance and actions. These components together build the complex company identity with which customers might identify (Ahearne, Bhattacharya, and Gruen 2005).

Most importantly, customer–company identification shows a high level of self-referentiality because it taps directly into a customer's self-concept (Ashforth, Harrison, and Corley 2008). In general, the self-concept and associated self-consistent behaviors are relatively stable (Aaker 1999; Lam et al. 2010) because people strive for confirmation of their self-related views and are reluctant to change their self-related attitude (Lam et al. 2010). Given people's tendency to acquire information that confirms their self-conceptualizations and to act in self-consistent ways, customers who identify with a company will continuously engage in favorable company-related behaviors that support their self-views. Thus, customers who identify with a company may continue to be more loyal and willing to pay higher prices than customers who are satisfied but for whom the company has no self-concept relevance.

In summary, strong theoretical reasons support the assumption that the effect of customer–company identification on customer loyalty and customer willingness to pay is more persistent over time than the effect of customer satisfaction. Thus, we postulate the following:

> H_4: Compared with customer satisfaction, the positive effect of customer–company identification on (a) customer loyalty and (b) customer willingness to pay decreases less over time.

The Moderating Influence of Advertising

Advertising is one of the main actions in which firms can invest to compete for customers and influence their perceptions about the company's products and services (Chen et al. 2009; Vakratsas and Ambler 1999), and advertising expenditures and competitive advertising have increased in recent years (Danaher, Bonfrer, and Dhar 2008; Nielsen 2013a, b). However, increases in competitive advertising can create difficulty for a company in maintaining successful customer relationships (Danaher, Bonfrer, and Dhar 2008; Unnava and Sirdeshmukh 1994). Given the practical importance of advertising and the detrimental effects of competitors' advertising, it is worthwhile to analyze how competitive advertising influences the effectiveness of customer satisfaction and customer–company identification as drivers of customer outcomes over time.

Furthermore, in analyzing the differential effect of competitive advertising on the long-term effectiveness of customer satisfaction and customer–company identification, it is important to recognize that the competitive effect of advertising on customers depends not only on competitors' advertising intensity but also on the focal company's advertising intensity (Kim and McAlister 2011). Thus, we focus on the moderating role of relative competitive advertising by relating the advertising efforts of the focal company to those of its competitors.

The moderating effect of relative competitive advertising on the long-term effects of customer satisfaction. With respect to customer satisfaction, a high level of relative competitive advertising may affect the customer's consideration set and future buying decision processes. Specifically, high competitive advertising exposes customers more frequently to favorable competitive offerings so that they consider these alternatives in their buying decisions (Joshi and Hanssens 2010; Terui, Ban, and Allenby 2011). Thus, high relative competitive advertising augments customers' consideration set of attractive offerings and increases the focal company's difficulty in retaining satisfied customers and maintaining their willingness to pay over time.

Research examining the effect of advertising on customers' expectations provides additional support for the negative effect of high relative competitive advertising on the long-term effectiveness of customer satisfaction, because advertising revises a customer's expectations (Boulding et al. 1993; Mehta, Chen, and Narasimhan 2008). Such revisions may be especially radical if the customer is frequently exposed to advertisements from different companies, which is likely when relative competitive advertising is high. Fundamental changes in expectations, however, reduce the informativeness of past satisfaction judgments for future purchase decisions and thus decrease the effectiveness of customer satisfaction to drive future loyalty and willingness to pay. Accordingly, we hypothesize the following:

H_5: The decrease in the positive effect of customer satisfaction on (a) customer loyalty and (b) customer willingness to pay over time is greater when relative competitive advertising is high than when it is low. Thus, relative competitive advertising negatively moderates the development of the effects of customer satisfaction on both outcomes over time.

The moderating effect of relative competitive advertising on the long-term effects of customer–company identification. While we expect that advertising competition influences the effects of customer satisfaction on customer loyalty and customer willingness to pay over time, we expect the effects of customer–company identification on both outcomes to be less sensitive to relative competitive advertising. Previous research has offered support for this suggestion through explorations of how strongly identified customers react when confronted with market disruptions or negative information about the firm with which they identify. For example, highly identified customers of an incumbent brand are less likely to switch to a newly introduced brand because, to maintain self-consistency, they iteratively engage in motivated reasoning that is biased in favor of the incumbent brand (Lam et al. 2010). In the same vein, Einwiller et al. (2006) argue that highly identified consumers engage in motivated reasoning in favor of a company and are thus less affected by negative information about this company than consumers who are less identified.

In line with this research, we suggest that when exposed to competitive advertising, highly identified customers will engage in motivated reasoning in favor of the company with which they are identified. Thus, highly identified customers confronted with a high level of competitive advertising are likely to accentuate the advantages of the offerings of the focal company with which they identify and devalue the competitive offerings presented in the advertisement. Therefore, highly identified customers are likely to remain more loyal and be willing to pay higher prices in times of high relative competitive advertising than customers who do not infer a self-definitional meaning from their association with the company. Consequently, the time-related decrease in the positive effect of customer–company identification on customer loyalty and customer willingness to pay under intense advertising competition should be less than the time-related decrease in the positive effect of customer satisfaction on both outcomes.

Complementary support for this reasoning can also be gained from research exploring the effectiveness of advertising, which has found that advertising is more effective if customers have a strong static preference for a firm (Deighton, Henderson, and Neslin 1994). This finding implies that a company's advertising should be more effective for customers who identify with the company than for "merely" satisfied customers, who are less likely to have a strong static preference for the company. This higher advertising effectiveness associated with customer–company identification helps companies keep identified customers more loyal and willing to pay higher prices even when advertising from competitors is intense. Therefore, the positive effects of customer–company identification on customer loyalty and willingness to pay should be less affected by relative competitive advertising than those of customer satisfaction.

Moreover, research examining the phenomenon of identity saturation provides further support for this reasoning.

Specifically, investigators have shown that a customer's need to identify with companies is saturated when the customer already strongly identifies with a specific firm (Chernev, Hamilton, and Gal 2011). Such effects of identity saturation may reduce identified customers' susceptibility to advertising attacks by companies that compete for the customer's identity. Consequently, the positive effects of customer–company identification on customer loyalty and customer willingness to pay over time should be less affected than those of customer satisfaction. In summary, we propose the following:

H_6: The effects of customer–company identification on (a) customer loyalty and (b) customer willingness to pay over time are less sensitive to relative competitive advertising than the effects of customer satisfaction on both outcomes. Thus, the negative moderating effect of relative competitive advertising is stronger for customer satisfaction than for customer–company identification.

Methodology

Sample

To test our hypotheses, we collected a large-scale, longitudinal data set from customers of a large European-based airline that offers a broad network of destinations serving national, European, and long-haul destinations. With respect to hubs and served destinations, it is comparable to other major airlines operating in Europe.

The airline industry is well suited to test our hypotheses for several reasons. First, it has been suggested that airline companies are prototypical companies with which customers can identify (Berry 2000; Bhattacharya and Sen 2003).[2] This potential for customer identification enables us to compare the short- and long-term effectiveness of customer satisfaction and customer–company identification over time. Second, as in other service industries, building and maintaining successful customer relationships is extremely important in the airline industry (e.g., Grewal, Chandrashekaran, and Citrin 2010), which makes it relevant to study the development of customer loyalty and willingness to pay over time and explore how different customer relationship concepts affect these developments. Furthermore, it gives us the opportunity to contribute to the rich knowledge base that previous customer relationship research has built in this context (Grewal, Chandrashekaran, and Citrin 2010). Third, given the importance of customer relationships (e.g., Agustin and Singh 2005) and the intense competitive environment (Luo 2007) in the airline industry, it can be relevant for airline companies to look for new ways to build deep and meaningful long-term relationships, as promised by the concept of customer–company identification (Bhattacharya and Sen 2003). Fourth, the high competitive dynamism in the airline industry (e.g., Dixit and Chintagunta 2007) is an ideal environment in which to study how competitive actions, such as competitive advertising, influence the effectiveness of both relationship concepts.

To collect longitudinal data from a broad range of customers of the focal airline company, we invited customers through multiple channels (i.e., through the focal airline company's frequent flyer program [FFP], through onboard flyers, and through partner companies; customers within channels were approached randomly). Overall, 7,923 customers were invited to participate in an online panel, which consisted of nine waves spanning 43 weeks. We received responses from 6,930 customers that could be included in the model estimation process. The final data set is sociodemographically diverse and comprises customers with different profiles. The overall mean age of customers in the data set is 49.61 years (SD = 12.71 years), and 72% of respondents are male. Customers' average personal monthly net income is between $2,700 and $4,100. With respect to membership and status in the FFP of the focal company, 15.02% of the 6,930 customers were not members, while 38.67% had tier 0 status (i.e., no miles earned), 13.02% had tier 1 status (with less than 25,000 miles earned), 28.24% had tier 2 status (with less than 50,000 miles earned), and 5.05% had tier 3 status (with more than 50,000 miles earned). Furthermore, 16.47% of all customers in the data set had used the airline solely for private purposes during the time of the study, 12.91% of the customers had used the airline company for businesses purposes only, and 70.62% had used the airline for both private and business purposes. We included all variables reflecting these differences in customers' characteristics as control variables in the model estimation process.

To assess whether nonresponse bias is an issue in our data, we compared responses between early and late respondents for the core variables of the model at each wave (Armstrong and Overton 1977). The results of these tests indicate that nonresponse bias is not a problem within the data set.

As in most longitudinal studies (Rindfleisch et al. 2008), our sample decreased over time due to respondent attrition. Complete avoidance of decreasing sample size over time seems inevitable as "even with the best design attrition will happen in longitudinal … research" (Ployhart and Vandenberg 2010, p. 104). Indeed, a drop in the response rate by half or more between the first and last measurements is not uncommon in longitudinal research (Chan 1998; Ployhart and Vandenberg 2010; Rindfleisch et al. 2008). Respondent attrition is comparatively low in our study, with an average decrease of 3.6% per measurement occasion (Ng and Feldman 2010). However, because attrition can be associated with systematic nonresponse, we followed recommendations from methodological literature on dropout modeling (Enders 2011; Muthén et al. 2011) and estimate additional models in which we explicitly consider

[2]To offer further indications that customers can identify with an airline company, we conducted several additional analyses using a separate data set comprising 1,408 airline customers. The results reveal that customers perceive great differences in prestige between different airline companies and that these differences translate to differences in their strength of identification with the airline companies. Furthermore, we found that customers may enhance their self by flying with a renowned airline company. Because self-enhancement is an important self-definitional need that customers try to partly fulfill by identifying with prestigious companies (Bhattacharya and Sen 2003), these findings offer further indications that customers may identify with airline companies.

respondent attrition. We briefly describe these models and their results in the "Additional Analysis" subsection.

Measures

We measured all core constructs using well-established scales from previous research. In addition, we discussed all measures with several marketing scholars and company representatives to ensure that they fit the context of the study. We kept all measures constant across the nine data collection waves. Table W1 in the Web Appendix provides the measures of the core constructs.

Core variables. We measured customer satisfaction with three items using the scale from Homburg, Koschate, and Hoyer (2006), which has been shown to be highly reliable in diverse contexts (e.g., Homburg, Wieseke, and Bornemann 2009; Homburg, Wieseke, and Hoyer 2009). To capture customers' identification with the company, we adapted the well-established six-item scale developed by Mael and Ashforth (1992) (Homburg, Wieseke, and Hoyer 2009).[3] The measure from Mael and Ashforth is especially well suited because it is one of the most renowned measures of social identification with companies in management and marketing literature and research has repeatedly indicated its validity in various contexts (e.g., Bhattacharya, Rao, and Glynn 1995; Boenigk and Helmig 2013).

To measure customer loyalty, we adapted two items from Zeithaml, Berry, and Parasuraman (1996) capturing customers' repurchase and recommendation intention and added a third item to capture customers' overall loyalty. To measure customer willingness to pay, we relied on the direct relative approach from the American Customer Satisfaction Index (Fornell et al. 1996).

To assess the contingency effect of competitive advertising, we obtained data on advertising expenditures from Nielsen Media Research. Specifically, weekly data on gross expenditures for the focal company and its major competitors were provided. Analogous to previous research (Chaudhuri and Holbrook 2001), we used these data to create an index of competitive advertising (CAI), which is defined as follows:

$$\text{CAI} = \frac{\text{AE}_{\text{FF}}}{\text{AE}_{\text{FF}} + \text{AE}_{\text{C}}}, \quad (1)$$

where AE_{FF} refers to the advertising expenditures of the focal company and AE_{C} refers to the sum of the advertising expenditures of the focal company's main competitors.

A high value of this index indicates that the advertising expenditures of the focal company are high relative to the overall expenditures for advertising. From the view of the focal company, this value indicates a situation in which competitive pressure through advertising is low (i.e., relative competitive advertising is low). In contrast, a low value of this index suggests that the firm's advertising expenditures are low relative to overall advertising expenditures. In such situations, advertising competition is intense from the view of the focal company (i.e., relative competitive advertising is high). Using the index, we distinguished periods that are characterized by high levels of competitive advertising and periods in which advertising competition was less intense (for further details about how the contingency effect of competitive advertising is modeled, see the "Analysis Strategy and Models" subsection).

Control variables. We include several control variables that may affect the development of customers' loyalty or their willingness to pay over time. Because loyalty programs play an important role in the airline industry, we use additional company data to control for customers' membership and status in the focal company's FFP. Specifically, we included four dummy variables that reflect the four status levels of the FFP (a value of 0 for all dummy variables reflects nonmembership in the FFP of the focal airline). We also controlled for customers' membership in FFPs of five major competitors of the focal company (in doing so, we captured customers' potential membership in FFPs of the three largest airline alliances [i.e., SkyTeam, Star Alliance, and oneworld]). Moreover, we included customers' evaluations of the importance of the amenities offered by the focal company's FFP as a control variable. In addition, we also controlled for the number of benefits a customer has enjoyed by redeeming frequent flyer points in the three months before the study and customers' evaluation of the importance of their memberships in FFPs for their booking decision.

We further included several control variables that account for the geographic location of hubs relative to the location of the customer as well as convenience in terms of (exclusive) destinations serviced from the airport closest to customers' home address. Specifically, we controlled for (1) the distance between the customer's home address and the closest hub airport of the focal company, (2) the number of carriers available at the airport closest to the customer's home address, (3) the percentage of destinations to which the focal airline offers (nonstop) service from the airport closest to the customer's home address, (4) the percentage of destinations to which the major competitors of the focal airline offer (nonstop) service from the airport closest to the customer's home address, (5) the number of exclusive (noncompetitive) nonstop routes of the focal airline at the airport closest to the customer's home address, (6) the number of exclusive (noncompetitive) nonstop routes of the major competitors at the airport closest to the customer's home address, and (7) the importance of convenience in terms of overall travel time for a customer when he or she books a flight.

[3]In addition, we cross-validated Mael and Ashforth's (1992) scale with three other measurement approaches used in previous research to measure customer–company identification (i.e., the approaches employed by Einwiller et al. [2006], Netemeyer, Heilman, and Maxham [2012], and Lam et al. [2010]). The results from a separate data set comprising 1,408 airline customers show a strong correlation between Mael and Ashforth's (1992) measure and the other measurement approaches (Netemeyer, Heilman, and Maxham [2012]: $r = .894$, $p < .001$; Lam et al. [2010]: $r = .787$, $p < .001$; Einwiller et al. [2006]: $r = .859$, $p < .001$), indicating strong parallel test reliability. To further ensure the robustness of our results, we reestimated the main effects and moderation model using a graphical rating scale of customer–company identification (Bergami and Bagozzi 2000). The results reveal that all hypothesis tests remain stable, thus underscoring the robustness of our findings.

In addition, we controlled whether customers use the focal company mainly for business or leisure trips (operationalized as the ratio of customers' flights for business purposes to total flights with the focal company during the time of the study). To further control for sociodemographic differences in the development of customer loyalty and customer willingness to pay over time, we included the customers' age, gender, and personal monthly net income as control variables in the analyses. In addition to the aforementioned time-invariant control variables, we also included customers' average number of flights per month since the last survey wave as a time-varying covariate in the model (for t = 0, we included customers' average number of past flights per month within the three months before the study).

Table W2 in the Web Appendix presents descriptive statistics, psychometric properties, and intercorrelations of the study's core variables. As Table W2 shows, all measures exceeded the recommended threshold of .7 for coefficient alpha (Nunally and Bernstein 1994). Furthermore, composite reliability exceeds .7 for all scales, providing further support for convergent validity (Bagozzi and Yi 1988).[4] To assess discriminant validity between different constructs for each measurement occasion, we relied on the criterion developed by Fornell and Larcker (1981). This criterion specifies that discriminant validity is supported if the average variance extracted exceeds the squared correlations between all pairs of constructs. The results of this test support discriminant validity between different constructs for each measurement.

As we collected longitudinal data with constructs measured at multiple points in time, we also assessed longitudinal validity of these variables by testing for measurement invariance (Ployhart and Vandenberg 2010). In longitudinal research, testing for measurement invariance is important to ensure that the change in the dependent variables over time is a true score change and not a change that occurs because of changes in the conceptualization or calibration of the variables' measurement (Vandenberg and Lance 2000). In general, a measure is said to demonstrate sufficient measurement invariance for the analysis of change over time if it shows configural and at least partial metric and scalar invariance (Chan 1998; Ng and Feldman 2010; Ng, Feldman, and Lam 2010). We tested measurement invariance for all multi-item measures by undertaking a series of confirmatory factor analysis nested model comparisons (Chan 1998). The results support full configural and partial metric and scalar invariance for all variables; thus, we consider all variables appropriate for longitudinal modeling.

[4]To ensure high reliability of the loyalty measures, we treated highly unreliable loyalty observations as missing. Specifically, 2.1% of the loyalty observations were identified as highly unreliable on the basis of their interitem variance and thus replaced with a missing value code. To ensure that this procedure did not affect the tests of the hypotheses, we estimated all models with and without the unreliable loyalty observations replaced. Tests of the hypotheses remain stable for all models.

Analytical Approach

To test our hypotheses, we employed a latent growth modeling approach (Bollen and Curran 2006). Latent growth modeling is frequently used in psychological and organizational research (Bindl et al. 2012; Chan and Schmitt 2000) and has been especially recommended in marketing research for analyzing longitudinal data at the individual level (Steenkamp and Baumgartner 2000). Thus, initial empirical studies in marketing have used latent growth modeling to explore longitudinal phenomena at the customer level (Koehler et al. 2011; Palmatier et al. 2013).

Conceptually, a latent growth model can be described as a two-stage process in which both stages are estimated simultaneously (Lance, Vandenberg, and Self 2000). In the first stage, a latent growth model captures intraindividual change over time by fitting individual-level growth trajectories, which are described by at least two latent factors, an intercept and a slope (Lance, Vandenberg, and Self 2000). The intercept factor presents information about the mean and the variance of the collections of individual growth trajectories (typically) at the first measurement occasion (Duncan, Duncan, and Strycker 2006). The slope factor offers information about the mean and the variance of the individual slopes of the trajectories (Duncan and Duncan 2004). In the second conceptual stage of a latent growth model, predictors of the latent intercept and slope factor can be added to the model to explain interindividual differences between the individual growth trajectories. Thus, latent growth modeling provides a unified framework for analyzing interindividual differences in intraindividual change over time (Chan and Schmitt 2000).

For multiple reasons, latent growth modeling is particularly appropriate to test our hypotheses. First, this approach enables us to explore in great detail how interindividual differences in satisfaction and customer–company identification between customers affect the intraindividual development of customers' loyalty and willingness to pay over time.

Second, a latent growth modeling approach enables us to estimate simple slopes for the conditional effects of customer satisfaction and customer–company identification on customer loyalty and customer willingness to pay over time. Estimating these simple slopes and their respective confidence bands enables us to determine when the effects of satisfaction and identification on customer loyalty and willingness to pay pass from significance to nonsignificance. Thus, comparing the simple slopes of customer satisfaction and customer–company identification offers unique comparative insights into the long-term effectiveness of both constructs in driving important customer outcomes.

Third, latent growth modeling offers the possibility to subdivide individual trajectories into their components to allow for diverging developmental patterns for different time periods (Duncan and Duncan 2004). Such a piecewise latent growth modeling approach is particularly useful in analyzing differences in the influence of covariates on developmental trajectories during distinct periods (Collins 2006; Duncan and Duncan 2004; Duncan, Duncan, and Strycker 2006). Thus, adopting a piecewise latent growth

modeling approach enables us to explore the differences in the ability of satisfaction and identification to drive loyalty and willingness to pay in periods characterized by low and high competitive advertising.

Analysis Strategy and Models

To test our hypotheses, we followed a two-step procedure. In the first step, we estimated a conditional dual-process latent growth model to assess the short- and long-term effects of customer satisfaction and customer–company identification on customer loyalty and willingness to pay (H_1–H_4). In the second step, we explored the conditional effect of relative competitive advertising on the long-term effects of customer satisfaction and customer–company identification on customer loyalty and customer willingness to pay (H_5 and H_6). We briefly describe both models in the following subsections.

Main effects model. To test our main effects hypotheses, we estimated a conditional dual-process latent growth model. In this model, we fitted individual growth trajectories for customer loyalty and customer willingness to pay spanning 43 weeks. These trajectories are described by two latent intercept parameters (α_{Loy} and α_{WTP}) and two latent slope parameters (β_{Loy} and β_{WTP}). In fitting the trajectories, we employed a scheme for coding time so that the intercept parameters reflect the initial level of loyalty and willingness to pay at t = 0 and the slope parameters indicate the change in loyalty and willingness to pay over ten weeks. To analyze the short- and long-term effects of customer satisfaction and customer–company identification on both dependent variables, we regressed the intercept and slope parameters of the growth trajectories for customer loyalty and willingness to pay on the customer satisfaction and customer–company identification variables from the first measurement occasion (t = 0).

In addition to customer satisfaction and customer–company identification, we included the previously discussed set of time-invariant and time-varying control variables in the model estimation process. Moreover, we control for the influence of outliers by including a dummy control variable (Sloot, Fok, and Verhoef 2006).[5] To further control for potential associations between the study covariates, we allow them to covary (Bollen and Curran 2006; Little 2013). In addition, we follow common practice in latent growth modeling and allow the residuals of the repeated growth measures to covary within each time period (Bollen and Curran 2006; Curran, Harford, and Muthén 1996). Finally, we capture associations between the two growth processes by freely estimating the covariances between latent intercept and slope factors (Duncan, Duncan, and Strycker 2006).

Moderation effects model. To explore the conditional effect of relative competitive advertising on the effectiveness of customer satisfaction and customer–company identification to drive customer outcomes over time, we estimated a conditional piecewise dual-process latent growth model with two time windows: one that captures the period of high levels of relative competitive advertising and one that captures the period characterized by considerably less competitive advertising. We identified the respective time windows in discussions with managers of the focal company and objectified them with data on advertising expenditures and customer data on frequencies of perceived advertisements.

Specifically, discussion with the focal company's corporate management indicated that the period of time comprising waves 1 through 4 (t = 0–3) is characterized by high levels of relative competitive advertising, whereas the period of time comprising waves 5 through 9 (t = 4–8) is characterized by considerably lower levels of relative competitive advertising intensity. Comparing the average values of the relative competitive advertising index (CAI) for both time windows offers initial support for this indication ($M[CAI_{t = 0–3}] = .154$, $M[CAI_{t = 4–8}] = .213$; $t = 1.868$, $p < .05$, one-tailed).

To further validate our classification, we compared information from customers about their perceptions of advertisements from the focal company and its competitors. Specifically, we asked customers at each measurement occasion whether they had recently perceived advertisements of the focal company and its major competitors. Using this information, we created an index (CAI2) that is analogous to the relative competitive advertising index (CAI). Comparing this index between the two time windows offers additional support that relative competitive advertising is considerably more intense during the time period comprising waves 1 through 4 (t = 0–3) than in the period comprising waves 5 through 9 (t = 4–8) ($M[CAI2_{t = 0–3}] = .377$; $M[CAI2_{t = 4–8}] = .432$; $t = 18.222$, $p < .001$).

Accordingly, the conditional piecewise dual-process latent growth model consists of two latent intercept factors (α_{Loy} and α_{WTP}) and four latent slope factors, which characterize the developmental process for customer loyalty and willingness to pay in times of high ($\beta_{Loy, HRCA}$ and $\beta_{WTP, HRCA}$) and low ($\beta_{Loy, LRCA}$ and $\beta_{WTP, LRCA}$) levels of relative competitive advertising. Analogous to the main effects model, we regressed the latent intercept and slope parameters on the customer satisfaction and customer–company identification variables from the first measurement occasion (t = 0). We then evaluated the hypotheses about the moderating effect of relative competitive advertising on the long-term effects of customer satisfaction and customer–company identification by comparing the effects of both predictor variables on the latent slope parameters between both time windows.

With respect to control variables and covariances, we estimated the piecewise latent growth model analogously to

[5]Because outliers have an undue impact on the estimated coefficients and their standard errors as well as on the overall model fit, controlling for them is important to avoid reporting potentially misleading results driven by the presence of a few observations in the data set (e.g., Grinstein and Nisan 2009; Kurt, Inman, and Argo 2011). Overall, the number of observations deemed outliers does not exceed the 5% threshold (MacMillan and Meshulach 1983; Tuli and Bharadwaj 2009). To ensure that the inclusion of the dummy control variable does not lead to fundamentally different results, we estimated all models with and without the control variable. Tests of the hypotheses remain stable irrespective of the inclusion.

the main effects model. We estimated all models with Mplus 7.1, using a maximum likelihood estimator with robust standard errors (Muthén and Muthén 2012).

Results

Short- and Long-Term Effects of Customer Satisfaction and Customer–Company Identification on Customer Loyalty and Customer Willingness to Pay

Table 2 reports the results of the main effects model. The global fit indices indicate that the model fits the data reasonably well (χ^2/d.f. = 3.808, comparative fit index [CFI] = .912, Tucker–Lewis index [TLI] = .896, root mean square error of approximation [RMSEA] = .020, standardized root mean square residual [SRMR] = .036).

H_1 and H_2 posit that both customer satisfaction and customer–company identification have a positive short-term effect on customer loyalty and customer willingness to pay. Table 2 shows that customer satisfaction and customer–company identification indeed positively affect the latent intercept factor of customer loyalty (γ_{CS} = .527, p < .01; γ_{CCI} = .093, p < .01) and willingness to pay (γ_{CS} = 2.181, p < .01; γ_{CCI} = .599, p < .01), indicating significant positive short-term effects of both relationship constructs. Thus, we find support for H_1 and H_2.

H_3 suggests that the positive effect of customer satisfaction on customer loyalty and customer willingness to pay decreases over time. The results of the latent growth model provide support for H_3 in that customer satisfaction has a highly significant negative effect on the latent slope factor of customer loyalty (γ_{CS} = –.124, p < .01) and customer willingness to pay (γ_{CS} = –.466, p < .01).

In H_4, we propose that the positive effect of customer–company identification on customer loyalty and customer willingness to pay decreases less over time than the positive effect observed for customer satisfaction. Table 2 shows that customer–company identification negatively affects the latent slope factor of customer loyalty (γ_{CCI} = –.010, p < .01) and customer willingness to pay (γ_{CCI} = –.076, p < .05). Comparing these effects with the effects of customer satisfaction on both latent slope factors (customer loyalty: γ_{CS} = –.124, p < .01; willingness to pay: γ_{CS} = –.466, p < .01) reveals that the negative effects of customer–company identification are significantly weaker than those of customer satisfaction (customer loyalty: $\gamma_{CS} - \gamma_{CCI}$ = –.114; p < .01; customer willingness to pay: $\gamma_{CS} - \gamma_{CCI}$ = –.390; p < .01). Overall, these results suggest that the positive effect of customer satisfaction erodes at a faster rate than the positive effect of customer–company identification, offering support for H_4.

Further insights into the long-term effectiveness of customer satisfaction and customer–company identification to drive customer loyalty and willingness to pay can be gained by analyzing their simple slopes. Figure 2 presents the simple slopes, which reflect the influence of customer satisfaction and customer–company identification on both outcomes over time.

Specifically, Figure 2, Panel A, shows that the effect of customer satisfaction on customer loyalty starts at a comparatively high level but decreases rapidly. Testing the regions of significance of the simple slope offers additional support for this negative trend by showing that the effect of customer satisfaction on customer loyalty becomes insignificant in week 39, as indicated by the dashed line in Figure 2, Panel A (for mathematical details of this test, see Curran, Bauer, and Willoughby 2004).

In contrast, the effect of customer–company identification on customer loyalty starts at a lower level but decreases very slowly (Figure 2, Panel B). Accordingly, testing the regions of significance reveals that the positive effect of identification does not become insignificant during the time of the study (mathematically, the effect becomes not insignificant before week 61). Together, these results of the simple slope analyses provide additional support for our suggestion in H_{4a} that the effect of customer–company identification on customer loyalty decreases at a slower rate than that of customer satisfaction.

The simple slopes for customer willingness to pay as the dependent variable show a similar pattern. The effect of customer satisfaction on customer willingness to pay again starts at a high level and decreases at a fast rate, becoming insignificant in week 38 (Figure 2, Panel C). The effect of customer–company identification starts at a lower level but again decreases more slowly. Mathematically, the effect passes from significance to nonsignificance in week 46 (Figure 2, Panel D). Thus, like the effect on customer loyalty, the effect of customer–company identification on customer willingness to pay does not become insignificant during the time of the study. Overall, these findings provide added support for H_{4b} that the positive effect of customer–company identification on customer willingness to pay decreases at a slower rate than that of customer satisfaction.

The Role of Relative Competitive Advertising

Table 3 presents the results of the piecewise latent growth model used to assess the moderating effect of relative competitive advertising. In H_5 we suggest that relative competitive advertising negatively moderates the effect of customer satisfaction on customer loyalty and willingness to pay over time. Specifically, we propose that the decrease in the positive effect of customer satisfaction on both outcomes is stronger in times of high levels of relative competitive advertising than when relative competitive advertising is less intense. Thus, H_{5a} and H_{5b} would be supported if the difference between the effect of customer satisfaction on the latent slope factor that represents the development of the outcome under low levels of competitive advertising (Slope 2 in Table 3) and the effect of customer satisfaction on the latent slope factor capturing the development of the outcome variable when competitive advertising is more intense (Slope 1 in Table 3) is positive and significant for both outcomes (i.e., $\gamma_{LRCA} - \gamma_{HRCA} > 0$).

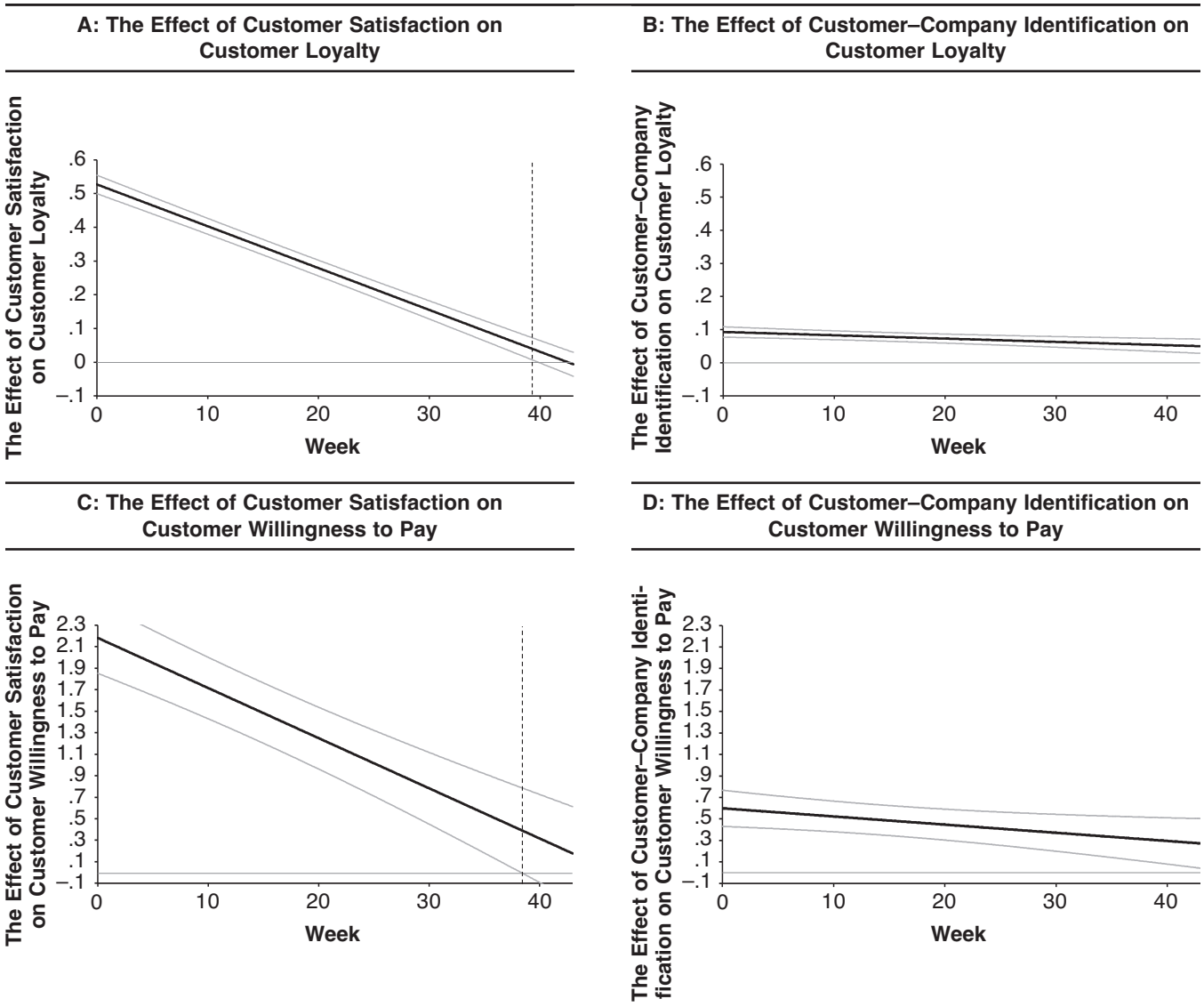
The results presented in Table 3 show that customer satisfaction indeed has a highly negative effect on the first latent slope factor of customer loyalty ($\gamma_{CS,\ HRCA}$ = –.245, p < .01) and a positive significant effect on the second

TABLE 2
Results from the Conditional Dual-Process Latent Growth Model: Main Effects, Time-Invariant Control Variables, and Model Fit

	DV = Customer Loyalty			DV = Customer Willingness to Pay		
	γ	(SE)	γ′	γ	(SE)	γ′
Predicting the Intercept of the DV						
Customer satisfaction	.527***	(.014)	.713	2.181***	(.168)	.469
Customer–company identification	.093***	(.008)	.156	.599***	(.086)	.160
Predicting the Slope of the DV						
Customer satisfaction (γ_{CS})	–.124***	(.005)	–.770	–.466***	(.060)	–.500
Customer–company identification (γ_{CCI})	–.010***	(.003)	–.076	–.076**	(.033)	–.101
Test of differences in effect sizes ($\gamma_{CS} - \gamma_{CCI}$)	–.114***	(.007)	—	–.390***	(.074)	—
Influence of Time-Invariant Control Variables on the Intercept of the DV						
Membership in focal company's FFP—status level = 0	.180***	(.044)	.097	1.110**	(.521)	.095
Membership in focal company's FFP—status level = 1	.246***	(.047)	.092	1.556***	(.540)	.092
Membership in focal company's FFP—status level = 2	.250***	(.048)	.125	1.416**	(.563)	.112
Membership in focal company's FFP—status level = 3	.307***	(.064)	.074	1.341*	(.700)	.052
Membership in FFP of major competitor 1	–.125***	(.024)	–.066	–.027	(.258)	–.002
Membership in FFP of major competitor 2	–.034	(.029)	–.012	–.009	(.292)	–.001
Membership in FFP of major competitor 3	–.069**	(.032)	–.025	–.331	(.311)	–.019
Membership in FFP of major competitor 4	–.058*	(.031)	–.021	–.983***	(.317)	–.058
Membership in FFP of major competitor 5	.017	(.037)	.005	.049	(.383)	.002
Importance of amenities offered by focal company's FFP	.037***	(.011)	.057	–.172	(.119)	–.041
Importance of FFP for booking decision	.018**	(.009)	.031	–.242**	(.097)	–.065
Number of enjoyed FFP benefits within the past three months	.031***	(.007)	.074	.099	(.069)	.038
Importance of overall travel time for booking decision	–.002	(.009)	–.002	–.042	(.107)	–.010
Distance between customer home and next hub of focal company[a]	.002	(.009)	.005	–.102	(.084)	–.034
Number of carriers available at the airport closest to the customer's home[b]	.016	(.012)	.042	–.009	(.121)	–.004
Percentage of destinations at the airport closest to the customer's home served by focal company	–.093	(.130)	–.024	.019	(1.310)	.001
Percentage of destinations at the airport closest to the customer's home served by major competitors	–.141	(.147)	–.035	–2.458*	(1.401)	–.096
Number of exclusive nonstop routes of focal company at the airport closest to the customer's home	–.009	(.015)	–.020	–.232	(.144)	–.083
Number of exclusive nonstop routes of major competitors at the airport closest to the customer's home	–.010	(.008)	–.045	.040	(.079)	.029
Primary purpose of traveling with focal company (business/leisure)	.030	(.060)	.012	.431	(.552)	.028
Age	.004***	(.001)	.053	–.018*	(.011)	–.041
Gender	–.076***	(.026)	–.038	.477**	(.241)	.038
Income	–.008	(.010)	–.012	.175*	(.106)	.044
Influence of Time-Invariant Control Variables on the Slope of the DV						
Membership in focal company's FFP—status level = 0	.170***	(.022)	.421	–.040	(.180)	–.017
Membership in focal company's FFP—status level = 1	.190***	(.022)	.324	–.050	(.185)	–.015
Membership in focal company's FFP—status level = 2	.187***	(.022)	.427	.089	(.186)	.035
Membership in focal company's FFP—status level = 3	.201***	(.026)	.222	.185	(.230)	.036
Membership in FFP of major competitor 1	.033***	(.008)	.080	.014	(.082)	.006
Membership in FFP of major competitor 2	–.002	(.009)	–.004	.145	(.090)	.042
Membership in FFP of major competitor 3	.014	(.009)	.022	.042	(.100)	.012
Membership in FFP of major competitor 4	.001	(.009)	.001	.171*	(.098)	.050
Membership in FFP of major competitor 5	.008	(.012)	.011	–.018	(.122)	–.004
Importance of amenities offered by focal company's FFP	.006*	(.004)	.045	.053	(.039)	.063
Importance of FFP for booking decision	–.006*	(.003)	–.043	.003	(.033)	.004
Number of enjoyed FFP benefits within the last three months	–.004*	(.002)	–.040	–.053**	(.021)	–.101
Importance of overall travel time for booking decision	.005	(.003)	.031	.026	(.038)	.031
Distance between customer home and next hub of focal company[a]	–.002	(.003)	–.024	.014	(.025)	.024
Number of carriers available at the airport closest to the customer's home[b]	–.006	(.004)	–.067	.005	(.036)	.010
Percentage of destinations at the airport closest to the customer's home served by focal company	.068	(.042)	.082	–.044	(.430)	–.009
Percentage of destinations at the airport closest to the customer's home served by major competitors	.042	(.044)	.047	.472	(.442)	.092
Number of exclusive nonstop routes of focal company at the airport closest to the customer's home[b]	–.002	(.004)	–.020	.035	(.046)	.062
Number of exclusive nonstop routes of major competitors at the airport closest to the customer's home[b]	.003	(.003)	.055	–.018	(.024)	–.067
Primary purpose of traveling with focal company (business/leisure)	.027*	(.015)	.051	.174	(.177)	.057
Age	–.001	(.0003)	–.029	.007**	(.003)	.079
Gender	.002	(.008)	.003	–.113	(.075)	–.045
Income	.003	(.003)	.020	.005	(.032)	.006
Model Fit						
χ^2/d.f.			3.808			
CFI			.912			
TLI			.896			
RMSEA			.020			
SRMR			.036			

*$p < .1$.
**$p < .05$.
***$p < .01$.
[a]In hundreds of kilometers.
[b]Total number divided by 10.
Notes: n = 6,930. Two-tailed tests of significance. Gender: 0 = female, 1 = male, γ = unstandardized coefficient; γ′ = standardized coefficient; DV = dependent variable. FFP = frequent flyer program. Standard errors of differences in effect sizes are based on the multivariate delta method (e.g., Bishop, Fienberg, and Holland 1975). We do not present results of time-varying control variables because of space constraints and reasons of clarity.

FIGURE 2
The Effects of Customer Satisfaction and Customer–Company Identification on Customer Loyalty and Customer Willingness to Pay Over Time: Simple Intercepts, Simple Slopes, and Regions of Significance



Notes: Outer lines illustrate .95 confidence bands; dashed line denotes the threshold where the simple slope of customer satisfaction becomes insignificant.

latent slope factor of customer loyalty ($\gamma_{CS,\,LRCA} = .051, p < .01$). The difference between both effects is positive and highly significant ($\gamma_{CS,\,LRCA} - \gamma_{CS,\,HRCA} = .296$, $p < .01$). Together, these findings suggest that the positive effect decreases rapidly in times of high levels of competitive advertising and increases in times of low levels of competitive advertising. Thus, relative competitive advertising negatively moderates the effect of customer satisfaction on customer loyalty over time, in support of H_{5a}.

Using customer willingness to pay as the dependent variable, we find that customer satisfaction has a highly significant negative effect on the first latent slope factor ($\gamma_{CS,\,HRCA} = -.879$, $p < .01$) and a positive, though nonsignificant, effect on the second latent slope factor ($\gamma_{CS,\,LRCA} = .097$, n.s.). Again, the difference in both effects is positive and highly significant ($\gamma_{CS,\,LRCA} - \gamma_{CS,\,HRCA} = .976$, $p < .01$), in support of H_{5b}'s prediction that relative competitive advertising negatively moderates the effect of customer satisfaction on customer willingness to pay over time.

In H_6 we suggest that the effects of customer–company identification on customer loyalty and willingness to pay over time are less sensitive to relative competitive advertising than that of customer satisfaction. This suggestion would be supported if the difference between the effects of customer satisfaction on the latent slope factors were larger than that of customer–company identification (i.e., $[\gamma_{CS,\,LRCA} - \gamma_{CS,\,HRCA}] - [\gamma_{CCI,\,LRCA} - \gamma_{CCI,\,HRCA}] > 0$).

As we mentioned previously, in testing H_5 we find that the differences between the effects of customer satisfaction on the latent slope factors are positive and significant (customer

TABLE 3
Results from Conditional Piecewise Latent Growth Model—Exploring the Moderating Role of Advertising Intensity: Main Effects, Time-Invariant Control Variables, and Model Fit

	DV = Customer Loyalty											DV = Customer Willingness to Pay										
	Intercept			Slope 1 (HRCA)			Slope 2 (LRCA)			Differences Across Slopes ($\gamma_{LRCA} - \gamma_{HRCA}$)		Intercept			Slope 1 (HRCA)			Slope 2 (LRCA)			Differences Across Slopes ($\gamma_{LRCA} - \gamma_{HRCA}$)	
	γ	(SE)	γ′	γ	(SE)	γ′	γ	(SE)	γ′	γ	(SE)	γ	(SE)	γ′	γ	(SE)	γ′	γ	(SE)	γ′	γ	(SE)
Main Effects																						
Customer satisfaction (γ_{CS})	.548***	(.014)	.733	−.245***	(.010)	−.762	.051***	(.010)	.413	.296***	(.018)	2.285***	(.183)	.492	−.879***	(.119)	−.502	.097	(.109)	.070	.976***	(.197)
Customer–company identification (γ_{CCI})	.072***	(.008)	.122	−.014**	(.006)	−.053	.003	(.006)	.035	.017	(.011)	.573***	(.089)	.155	−.154**	(.061)	−.110	.028	(.068)	.025	.182	(.111)
Time-Invariant Control Variables																						
Membership in focal company's FFP—status level = 0	.051	(.044)	.027	.314***	(.035)	.396	−.016	(.034)	−.054		–	1.162**	(.565)	.101	−.147	(.313)	−.034	.026	(.321)	.008		–
Membership in focal company's FFP—status level = 1	.120**	(.048)	.045	.334***	(.036)	.291	−.008	(.034)	−.019		–	1.340**	(.587)	.081	.115	(.326)	.018	−.238	(.332)	−.048		–
Membership in focal company's FFP—status level = 2	.116**	(.049)	.058	.327***	(.036)	.380	−.009	(.035)	−.026		–	1.170**	(.592)	.094	.243	(.328)	.052	−.088	(.343)	−.024		–
Membership in focal company's FFP—status level = 3	.172***	(.064)	.042	.337***	(.044)	.191	−.005	(.041)	−.008		–	1.355*	(.737)	.053	.072	(.440)	.007	.149	(.410)	.020		–
Membership in FFP of major competitor 1	−.115***	(.024)	−.060	.035**	(.015)	.043	.020	(.014)	.064		–	.104	(.281)	.009	−.079	(.157)	−.018	.061	(.150)	.017		–
Membership in FFP of major competitor 2	−.011	(.029)	−.004	−.022	(.017)	−.019	.007	(.016)	.015		–	.095	(.327)	.006	.061	(.190)	.010	.189	(.161)	.037		–
Membership in FFP of major competitor 3	−.088***	(.033)	−.031	.027	(.019)	.022	.004	(.017)	.008		–	−.607*	(.336)	−.035	.309	(.188)	.047	−.183	(.167)	−.035		–
Membership in FFP of major competitor 4	−.051	(.031)	−.019	.001	(.018)	.001	−.006	(.017)	−.014		–	−.988***	(.342)	−.059	.203	(.216)	.032	.123	(.179)	.025		–
Membership in FFP of major competitor 5	.0004	(.040)	.0001	.038	(.025)	.027	−.020	(.021)	−.038		–	.007	(.408)	.0003	.059	(.240)	.008	−.098	(.228)	−.016		–
Importance of amenities offered by focal company's FFP	.040***	(.011)	.061	−.0002	(.007)	−.001	.016**	(.006)	.144		–	−.187	(.133)	−.046	.057	(.077)	.037	.060	(.066)	.049		–
Importance of FFP for booking decision	.027***	(.009)	.046	−.013**	(.006)	−.050	.002	(.006)	.019		–	−.227**	(.106)	−.062	.003	(.069)	.002	−.001	(.069)	−.0004		–
Number of enjoyed FFP benefits within the last three months	.033***	(.006)	.079	−.003	(.004)	−.018	−.002	(.004)	−.026		–	.177**	(.074)	.069	−.125***	(.042)	−.129	.013	(.041)	.017		–
Importance of overall travel time for booking decision	.008	(.009)	.012	−.004	(.006)	−.014	.012*	(.006)	.110		–	−.006	(.115)	−.001	−.001	(.067)	−.001	.041	(.071)	.033		–
Distance between customer home and next hub of focal company[a]	.005	(.009)	.010	−.003	(.006)	−.013	−.004	(.005)	−.047		–	−.209**	(.093)	−.072	.131**	(.058)	.119	−.084*	(.046)	−.096		–
Number of carriers available at the airport closest to the customer's home[b]	.022*	(.012)	.059	−.015**	(.007)	−.092	.004	(.006)	.067		–	−.125	(.133)	−.054	.112	(.074)	.128	−.076	(.069)	−.109		–
Percentage of destinations at the airport closest to the customer's home served by focal company	−.082	(.134)	−.022	.066	(.083)	.040	.036	(.069)	.058		–	−.034	(1.362)	−.001	.053	(.791)	.006	−.257	(.830)	−.036		–

TABLE 3
Continued

	DV = Customer Loyalty											DV = Customer Willingness to Pay										
	Intercept			Slope 1 (HRCA)			Slope 2 (LRCA)			Differences Across Slopes ($\gamma_{LRCA} - \gamma_{HRCA}$)		Intercept			Slope 1 (HRCA)			Slope 2 (LRCA)			Differences Across Slopes ($\gamma_{LRCA} - \gamma_{HRCA}$)	
	γ	(SE)	γ′	γ	(SE)	γ′	γ	(SE)	γ′	γ	(SE)	γ	(SE)	γ′	γ	(SE)	γ′	γ	(SE)	γ′	γ	(SE)
Percentage of destinations at the airport closest to the customer's home served by major competitors	–.152	(.156)	–.038	.073	(.091)	.042	.021	(.073)	.032	–		–2.627	(1.603)	–.105	.668	(.917)	.071	.372	(.752)	.050	–	
Number of exclusive nonstop routes of focal company at the airport closest to the customer's home[b]	–.012	(.016)	–.026	.006	(.009)	.029	–.008	(.007)	–.110	–		–.222	(.162)	–.080	.041	(.095)	.039	.033	(.079)	.040	–	
Number of exclusive nonstop routes of major competitors at the airport closest to the customer's home[b]	–.013	(.008)	–.060	.008	(.005)	.083	–.003	(.004)	–.073	–		.124	(.087)	.092	–.099*	(.056)	–.195	.042	(.047)	.105	–	
Primary purpose of traveling with focal company (business/leisure)	.009	(.047)	.004	.028	(.027)	.027	.044*	(.025)	.110	–		.455	(.564)	.030	.094	(.320)	.017	.248	(.302)	.055	–	
Age	.003***	(.001)	.047	–.0002	(.001)	–.007	–.0003	(.001)	–.024	–		–.021*	(.012)	–.048	.009	(.006)	.052	.007	(.006)	.053	–	
Gender	–.063**	(.025)	–.032	–.009	(.015)	–.011	.010	(.014)	.030	–		.414	(.274)	.033	–.045	(.162)	–.010	–.163	(.135)	–.044	–	
Income	–.007	(.010)	–.011	.004	(.006)	.015	–.001	(.005)	–.009	–		.208*	(.116)	.053	–.011	(.062)	–.007	–.001	(.055)	–.001	–	
Model Fit																						
χ^2/d.f.										2.198												
CFI										.965												
TLI										.956												
RMSEA										.013												
SRMR										.025												

*$p < .1$.
**$p < .05$.
***$p < .01$.
[a]In hundreds of km.
[b]Total number divided by 10.
Notes: n = 6,930. Two-tailed tests of significance. Gender: 0 = female, 1 = male. γ = unstandardized coefficient; γ′ = standardized coefficient; DV = dependent variable; HRCA = high relative competitive advertising; LRCA = low relative competitive advertising. FFP = frequent flyer program. Standard errors of differences in effect sizes are based on the multivariate delta method (e.g., Bishop, Fienberg, and Holland 1975). We do not present results of time-varying control variables because of space constraints and reasons of clarity.

loyalty: $\gamma_{CS, LRCA} - \gamma_{CS, HRCA} = .296$, $p < .01$; customer willingness to pay: $\gamma_{CS, LRCA} - \gamma_{CS, HRCA} = .976$, $p < .01$). The differences between the effects of customer–company identification on the latent slope factors are also positive, but they are insignificant (customer loyalty: $\gamma_{CCI, LRCA} - \gamma_{CCI, HRCA} = .017$, n.s.; customer willingness to pay: $\gamma_{CCI, LRCA} - \gamma_{CCI, HRCA} = .182$, n.s.). These results offer initial support for H_6. An additional test to determine whether the differences between the effects of customer satisfaction on the latent slope factors are significantly larger than the differences between the effects of customer–company identification yields further support for our prediction (customer loyalty: $[\gamma_{CS, LRCA} - \gamma_{CS, HRCA}] - [\gamma_{CCI, LRCA} - \gamma_{CCI, HRCA}] = .279$, $p < .01$; customer willingness to pay: $[\gamma_{CS, LRCA} - \gamma_{CS, HRCA}] - [\gamma_{CCI, LRCA} - \gamma_{CCI, HRCA}] = .794$, $p < .01$). Overall, these findings suggest that the effects of customer–company identification on both outcomes over time are less sensitive to competitive advertising than the effects of customer satisfaction, thereby implying that the negative moderating effect of relative competitive advertising is stronger for customer satisfaction than for customer–company identification. Thus, H_6 is supported.

Additional Analysis

Interrelationships between customer satisfaction and customer–company identification. To test whether potential interrelationships between customer satisfaction and customer–company identification affect our results and conclusions, we conducted two additional analyses. First, we tested for interaction effects between customer satisfaction and customer–company identification and the latent intercept and slope factors of customer loyalty and willingness to pay. Beyond offering further insights about the robustness of our findings, such an analysis also helps explore the complementary function of customer–company identification. For example, it might be suggested that customer–company identification may strengthen the effectiveness of customer satisfaction. A possible competing suggestion would be that customer–company identification is especially important if current customer satisfaction is low.

The results of the additional analysis reveal that including the interaction effects does not change the tests of our hypotheses, thus underscoring the robustness of our findings. Furthermore, our results show a small but significant negative interaction effect of customer satisfaction and customer–company identification and the latent intercept factor of customer loyalty ($\gamma = -.032$, $p < .01$).[6] This result supports the second suggestion that customer–company identification can be especially helpful to keep customers loyal when current satisfaction is low. This finding underscores the complementary function of customer–company identification and is in line with previous research that highlights the benefits of customer–company identification when customers are confronted with negative information about the company (Einwiller et al. 2006). We did not find the other interaction effects to be significant.

To further assess potential cross-temporal interrelationships between customer satisfaction and customer–company identification, we reestimated the main effects model including an autoregressive, cross-lagged structure that contains the lagged and the cross-lagged effects between customer satisfaction and customer–company identification (i.e., $CS_t \rightarrow CS_{t+1}$; $CCI_t \rightarrow CCI_{t+1}$; $CS_t \rightarrow CCI_{t+1}$; $CCI_t \rightarrow CS_{t+1}$; $t = 0, ..., 8$). This analysis is helpful in offering additional evidence about the robustness of our findings and additionally offers new insights about the direction of the link between customer satisfaction and customer–company identification.

Again, the results of the additional analysis show that tests of the proposed hypotheses remained stable. Furthermore, the results reveal positive, significant lagged ($\gamma_{CS} = .679$, $p < .01$; $\gamma_{CCI} = .776$, $p < .01$) and cross-lagged effects for customer satisfaction and customer–company identification ($\gamma_{CS \rightarrow CCI} = .105$, $p < .01$; $\gamma_{CCI \rightarrow CS} = .100$, $p < .01$).[7] These results imply that the effects of customer satisfaction and customer–company identification also affect the outcomes through the respective other relationship construct. However, given the rather small and almost equal effect sizes of the cross-lagged effects, the positive interrelationship between customer satisfaction and customer–company identification does not substantially affect the conclusion of our findings.

Common method bias. Whereas our models are based on data from three different data sources (i.e., customer data, company data, and data from Nielsen Media Research), information about the focal constructs (customer satisfaction, customer–company identification, customer loyalty, and willingness to pay) are based on customer responses. Thus, it is important to ensure that our results are not biased by common method variance. We therefore reestimated the main effects model including an unmeasured latent method factor (e.g., Podsakoff, MacKenzie, and Podsakoff 2012). The results show that tests of hypotheses and conclusions remain stable when the latent method factor is included, indicating that common method variance is not a major issue in our data. Furthermore, the highly plausible and significantly positive effects of customers' membership and status in the FFP (based on objective company data) on the latent intercept factors of customer loyalty and customer willingness to pay (based on customer responses) offer further indications for the validity of our outcome measures. In summary, these findings reveal that common method bias is not a threat to the results and conclusions of this study.

Respondent attrition. To assess whether respondent attrition affects our results, we estimated two additional models in which we explicitly consider respondent dropout. Specifically, we estimated a pattern-mixture model (Little 1995) for both the main effects model and the piecewise latent growth model. In these models, we employed a pattern-

[6]A simple slope analysis reveals that the positive effect of customer–company identification on the latent slope factor remains positive and significant under each condition (low, mean, and high) of customer satisfaction.

[7]We constrained structurally identical effects (i.e., lagged and cross-lagged effects across time) to be equal to ease interpretation.

mixture approach in which the latent factors of the substantive growth model may vary as a function of a set of dummy variables that reflect the potential dropout occasion (Muthén et al. 2011). Thus, the pattern-mixture models are informative if respondent attrition at a specific measurement occasion affects the developmental trajectories of the latent growth model. Furthermore, the pattern-mixture models offer results for the parameters of the latent growth model, which are corrected for potential bias due to respondent attrition (Enders 2011).

The results of the pattern-mixture models appear in Table W3 and Table W4 of the Web Appendix. For both models, they show that in a few cases, respondent attrition affects the latent intercept or slope factors of the latent growth models. However, most importantly, these influences do not substantially affect the models' results and thus do not affect our tests of the hypotheses. Overall, the results of the pattern-mixture models show that respondent attrition does not substantially affect our results, which highlights the robustness of our findings.

Discussion

The main purpose of this study is to offer a comparative view on two critical relationship constructs—customer satisfaction and customer–company identification—and their ability to drive important customer outcomes over time. Drawing on our theorization about how the concepts differ, we investigated their short- and long-term effectiveness in driving customer loyalty and customer willingness to pay. Moreover, because the degree to which customers' evaluations of a company and its offerings translate into company-favoring behaviors may depend on the competitive environment (Jones and Sasser 1995), we also explored how different levels of competitive advertising influence the effectiveness of customer satisfaction and customer–company identification to drive customer loyalty and willingness to pay over time.

The results of the study support our predictions in that both concepts have a positive initial effect on customer loyalty and willingness to pay. However, comparing these initial effects between both concepts shows that the initial effects of customer satisfaction are substantially greater than the initial effects of customer–company identification. This finding is of importance because the initial effects determine the range of the total effects of customer satisfaction and customer–company identification on customer loyalty and willingness to pay. Turning to the dynamics of the effects of both concepts, our results show that the strong initial effects of customer satisfaction erode rapidly and thus become insignificant within the time frame of the study. In contrast, the positive effects of customer–company identification on both outcomes are more stable because they decrease much more slowly and therefore do not become insignificant during the study. In summary, these findings reveal a notable pattern of the total effects of customer satisfaction and customer–company identification and thus of their effectiveness in driving important customer outcomes over time. Specifically, our findings imply that, driven by the strong initial effects, customer satisfaction is more effective in the short run.[8] In contrast, because of the stability of its positive effects, customer–company identification is more effective at later points in time, when the positive effects of customer satisfaction have already vanished.

With respect to the role of competition in influencing the long-term effectiveness of customer satisfaction and customer–company identification to drive important customer outcomes over time, the findings also suggest that customer satisfaction is more sensitive than customer–company identification to competitive actions such as relative competitive advertising. Remarkably, the findings show that the positive effects of customer satisfaction decrease extremely rapidly in times of high levels of relative competitive advertising but do not change or even increase in times of low levels of competitive advertising. In contrast, we found that the positive effects of customer–company identification are not substantially affected by the intensity of advertising competition.

Overall, the study provides insights about the time- and competition-related power of customer satisfaction and customer–company identification to drive important customer outcomes. We offer indications about the effectiveness and the limitations of customer satisfaction and show how and when customer–company identification can complement the benefits of customer satisfaction. Thus, the study contributes in multiple important ways to research on customer relationship management, customer satisfaction, and customer–company identification. Furthermore, our findings have important implications for marketing practice.

Theoretical Implications

The current study contributes to marketing research in several ways. First, it adds to the customer relationship management literature by comparatively analyzing the long-term effectiveness of customer satisfaction and customer–company identification, two of the most important relationship constructs. In recent decades, marketing research has addressed the clear benefits that companies receive from highly satisfied customers (Luo and Homburg 2007; Mittal and Kamakura 2001; Szymanski and Henard 2001) but has also repeatedly mentioned the potential limitations that customer satisfaction might impose on important customer outcomes (Jones and Sasser 1995; Keiningham and Vavra 2001; Reichheld 1996). The concept of customer–company identification has emerged more or less independently from this research stream (Ahearne, Bhattacharya, and Gruen 2005; Bhattacharya and Sen 2003). Because customer–company identification differs from the concept of customer satisfaction on several central dimensions, questions arise as to whether and how customer–company identification can complement customer satisfaction by compensating for its limitations. The current study addresses these neglected research questions and shows that customer–

[8]Specifically, the overall positive effects of customer satisfaction are significantly stronger than those of customer–company identification until week 34 for customer loyalty as the dependent variable and until week 28 for customer willingness to pay as the dependent variable (as indicated by nonoverlapping confidence bands).

company identification is an important complement to customer satisfaction in that it preserves customer loyalty and willingness to pay over a long period of time, especially if competition is intense. Overall, our findings improve the theoretical understanding of the similarities and differences between the concepts of customer satisfaction and customer–company identification and the consequences of these differences in terms of their short- and long-term ability to drive important customer outcomes.

Second, the study contributes to customer relationship literature by offering new insights into the complex cross-temporal interrelationship between customer satisfaction and customer–company identification, which may further clarify the link between both relationship concepts. In this regard, previous research has mainly argued that customer satisfaction leads to stronger customer identification (e.g., Bhattacharya, Rao, and Glynn 1995; Boenigk and Helmig 2013). However, there are also good reasons to assume that identified customers may perceive the company and its performance more favorably so that stronger identification also leads to higher levels of customer satisfaction (for an example from an organizational context, see Van Dick et al. 2004). Our results show that both lines of reasoning are correct and thus imply that the link between customer satisfaction and customer–company identification is not unidirectional but bidirectional.

Third, the study contributes to research on customer satisfaction. Although some studies have analyzed the consequences in a longitudinal design (see the bottom of Table 1), most studies have focused on either the financial performance consequences of customer satisfaction on the aggregate firm level (e.g., Aksoy et al. 2008, Luo, Homburg, and Wieseke 2010) or the effect of customer satisfaction on an individual-level customer outcome in two consecutive periods (i.e., CS_t on $Outcome_{t+1}$; Bolton and Lemon 1999; LaBarbera and Mazursky 1983). Consequently, the effectiveness of customer satisfaction to drive important outcomes on the customer level over multiple periods of time (and measurement occasions) is less clear (Kumar, Pozza, and Ganesh 2013). In the current investigation, we address this research gap and offer a differentiated picture of the short- and long-term consequences of customer satisfaction. Specifically, we advance research by showing the power of customer satisfaction in the short run as well as the decline of its power in the long run. In this way, the study also helps overcome potential disparities between research that emphasizes the power of customer satisfaction and studies that highlight its limitations, thus contributing to a better and more differentiated theoretical understanding of customer satisfaction's effectiveness.

Fourth, the study contributes to research on customer satisfaction by exploring the boundary conditions of customer satisfaction's effectiveness. Specifically, we focus on the important but underresearched role of competitive actions in influencing the effectiveness of customer satisfaction. Previous research in this field has found, using aggregated data, that competition weakens the relationship between customer satisfaction and firm-level performance outcomes (Anderson, Fornell, and Mazvancheryl 2004; Gruca and Rego 2005). Our study expands the understanding of these relationships by exploring how competitive actions such as competitive advertising influence the effectiveness of customer satisfaction at the individual level. Specifically, we show that competitive advertising negatively influences customer satisfaction's ability to drive important customer outcomes such as customer loyalty and willingness to pay over time.

Fifth, the study advances research on customer–company identification. Although previous research has repeatedly shown the positive short-term consequences of customer–company identification (Homburg, Wieseke, and Hoyer 2009; Lichtenstein, Netemeyer, and Maxham 2010; Netemeyer, Heilman, and Maxham 2012), research examining the long-term consequences is extremely scarce, which is surprising because the theoretical roots in social identity theory imply that engendering customer–company identification especially pays off in the long run. A rare exception is Lam et al. (2010), who explore the positive effect of customer–brand identification on customer switching behavior when a radically new brand is introduced. We extend this research by showing that the positive long-term effects of customer–company identification are not limited to situations in which a new brand is introduced. Specifically, we show that the power of customer–company identification to influence important customer outcomes is especially based on the stability of its positive effects over time. Thus, our study bolsters theoretical foundations that suggest that identification is especially effective in the long run, and our findings add to the understanding of the long-term consequences of customer–company identification.

Sixth, the study also contributes to research on customer–company identification by investigating how the intensity of competition influences its effectiveness. Specifically, our study indicates that the effectiveness of customer–company identification in driving important customer outcomes over time is far less sensitive to competitive actions (here, competitive advertising) than other relationship constructs (here, customer satisfaction). These findings deepen the understanding of the long-term effectiveness of customer–company identification by offering new insights into the power of customer–company identification to immunize customers against external, competitive threats.

Seventh, we offer novel insights into the effectiveness of loyalty programs. Previous research analyzing the effectiveness of loyalty programs has found mixed results (for an overview, see, e.g., Liu and Yang 2009). Some of these divergences in existing findings have been attributed "to a lack of considering the market environment in which loyalty programs operate" (Liu and Yang 2009, p. 93). Our study offers some new insights into how the market environment affects loyalty programs' effectiveness by showing how competitive actions such as competitive advertising influence the success of loyalty programs to maintain customer loyalty over time. The results of our analysis indicate that the effectiveness of a loyalty program to keep customers loyal is significantly higher when competitive advertising levels are high than when they are low. These

findings provide new insights that may be important for evaluating the overall effectiveness of loyalty programs.

Managerial Implications

In addition to providing theoretical implications, this research also has important implications for managers and firms. First, our findings regarding the differentiated and complementary positive effects of customer satisfaction and customer–company identification imply that managers should not solely concentrate on either increasing customer satisfaction or engendering customer–company identification but should try to augment both to keep customers loyal and willing to pay high(er) prices.

To benefit from the strong short-term effectiveness of customer satisfaction, firms should continually work to improve the performance of their products and services because customer satisfaction is determined by customers' comparisons between their expectations and their perceptions of performance. Furthermore, firms should be careful not to overpromise to avoid undermining customer satisfaction by exaggerated customer expectations (Szymanski and Henard 2001).

To benefit from the long-term effectiveness of customers' identification with the company, firms must go beyond satisfying customers' basic utilitarian needs and develop a company identity that enables customers to fulfill their higher-order self-definitional needs (Bhattacharya and Sen 2003). Specifically, companies may address customers' self-definitional needs and engender or strengthen customer–company identification in several ways. First, knowing and responding to central positive values that are important for many customers (e.g., being socially responsible; Lichtenstein, Drumwright, and Braig 2004) can help make a company an attractive target for customers to identify with.[9] Second, investments in image campaigns may help increase the company's prestige, thereby enabling customers to enhance their selves by associating with the company. Third, embedding customers in company-derived networks by, for example, engaging them in company decision making (e.g., decisions about new products; Fuchs, Prandelli, and Schreier 2010) or organizing customer events can help strengthen their self-definitional bonds with the company. Fourth, highly identified frontline employees have been shown to be very effective communicators of the virtues of a company identity, thereby fostering customer–company identification (e.g., Lichtenstein, Netemeyer, and Maxham 2010).

Although our findings underscore the complementarity between the benefits of customer satisfaction and customer–company identification, it is also of managerial importance to recognize the differences in their temporal effectiveness. In the short run, satisfying customers' functional, utilitarian needs is most effective at keeping them loyal and willing to pay high prices. However, in the long run, the importance of also offering customers the possibility to fulfill higher-order self-definitional needs (resulting in a strong identification with the company) increases. These discrepancies in the temporal effectiveness may be relevant if, for example, differences in purchase frequencies exist (due to the type of product/service category or the type of customer). In summary, our findings do not imply that managers should overemphasize one relationship concept at the cost of disregarding the other (because both concepts are also interrelated) but rather that managers should recognize the differences in their temporal effectiveness to drive customer loyalty and willingness to pay over time.

A further implication from the study's findings refers to measuring not only customer satisfaction but also customer–company identification and the potential for customer–company identification in customer surveys. Although companies typically collect data on customer satisfaction on a regular basis (e.g., the American Customer Satisfaction Index tracks customer satisfaction for nearly 200 *Fortune* 500 companies; Anderson, Fornell, and Mazvancheryl 2004; see also Morgan and Rego 2006), to the best of our knowledge, information on customer–company identification is rarely considered. Thus, including measures of customer–company identification and the potential for engendering customer–company identification in regular customer surveys may offer companies additional insights into their customer base and their current ability to create "the deep, committed, and meaningful relationships" (Bhattacharya and Sen 2003, p. 76) with their customers they are often seeking.

Furthermore, information about customer–company identification and the potential to engender customer–company identification may enable firms to develop criteria that help them identify customer segments that are (un)likely to identify with the company. Identifying such segments may then be helpful in improving the effectiveness of (personalized) corporate communication. For example, information in mailings or newsletters to customers who are unlikely to identify with the company may focus on the improvements of the product/service, whereas customers who are more likely to identify with the company should receive additional information that outlines the attractiveness of the company's identity and addresses customers' self-definitional needs (e.g., by outlining the positive values the company stands for, noting its high reputation). Moreover, knowledge about customers' identification with the company is of high relevance in times of tough competition (e.g., when competitive advertising is strong). Because our findings indicate that the beneficial effects of customer satisfaction erode very rapidly when competition is high, a company can make special offers to customers who do not identify with the company to keep them loyal in such times (e.g., offering discounts or add-on products/services). Moreover, given the temporal differential effects of customer satisfaction and customer–company identification, it may be fruitful to consider information on customer–company identification and the potential of customer–company identification in addition to the information on customer satisfaction for customer segmentation and valuation approaches.

[9]However, companies that communicate specific values to engender customer–company identification should be aware that values that are important for some customers may be irrelevant or even repellent for other customers.

The study also offers important implications regarding the competition for customers. One major implication of our results of the contingent effects of relative competitive advertising is that fostering customer–company identification is an effective way for firms to defend their customer base against competitive attacks. Specifically, our findings indicate that highly identified customers are more likely to remain loyal and be willing to pay higher prices even in times of intense competitive advertising. In contrast, customers who are merely satisfied may be more vulnerable to intense advertising competition. This implication is especially important for smaller, financially weaker firms because they may have more difficulty competing for customers through advertising.

In addition, companies may take advantage of the study's results that the beneficial effects of customer satisfaction erode quickly when competition in the form of competitive advertising is high. These results indicate that companies may entice satisfied but not identified customers from competitors by increasing their own advertising spending. Moreover, because information about competitors' advertising spending is often available and because companies are increasingly able to personalize and target their advertisements (e.g., by using information consumers provide in social networks; Lambrecht and Tucker 2013; Tucker 2014), companies may specifically target customers from competitors with low advertising spending (as compared with total advertising spending). This targeting may be promising because satisfied but not identified customers from such competitors may be more prone to switch to another company.

Limitations and Directions for Further Research

This study has limitations that can provide opportunities for further research. Although analyzing the short- and long-term effectiveness of customer satisfaction and customer–company identification on a longitudinal data set from a single company enables us to hold company- and industry-specific factors constant (e.g., Korschun, Bhattacharya, and Swain 2014) and although our results from the airline industry may be generalizable to other competitive service industries with intense customer–frontline employee interaction (e.g., restaurants, hotels, retailing banking, insurance services, medical services, tourism), further research is needed that replicates our results in other contexts to ensure the generalizability of our findings to different industries. This may also be of importance because the likelihood that customers identify with a company may vary between both companies and industries, which might influence the results. For example, we would expect our effects referring to the long-term effectiveness of customer–company identification to be somewhat muted (strengthened) in contexts in which strong customer–company identification is less (more) likely. Overall, we agree with previous research that insights into complex phenomena of customer–company identification will not be gained on the basis of any single study but will only be gained over time as a result of multiple studies (Lichtenstein, Netemeyer, and Maxham 2010).

Another opportunity for further research pertains to the level of analysis. In this study, we analyzed the short- and long-term effectiveness of customer satisfaction and customer–company identification to drive important customer outcomes over time at the individual level. However, it might be fruitful for future studies to explore the effectiveness of customer satisfaction and identification at the aggregate firm level. For example, previous research at the interface of marketing and finance has shown that customer satisfaction may increase firm value and stock market performance (e.g., Aksoy et al. 2008; Anderson, Fornell, and Mazvancheryl 2004; Fornell et al. 2006). However, to the best of our knowledge, research is silent about the potential positive effects of customer–company identification on such outcomes. Given the findings of previous research on the effects of customer–company identification on performance outcomes (e.g., customer spending; Lichtenstein, Netemeyer, and Maxham 2010), it might be worthwhile to investigate the relationship between customer–company identification and financial performance outcomes at the firm level (e.g., stock performance) and compare the results with those for customer satisfaction. This would offer new insights into what firms can do to strengthen their long-term financial performance.

Moreover, exploring additional boundary conditions of the effectiveness of customer satisfaction and customer–company identification might provide a fruitful avenue for further research. In providing first insights into such boundary conditions, we concentrated on exploring the differences in the effectiveness of customer satisfaction and customer–company identification in times of high and low competitive advertising. However, it might be fruitful to explore further boundary conditions that may affect the effectiveness of one or both relationship concepts. For example, it could be worthwhile to investigate how market or industry characteristics such as competitive dynamism (e.g., frequency of new competitors entering the market) or frequency of product/service innovations influence the effectiveness of both relationship concepts.

Relatedly, it might be useful to comparatively investigate the effectiveness of both concepts in light of critical incidents such as service/product failures or price increases. Although some first insights exist regarding how such critical incidents influence the effectiveness of customer satisfaction (e.g., Van Doorn and Verhoef 2008; Homburg, Koschate, and Hoyer 2005a), extant research has largely neglected how these incidents influence the effectiveness of customer–company identification. Offering new comparative insights into how previous customer satisfaction and customer–company identification might influence customer reactions to positive and negative critical incidents could help create a more holistic view about the differences in the effectiveness of both relationship constructs.

Moreover, it might be fruitful to explore potential threats to the effectiveness of customer–company identification. In analyzing the long-term effectiveness of customer satisfaction and customer–company identification, we found that customer–company identification is effective in driving long-term loyalty. However, situations might exist

in which customers who once strongly identified with the company then switch (voluntarily) to one of its competitors (e.g., when confronted with extreme negative information about the company; Einwiller et al. 2006). Further research about potential threats that undermine the effectiveness of customer–company identification (e.g., corporate scandals, mergers) and how companies should react to such threats to mitigate potential negative consequences could offer new insights into how companies can successfully manage customer–company identification.

Finally, further investigations of the complex interrelationship between customer satisfaction and customer–company identification could provide an additional promising avenue for research. Although our additional analyses offer first insights into this complex interrelationship by analyzing the interactive and cross-lagged effects between customer satisfaction and customer–company identification, further research that explores this interrelationship in more depth would contribute to a more holistic understanding of the connection between these central relationship marketing constructs.

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Web Appendix

Footprints in the Sands of Time: A Comparative Analysis of the Effectiveness of Customer Satisfaction and Customer–Company Identification Over Time

Till Haumann, Benjamin Quaiser, Jan Wieseke, and Mario Rese

TABLE W1
Measurement Scales

Measures of Core Constructs

Customer Satisfaction
Based on Homburg, Koschate, and Hoyer (2006)

1. All in all, I am very satisfied with [company name].[a)]
2. [company name] compares to an ideal airline.[a)]
3. Overall, how satisfied are you with [company name]?[b)]

Customer–Company Identification
Based on Homburg, Wieseke, and Hoyer (2009) and Mael and Ashforth (1992)

1. When someone criticizes [company name], it feels like a personal insult.[a)]
2. I am very interested in what others think about [company name].[a)]
3. When I talk about [company name], I usually say "we" rather than "they."[a)]
4. [company name]s' successes are my successes.[a)]
5. When someone praises [company name], it feels like a personal compliment.[a)]
6. If a story in the media criticized [company name], I would feel embarrassed.[a)]

Customer Loyalty
Based on Zeithaml, Berry, and Parasuraman (1996)

1. How likely are you to recommend [company name] to friends and relatives.[c)]
2. How likely are you to book [company name] again?[c)]
3. Overall, I am a loyal customer of [company name].[a)]

Customers' Willingness to Pay
Fornell et al. (2006)

1a. How much can [company name] raise its prices before you would definitely not choose to book [company name] again? (given that the customer has indicated he or she is likely to repurchase).[d)]
1b. How much has [company name] to lower its prices before you would definitely choose to book [company name] again? (given that the customer has indicated he or she is unlikely to repurchase).[d)]

Anchors: [a)] 1 = "strongly disagree" and 7 = "strongly agree"; [b)] 1 = "very dissatisfied" and 7 = "very satisfyied"; [c)] 1 = "not at all likely" and 7 = "extremely likely"; [d)] 1 = "0 %" and 12 = "more than 55%" (percentage values were used in the analyses).

TABLE W2
Means, Standard Deviations, and Intercorrelation Matrix of Core Constructs

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
1. CS (t = 0)	(.913)																																			
2. CS (t = 1)	.615**	(.920)																																		
3. CS (t = 2)	.600**	.692**	(.917)																																	
4. CS (t = 3)	.620**	.670**	.714**	(.917)																																
5. CS (t = 4)	.591**	.626**	.644**	.697**	(.925)																															
6. CS (t = 5)	.561**	.612**	.611**	.661**	.746**	(.923)																														
7. CS (t = 6)	.552**	.598**	.603**	.643**	.690**	.743**	(.921)																													
8. CS (t = 7)	.570**	.625**	.630**	.690**	.700**	.744**	.730**	(.916)																												
9. CS (t = 8)	.555**	.604**	.598**	.627**	.643**	.682**	.715**	.756**	(.930)																											
10. CCI (t = 0)	.445**	.398**	.425**	.413**	.406**	.386**	.346**	.386**	.348**	(.923)																										
11. CCI (t = 1)	.436**	.469**	.466**	.438**	.415**	.411**	.381**	.405**	.349**	.777**	(.930)																									
12. CCI (t = 2)	.408**	.439**	.476**	.447**	.440**	.439**	.404**	.425**	.402**	.774**	.805**	(.938)																								
13. CCI (t = 3)	.411**	.427**	.448**	.465**	.423**	.418**	.403**	.425**	.403**	.766**	.801**	.827**	(.939)																							
14. CCI (t = 4)	.404**	.399**	.431**	.454**	.489**	.432**	.432**	.439**	.410**	.753**	.771**	.815**	.836**	(.943)																						
15. CCI (t = 5)	.426**	.405**	.443**	.455**	.485**	.507**	.478**	.488**	.428**	.744**	.779**	.806**	.832**	.847**	(.944)																					
16. CCI (t = 6)	.396**	.398**	.453**	.451**	.469**	.501**	.490**	.500**	.449**	.740**	.774**	.810**	.833**	.838**	.864**	(.945)																				
17. CCI (t = 7)	.379**	.401**	.433**	.457**	.449**	.486**	.447**	.499**	.445**	.721**	.755**	.791**	.805**	.820**	.841**	.862**	(.944)																			
18. CCI (t = 8)	.389**	.406**	.428**	.442**	.454**	.464**	.475**	.499**	.503**	.723**	.748**	.788**	.811**	.816**	.837**	.856**	.873**	(.947)																		
19. LOY (t = 0)	.747**	.530**	.557**	.562**	.495**	.477**	.492**	.501**	.496**	.429**	.419**	.394**	.384**	.376**	.390**	.371**	.352**	.367**	(.773)																	
20. LOY(t = 1)	.571**	.766**	.625**	.611**	.537**	.526**	.526**	.553**	.546**	.410**	.458**	.437**	.428**	.415**	.417**	.406**	.408**	.404**	.686**	(.780)																
21. LOY(t = 2)	.500**	.598**	.779**	.620**	.541**	.522**	.526**	.535**	.555**	.398**	.415**	.427**	.397**	.407**	.401**	.415**	.398**	.391**	.648**	.756**	(.801)															
22. LOY(t = 3)	.516**	.558**	.614**	.762**	.584**	.551**	.545**	.587**	.553**	.372**	.409**	.412**	.428**	.408**	.406**	.405**	.408**	.402**	.644**	.717**	.790**	(.801)														
23. LOY(t = 4)	.482**	.537**	.528**	.594**	.760**	.612**	.552**	.597**	.534**	.346**	.355**	.366**	.363**	.398**	.394**	.409**	.372**	.374**	.612**	.700**	.802**	.795**	(.788)													
24. LOY(t = 5)	.442**	.507**	.506**	.576**	.612**	.777**	.625**	.629**	.610**	.335**	.349**	.377**	.367**	.377**	.430**	.414**	.390**	.386**	.562**	.623**	.728**	.771**	.803**	(.805)												
25. LOY(t = 6)	.454**	.496**	.506**	.549**	.509**	.612**	.770**	.633**	.629**	.318**	.327**	.357**	.366**	.366**	.392**	.420**	.384**	.398**	.589**	.640**	.722**	.764**	.774**	.831**	(.807)											
26. LOY(t = 7)	.466**	.510**	.524**	.571**	.542**	.601**	.621**	.774**	.680**	.355**	.362**	.376**	.383**	.404**	.431**	.433**	.420**	.433**	.596**	.654**	.732**	.766**	.775**	.808**	.857**	(.800)										
27. LOY(t = 8)	.548**	.502**	.521**	.566**	.523**	.548**	.589**	.666**	.738**	.369**	.348**	.389**	.367**	.394**	.402**	.415**	.395**	.446**	.727**	.657**	.744**	.759**	.766**	.766**	.798**	.846**	(.817)									
28. WTP (t = 0)	.378**	.298**	.303**	.293**	.262**	.245**	.234**	.266**	.228**	.240**	.247**	.231**	.232**	.207**	.227**	.211**	.202**	.199**	.454**	.332**	.310**	.303**	.263**	.255**	.275**	.292**	.343**	–								
29. WTP (t = 1)	.292**	.407**	.383**	.337**	.323**	.327**	.284**	.293**	.299**	.247**	.278**	.268**	.256**	.245**	.266**	.252**	.255**	.261**	.295**	.462**	.419**	.372**	.384**	.353**	.324**	.357**	.336**	.428**	–							
30. WTP (t = 2)	.272**	.369**	.449**	.375**	.311**	.296**	.297**	.296**	.299**	.209**	.245**	.264**	.250**	.257**	.256**	.258**	.257**	.231**	.309**	.394**	.515**	.395**	.378**	.315**	.332**	.326**	.334**	.454**	.576**	–						
31. WTP (t = 3)	.288**	.320**	.357**	.427**	.350**	.306**	.266**	.315**	.280**	.215**	.226**	.240**	.259**	.242**	.242**	.244**	.236**	.236**	.312**	.356**	.395**	.501**	.378**	.340**	.307**	.338**	.338**	.441**	.551**	.621**	–					
32. WTP (t = 4)	.313**	.326**	.321**	.333**	.440**	.367**	.322**	.375**	.304**	.241**	.253**	.265**	.270**	.284**	.279**	.294**	.260**	.258**	.321**	.338**	.349**	.352**	.502**	.401**	.340**	.367**	.335**	.404**	.544**	.570**	.620**	–				
33. WTP (t = 5)	.219**	.279**	.267**	.313**	.343**	.411**	.337**	.329**	.287**	.177**	.177**	.214**	.212**	.208**	.247**	.255**	.215**	.209**	.238**	.290**	.295**	.331**	.382**	.469**	.341**	.330**	.324**	.356**	.450**	.523**	.555**	.613**	–			
34. WTP (t = 6)	.218**	.275**	.250**	.278**	.264**	.326**	.433**	.319**	.323**	.159**	.164**	.193**	.207**	.188**	.212**	.247**	.213**	.209**	.259**	.255**	.279**	.317**	.266**	.344**	.496**	.354**	.320**	.388**	.433**	.484**	.545**	.482**	.529**	–		
35. WTP (t = 7)	.277**	.317**	.305**	.345**	.314**	.345**	.344**	.429**	.336**	.192**	.197**	.194**	.226**	.202**	.221**	.227**	.233**	.233**	.281**	.339**	.297**	.398**	.359**	.416**	.413**	.489**	.395**	.421**	.521**	.476**	.636**	.594**	.580**	.650**	–	
36. WTP (t = 8)	.233**	.282**	.260**	.298**	.295**	.306**	.319**	.381**	.432**	.145**	.145**	.163**	.153**	.169**	.188**	.199**	.183**	.219**	.296**	.306**	.349**	.355**	.353**	.336**	.374**	.433**	.468**	.373**	.447**	.463**	.498**	.497**	.534**	.586**	.678**	–
M	5.422	5.365	5.296	5.270	5.204	5.233	5.271	5.211	5.200	3.023	3.043	3.027	3.002	3.006	3.036	3.016	3.007	2.996	6.000	5.930	5.776	5.741	5.687	5.679	5.696	5.660	5.582	2.047	1.777	1.306	1.157	0.946	0.992	1.001	0.862	0.502
SD	1.182	1.236	1.210	1.212	1.236	1.217	1.206	1.196	1.283	1.522	1.544	1.569	1.558	1.578	1.576	1.587	1.568	1.589	0.945	1.005	1.138	1.119	1.169	1.192	1.165	1.173	1.177	7.618	7.391	7.683	7.408	7.023	7.620	6.791	7.296	8.146
AVE	.804	.817	.824	.817	.843	.837	.836	.826	.847	.680	.699	.729	.735	.750	.751	.755	.755	.763	.612	.625	.651	.638	.652	.652	.672	.640	.660	-	-	-	-	-	-	-	-	-
CR	.925	.930	.933	.931	.942	.939	.939	.934	.943	.927	.933	.941	.943	.947	.947	.948	.948	.950	.823	.832	.848	.840	.848	.848	.860	.842	.853	-	-	-	-	-	-	-	-	-

Notes: $^{**}p < .01$, $^{*}p < .05$ (two-tailed); CS = Customer Satisfaction; CCI = Customer-Company Identification; LOY = Customer Loyalty; WTP = Customers' Willingness to Pay; Cronbach's (1951) internal consistency reliability coefficients appear in parentheses on the diagonal. Correlations are not corrected for outliers.

TABLE W3
Results from Conditional Dual-Process Latent Growth Model with Pattern-Mixture Dropout Modeling:

	DV = Customer Loyalty			DV = Customer Willingness to Pay		
	γ (S.E.)		γ*	γ (S.E.)		γ*
Predicting the Intercept of the DV						
Customer Satisfaction	.526***	(.014)	.711	2.188***	(.167)	.468
Customer-Company Identification	.093***	(.008)	.156	.605***	(.086)	.161
Predicting the Slope of the DV						
Customer Satisfaction (γ_{CS})	–.124***	(.005)	–.761	–.469***	(.060)	–.491
Customer-Company Identification (γ_{CCI})	–.010***	(.003)	–.076	–.078**	(.033)	–.101
Test of differences in effect sizes ($\gamma_{CS} - \gamma_{CCI}$)	–.114***	(.007)	–	–.391***	(.074)	–
Influence of Time-Invariant Control Variables on the Intercept of the DV						
Dropout after t = 0	.010	(.048)	.002	.929**	(.466)	.033
Dropout after t = 1	.031	(.057)	.007	–.156	(.744)	–.006
Dropout after t = 2	.165**	(.075)	.036	1.476**	(.731)	.050
Dropout after t = 3	.099	(.075)	.020	.665	(.504)	.021
Dropout after t = 4	.056	(.070)	.010	1.232	(1.045)	.036
Dropout after t = 5	.138	(.057)	.029	–.446	(.698)	–.015
Dropout after t = 6	.131	(.052)	.028	–.112	(.362)	–.004
Dropout after t = 7	.004	(.037)	.001	.065	(.418)	.003
Influence of Time-Invariant Control Variables on the Slope of the DV						
Dropout after t = 0	–.001	(.008)	–.001	–.185**	(.093)	–.032
Dropout after t = 1	–.102	(.072)	–.104	.689	(.660)	.120
Dropout after t = 2	–.108*	(.065)	–.105	–.433	(.495)	–.072
Dropout after t = 3	–.092*	(.054)	–.083	–.198	(.321)	–.030
Dropout after t = 4	–.039	(.036)	–.032	–.753*	(.455)	–.108
Dropout after t = 5	–.056**	(.028)	–.053	.017	(.277)	.003
Dropout after t = 6	–.036	(.026)	–.034	.169	(.180)	.028
Dropout after t = 7	.028**	(.013)	.034	.215	(.144)	.045
Model Fit						
$\chi 2$ / df				3.777		
CFI				.873		
TLI				.892		
RMSEA				.020		
SRMR				.033		

Notes: n = 6930; *p < .1; **p < .05; ***p < .01 (two-tailed tests). Gender: 0 = female, 1 = male; γ = unstandardized coefficient; γ* = standardized coefficient; S.E. = Standarad Error; DV = Dependent Variable; RCA = Relative Competitive Advertising, CS = Customer Satisfaction; CCI = Customer–Company Identification; RCA = Relative Competitive Advertising, CS = Customer Satisfaction; CCI = Customer–Company Identification; FFP = Frequent Flyer Program; FC = Focal Company; MC = Major Competitor; ACCH = Airport Closest to Customer Home. Additional controls: Membership and status in FFP of FC; membership in FFP of MC 1-5; importance of amenities offered by FFP of FC; importance of FFP for booking decision; number of enjoyed FFP benefits within the last 3 months; importance of overall travel time for booking decision; distance between customer home and next hub of FC; number of carriers available at the ACCH; percentage of destinations at the ACCH served by FC; percentage of destinations at the ACCH served by MCs; number of exclusive non-stop routes of FC at the ACCH; number of exclusive non-stop routes of MCs at ACCH; primary purpose of travelling with FC (business/leisure); average number of total past flights between t and (t+1) (t = 0, …, 8); customer satisfaction (t = 1, …, 8); customer–company identification (t = 1, …, 8); age; gender; income. To additionally ensure model identification we re-run the model with additional parameter constraints (Muthén et al. 2011). Substantive results remain stable. Standard errors of differences in effect sizes are based on multivariate delta method (e.g., Bishop, Fienberg, and Holland 1975).

TABLE W4
Results From Conditional Piecewise Latent Growth Model with Pattern-Mixture Dropout Modeling: Exploring the Moderating Role of Advertising Intensity

Predictor	DV = Customer Loyalty										DV = Customer Willingness to Pay									
	Intercept			Slope 1 (HRCA)			Slope 2 (LRCA)			Differences Across Slopes ($\gamma_{LRCA} - \gamma_{HRCA}$)		Intercept			Slope 1 (HRCA)			Slope 2 (LRCA)			Differences Across Slopes ($\gamma_{LRCA} - \gamma_{HRCA}$)	
	γ (S.E.)		γ*	γ (S.E.)		γ*	γ (S.E.)		γ*	γ (S.E.)		γ (S.E.)		γ*	γ (S.E.)		γ*	γ (S.E.)		γ*	γ (S.E.)	
Main Effects																					
Customer Satisfaction (γ_{CS})	.548***	(.014)	.732	–.245***	(.010)	–.763	.050***	(.010)	.406	.295***	(.018)	2.293***	(.183)	.492	–.883***	(.119)	–.501	.092	(.109)	.066	.975***	(.198)
Customer-Company Identification (γ_{CCI})	.072***	(.008)	.121	–.013**	(.006)	–.053	.003	(.006)	.033	.016	(.011)	.579***	(.089)	.157	–.156**	(.061)	–.112	.028	(.068)	.026	.185*	(.111)
Time-Invariant Control Variables																					
Dropout after t = 0	–.027	(.048)	–.006	.004	(.019)	.002	.017	(.021)	.023	–		.868*	(.471)	.031	–.210	(.203)	–.020	–.267	(.212)	–.032	–	
Dropout after t = 1	–.018	(.057)	–.004	–.045	(.072)	–.024	.017	(.021)	.023	–		–.238	(.761)	–009	.822	(.709)	.079	–.267	(.212)	–.032	–	
Dropout after t = 2	.124*	(.075)	.027	–.033	(.061)	–.017	.002	(.028)	.003	–		1.438*	(.739)	.050	–.326	(.516)	–.030	–.086	(.283)	–.010	–	
Dropout after t = 3	.054	(.070)	.011	–.035	(.047)	–.016	.013	(.021)	.016	–		.509	(.502)	.016	–.073	(.327)	–.006	–.064	(.152)	–.007	–	
Dropout after t = 4	.042	(.073)	.008	–.034	(.051)	–.015	.085	(.178)	.095	–		1.299	(1.100)	.038	–.838	(.678)	–.066	–.449	(2.075)	–.044	–	
Dropout after t = 5	.105*	(.058)	.022	–.027	(.039)	–.013	–.032	(.076)	–.040	–		–.386	(.748)	–.013	–.119	(.471)	–.011	.611	(.938)	.068	–	
Dropout after t = 6	.165***	(.051)	.035	–.090**	(.037)	–.045	.052	(.055)	.068	–		.009	(.453)	.0003	–.007	(.361)	–.001	.440	(.471)	.051	–	
Dropout after t = 7	.020	(.037)	.005	.013	(.022)	.008	.031	(.024)	.050	–		.153	(.392)	.007	.128	(.231)	.015	.267	(.296)	.038	–	
Model Fit																					
χ^2 / df	2.515																				
CFI	.934																				
TLI	.941																				
RMSEA	.015																				
SRMR	.023																				

Notes: n = 6930; *p < .1; **p < .05; ***p < .01 (two-tailed tests). Gender: 0 = female, 1 = male; γ = unstandardized coefficient; γ* = standardized coefficient; S.E. = Standarad Error; DV = Dependent Variable; RCA = Relative Competitive Advertising, HRCA = High Relative Competitive Advertising; LRCA = Low Relative Competitive Advertising; CS = Customer Satisfaction; CCI = Customer–Company Identification; FFP = Frequent Flyer Program; FC = Focal Company; MC = Major Competitor; ACCH = Airport Closest to Customer Home.
Additional controls: Membership and status in FFP of FC; membership in FFP of MC 1-5; importance of amenities offered by FFP of FC; importance of FFP for booking decision; number of enjoyed FFP benefits within the last 3 months; importance of overall travel time for booking decision; distance between customer home and next hub of FC; number of carriers available at the ACCH; percentage of destinations at the ACCH served by FC; percentage of destinations at the ACCH served by MCs; number of exclusive non-stop routes of FC at the ACCH; number of exclusive non-stop routes of MCs at ACCH; primary purpose of travelling with FC (business/leisure); average number of total past flights between t and (t+1) (t = 0, …, 8); customer satisfaction (t = 1, …, 8); customer–company identification (t = 1, …, 8); age; gender; income.
To additionally ensure model identification we re-run the model with additional parameter constraints (Muthén et al. 2011). Substantive results remain stable. Standard errors of differences in effect sizes are based on multivariate delta method (e.g., Bishop, Fienberg, and Holland 1975).