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Extending Service Brands into Products Versus Services: Multilevel Analyses of Key Success Drivers

Abstract

Despite the recognition that service brands can extend to other services (service-to-service brand extensions) or products (service-to-product brand extensions), little research considers the effect of the extension category on the drivers of service brand extension success. To address this gap, the present study proposes and empirically tests a conceptual framework that explicitly considers the extension category as a moderator of the relationship of brand- and consumer-level success drivers (perceived quality of the parent brand, parent brand conviction, brand reliance, consumer innovativeness) with perceived extension quality. The findings indicate a systematic, extension category–dependent influence on the effects of service brand extension success drivers. In particular, the influence of perceived parent brand quality and parent brand reliance is stronger, but the influence of parent brand conviction is weaker, when service brands extend to other services. These findings have significant implications for theory and practice.

Keywords: service branding, brand extension, success drivers, multilevel analyses

Service brand extensions use an established service brand name to enter a new product category¹ (Aaker and Keller, 1990). As modern competition intensifies, such strategies have become increasingly important for service firms that seek to achieve and ensure their growth (Lei et al., 2008; Spiggle et al., 2012), as exemplified by the extension of the Virgin brand to banking (Virgin Money) and health clubs (Virgin Active) or the “easy” brand to hotels (easyHotels.com) and airport transportation (easyBus.com). Such extensions allow service firms to leverage the equity of their established brand while expanding into different markets. Yet service brand extensions are not without risk; some authors estimate that only two of ten extensions ultimately succeed (Thamaraiselvan and Raja, 2008). Therefore, a critical question asks, in which conditions are service brand extensions likely to succeed?

Substantial literature investigates drivers of successful brand extensions in fast moving consumer goods context, but we know relatively little about extensions of service brands. As Völckner et al. (2010) argue, this research gap contrasts sharply with the importance of service brands in practice and the extent to which service firms have embraced brand extensions. Even as research in this area expands (e.g., Boisvert, 2012; Lei et al., 2004; Martínez and Pina, 2005; van Riel et al., 2001; van Riel and Ouwersloot, 2005; Völckner et al., 2010), the focus has remained largely on investigating drivers of successful service brand extensions in the same category (i.e., service-to-service brand extensions). In this sense, our understanding remains inherently limited, because service brand extensions into different categories (i.e., service-to-product² brand extensions) remain underresearched.

This scarcity is an important omission, considering the prevalence of such service-to-product extensions (e.g., the travel agency brand Thomas Cook expanded into tour guide books; Virgin extended to a cola) and the theoretical and empirical evidence indicating that drivers of

service brand extension success depend on the extension category.³ Services have unique characteristics (i.e., intangibility, heterogeneity, inseparability, and perishability) and strongly feature experience and credence qualities, so consumers tend to perceive relatively higher risks when purchasing services, relative to products (Mitchell and Greatorex, 1993; Zeithaml, 1981). According to brand extension literature (Arslan and Altuna, 2012; Gronhaug et al., 2002; Thamaraiselvan and Raja, 2008; van Riel et al., 2001; Völckner et al., 2010) and signaling theory (Erdem and Swait, 1998; Montgomery and Wernerfelt, 1992), this heightened risk perception increases consumers' uses of extrinsic information, as cues to reduce their risk, and suggests a systematic influence of the extension category on the importance of various drivers of service brand extension success. A systematic influence of extension category finds further support from construal level theory (Liberman and Trope, 2008; Meyvis et al., 2012), which suggests that consumers consider the level of abstraction associated with a stimulus, such as a brand extension, when choosing which features and characteristics to use in evaluating that stimulus. Service extensions are intangible and represent more abstract stimuli than products, such that it is more difficult for consumers to imagine a service and its quality than a product and its quality (Laroche et al., 2004). According to construal level theory, consumers therefore should be influenced by more abstract and general features of services, such as the parent brand quality or parent brand conviction (Fiske and Pavelchak, 1986; Hilton and von Hippel, 1996), and we expect a stronger influence of these types of success drivers for service extensions, relative to product extensions.

Previous studies (e.g., Völckner and Sattler, 2006; Völckner et al., 2010) identify several drivers of (service) brand extension success; we seek to extend such research by examining how the influence of different success drivers varies as a function of the extension category (product

vs. service). Understanding the impact of the extension category on service brand extension success is essential for both theory and practice. At a theoretical level, the extension category may alter how consumers process and evaluate service brand extensions. At a practical level, understanding the effect of the extension category context can improve predictions of service brand extension success.

CONCEPTUAL FRAMEWORK AND HYPOTHESES

Consistent with Aaker and Keller's (1990) basic model of brand extension success and prior research into service brand extensions (e.g., Arslan and Altuna, 2012; Martínez and Pina, 2010; van Riel et al., 2001; Völckner et al., 2010), we conceptualize brand extension success as the perceived quality of an extension.⁴ Drawing on Völckner and Sattler's (2006) comprehensive investigation on the determinants of brand extension success (for justification of this comprehensiveness, see Albrecht et al. 2013, p. 649), we identify drivers relevant to service brand extension success. For example, because we investigate hypothetical rather than real brand extensions, we cannot measure marketing support or retailer acceptance, so we exclude these two drivers from our conceptual framework. By focusing on hypothetical extensions, we can compare the effects of the extension category on the kind and degree of success factors, but we do not design marketing activities to support them, nor do retailers need to decide whether to carry them. Furthermore, we exclude drivers that have no significant impact on brand extension success in prior research, namely, the history of previous brand extensions, parent brand experience, and the link between the utility of the parent brand and specific product attributes (Völckner and Sattler, 2006).⁵

The drivers of service brand extension success that we retain consist of two groups: parent brand and consumer characteristics. Drivers of success at the *parent brand level* include

consumers' perception of and relationship with the parent brand; in our framework, we assess the impact of the *perceived quality of the parent brand*, or “the consumer’s judgment about a [service’s] overall excellence or superiority” (Zeithaml, 1988, p. 3), and *parent brand conviction*, defined as the “liking of and trust in the parent brand” (Völckner et al., 2010, p. 382). On the *consumer level*, the success factors entail consumer characteristics that are independent of the parent brand, such as *consumers’ innovativeness*, defined as “a generalized unobservable trait that reflects a person’s inherently innovative personality, predisposition, and cognitive style” (Im et al., 2007, p. 64), and general *brand reliance*, which refers to “the degree to which consumers prefer branded goods over unbranded goods” (Shachar et al., 2011, p. 92).

INSERT FIGURE 1 ABOUT HERE

Our conceptual framework explicitly considers the extension category (product vs. service) as a moderator of the relationships of the brand- and consumer-level drivers of success with perceived extension quality. The inclusion of the extension category is important; prior service brand extension studies emphasize that “research must acknowledge the conceptual differences between consumer products and services” (Völckner et al., 2010, p. 380), which “have consequences for the relative importance of the dimensions consumers use to compare original and extension” (van Riel et al., 2001, p. 222). Accordingly, we posit that consumers rely more on extrinsic information cues when evaluating service extensions compared with product extensions, on the basis of both signaling theory and construal level theory.

As signaling theory reveals (Erdem and Swait, 1998; Wernerfelt, 1988), conceptual differences between products and services (i.e., intangibility, heterogeneity, inseparability, and perishability) primarily reflect their relative shares of search, experience, and credence properties (Darby and Karni, 1973; Nelson, 1970). The greater experience and credence qualities associated

with services increase consumers' quality uncertainty and thus the level of perceived risk associated with purchasing a service compared with purchasing products (Mitra et al., 1999; Zeithaml, 1981). Mitchell and Greatorex (1993, p. 179) suggest that "the theory of perceived risk plays a greater role in explaining the behaviors of buyers of services than in the behavior of buyers of goods." The extent to which consumers rely on extrinsic information as risk reduction cues thus should depend on the extension category (service versus product). That is, we expect that extrinsic information cues are more important for service than for product extensions.

This variance in the importance of service brand extension success drivers also aligns with construal level theory (e.g., Liberman and Trope, 2008; Trope and Liberman, 2010). This theory posits that the level of abstraction of a stimulus (e.g., brand extension) influences whether people use primary, essential characteristics in their evaluations of the stimulus, such as product attributes, or if they rely on secondary, peripheral characteristics, such as parent brand quality (Trope et al., 2007). Consumers likely assign service and product brand extensions to different levels of abstraction. Product extensions are more readily imaginable and distinctive, due to their tangible character; service extensions are more difficult to conceive due to their intangible nature and the variability of the service outcomes (Laroche et al., 2004; Skalen and Edvardsson, 2015). For example, a brand extension to a product such as shampoo allows consumers to form a vivid, specific representation of the product, and quality variability within this product category is relatively small. If the extension refers to a service though, such as a hairdresser's shop, the image is not bounded by any particular context, and the perceptions of service quality depend on the service's physical environment (i.e., design of the shop), the interaction with the hairdresser, and the uncertain service outcome (Brady and Cronin, 2001). As these differences suggest, service extensions should be perceived as more abstract than product extensions, such that

consumers may tend to be influenced by more abstract, general features. Instead of using specific product attributes, consumers thus might rely on abstract, general features, such as parent brand quality or conviction, to evaluate the service extension (Fiske and Pavelchak, 1986; Hilton and von Hippel, 1996). In line with Meyvis et al. (2012), we contend that the extension category influences the unique importance of different service brand extension success drivers, such that more (less) weight gets assigned to more abstract (concrete) information cues in the case of an extension to a service (product).

Extension Category as a Moderator of Perceived Parent Brand Quality and Perceived Extension Quality

Extant brand extension literature based on signaling theory emphasizes that perceived parent brand quality provides an extrinsic information cue that can reduce consumer uncertainty (e.g., Erdem and Swait, 1998; Montgomery and Wernerfelt, 1992). A lack of information about the quality of the extension leads consumers to rely on the quality of the parent brand, because they expect “the new extension of a high quality brand is likely to be of high quality as well” (Erdem, 1998, p. 340). Higher perceived quality of the parent brand also puts more “at stake” for the brand, if it were to offer a poor quality extension (Erdem and Swait, 1998). Therefore, the perceived quality of the brand acts as an implicit bond of quality. If an extension fails to meet consumers’ quality expectations, the parent brand likely suffers negative effects, including the loss of the sunk costs of its investments in the brand (Völckner et al., 2010; Wernerfelt, 1988). If consumers believe that a poor quality offering creates risk for the firm’s brand investments and reputation, they likely recognize that firms have an incentive to produce high-quality products and services (Erdem and Swait, 1998; Shapiro, 1983). Therefore, perceived parent brand quality should have positive influences on consumers’ evaluations of its extensions (e.g., de Ruyter and

Wetzels, 2000; Hem et al., 2003; van Riel et al., 2001; Völckner et al., 2010). The extension category (product vs. service) also should influence this positive relationship, because consumers associate service extensions with more experience and credence qualities, increasing their quality uncertainty and their risk perceptions of service-to-service brand extensions (Arslan and Altuna, 2012; Gronhaug et al., 2002; Thamaraiselvan and Raja, 2008; van Riel et al., 2001; Völckner et al., 2010). In turn, consumers must rely more on perceived parent brand quality as an extrinsic information cue to reduce the heightened risk perceptions associated with a service as the extension category.

This greater influence of perceived parent brand quality also can be explained by construal level theory (Liberian and Trope, 2008). The conceptual differences between services and products (in particular, intangibility and variability) lead consumers to adopt more abstract representations of extensions to services, thereby increasing the importance of abstract information cues such as perceived parent brand quality. Conversely, consumers may adopt more concrete representations for extensions to products, which reduce the importance of abstract information cues but increase the weight assigned to concrete information cues, such as size, shape, or form. Accordingly, we hypothesize:

Hypothesis 1: The impact of perceived parent brand quality on the perceived quality of extensions is greater for service-to-service extensions than for service-to-product extensions.

Extension Category as a Moderator of Parent Brand Conviction and Perceived Extension Quality

Parent brand conviction reflects the affective dimension of brand loyalty (Oliver, 1999). Brand loyalty can reduce consumers' perceptions of the risk associated with brand extensions

(Mitchell, 1999), leading Völckner et al. (2010, p. 382) to argue, in the context of service brand extensions, that parent brand conviction “should provide consumers with greater risk relief and encourage more positive evaluations than low parent brand conviction,” with a resultant positive impact on quality perceptions of the extension. That is, the theoretical arguments suggest a positive influence of parent brand conviction on perceived extension quality (e.g., Sichtmann, 2007; Völckner et al., 2010). Again, because of the conceptual differences between services and products, we expect the extension category to influence this positive relationship. Parent brand conviction offers an important surrogate when information about extension quality is difficult to assess (Sichtmann, 2007), so consumers should rely more on perceived parent brand conviction as an information cue to reduce the heightened risk perceptions associated with service extensions.

According to construal level theory, the more abstract representation of service extensions should lead to a greater influence of perceived parent brand conviction, because consumers rely more on abstract information cues (Meyvis et al., 2012). For service-to-product brand extensions, consumers instead may adopt a more concrete representation of the extension, which will increase (decrease) the importance of concrete (abstract) information cues. Formally,

Hypothesis 2: The impact of parent brand conviction on the perceived quality of extensions

is stronger for service-to-service extensions than for service-to-product extensions.

Extension Category as a Moderator of Brand Reliance and Perceived Extension Quality

Brand reliance refers to the “weight that the individual is placing on the equity of a brand” (Shachar et al., 2011, p. 92), which reflects the consumer’s uncertainty about the type and degree of expected loss associated with buying a poor quality brand (DelVecchio and Smith, 2005; Völckner and Sattler, 2006). This individual trait may be characterized by the degree to

which a consumer is oriented toward buying well-known brands (Ramanathan, 2013; Shim and Gehrt, 1996, Sproles and Kendall, 1986). Brand reliance has not been analyzed previously in the context of service brand extensions, yet we predict that it will be relevant in this context, because service brands provide critical extrinsic cues that customers can use to evaluate service offerings (Berry, 2000; Brady et al., 2005; Onkvisit and Shaw, 1989). Because brand reliance is a consumer-specific trait (Ramanathan, 2013), consumers likely vary in the amount of relevance they assign to a brand cue. If they tend to perceive buying an unknown brand as more risky (high brand reliance), they should prefer well-known brands in an extension category, so we predict a positive impact of brand reliance on service brand extension evaluations (DeVecchio, 2000; Ramanathan, 2013; Völckner and Sattler, 2006).

Brand reliance also influences brand extension evaluations by affecting the perceived relevance of the loss if an extension fails to meet customers' expectations (Steenkamp and Baumgartner, 1992). Products are easier to evaluate prior to purchase than services are, so the potential loss associated with product extensions is lower (Smith and Park, 1992). According to signaling theory, the increased risk perceptions associated with extensions to services should result in a stronger influence of brand reliance as an extrinsic, risk-reducing information cue.

Building on construal level theory (Liberman and Trope, 2008), and similar to the effects of parent brand quality and parent brand conviction, the more abstract representation of service extensions should lead to a stronger effect of brand reliance on the perceived quality of the extension for service extensions, in that consumers can rely more on specific, detailed attributes with a product extension, leaving brand reliance less important in that case.

Hypothesis 3: The impact of brand reliance on the perceived quality of extensions is stronger for service-to-service extensions than for service-to-product extensions.

Extension Category as a Moderator of Consumer Innovativeness and Perceived Extension Quality

Consumer innovativeness implies a predisposition toward new ideas and willingness to try new products and brands (Steenkamp et al., 1999). Hem et al. (2003), studying a service-to-service extension, uncover a positive impact of consumer innovativeness on evaluations of the extension. More innovative consumers have a greater propensity for risk taking (e.g., Hem et al., 2003; Klink and Smith, 2001), so the relevance of an expected loss, in the case of an unfavorable outcome due to the extension, diminishes (Steenkamp and Baumgartner, 1992). This potential loss also is lower for product than for service extensions. With more at stake for an extension purchase, consumers' risk propensity should become increasingly important. We argue that the heightened risk perceptions associated with service-to-service brand extensions lead to a greater impact of consumer innovativeness on quality evaluations, compared with the effect for service-to-product extensions:

Hypothesis 4: The impact of consumer innovativeness on perceived quality of extensions is stronger for service-to-service extensions than for service-to-product extensions.

To investigate these moderating roles of the extension category and test H1–H4, we also include several additional relationships in our conceptual framework (Figure 1). However, these relationships are well established, so we do not develop explicit hypotheses for them. Specifically, the model includes (presumably positive) relationships of the perceived quality of the extension with the perceived quality of the parent brand (e.g., Arslan and Altuna, 2012; Völckner and Sattler, 2006, Völckner et al., 2010), parent brand conviction (e.g., Sichtmann, 2007; Völckner et al., 2010), brand reliance (e.g., Ramanathan, 2013; Völckner and Sattler, 2006), and consumer innovativeness (e.g., Hem et al., 2003; Steenkamp et al., 1999).

RESEARCH DESIGN

Selection of Parent Brands and Extensions

We tested our hypotheses with an empirical study, with real service brands to increase external validity. However, we featured hypothetical extensions to isolate the specific effects of the extension category on evaluations, rather than confront the noise of real market settings that include influences from advertising or competitors' actions (Diamantopoulos et al., 2005). This approach has been used widely in prior brand extension research (e.g., Arslan and Altuna, 2012; Kappor and Heslop, 2009; Sattler et al., 2010; Sichtmann and Diamantopoulos, 2013; Spiggle et al., 2012; Thamraiselvan and Raja, 2008; Yorkston et al., 2010), and Völckner and Sattler (2007, p. 155) confirm that the results of hypothetical brand extension studies “can be largely generalized to real brand extension studies.”

To begin, we presented a list of service-oriented parent brands to five marketing academics and asked them to select those that, according to Aaker and Keller's (1990) parent brand selection criteria, were likely to be relevant to respondents, of medium quality, and immediately and clearly recognizable (van Riel and Ouwersloot, 2005), which ensured that their associations with the brands were relatively specific (Martínez and Pina, 2005). The brands also needed to be clearly associated with a service as their core offering. Two service brands met these criteria well, according to the marketing experts: Lufthansa Airlines and ADAC, an automobile club service brand.

For each parent brand, we used four extensions that were hypothetical at the time of the survey, including two services and two products in each case. The products (services) featured low (high) degrees of intangibility, heterogeneity, and inseparability of consumption and production. To ensure variance in the fit of the extension to the parent brand, for each category

we chose one extension that was similar to the core offering and one that was dissimilar. We asked five marketing academics to assess the extensions in terms of their fit with the parent brand and their characteristics, then classify them as more service or goods dominant. The experts confirmed that for Lufthansa, the service extensions of a hotel (mean fit in the main survey = 3.98; SD = 1.25) and a wellness center (M = 2.29; SD = 1.65) were high in intangibility, heterogeneity, and inseparability, whereas the product extensions of luggage (M = 4.19; SD = 1.83) and business clothes (M = 2.81; SD = 1.68) were low in these characteristics. Similarly, for the service brand ADAC, the service extensions were rest areas at motorways (M = 4.29; SD = 1.69) and mobile phone services (M = 2.76; SD = 1.81), which were high in intangibility, heterogeneity, and inseparability. The product extensions, navigation devices (M = 5.05; SD = 1.35) and bicycles (M = 2.43; SD = 1.47), ranked low on these characteristics. The mean fit and standard deviations for each extension indicate that our selection of extensions varied satisfactorily in terms of perceived fit.

Data Collection

In an online survey, we sent 632 personalized e-mails to a random sample of addresses from a database administered by the marketing department of a major German university. The link to the questionnaire was personalized, so each respondent could participate only once, and we could control for who answered the questionnaire. After two weeks, a reminder was sent to nonrespondents. We obtained 216 questionnaires, for a response rate of 34.2%. To test for nonresponse bias, we compared the answers of early respondents (first one-third) with late respondents (last one-third) on all the survey items (Armstrong and Overton, 1977). The t-test of group means shows no significant differences; nonresponse bias does not appear to be a problem. In this sample, 58.5% of the respondents were women, and the average age was 25.8 years.

Similar to prior studies (e.g., Sichtmann and Diamantopoulos, 2013; Völckner and Sattler, 2007), we presented the respondents with the brand names and hypothetical brand extensions (e.g., “Given that [brand] offers [extension], how would you rate the quality of [the extension]?”) In line with prior brand extension studies (e.g., van Riel et al., 2001; Völckner and Sattler, 2007), we applied a repeated measures approach to collect the data. Respondents had to answer the questionnaire for two brands, extended to four brand extensions each (two products and two services). Thus we collected data on three levels: consumer ($n = 216$ evaluations), parent brand ($n = 432$ evaluations), and extension ($n = 1728$ evaluations). The dependent variable appears on the lowest brand extension level, influenced by variables of the same level, as well as variables on the parent brand and consumer levels.

Measures

Wherever possible, we adopted established scales from prior studies to measure the constructs of interest. A detailed overview of the wording and sources of all the items, along with psychometric information for each construct, appears in Appendix A. To assess the reliability and validity of the scales, we ran confirmatory factor analyses using LISREL 8.8 and found good psychometric properties. Each construct’s composite reliability was greater than the recommended value of .6 (Bagozzi and Yi, 1988), and all loading and error variances were substantial and statistically significant. The average variance extracted (AVE) for each construct was greater than .5, in support of convergent validity. Using Fornell and Larcker’s (1981) criterion, we also can confirm discriminant validity, because the AVE for each construct is greater than the squared correlation between the construct and all other constructs in the model (Table 1). To test for multicollinearity, we inspected the variance inflation factors, all of which

are less than the recommended threshold value of 2, with a maximum of 1.81, indicating the absence of serious multicollinearity (Kleinbaum et al., 2007).

INSERT TABLE 1 ABOUT HERE

The measures for all constructs came from the same source, so we accounted for common method bias by conducting Harman's single-factor test. We also included all the indicators in an exploratory factor analysis (Podsakoff et al., 2003). The unrotated factor solution indicates four factors; 24.9% is the most variance explained by any one factor. Furthermore, we followed the more strict procedure for common method bias testing proposed by Lindell and Whitney (2001), with the number of household members as a marker variable that theoretically is not related to any of the study constructs. We adjusted the zero-order correlations among constructs in our study by partialling out this marker variable. The significance of the resulting coefficients did not change; common method variance thus does not seem to be a serious problem.

Control Variables

We also introduced several linkages into the model as controls. Specifically, we controlled for the (presumably positive) effects of perceived fit between the parent brand and the extension and for the (presumably positive) interaction effect between perceived fit and parent brand quality perceptions (see de Ruyter and Wetzels, 2000; Hem et al., 2003; Martínez and Pina, 2005; van Riel et al., 2001; Völckner et al., 2010).

RESULTS

Interaction Model

To analyze the repeated measure design structure of our data, we used a multilevel approach, or hierarchical linear modeling (HLM). This approach is appropriate, because it enables us to examine effects across different hierarchical levels of analysis simultaneously

(Raudenbush and Bryk, 2002). We also can justify this analytical approach on the basis of an assessment of the intraclass coefficients (ICCs), which represent the proportion of variance in the dependent variable between groups or higher-level units (Hofmann, 1997). Although no strict rule establishes what constitutes a sufficient amount of between-unit variance, a popular rule of thumb suggests that ICCs greater than .10 justify the application of HLM (Ozkaya et al., 2013). The ICCs we obtained at the consumer level 1 (.16) and the brand 2 (.07) indicate that the application of HLM is justified (see Appendix B).⁶

For the hypotheses tests, we used multilevel regression analysis with MLwiN. All scales were averaged to form a composite. Table 1 contains the summary statistics, including the mean and standard deviation of each construct; the results of the multilevel regression are in Table 2. The model explains 58.4% of the total variance in evaluations of the quality of the extension.

INSERT TABLE 2 ABOUT HERE

With regard to category moderating effects, we found three significant interaction terms of the four we predicted, and two are in the expected direction. Specifically, in support of H₁, the quality of the parent brand is more influential if the extension is a service (coded 1, product extensions coded 0), as revealed by the positive, significant interaction term (.17, $p < .01$). We also proposed that brand reliance has a stronger influence on extension evaluations when the extension is a service; we again find a positive and significant interaction term (.07, $p < .05$), in support of H₃. However, we uncover no interaction effect between the category and consumers' innovativeness (.05, $p > .10$), so we must reject H₄. In contrast with our expectations, the extension category has a negative moderating influence on the relationship between parent brand conviction and the perceived quality of the extension ($-.12$, $p < .01$), such that parent brand

conviction has a weaker impact on consumers' evaluations when the extension is a service. Therefore, we cannot confirm H₂ with our data.

DISCUSSION AND IMPLICATIONS

Research Issues

With the present study, we have sought to explore the effect of the extension category on the influence of different success drivers of service brand extensions. Prior research emphasizes key differences in consumers' evaluations of products and service extensions (Martínez and Pina, 2005; van Riel et al., 2001), but very little research has been dedicated to the effect of service versus product categories. To address this gap, our conceptual framework predicts that the extension category (product vs. service) moderates the relationship of brand- and consumer-level success drivers (i.e., perceived quality of the parent brand, parent brand conviction, brand reliance, and consumer innovativeness) with the perceived quality of the extension. Our study thus complements and extends prior work on brand extensions (Arslan and Altuna 2012; de Ruyter and Wetzels, 2000; Hem et al., 2003; Martínez and Pina, 2005, 2010; Pina et al., 2006; van Riel and Ouwersloot, 2005; Völckner and Sattler 2006; Völckner et al., 2010).

In particular, three of the four of the relationships we investigate are significant, offering evidence that the influence of the drivers of service brand extension success depend on whether the service brand extends to a service or a product. Perceived parent brand quality appears to exert a stronger influence when service brands extend to other services but not when they extend to products. This finding accordingly is consistent with Arslan and Altuna's (2012) recognition that when a parent service brand extends into a service category instead of a product category, the perceived quality of the parent brand has a stronger effect on evaluations of the extension. Furthermore, our findings indicate a greater influence of parent brand reliance on the perceived

quality of service-to-service extensions, compared with those involving extensions to products. This finding is consistent the meta-analytical results that Palmatier et al. (2006) present, documenting that trust and commitment are more important as relational outcome predictors for service-based than product-based exchanges. Contrary to our original predictions though, consumers with parent brand convictions actually evaluate the quality of service extensions more poorly than consumers without this conviction. We speculate that the former may fear that extensions to other services will divert resources, with the risk that the provider might not perform the core service as well as it has in the past. Alternatively, these consumers might worry about losing an exclusive status if a service provider attracts new customers, which would mean they no longer belong to an “exclusive circle.” Finally, the negative effect of parent brand conviction on service extension quality evaluations might arise due to our exclusion of competitive effects from this study (Kapoor and Heslop, 2009). Without information about competitive services in the extension category, consumers cannot compare the services of different providers, so even minimally convinced consumers might overestimate the quality of the service extension—a phenomenon known as a brand positivity effect (Kapoor and Heslop, 2009). We also find no support for a moderating influence of the extension category on the influence of consumer innovativeness on perceived quality; consumer innovativeness appears equally relevant in both service-to-service and service-to-product brand extension contexts.

The results thus confirm half of our hypotheses. Our prediction that brand extension success drivers are more important for extensions to services is partially confirmed. Yet the significance of three interaction effects implies a systematic, category-dependent influence on the importance of different service brand extension success drivers and thus the need for a revision of existing service brand extension models. Ignoring these effects may limit scholarly

insights into the mechanisms underlying (un)successful service brand extensions and produce potentially suboptimal guidance for marketing practitioners tasked with planning and delivering service brand extensions. Further research accordingly might investigate the extent to which previously identified drivers of brand extension success are universally important or have unique relevance to specific extension categories.

Furthermore, from a theoretical perspective, this study confirms that signaling theory is an appropriate means to explain category-specific effects on brand extension success. Particularly for extensions that span categories (i.e., service-to-product extensions), signaling theory offers critical insights into consumers' evaluations of extensions with varying levels of abstractness, as well as of communications about such extensions (Balachander and Ghose, 2003). By using signaling theory to elaborate on the cues that affect consumers' evaluations, across both brand- and consumer-level perspectives, this study suggests some general insights into what brands should communicate. In further research, signaling theory would be beneficial for investigating negative signals that might dilute brand equity or prompt reciprocal negative effects for the parent brand (Basuroy et al., 2006).

Finally, construal level theory previously has been applied only rarely in this context, but we show that it offers a good predictor of the category-specific effects of brand extension success drivers. By confirming its relevance in this research context, we hope to encourage more regular uses of this theory in brand extension studies. Its ability to reflect psychological distance in consumers suggests that implementations of construal level theory also could effectively investigate distant or novel extensions to determine how consumers evaluate these types of abstract extensions (Goederiter et al, 2015).

Managerial Implications

Service brand managers receive little guidance from marketing scholars about brand extensions; to the best of our knowledge, this study is the first to provide explicit guidance about extension category–dependent variations in the drivers of service brand extension success. Rather than questioning the conceptual insights gained from previous research, our findings demonstrate the importance of taking an extension category into account in any situation that requires an assessment of the specific magnitude of brand- and consumer-level drivers, such as when service managers seek to predict the success of a proposed extension.

In addition, service managers can use our findings to design communications that will enhance consumers' evaluations of an extension. For example, we show a heightened influence of perceived parent brand quality and parent brand reliance for service-to-service extensions. Therefore, a high quality service brand introducing an extension should emphasize its parent brand quality, without presenting the extension too vividly. A lower quality service brand instead should encourage isolated evaluations of the extension (e.g., placing it in an end-of-aisle display), to reduce considerations of the parent brand's quality. Furthermore, our finding that the influence of parent brand conviction is weaker for service-to-service extensions suggests that consumers may worry that these extensions will mean a diversion of resources to the new service or a loss of exclusivity. Therefore, service providers that undertake such extensions should address these concerns in their marketing communications.

Limitations and Further Research

Our study is a first step in analyzing the influence of extension categories for service brand extensions, so it features several limitations that also offer possible avenues for research. First, we analyzed two brands with four extensions. Additional studies should replicate our approach with a broader range of brands and extensions to verify the results. In this context, studies might

account particularly for the categorization of products and services on a continuum (Shostack, 1977) or analyze the effects of the service intensiveness of both the parent brands and their extensions more systematically (Lei et al., 2004).

Second, we sought to replicate findings from prior extension research; we call for further research that also considers the service-specific drivers of brand extension evaluations. We analyzed the perceived quality of the parent brand and the extension on a general level, so that we could compare the results for service and product extensions. It also might be possible to use context-specific measures of the perceived quality of the parent brand and its extensions. For example, Völckner et al. (2010) conceptualize parent brand quality and service extension quality as three-dimensional constructs. Perhaps other studies could compare the relative influence of the dimensions of parent brand quality on the quality evaluations of the extension.

Third, we defined fit as global similarity between the parent brand and extension. A differentiation and application of the fit dimensions (i.e., complement, substitute, and transfer) proposed by Martin et al. (2005) could be an interesting extension, to reveal whether different fit dimensions apply for service and product extensions.

Fourth, though we used actual parent service brands as stimuli, the study featured hypothetical extensions. Zimmer and Bhat (2004) caution that consumers may express weaker attitudes toward hypothetical extensions compared with actual extensions. Further studies conducted using actual market brand extensions might produce a better understanding of how consumers evaluate extensions.

Fifth, this study did not account for competitive effects, so we encourage replications that explicitly consider how competing brands in the target category might affect evaluations of brand extensions.

Notes

1. We use the term “product category” to distinguish between extensions involving tangible offerings (products) and those involving intangible offerings (services).
2. Here, the term “product” refers to tangible goods.
3. We acknowledge that few pure services or products exist; most offerings combine products and services (De Chernatony and Dall’Olmo Riley, 1999; Shugan, 1994; Zeithaml, 1981). However, research on service brand extensions (cf. Lei et al., 2004) explicitly refers to service brand extensions and implicitly focuses on (pure) service extensions (e.g., de Ruyter and Wetzels, 2000; van Riel, Lemmink, and Ouwersloot, 2001; Völckner et al., 2010), so we make this distinction between product and service extensions, for consistency. We regard service (product) extensions as offerings for which most elements are intangible (tangible) and the degree of customer participation is high (low). These characteristics are reflected in the study design.
4. This attitudinal variable may not measure brand extension success perfectly (Sjödin, 2007), but Völckner and Sattler (2007) confirm the strong relationship between perceptions of extension quality and economic success measures such as market share, trial, or repeat purchase behaviors.
5. For completeness, we also estimated a model that included parent brand history, parent brand experience, and a link from the utility of the parent brand to the product attributes of the original product category. As in Völckner and Sattler’s (2006) study, these potential drivers of success were not significant.
6. This rule remains a topic of debate (e.g., Newman and Newman, 2012). Others propose that the ICC should be less than .05 to indicate no meaningful nesting effect.

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46.

Table 1. Summary statistics and test for discriminant validity

	Mean (SD)	AVE	1.	2.	3.	4.	5.	6.	7.
1. Quality of extension ^a	3.46 (1.07)	--	--						
2. Fit	3.14 (1.20)	.69	.53	--					
3. Quality of parent brand	3.72 (.83)	.50	.04	.01	--				
4. Conviction	3.18 (.97)	.58	.03	.01	.42	--			
5. Innovativeness	3.33 (.82)	.61	.00	.00	.00	.00	--		
6. Brand reliance	2.98 (.97)	.55	.01	.00	.03	.06	.04	--	
7. Extension category ^{ab}	--	--	.00	.01	.00	.00	.00	.00	--

Notes: AVE = average variance extracted; squared correlations between constructs are shown.

^a Because this construct is measured with a single item, the AVE cannot be computed.

^b Because this is a binary variable, no mean value is reported. Services are coded as 1, and products are coded as 0.

Table 2. Results of multilevel regression analysis

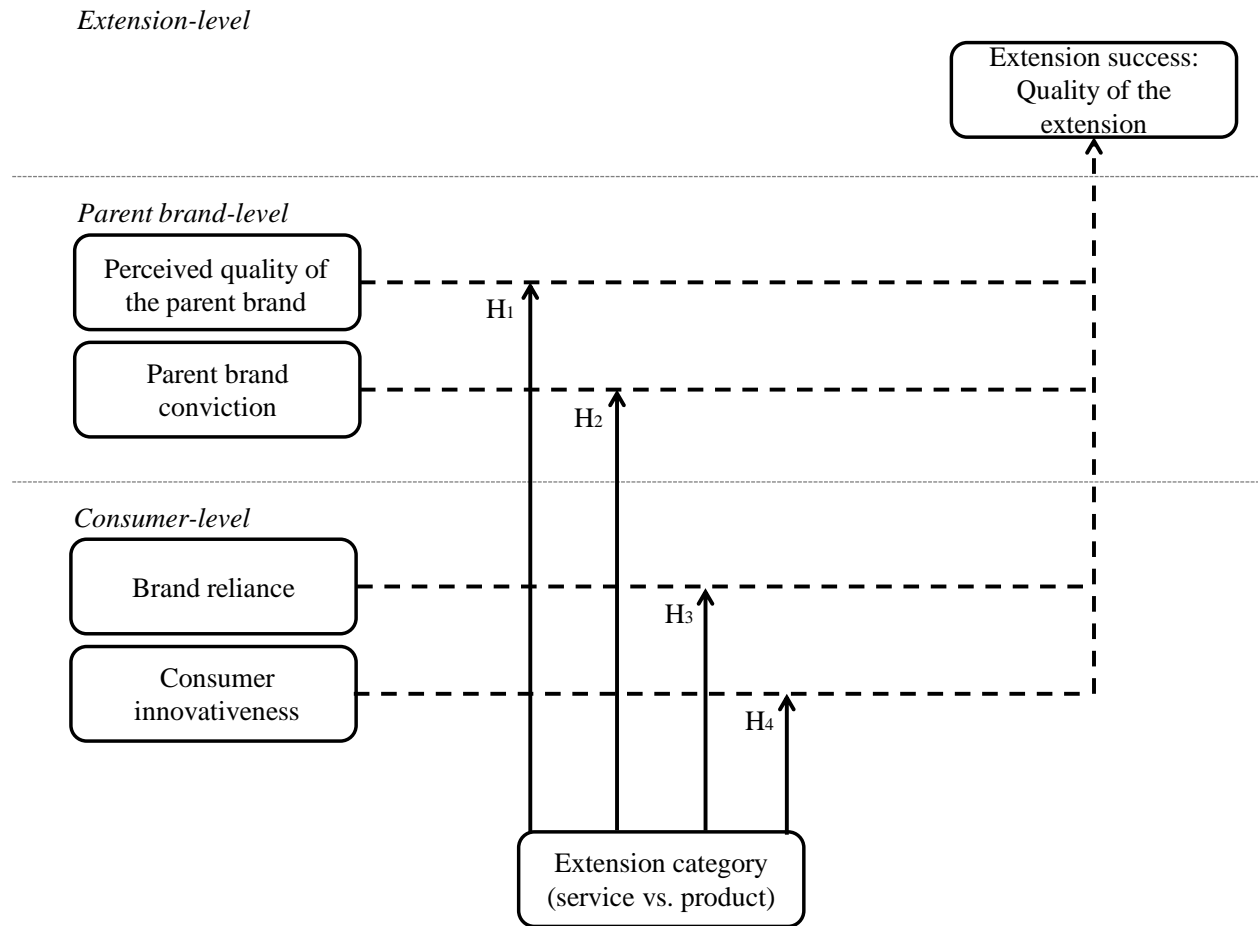
Dependent variable	Quality Evaluation of Extension
Extension level	
Fit	.82**
Category of brand extension ^b	-.50**
Brand level	
Quality of the parent brand	.26**
Parent brand conviction	.03
Consumer level	
Brand reliance	.02
Innovativeness	-.01
Moderating effects	
Fit x quality of the parent brand	-.05*
Category × quality of the parent brand	.17**
Category × conviction	-.12**
Category × brand reliance	.07*
Category × innovativeness	.05
R ²	.58

^a Unstandardized coefficients are shown.

^b Services coded as 1, products coded as 0.

** $p < .01$; * $p < .05$.

Figure 1. Conceptual Framework



Notes: Solid arrows refer to explicitly hypothesized relationships; dashed arrows represent links established by prior research.

APPENDIX A
Scale items and properties of the measurement models

Construct	Indicator	Source	Mean (SD)	Factor loading/weight	Cronbach's alpha	Composite reliability	Average variance extracted
Quality of the extension	Perceived overall quality of the extension product/service ¹	Aaker and Keller 1992; Lei et al. 2004; Völckner and Sattler 2007	3.46 (1.07)	---	--	---	---
Fit	How does the picture you have of [brand name] fit [extension product]? ²	Völckner and Sattler 2006	3.06 (1.38)	.85	.87	.87	.69
	In your opinion, how does the [extension product] fit with the other products and services that are offered by [brand name]? ²		3.18 (1.35)	.89			
	Would the people, facilities, and skills of [brand name] used to deliver the original service be helpful if the service provider were to offer the following products and services? ⁴		3.18 (1.31)	.75			
Quality of the parent brand	[Brand name] offers high-quality products. ²	Aaker and Keller 1990	3.87 (1.01)	.76	.79	.77	.50
	The quality of [brand name] products is far above average. ²		3.63 (.98)	.86			
Parent brand conviction	I trust [brand name].	Völckner and Sattler 2006	3.50 (1.06)	.77	.84	.81	.58
	[Brand name] is a likeable brand ² I relate to [brand name]. ²		3.30 (1.11) 2.73 (1.17)	.89 .76			
Innovativeness	Overall, I enjoy buying the latest products. ²	DelVecchio 2000	3.63 (.96)	.89	.73	.82	.61
	I like to purchase new products before others do. ²		2.77 (1.07)	.77			
	Overall, it is exciting to buy the latest products. ²		3.59 (1.01)	.67			
Brand reliance	If I buy an unknown brand, I would feel very uncertain of the level of quality that I am getting. ²	Völckner and Sattler 2006	2.86 (1.16)	.79	.82	.78	.55
	I prefer buying a well-known brand, because I need the reassurance of an established brand name. ²		3.41 (1.08)	.57			
	I prefer buying a well-known brand, because the risk that my needs will not be met is low compared with an unknown brand. ²		2.68 (1.16)	.70			

¹ 1 = "very bad" and 5 = "very good"; ² 1 = "strongly disagree" and 5 = "strongly agree"

APPENDIX B

Hierarchical Regression Model Equations

Level 1 Model: Extension level

$$\text{Extension success}_{ijk} = \pi_{0jk} + \pi_{1jk} \times \text{FIT}_{ijk} + \pi_{2jk} \times \text{EC}_{ijk} + e_{ijk}$$

Level 2 Model: Parent brand level

$$\pi_{0jk} = \beta_{00k} + \beta_{01k} \times \text{PBQ}_{jk} + \beta_{02k} \times \text{PBC}_{jk} + r_{0jk}$$

$$\pi_{1jk} = \beta_{10k} + \beta_{11k} \times \text{PBQ}_{jk} + r_{1jk}$$

$$\pi_{2jk} = \beta_{20k} + \beta_{21k} \times \text{PBQ}_{jk} + \beta_{22k} \times \text{PBC}_{jk} + r_{2jk}$$

Level 3 Model: Consumer level

$$\beta_{00k} = \gamma_{000} + \gamma_{001} \times \text{CI}_k + \gamma_{002} \times \text{BR}_k + u_{00k}$$

$$\beta_{01k} = \gamma_{010} + u_{01k}$$

$$\beta_{02k} = \gamma_{020} + u_{02k}$$

$$\beta_{10k} = \gamma_{100} + u_{10k}$$

$$\beta_{11k} = \gamma_{110} + u_{11k}$$

$$\beta_{20k} = \gamma_{200} + \gamma_{201} \times \text{CI}_k + \gamma_{202} \times \text{BR}_k + u_{20k}$$

$$\beta_{21k} = \gamma_{210} + u_{21k}$$

$$\beta_{22k} = \gamma_{220} + u_{22k}$$

Notes: PBQ = Parent brand quality

PBC = Parent brand conviction

CI = Consumer innovativeness

BR = Brand reliance

EC = Extension category

The n_{jk} extension evaluations are nested within each of $j = 1, \dots, J_k$ parent brands, which in turn are nested within each of $k = 1, \dots, K$ consumers. Thus, we examine 1,728 extension evaluations (Level 1), nested in 432 parents brands (Level 2), assessed by 216 consumers (Level 3).