Quid pro quo : the impact of explicit brand mentions and reciprocity in brand alliance communications

Reference:
Roosens Bram.- Quid pro quo : the impact of explicit brand mentions and reciprocity in brand alliance communications
European journal of marketing - ISSN 0309-0566 - (2019), p. 1-26
Full text (Publisher's DOI): https://doi.org/10.1108/EJM-09-2016-0502
To cite this reference: https://hdl.handle.net/10067/1573490151162165141

Quid pro quo: The impact of explicit brand mentions and reciprocity in brand alliance communications

Structured abstract

Purpose: This article assesses the effects of explicit partner brand mentions (as opposed to a mere partnership mention) in communications by brand allies on consumers' purchase intention and willingness to pay for an innovation, as mediated by the perceived relational embeddedness of the allies and their respective perceived corporate credibility. In Study 1, we investigate effects of (reciprocal) explicit brand mentions by both allies (as opposed to by a single ally), and further test whether explicit brand mentions moderate spillover effects from the ally. In Study 2, we investigate the effect of reciprocity of explicit brand mentions, and whether this is moderated by a company's experience.

Design/methodology/approach: We conduct two online experiments. Study 1 (N = 216) is a 4-level between-subjects experiment (Single communication by partner A with explicit brand mention, Single communication by partner B with explicit brand mention, Explicit brand mentions by both allies, Mere partnership mention by both allies) where participants judge a social alliance related to a new tablet. Study 2 (N = 376) builds upon these findings in a 4 (Explicit brand mentions by both allies; Mere partnership mention by both allies; Explicit brand mention by partner A, mere partnership mention by partner B; Explicit brand mention by partner B, mere partnership mention by partner A) x 2 (partner A experience: established vs startup) between-subjects experimental design for a co-created battery.

Findings: Spillover effects from one ally to the other are stronger with explicit brand mentions than with a mere partnership mention. There is no added value of two allies communicating over one, provided that both partners explicitly mention their partner brand. However, when allies do communicate separately, it is crucial that an explicit brand mention is reciprocated. This effect is explained by an increase in the perceived relational embeddedness of the partners, which in turn positively influences their corporate credibility. This effect does not differ depending on a company's experience.

Originality/value: This research is one of the first to study effects of how a brand alliance is communicated, and extends previous studies on the effects of communication about brand and co-creation alliances, by demonstrating that communications moderate spillover effects, that brand mention reciprocity is crucial, and by introducing the concept of perceived relational embeddedness.

Keywords: communication, brand alliances, partners, brand mention, reciprocity, adoption, relational embeddedness

Introduction

Brand alliances - defined as short- or long-term combinations of two or more individual partner brands that undertake combined activities, flourish in various industries (Schnittka et al., 2017). Research shows that brand alliances may exert positive effects on both the alliance product (e.g., a co-branded innovation) and the partner brands themselves through signaling and spillover effects (Geylani et al., 2008; Nguyen et al., 2018; Roosens and Dens, 2018). At the same time, some studies find non-significant (Levin et al., 2003; Vaidyanathan and Aggarwal, 2000) or even negative (Geylani et al., 2008; Levin et al., 2003) effects of brand alliances on the partner brands.

In the current study, we focus on communications, and more specifically, explicit brand mentions and reciprocity in communications by brand allies. We argue that the way in which partners communicate about an alliance changes consumers' perception of that alliance. Current brand alliance literature suggests that it is sufficient that a link between partner brands is somehow established to allow for signaling and spillover effects to occur. It is unclear, however, if it matters WHO (which of the partners) is communicating the brand alliance or WHAT they communicate, and if there is added value (i.e., a synergy effect) to be gained when BOTH partners (implicitly or explicitly) communicate their involvement in the alliance. Kostyra and Klapper (2015) show that, when one brand mentions its partner brand more prominently in its advertising, this signals a stronger conviction of the participating brands, and potential consumers use this signal as a basis to infer higher quality due to a higher brand fit, complementarity and perceived degree of cooperation between the alliance partners.

With a single communication, there is the implicit understanding that both partners support the communication. However, it may be detrimental when one partner mentions the other partner explicitly, while the other does not reciprocate and may, therefore, signal less commitment. Partners communicate about brand alliances for varying reasons and with differing frequencies. In a recent exploration of reciprocity between social alliance partners on Twitter, Burton et al. (2017) document evidence that social partners do on occasion retweet a brand's communications, but less than expected. The social partner under study mentioned partners in only 16% of their tweets, with 21 partners not being mentioned by them at all. Nearly half of the tweets mentioning a partner consisted of unmodified retweets, missing out on an opportunity to more directly endorse partners through an explicit acknowledgement of their support.

As consumers today have easy access to information from different sources, this paper sets a first step in investigating consumer responses to brand alliance communications by individual partners, in light of each other. In Study 1, we test whether the source of the brand alliance communication (one partner, the other partner, or both) moderates spillover effects from one partner brand to another in a social alliance and how this, in turn, affects the purchase intention and willingness to pay for an innovation resulting from the alliance. Moreover, we test whether "co-branded" communications (explicitly mentioning both brands) differentially affect spillover effects compared to a mere partnership mention (where both partners mention the partnership, but not the partner brand by name). Previous brand alliance literature has exclusively tested communications with explicit mentions of both brands. Liljedal (2016) suggests that the mere existence of an alliance could serve as a signal and positively influence consumer responses, without awareness of the specific partners. That is not something that has previously been empirically explored.

In Study 2, we will show that explicit brand mentions need to be reciprocated by the partner for positive consumer responses to occur. To this end, we introduce the concept of perceived relational embeddedness (i.e., consumers' perceptions about the degree of reciprocity and closeness between co-creation partners) (Rindfleisch and Moorman, 2001) as a potential mediator between (reciprocal) explicit brand mentions and corporate credibility. Moreover, we study whether these effects can be further enhanced or reduced by the corporate experience of one of the partners (Colombo et al., 2006; Das and He, 2006). As such, we provide insight into the underlying process and investigate corporate experience as a boundary condition to this effect.

Finally, we extend brand alliance research by measuring consumers' purchase intentions and willingness-to-pay, which are more relevant to actual consumer behavior than attitudes towards (co-)brands (e.g. Cunha et al., 2015; Irmak et al., 2015; Lafferty et al., 2004) or the perceived fit between brands (e.g. Decker and Baade, 2016; Norman, 2017). Our study offers new insights into the processes involved in consumer evaluations of brand alliances and adds substantially to the related body of literature. The findings can benefit managerial decision-making in selecting alliance partners and in promoting the alliance.

Study 1

Literature review and hypothesis development

Explicit partner brand mentions versus a mere partnership mention

The brand alliance literature suggests that consumer perceptions about a brand alliance can change depending on how it is presented to consumers, for example depending on how the brands are portrayed in communications about the alliance (Lafferty and Edmondson, 2009; Samu and Wymer, 2009) or on the positioning of the alliance within the strategy of the firm (Singh et al., 2014). In the current paper, we investigate whether the communication content (how allies refer to each other) and the communication source (one partner, the other partner, or both) alter the signals that consumers pick up from the communications.

First, we focus on explicit partner brand mentions (one partner brand explicitly mentioning the other partner brand by name), as opposed to a mere partnership mention (referring to a partnership in general, without disclosing the actual partner brand(s)). Recent literature suggests that mentioning collaboration with customers to develop a product acts as a signal for product quality just like collaboration with a brand (Liljedal, 2016). This finding could imply that a general association with any kind of partner could be sufficient to induce positive results. In other words, the specific partner brand may matter less than the fact that an alliance is formed. That would mean that consumer responses should not differ between a mere partnership mention or explicit brand mentions.

Research in brand-alliance signaling is primarily based on the bonding hypothesis, which holds that the potential loss of the firm's future profits and/or its prior investment in reputation building act as a bond for the quality of the brand (Gammoh et al., 2006). For example, Rao and Ruekert (1994) argued that a credible alliance signal occurs when the ally is exposed to large monetary losses, that is when the ally posts a bond. We argue that an explicit partner brand mention positively influences the credibility of the "bond" posted by an ally. People tend to believe that an organization will never risk its reputation by linking its name to a partner or product it does not support (Bower and Grau, 2009). Explicit brand name mentions signal to consumers that the ally explicitly and openly supports the partner. By merely mentioning the partnership, but not disclosing the actual partner, the ally may signal that it is more unsure about the other partner. This signal should therefore reflect in the partner's perceived trustworthiness.

Moreover, by mentioning the other partner explicitly, the ally might further signal its commitment to the partnership. Kostyra and Klapper (2015) show that a greater "prominence" of a partner brand in communication by the other partner signals a stronger conviction of the participating brands. Consumers use this signal as a basis to believe in higher product quality due to a higher perceived brand fit, complementarity and degree of cooperation. Strong ties motivate collaboration and allow for the exchange of rich, complex and proprietary information and knowhow between partners (Bonner and Walker Jr., 2004; Rindfleisch and Moorman, 2001). Consumers will, therefore, link stronger ties to higher levels of shared expertise and thus to higher expertise of both partners (Dhanaraj et al., 2004; Nielsen, 2005; Samuel et al., 2016).

In sum, explicit brand mentions should enhance the perceived trustworthiness and expertise of the partners. Trustworthiness and expertise make up the two dimensions of corporate credibility (Bigné-Alcañiz et al., 2010). Corporate credibility, in turn, benefits consumes'purchase intention (Jacobson et al., 2011; Lafferty, 2007; Park et al., 2007) and willingness to pay (Erdem et al., 2002; Kazadi et al., 2015; van Dijk et al., 2014) for the company's products.

H_1: Explicit partner brand mentions by both partners enhance consumers' (a) purchase intentions and (b) willingness to pay for an innovation compared to a mere partnership mention by both partners, through an increase in perceived corporate credibility.

How brand mentions moderate spillover effects

Apart from exerting a main effect, we argue that the absence or presence of partner brand mentions will also moderate spillover effects, the transfer of (positive) associations from one partner brand to the other. Associative Network Theory (Anderson and Bower, 1973; Van Osselaer and Janiszewski, 2001) considers human memory as a network of interconnected nodes that activate each other in relevant contexts. As argued before, explicit brand mentions will increase perceptions of fit, complementarity and cooperation between the partners (Kostyra and Klapper, 2015). This means that the (strength of the) links between the associative networks of the co-creating partner(s) should be stronger (more accessible) in consumers' minds. According to Associative Network Theory, affect transfer between the partners then becomes easier.

Explicit brand mentions may also benefit the occurrence of spillover effects because consumers tend to infer that high equity brands will only allow association with other high equity brands (Washburn et al., 2000). A mere partnership mention may serve as a discounting signal making consumers less likely to transfer their brand associations to the "unmentioned" partner. In other words, explicit brand mentions increase the chance that consumers' perceptions of one alliance partner will transfer or spill over to another.

H_2: The spillover of a (positive) attitude towards on alliance partner on a company's perceived corporate credibility is greater with explicit brand mentions by both partners than with a mere partnership mention by both partners.

Source effects in communications about brand alliances

Apart from brand mentions, the source of the message could also moderate spillover effects. Allies will communicate an alliance through their own communication channels with differing goals and differing frequencies (Burton et al., 2017). For example, Unicef and ARM both independently communicated about a joint 'Wearables for Good' design challenge (Unicef, 2015). Does it matter to message recipients whether one brand communicates, or the other, or both?

A company communicating about an alliance will often do so for brand building reasons (i.e., creating awareness and managing brand image) (Burton et al., 2017). Therefore, consumers could consider brand alliance information by a company as a form of (hidden) "advertising". Consumers are typically and increasingly skeptical about advertising (Nielsen, 2013), as they understand the commercial intent behind it. The Persuasion Knowledge Model (Friestad and Wright, 1994) states that people develop "coping" mechanisms in an attempt to resist persuasion attempts when they recognize them as such (Friestad and Wright, 1994). The activation of persuasion knowledge is typically related to more critical processing and resistance or reactance (Boerman et al., 2012; Daems et al., 2017). As a result, persuasion knowledge may weaken the positive impact of positive spillover effects on consumers' brand attitude when the communication is issued by the company itself.

When it is the partner brand communicating, however, the partner could be considered as a more "independent" party, outside to the firm, and therefore more reliable. A communication by the partner brand could also more strongly activate the associative network of that partner in consumers' minds. This activation would benefit the spillover of positive associations. Moreover, the fact that the partner communicates the alliance reinforces the "bond" of the partner, linking the companies stronger together than when the company itself would communicate. This, too, should benefit spillover effects.

When both partners communicate, we can expect a sort of "synergetic" effect. Communications by two sources, especially when they are both co-branded, should result in an even stronger link between the partners than with a single communication because of (partial) overlap of repetition of the provided information. This means that spillover effects should be greater when two partners communicate, compared to only one.

H_3: The spillover of a (positive) attitude towards on alliance partner on a company's perceived corporate credibility is strongest with explicit brand mentions by both partners, compared to, respectively, (a) an explicit partner brand mention by the alliance partner and (b) an explicit partner brand mention by the company itself.

Method

Design

The context of Study 1 is a social alliance in which a technology manufacturer (further referred to as "the company") proposes a new tablet designed in co-operation with an NGO (the “social partner”). The choice for a tablet is motivated by the fact that co-creation is widely applied for consumers electronics (Enkel et al., 2009). We selected an NGO as the alliance partner because they increasingly engage in collaborative value creation with firms, making them a relevant partner for study (Austin and Seitanidi, 2012). Also, the term “NGO” covers a wide array of organizations and is closely related to other compelling co-creation partners for innovation such as governments or universities, which enhances the generalizability of the results. The social partner (Tech Worldwide Foundation) was said to be active in making technology available around the world. The company (STC) and the social partner were both fictitious, in order to avoid potential confounds of prior attitudes towards one or both partners and their products/activities (Delgado-Ballester et al., 2012).

The study adopts a four-level between-subjects experimental design: Single communication by the company with explicit brand mention; Single communication by the social partner with explicit brand mention, Explicit brand mentions by both allies, Mere partnership mention by both allies. Per condition, respondents always read two website news items introducing the new tablet (see Appendix 2). In the conditions where both allies communicate, one news item was supposedly posted on the company’s website, while the second was said to be posted on the website of the social partner (presented in random order). In the conditions where one partner communicates, respondents also read two news items, but were told both appeared on the company's website or both appeared on the social partner’s website, depending on the condition. The product features of the tablet, the information provided, page layout and description of the partners were identical across conditions to avoid possible confounds.

The co-branded communications with explicit brand mentions mentioned the other alliance partner by name 5 times and included both partners’ logos. In the “mere partnership mention” condition, both news items mention a partnership and provide a general description of the partner (e.g., “an NGO” or “a leading tablet manufacturer”), without specifying the partner brand by name. The news items also only included the own organization’s logo. Due to the setup of the experiment (each respondent reading the two news items), it was still clear for respondents who the specific partners in the alliance were.

Pretest

In order as to appear as coming from different sources, we varied the graphic design of the news items between the company and the social partner. To avoid confounding effects of the design, we measured consumers’ attitude towards the designs of both partners in an online pretest (N = 70). The results show no significant attitudinal difference between the designs ($t(70) = .371$, $p = .712$). Furthermore, we tested what technical product benefits respondents remembered after reading the news items in all conditions, to make sure our results would not be confounded by a dissimilarity in the amount or content of information.

Participants and procedure

The experiment was conducted online. We obtained a sample of Flemish participants from a consumer panel of a professional market research agency. Respondents were contacted by e-mail and asked to participate in the online experiment. They were randomly assigned to one of the four conditions by the survey software (Qualtrics). As a quality control, only respondents who spent at least 7 seconds (the absolute minimum reading time for a basic understanding) on each news item page could complete the questionnaire. We also added a control question (“This a control question. Please select ‘Totally agree’ when you are completing the questionnaire”) at two separate locations in the questionnaire. Participants who did not answer both these control questions correctly were disqualified. In total, 200 respondents (48%, N = 416) were excluded due to the time check for the stimuli or because they did not correctly complete both control questions. Our final sample consists of 216 respondents (49% female, *M age* = 44 years, *SD age* = 14 years, 57% Bachelor's Degree or higher).

Measures

After the welcome page, we asked participants about the perceived fit between a technology firm and several stakeholder types for the development of a new tablet, including an NGO (3 items, e.g. 'a technology firm and … don't fit/fit together', α = .957) (Bower and Grau, 2009). We added this measure to control for the effects of the perceived fit between the co-creation partners on our dependent variables (Lanseng and Olsen, 2012). We deliberately asked participants about their perceptions of fit with different kind of partners to reduce potential priming effects as much as possible. After this first question, we asked participants to read the two website news items containing the manipulations, in a random order. After reading both articles, participants completed the measures for the manipulation checks, moderators, mediators, and dependent variables. Except for willingness to pay, all variables were measured on multi-item 7-point Likert or semantic differential scales. Corporate credibility was measured through both its dimensions, perceived trustworthiness (Sinclair and Irani, 2005) and perceived expertise in innovation (Kazadi et al., 2015) (6 items in total, e.g. 'The firm makes very innovative products', α = .911). A principal component analysis confirmed that these six items loaded on to a single factor explaining 69.25% of the variance. The two moderators, attitude towards the co-creation partner (4 items, e.g. 'The NGO is an organization that does important work', α = .903) (Irmak et al., 2015) and product category involvement (3 items, e.g. 'means a lot to me', α = .966) (Park et al., 2007) were not explicitly manipulated, but measured.

To measure willingness to pay, we asked each participant how much he would be willing to pay for the co-created tablet mentioned in the news items through the use of a slider with a maximum amount of 1000 EUR (*M* = 309.77, *SD* = 163.00). We then measured brand familiarity ('to what degree were you familiar with the firm/the co-creation partner before your participation to this research') for both the lead firm and the co-creation partner to check whether respondents were indeed unfamiliar with both brands, as we presumed in our research design. Finally, participants reported their age, gender, and level of education.

Testing of the measurement model

We first conducted a confirmatory factor analysis using IBM AMOS 25 to assess the validity of the constructs (Hair et al., 2010). The model showed an acceptable level of fit (χ^2/df = 3.334, CFI = .914, SRMR = .067). The composite reliability (CR) was well above the threshold of 0.70 for all constructs. The average variance extracted (AVE) is also greater than .50, suggesting convergent validity. For discriminant validity, we can confirm that the maximum shared variance (MSV) is smaller than the AVE and the square root of the average variance is greater than the inter-construct correlations (Table 1).

Table 1: Confirmatory Factor Analysis results (Study 1)

	CR	AVE	MSV	Perceived Fit	Attitude to Ally	Corporate Credibility	Purchase Intention
Perceived Fit	.954	.873	.012	**.934**			
Attitude to Ally	.883	.654	.399	.108	**.809**		
Corporate Credibility	.899	.601	.399	.020	.632	**.775**	
Purchase Intention	.890	.731	.359	.103	.502	.599	**.855**

Note: The right-hand side represents the correlation matrix with the square root of the AVE on the diagonal

CR = Composite reliability, AVE = Average variance extracted, MSV = Maximum Shared Variance

Results

As expected, both the company (*M* = 1.70, *SD* = 1.49) and the alliance partner (*M* = 1.66, *SD* = 1.41) were highly unfamiliar to respondents. In order to test the hypotheses, we ran two moderated mediation analyses (model 7) in IBM SPSS Statistics 24, based on Hayes' PROCESS macro v3.0 (Hayes, 2017), using bootstrapping (number of bootstrap replicates: 10000). We performend one analysis with purchase intention as the dependent variable and one with willingness to pay. As the independent variable, we used respondents' attitude towards the (NGO) alliance partner (*M* = 5.09, *SD* = 1.04). We included the perceived corporate credibility (*M* = 4.99, *SD* = .75) as a mediator, and the four conditions as a multi-categorical moderator with the "explicit brand mentions by both allies" as the baseline. We also included the perceived fit between a technology firm and an NGO as innovation partners as a covariate, because previous research indicates that the perceived fit between co-creation partners influences the adoption of co-created products (Dickinson and Heath, 2008). The independent variable, mediator, and covariate were mean-centered. Following tests of normality and heteroscedasticity, the dependent variable willingness to pay appeared to be positively skewed. To deal with this positive skewedness, we transformed willingness to pay using a logarithmic transformation (Manning and Mullahy, 2001).

The results (Table 2) show a significant positive effect of attitude towards the alliance partner on perceived corporate credibility (b = .207, $t(207) = 6.44$, $p < .001$), which in turn positively affects respondents' purchase intentions (b = .823, $t(212) = 7.09$, $p < .001$) and willingness to pay (b = .142, $t(112) = 4.12$, $p < .001$). This confirms the results in earlier studies that suggest positive spillover effects of the attitude towards the alliance partner to the company.

We find a significant negative effect of an implicit partnership mention by both allies (compared to explicit brand mentions by both allies) on corporate credibility (b = - .305, $t(207) = -2.68$, $p < .01$). Perceived corporate credibility in turn has a significant positive effect on both purchase intentions (b = .823, $t(207) = 7.09$, $p < .001$) and willingness to pay (b = .142, $t(207) = 4.12$, $p < .001$). This confirms H_1: explicit brand mentions enhance consumers' (a) purchase intentions and (b) willingness to pay for an innovation compared to a mere partnership mention, through an increase in perceived corporate credibility.

Table 2: Unstandardized regression weights moderated mediation analysis (Study 1)

	Corporate credibility	Purchase intentions	Log Willingness to pay
Perceived corporate credibility		.823***	.142***
Attitude towards alliance partner	.468***	.223*	.009
Single communication by company (explicit brand mention)	.054		
Single communication by alliance partner (explicit brand mention)	- .024		
Mere partnership mention by both allies	- .305**		
Attitude towards alliance partner * Single communication by company (explicit)	.057		
Attitude towards alliance partner * Single communication by alliance partner (explicit)	.024		
Attitude towards alliance partner * Implicit reference by both partners	- .228*		
Perceived fit	- .025	.084°	.026°
R^2	.3961	.3703	.1346

Note: *** $p \leq .001$, ** $p \leq .010$, * $p \leq .050$, ° $p \leq .100$

Moreover, we find a significant interaction effect between attitude towards the alliance partner and a mere partnership mention on corporate credibility (b = - .228, t(207) = -2.06, p < .05). The negative effect entails that spillover effects are weaker when allies don't explicitly mention their partner brand, confirming H_2.

In H_3, we expected that spillover effects would be moderated by the source of the communication and would be strongest when both partners communicate. However, the interaction effect between the attitude towards the alliance partner and an explicit brand name mention by the company on corporate credibility (b = .057, $t(207) = .49$, $p = .622$) is not significant. This means that spillover effects do not differ between the situation where both partners explicitly mention each other and only the company itself communicates. The same holds when the social partner communicates (b =.024, $t(207) = .22$, $p = .828$). We thus need to reject H_3.

Discussion

The results of Study 1 provide evidence that explicit partner brand mentions by both alliance partners enhance consumers' purchase intentions and willingness to pay for an innovation compared to a mere partnership mention. The positive effect of explicit brand mentions is explained by an increase in the perceived corporate credibility of the company. This finding suggests that, conversely as to what Liljedal (2016) proposes, mentioning a general category of alliance partners (as is often the case with customer co-creation, or when companies engage in partnerships with multiple allies) is not as powerful as mentioning the specific brand. Note that the alliance partner under study was a fictitious NGO. While the choice for a fictitious partner was deliberate, it also entails that consumers will not have have strong associations with this partner. The positive effect of explicitly communicating the partner brand may be even greater when the partner brand is a well-established and highly esteemed partners.

In line with spillover effects documented by a large body of literature, people's attitude towards the alliance partner exerts a positive main effect on the corporate credibility of the company. Interestingly, however, this spillover effect is moderated by the content of the communication: the spillover is stronger when (both) brand alliance partners mention each other explicitly than when both merely mention a partnership. A limitation of this first experiment is that we did not test any underlying mechanisms causing the positive effect. To overcome this concern, we designed a second experimental study. Kostyra and Klapper (2015) suggest that prominent partner brand signals a stronger conviction of the participating brands, leading to perceptions of higher quality due to a higher brand fit, complementarity and perceived degree of cooperation between the alliance partners. We will introduce the concept of "perceived relational embeddedness" of alliance partners and investigate the mediating role of this construct in the relationship between co-branded communication and perceived corporate credibility.

Contrary to our expectations, we don't find evidence that communications by two partners are better than by only one, or that a communication by the alliance partner is better than a communication by the company itself. While this finding is unexpected, it does provide support for our intuition that consumers, when facing a single communication, automatically assume that both partners support the communication. After all, a partner would never enter an alliance with a company it does not have good relations with. Even if an alliance communication appears on the website of the company, surely it must be "approved" by the partner before being published. In this study, the communication contained both partners' logo, making it rational to assume that the communication is jointly issued by both partners. Increasingly, however, consumers have access to multiple information sources. In practice, we see that partners may choose to mention some partner brands, but not others and to explicitly endorse (retweet) some partner communications, but not others (Burton et al., 2017). To what extent does this alter the signal consumers pick up about the alliance?

In our second study, we try to answer this question by examining the added value of explicit brand mentions by both partners ("co-branded communications"), not just over a mere partnership mention by both partners, but also over a situation in which one of the partners explicitly mentions the partner brand, but the other does not reciprocate in its communication (and merely mentions the partnership). Moreover, there is reason to believe that start-up companies may benefit more from co-branded communications than established firms. To test this assumption, we also manipulate the corporate experience of the company in Study 2.

Finally, in the second study, we also try to generalize the findings of Study 1 by choosing an industrial organization – Tech Mobile, a manufacturer of mobile phones – as alliance partner instead of an NGO, as it is important to test our results for different stakeholder types. Although stakeholders like NGO's are increasingly involved in co-creation, brand alliances between two companies are also common (Schilling, 2015; van Beers and Zand, 2014).

Study 2

Literature review and hypotheses

The effect of brand name reciprocity on perceived corporate credibility and adoption

As mentioned, alliance partners will communicate an alliance through their own communication channels with differing goals and differing frequencies (Burton et al., 2017). The alliance information that consumers obtain by one source will always be interpreted in light of information by other sources (in this case, the partner brand) (Gurau, 2008). When both partners refer to each other by name, this underlines the importance of the collaboration between theses specific (and not other) partners in achieving the obtained outcomes from both parties' perspectives. Reciprocity of communication by collaborating partners is therefore recognized as very important in for example public relations (PR) literature (Kelly, 2001). When only one of the two partners refers explicitly to the other partner, consumers may perceive an imbalance in the partners' relationship. Rodrigue and Biswas (2004) demonstrate that equal dependencies between partners in brand alliances lead to better results than alliances with power imbalance. An interdependent relationship will lead to closer collaboration. How companies refer to each other is a signal for this interdependency, i.e., the relational embeddedness of the co-creation partners. Reciprocated explicit brand mentions thus further strengthens the perceived relational embeddedness of the co-creation partners compared to only one partner explicitly mentioning the other partner (and the other merely mentioning the partnership).

The perceived relational embeddedness between the alliance partners should positively affect the corporate credibility of both partners. As mentioned above, corporate credibility consists of two dimensions, trustworthiness and expertise (Bigné-Alcañiz et al., 2010; Newell and Goldsmith, 2001), both of which should be positively affected. First, a higher degree of perceived relational embeddedness will increase a partner's perceived trustworthiness, because of the bonding rationale: people tend to believe that the ally will never risk its own reputation by linking its name to a company it does not fully trust or support (Bower and Grau, 2009). Second, a stronger perception of relational embeddedness will enhance the perceived expertise of the allies. Strong, embedded ties motivate collaboration and allow for the exchange of rich, complex and proprietary information and knowhow between partners (Bonner and Walker Jr., 2004; Rindfleisch and Moorman, 2001). Consumers will therefore link a stronger relational embeddedness to a greater shared expertise and thus to a greater expertise of both partners to develop the new innovation(s) (Dhanaraj et al., 2004; Nielsen, 2005; Samuel et al., 2016).

As mentioned with H1, corporate credibility in turn benefits purchase intentions (Jacobson et al., 2011; Lafferty, 2007; Park et al., 2007) and willingness to pay for the innovation (Erdem et al., 2002; Kazadi et al., 2015; van Dijk et al., 2014).

In sum, we argue that the effect of (reciprocated) explicit brand mention on consumers' adoption of products resulting from a brand alliance can be explained by a serial mediation. First, an explicit partner brand mention by one partner signals a greater degree of relational embeddedness between the partners, which is particularly strong when the brand mention is reciprocated. This higher degree of relational embeddness will then, in turn, lead to an increase in the perceived corporate credibility of both partners. In turn, corporate credibility is an important determinant of consumer adoption.

H_4: An explicit partner brand mention which is reciprocated by the partner enhances consumers' (a) purchase intentions and (b) willingness to pay for an innovation compared to a non-reciprocated explicit brand mention, through an increase in perceived corporate credibility.

H_5: The positive effect of explicit brand mention reciprocity on perceived corporate credibility is, in turn, mediated by a stronger perceived relational embeddedness between the alliance partners.

The moderating role of corporate experience

Above, we argue that (reciprocated) explicit brand mentions will have a positive effect on the corporate credibility of the firm(s) and hence consumers' purchase intentions and willingness to pay. However, can we expect this positive effect on any firm? Is there a different impact of using reciprocated brand name or mere partnership mention on the corporate credibility of a firm depending on the experience of this firm? In other words, does corporate experience moderate the effects hypothesized above?

On the one end of the spectrum, there are firms with long-lasting experience in one or multiple industries. On the other, start-ups with little or no experience (which are also typically smaller than long-established firms) try to conquer the market with new products or services. Both start-ups and experienced organizations benefit from collaboration to develop innovations and the access to (often complementary) associations and resources they can gain through it (Decker and Baade, 2016). The moderating impact of corporate experience will result in asymmetric contributions to and effects of explicit brand mentions in brand alliances. One of the reasons for start-ups to partner with established firms is to improve their legitimacy and the quality perception of their products (Colombo et al., 2006; Dacin et al., 2007). An unexperienced organization does, in itself, not signal much regarding product quality, as preexisting attitudes will be weak regarding attitude strength and accessibility (Simonin and Ruth, 1998). The alliance represents new affective information that can add relevant associations to this partner. The corporate credibility of an unexperienced partner will therefore strongly be affected by the collaboration and what is communicated about it. Therefore, the effect of (reciprocated) explicit partner brand mention on a less experienced organization will be relatively strong.

Conversely, an established company almost by definition signals expertise and product quality (Dilling, 2011). Literature on signaling suggests that, among other factors, a firm's experience can be a signal for consumers that what the company claims about its products must be true (Kirmani and Rao, 2000). Consumers believe that established companies will be subject to lawsuits if they make false claims, and thus will not do this, while start-ups have little to lose. Established brands generally benefit from a strong and extensive network of associations, making the attitudes toward them more resistant to change (Simonin and Ruth, 1998). The upward potential of a (reciprocated) explicit brand mention strategy is therefore limited.

H_6: Reciprocated explicit brand mentions have a stronger positive effect (through perceived relational embeddedness) on the perceived corporate credibility of a less experienced (start-up) company than on the perceived corporate credibility of a more experienced company.

Method

Design

Our second study adopts a 4 (Explicit brand mentions by both allies; Mere partnership mention by both allies; Non-reciprocated explicit brand mention by partner A; Non-reciprocated brand mention by partner B) x 2 (partner A corporate experience: established vs startup) between-subjects experimental design. As such, the design entails 8 experimental conditions (see Appendix 2 for examples). As in Study 1, each experimental condition consists of two separate news items (one by each partner) which were presented to respondents in a randomized order. One news item was supposedly posted on the website of the first partner, a fictitious computer manufacturer “STC”; the other news item was posted on the website of the brand ally, a fictitious mobile phone manufacturer “Tech Mobile”. The news items discussed a new battery technology resulting from the co-creation between these two industrial organizations. The technology was used by both partners in their own products.

We manipulated the explicit brand mentions versus mere partnership mention in a similar way as in the first study. Differently to Study 1, however, we now always presented respondents with one communication by each partner. As such, we also create a situation where one of the allies explicitly mentions the partner brand, but the mention is not reciprocated by the other partner (in this case, that partner merely mentions the partnership). A communication explicitly mentioning the partner brand included 4 mentions to the partner brand name and the partner’s website. The communication then also featured both partners’ logos. In case of an implicit partnership mention, the news item did not specifically mention the partner by name, but referred to “a computer / mobile phone manufacturer” in more general terms.

In addition, we manipulated the corporate experience of one of the partners (Tech Mobile) by describing it as “a newly established startup” (startup, low experience) or as “a multinational with 20 years of experience” (established firm, high experience). The other partner, STC, was always described as “a leading multinational in the computer industry”. Other than the intended manipulations, the article content, visual design and product features in all conditions were identical.

Participants and procedure

Similarly to our first experiment, we obtained our data through the Prolific consumer panel, selecting a sample of US participants. Respondents were contacted by e-mail and asked to participate in the online experiment. The survey software (Qualtrics) randomly assigned participants to one of the 8 conditions. As a quality control, we included similar control measures as in Study 1: a time check of 20 seconds for reading each news item, and the control question ("This a control question. Please select 'Totally agree' when you are completing the questionnaire") at two different locations. A total of 147 respondents (28%, N = 523) who spent less than 20 seconds on a news item, less than 6 minutes on the whole survey or who incorrectly answered one of the control questions, were excluded. Our final sample consists of 376 respondents (48% female, *M age* = 33 years, *SD age* = 10 years, 63% Bachelor's Degree or higher).

Measures

Similarly to Study 1, participants had to read two website news items containing the manipulations, presented in a random order. Next, we measured our dependent variables. To measure willingness to pay, participants were asked to indicate on a slider how much they would be willing to pay for a laptop by STC and for a mobile phone of Tech Mobile, both using the co-created battery technology described in the news items. We provided a suggested retail price (800$ for the laptop, 300$ for the mobile phone) as a reference, and the maximum price in the slider was set as twice that amount. We thus measured consumers' willingness to pay for a laptop by STC (M = 808.25, SD = 254.90), and for a mobile phone of Tech Mobile (M = 303.42, SD = 119.87). Consistent with Study 1, we transformed the willingness to pay scale using a logarithmic transformation to correct for skewedness of our dependent variable.

Next, all other relevant variables for our study were measured on multi-item 7-point Likert or semantic differential scales. Corporate credibility was measured through the same measures as in Study 1, including a scale for perceived trustworthiness (Sinclair and Irani, 2005) and perceived expertise in innovation (Kazadi et al., 2015) (6 items in total). In this case, we measured the corporate credibility of both partners: STC ($\alpha = .917$) and Tech Mobile ($\alpha = .927$). Furthermore, we measured the perceived relational embeddedness through a scale adapted from Rindfleisch and Moorman (2001) (4 items, e.g. 'The relationship between STC and Tech Mobile can be defined as "mutually gratifying".', $\alpha = .817$). We measured the perceived fit between both partners (3 items, e.g. 'I think the combination of STC and Tech Mobile collaborating to develop new innovations does not go together / goes together', $\alpha = .950$) (Bower and Grau, 2009) to include as a covariate in our analyses. Finally, we measured consumers' familiarity with both companies ('How familiar were you with the company X before you read the news items in this survey?') and the perceived experience of Tech Mobile ('Tech Mobile has a great amount of experience.') as a manipulation check through single item 7-points Likert-type scales. Furthermore, we included a manipulation check of whether respondents perceived the articles as referring explicitly to the other partner or not. Respondent were shown both news items again at the end of the survey (to avoid undue demand effects by measuring it before the dependent variables), and where asked after each news item a 'yes/no'-question: "Did X refer to their innovation partner Y by name in their news item?" To conclude, participants also reported their age, gender and level of education.

Testing of the measurement model

As in Study 1, we started by conducting a confirmatory factor analysis using IBM AMOS 25 to assess the validity of the constructs (Hair et al., 2010). Different from our first study, the correlation between the error terms of the three items of perceived expertise in innovation, one of the two dimensions of corporate credibility, was too high for both STC and Tech Mobile. Therefore, we included only one of these items in the construct of corporate credibility in this study. As such, the model showed an acceptable level of fit for both STC (χ^2/df = 3.959, CFI = .953, SRMR = .0816) and Tech Mobile (χ^2/df = 3.507, CFI = .961, SRMR = .0743). The composite reliability (CR) was well above the threshold of 0.70 for all constructs. The average variance extracted (AVE) is also greater than .50, suggesting convergent validity. For discriminant validity, we can confirm that the maximum shared variance (MSV) is smaller than the AVE and the square root of the average variance is greater than the inter-construct correlations (Table 3).

Table 3: Factor Correlation Matrices with Square Root of the AVE on the Diagonal (Study 2)

STC

	CR	**AVE**	**MSV**		**CC**	**Fit**	**REmbed**	**PI**
CC	.908	.721	.376		**.849**			
Fit	.950	.864	.452		.371	**.930**		
REmbed	.820	.539	.452		.352	.672	**.734**	
PI	.926	.807	.376		.613	.398	.413	**.898**

Tech Mobile

	CR	**AVE**	**MSV**		**CC**	**Fit**	**REmbed**	**PI**
CC	.908	.721	.376		**.849**			
Fit	.950	.864	.452		.371	**.930**		
REmbed	.820	.539	.452		.352	.672	**.734**	
PI	.926	.807	.376		.613	.398	.413	**.898**

CC: Corporate Credibility
REmbed: Perceived Relational Embeddedness
PI: Purchase Intentions

Results

As intended, our respondents indicated to be unfamiliar with both companies before the start of the experiment (STC: $M = 1.33$, $SD = 1.04$; Tech Mobile: $M = 1.42$, $SD = 1.18$). Next, an independent samples t-test confirmed that consumers indeed perceived Tech Mobile as more experienced in the conditions where it was described as a company with experience in the business ($M = 5.22$, $SD = 1.08$) compared to the conditions where it was described as a start-up ($M = 4.55$, $SD = 1.36$) ($t(374) = -5.33$, $p < .001$). Furthermore, 97.6% of respondents (n=376) correctly judged the news items with mere partnership mention as 'not referring to the other partner by name' and the news items with explicit brand mentions as 'referring to the other partner by name'.

In order to test the hypotheses H_4 and H_5, regarding the effects of reciprocated brand mention on corporate credibility and adoption, we ran four serial mediation analyses in IBM SPSS Statistics 20, based on Hayes' PROCESS macro (model 6) (Hayes, 2013) using bootstrapping (number of bootstrap replicates: 10000): two with respectively purchase intentions and willingness to pay for STC as dependent variables, and two with purchase intentions and willingness to pay for Tech Mobile as dependent variables. The independent variables were the same in all models. For the independent variable – our four conditions – we created three dummy variables: (1) both partners use an implicit partnership mention, (2) STC explicitly refers to Tech Mobile, but Tech Mobile refers to a partnership in general (implicit), and (3) Tech Mobile explicitly refers to STC, but STC refers implicitly to the partnership. The strategy of reciprocated explicit brand mention thus served as the baseline, as we are interested in whether reciprocated brand mention strategy has a significant more positive effect than any other strategy. We included the perceived relational embeddedness of both partners ($M = 5.12$, $SD = 1.02$) as a first mediator in our models, and the corporate credibility of respectively STC ($M = 4.88$, $SD = .99$) and Tech Mobile ($M = 4.89$, $SD = .98$) as second mediator in the first two and second two analyses. We also included the fit between both parties as a control variable, as in Study 1. The mediators and covariate were mean-centered.

First, we find a significant negative effect of both partners using implicit partnership mention over reciprocated explicit brand name references on the perceived relational embeddedness of the partners (b = - .443, $t(371) = -3.92$, $p < .001$), which in turn positively affects the corporate credibility of both STC (b = .216, $t(370) = 3.19$, $p < .01$) and Tech Mobile (b = .190, $t(370) = 2.73$, $p < .01$). Next, the corporate credibility of STC and Tech Mobile both have a positive effect on the purchase intentions and willingness to pay for the product containing their co-created innovation (see Table 4). This confirms partly H_4, and discloses the mediating role of perceived relational embeddedness in the effect of explicit brand name references on corporate credibility (H_5).

To know whether we can fully accept H_4, we compare reciprocated brand mention with strategies where only one of the two partners refers to the other explicitly by name. We find a (marginally) significant negative effect on the perceived relational embeddedness between both partners of strategies where only one partner uses explicit references compared to reciprocated explicit brand mention. In case 2, where STC explicitly refers to Tech Mobile, but Tech Mobile refers to its partner in general, this difference is significant (b = - .226, $t(371) = -2.03$, $p < .05$); in case 3, where Tech Mobile explicitly refers to STC, but STC refers to partner in general, we find a marginally significant difference with reciprocated brand mention (b = - .213, $t(371) = -1.77$, $p < .10$). As demonstrated above, perceived relational embeddedness has a positive effect on the perceived corporate credibility of both STC and Tech Mobile. This further confirms H_5, stating that the effect of reciprocated explicit brand mention on corporate credibility is mediated by perceived relational embeddedness between the partners. As stated above, we also find that corporate credibility positively affects purchase intentions and willingness to pay in the case of both partners. We can thus confirm H_{4a} and H_{4b}. The serial mediation effects of reciprocated explicit brand name references on purchase intentions (PI) and willingness to pay (WTP) through relational embeddedness and corporate credibility are summarized in Table 5.

Table 4: Unstandardized regression weights serial mediation analyses (Study 2)

STC

	Perceived relational embeddedness	**Corporate credibility STC**	**Purchase Intentions STC**	**Log Willingness To Pay STC**
Reciprocated explicit brand mention (constant)	2.451***	2.269***	.659*	6.026***
(1) Implicit reference by both partners (dummy)	- .443***	.077	- .037	- .004
(2) STC explicitly refers to Tech Mobile, but Tech Mobile refers to partner in general (implicit) (dummy)	- .226*	- .029	- .145	.060
(3) Tech Mobile explicitly refers to STC, but STC refers to partner in general (implicit) (dummy)	- .213°	.135	- .107	.022
Perceived relational embeddedness		.216**	.039	- .015
Corporate credibility STC			.773***	.155***
Perceived partner fit	.510***	.256***	.149**	- .014
R^2	.3267	.1950	.4652	.1625

Tech Mobile

	Perceived relational embeddedness	**Corporate credibility Tech Mobile**	**Purchase Intentions Tech Mobile**	**Log Willingness To Pay Tech Mobile**
Reciprocated explicit brand mention (constant)	2.451***	2.374***	.483	4.562***
(1) Implicit reference by both partners (dummy)	- .443***	.012	- .082	- .009
(2) STC explicitly refers to Tech Mobile, but Tech Mobile refers to partner in general (implicit) (dummy)	- .226*	- .054	- .306°	.119°
(3) Tech Mobile explicitly refers to STC, but STC refers to partner in general (implicit) (dummy)	- .213°	.125	- .089	.135*
Perceived relational embeddedness		.190**	.080	.032
Corporate credibility STC			.600***	.193***
Perceived partner fit	.510***	.267***	.280***	- .020
R^2	.3267	.1930	.3482	.1587

Note: *** $p \leq .001$, ** $p \leq .010$, * $p \leq .050$, ° $p \leq .100$

Table 5: Total indirect effects of explicit brand mention on PI and WTP (Baseline = reciprocated explicit brand mention)

STC

	PI	SE	95% CI		**LogWTP**	SE	95% CI	
(1) Implicit reference by both partners (dummy)	**-.074***	.030	-.150	-.027	**-.015***	.006	-.032	-.005
(2) STC explicitly refers to Tech Mobile, but Tech Mobile refers to partner in general (implicit) (dummy)	**-.038***	.022	-.095	-.005	**-.007***	.005	-.021	-.001
(3) Tech Mobile explicitly refers to STC, but STC refers to partner in general (implicit) (dummy)	**-.036***	.023	-.095	-.002	**-.007***	.005	-.020	-.001

Tech Mobile

	PI	SE	95% CI		**LogWTP**	SE	95% CI	
(1) Implicit reference by both partners (dummy)	**-.050***	.025	-.115	-.016	**-.016***	.008	-.039	-.005
(2) STC explicitly refers to Tech Mobile, but Tech Mobile refers to partner in general (implicit) (dummy)	**-.026***	.016	-.073	-.004	**-.008***	.005	-.024	-.001
(3) Tech Mobile explicitly refers to STC, but STC refers to partner in general (implicit) (dummy)	**-.024***	.017	-.081	-.001	**-.008***	.006	-.024	-.001

Note: *** $p \leq .001$, ** $p \leq .010$, * $p \leq .050$, ° $p \leq .100$

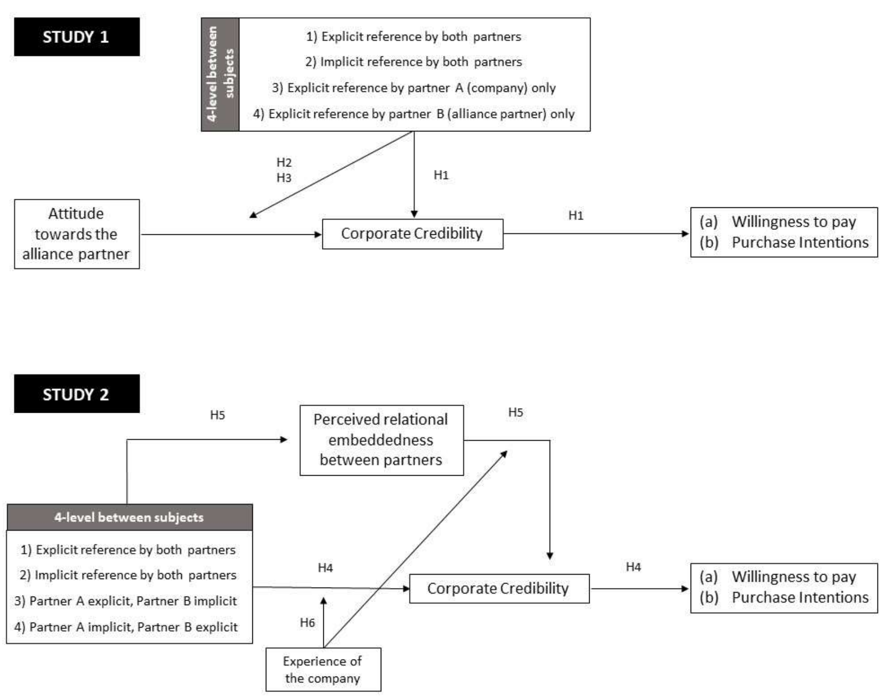
PI: Purchase intentions
WTP: Willingness to pay

Next, to test hypothesis H_6 regarding the moderation effect of company experience on the effect of reciprocated explicit brand mention on corporate credibility, we ran a moderated mediation analysis, based on Hayes' PROCESS macro (model 15) (Hayes, 2013) using bootstrapping (number of bootstrap replicates: 10000). Again, for the independent variable –

our four conditions – we created three dummy variables: (1) both partners use a mere partnership mention, (2) STC explicitly refers to Tech Mobile, but Tech Mobile refers to a partnership in general, and (3) Tech Mobile explicitly refers to STC, but STC refers to partnership in general. Perceived relational embeddedness was included as mediator, and a dummy variable distinguishing the manipulated company experience of Tech Mobile (0 = start-up, 1 = long-established) as a moderator (see Figure 1).

However, we did not find support for an interaction effect between the use of reciprocated explicit brand mention versus implicit partnership mention and company experience (b = - .022, $t(367) = -.10$, $p = .917$), nor between perceived relational embeddedness and company experience (b = - .092, $t(367) = -.91$, $p = .361$) on corporate credibility of Tech Mobile, as hypothesized in H_6. There was also no direct effect of company experience on corporate credibility (b = .052, $t(367) = .56$, $p = .578$). This demonstrates that the results of our study are the same for start-ups as for long-established companies. We thus reject H_6.

Figure 1: Overview of studies



Conclusions

In this paper, we investigated the effect of explicit brand mentions, communication source and brand name reciprocity in brand alliance communications on consumers' purchase intentions and willingness to pay for an innovation, and test the serial mediation through the perceived relational embeddedness of the partners and the perceived corporate credibility of the co-creating companies. In Study 1, we compared explicit brand mention by one or both partners with implicit partnership mention by both partners, where in Study 2 we investigated the effects of reciprocated brand mentions in comparison with an implicit partnership reference by one of both partners.

First, we determine that when alliance partners explicitly refer to each other, this positively influences the perceived corporate credibility of the firm(s) involved in the co-creation. In line with signaling theory (Besharat, 2010; Gammoh et al., 2006; Rao and Ruekert, 1994), we show that the way in which partners refer to each other acts as a signal for the unobservable relational embeddedness of the partners. Consumers base their perception of relational embeddedness on whether or not allies explicitly mention the other partner's brand, and a higher relational embeddedness positively influences the corporate credibility of the company. Consumers believe that companies that work in a close relationship with their co-creation partners are more trustworthy and have more expertise in developing new innovations (Bower and Grau, 2009; Samuel et al., 2016). Our results do show that explicit brand mentions induce higher levels of perceived relational embeddedness. Especially when the explicit references are reciprocated, consumers see partners as strongly embedded. If they only read news items by one partners they seem to assume that the other partner will do the same. However, when the alliance partner is not referring to them explicitly, like documented by Burton et al. (2017), this has a significant effect on the perceived relational embeddedness, and hence corporate credibility, willingness to pay and purchase intentions. We thus see a double signaling effect of co-branded communications over implicit partnership mention, in that consumers change their perceptions based on the fact that the reference to the other partner in communications about an alliance is explicit AND based on the fact that it is reciprocated. As a result, consumers have a higher intention to buy and are prepared to pay more for the new products of the firm after communication about collaboration activities containing reciprocated brand mentions to the brand ally.

Next, we find that the way allies communicate, i.e. whether they mention the other partner explicitly or implicitly, interacts with the spillover effects of the brand ally to the own brand. Co-branded communications increases the associations between lead firm and its partner. Consumers with a more positive attitude towards this partner will therefore transfer this positive image more easily to the lead firm, as explained by Associative Network Theory (Anderson and Bower, 1973). The results of Study 2 further indicate that there is no difference between long-established and start-ups in relation to the effects of brand mentions on corporate credibility. This means that co-branded communications is beneficial for both young and experienced firms to improve their corporate credibility, and hence the purchase intentions and willingness to pay for their products.

Theoretical implications

Our research has several theoretical implications. First, we extend previous studies that have identified a number of boundary conditions of signaling and spillover effects. Spillover effects of consumer attitudes from partners in brand alliances is well established in current literature (Simonin and Ruth, 1998). However, in this study, we introduce explicit brand mention in brand alliance communications as a moderator, interacting with the spillover effects, which is to our knowledge not done before. Although the results are pretty intuitive, they can be an interesting starting point for research on how to communicate about partnerships. Indeed, brand alliance literature has almost exclusively tested a single communication "source", where alliance information is presented by the researchers, or in a mock ad or press release, communicated jointly by partners, or just one of the partners. Based on this research, it seems sufficient that a link is somehow established to allow for spillover effects to occur. Recent research by Liljedal (2016) questioned whether it is the signal of another partner collaborating with a firm that induces positive effects for this firm, or a specific brand explicitly exhibiting the alliance. We demonstrate the importance of explicit brand mentions, as they imply a strong bond between partners (Gammoh et al., 2006).

Our results also demonstrate that it matters that when both partners communicate the brand alliance, there is added value (i.e., a synergy effect) to be gained when both partners explicitly communicate the other partner's brand name. With a single communication, there is the implicit understanding that both partners involved support the communication. At the same time, when one partner mentions the other partner explicitly, while the other does not reciprocate, this signals less commitment. Following this, a third theoretical contribution is the introduction of perceived relational embeddedness as a determinant of corporate credibility for firms participating in brand alliances.

Furthermore, the results regarding the moderating role of experience of the co-creating firm demonstrate that long-established firms and young start-ups benefit similarly from reciprocal explicit brand name references. Of course these results cannot be extrapolated to the difference between young unknown and highly familiar, well-established brands, which is often the difference between long-established firms and start-ups in reality (Colombo et al., 2006). Nevertheless, they are interesting from a theoretical point-of-view, as potential differences between young start-ups and long-established companies thus seem not to be attributable to their organizational characteristic of corporate experience per se (but rather to earlier brand associations) (Liljedal, 2016).

Managerial implications

Our study also offers a number of managerial implications. In practice, alliance partners increasingly communicate independently about their individual initiatives or results, especially online. One of them may choose, for some reason, to not communicate or communicate a general involvement, without mentioning specific partners. Partners may choose not to communicate an alliance or to communicate a general involvement, without mentioning specific partner brands for several reasons. For example, because the alliance did not lead to a marketable innovation, because of a potential conflict of interest with other (future) alliances, because the alliance partner may not be an established or reputable firm, because the alliance involves multiple partners, or because an NGO, government or scientific institute may be afraid to come across as “too commercial”.

Research by Burton et al. (2017) shows the almost complete lack of reciprocal promotion between partners. We show there is great potential for firms to increase purchase intentions and willingness to pay for their products/services if they communicate explicitly about their alliance partners, and that they should engage their partner organizations to do the same. Companies engaging in an alliance should be aware that their communications influences consumers´ willingness to pay for their products. On a specific level, communication surrounding these alliances may focus on brand names and partner alliance names. As our research points out companies should be explicit and reciprocal in brand mention and partner name mention. Indeed, reciprocity in brand mentions emphasizes to consumers that partners worked in a good and close relationship, which in turn is valued as a strong asset to develop qualitative and innovative offerings. Moreover, the firm may reach a larger audience when partners co-communicate, further increasing the potential adoption of the innovation (Rogers, 2010). As shown in recent literature, marketing communication through social media can lend itself perfectly for reciprocal co-branding a brand alliance (Burton et al., 2017; Hanna et al., 2011). Platforms like Twitter or Facebook enable organizations to retweet/share online marketing communications of partner organizations (Lee and Sundar, 2013). If companies communicate themselves about their alliance partner(s), and share communications created by their partners mentioning their company, their customers will see the reciprocal brand mentions, hence leading to higher purchase intentions and willingness to pay. Besides, news about brand alliances could be spread via website news items, e-mail new bulletins and press releases. Given our positive results of reciprocal brand mentions, alliance partners may also think about advertising their collaborative efforts, online or via offline channels.

On a more general level, we noticed in our results that companies should address the perceived relationship with their alliance partners in their communication as well. As our results show that a perception of a high relational embeddedness of the partners positively impacts a firm's corporate credibility, we also recommend firms and their partners to strongly emphasize their close collaboration during innovation processes when communicating about brand alliances. Companies could for example stress that the end result could only be developed by virtue of the strong engagement of all allies or state their intention to build an enduring partnership with the alliance partners for the future. Again, the companies will gain the most positive results in terms of corporate credibility if all partners reciprocate this message of strong collaboration. Perceived relational embeddedness may also be increased if partners continue to spread information about the alliance over time. Our findings also could inspire companies to more carefully plan and screen the selection of alliance partners in view of their potential impact (i.e., spillover effect) on a company's perceived corporate reputation and hence consumers´

purchase intentions and willingness to pay. Alliance partners with solid reputations in the market are seen as trustworthy and reliable. Their expertise as well as established brand names will signal quality and will enhance the successful collaboration and outcomes of the alliance partners. Explicit and reciprocal communications by all alliance partners should be carefully developed and timed in view of the essential impact on consumers´ willingness to adopt these co-branded products or innovations.

Furthermore, we demonstrate that both start-ups and multinationals will benefit from mentioning their partner brands explicitly (and asking their partners to do the same). This means that all companies, young or long-established, should invest in proper communication about partnerships, as communications favors both themselves and their allies.

Limitations and further research

There are some limitations to this study that could inspire future research. Firstly, in both studies we included the communication of a single partner. In practice, firms increasingly collaborate with multiple partners in the alliance (Fyrberg Yngfalk, 2013; Kazadi et al., 2016). More partners will make communications more complex and bring additional challenges to communicating effectively about the brand alliance. Therefore, both the effects of communication by multiple partners and the management of marketing communications in a network of diverse partners are compelling paths for future research. In light of the current research, it would be interesting to test whether reciprocity of explicit brand mention is required by all parties in more complex setting, or whether a “tipping point” might occur where additional explicit references by more than x parties may no longer add additional value. While we suspect that the conclusions of our research would also hold for other types of partners and other types of brand alliances, this is something that should be explicitly tested in further research.

Secondly, we used fictitious brands for both the firm and the brand ally. As such, we were able to enhance the internal validity of our research. Moreover, stronger effects can be expected for unfamiliar brands, as it is more easy to change affective reactions towards a brand by reading two news items about an unfamiliar brand than about a familiar brand (Derbaix, 1995; Liljedal, 2016). Nevertheless, we are aware that for familiar brands, different effects might be found (Delgado-Ballester et al., 2012).

Additionally, we only used a direct approach to measure willingness to pay. In line with previous research on innovation adoption, we argue that willingness to pay is an appropriate measure for consumer adoption of new products. On the one hand, the willingness to pay expresses how potential customers value a new product, driving adoption (Kazadi et al., 2015). On the other hand, it is directly linked to the firm's pricing strategy and hence the profitability of the innovation (Parry and Kawakami, 2015). As a result, willingness to pay is of particular interest for both research and practice (Homburg et al., 2005; Kazadi et al., 2015). At the same time, the product in question (a tablet) is a low frequency purchase product, co-created by two unfamiliar organizations. Asking consumers directly about their willingness to pay for such a product can cause consumers to set a higher price than they would pay in real life, or to underestimate their willingness to pay for the product (Breidert et al., 2006). We included purchase intentions to further validate our findings, but we encourage the use of other measures for adoption behavior, including actual behavior, or other relevant outcomes such as positive word of mouth or willingness to participate in future co-creation activities with the company, in further research on the effects of communication about co-creation.

Next, this paper solely examines consumer responses to collaboration in a B2C setting. That is consistent with the brand alliance and signaling theories we rely on. Testing our results in a B2B market is an interesting field for further research, which falls beyond the scope of the current manuscript. We also tested only moderately complex products in the product category of consumer electronics. Kazadi et al. (2015) demonstrate that consumers prefer customer co-creation for lowly complex products, but multiple stakeholder co-creation for highly complex products. Further examination of our findings for different product categories may be useful. Moreover, other discriminators than product complexity, e.g. hedonic vs utilitarian goods, can be applied.

Finally, we encourage further research on the influence of other factors that influence consumer responses to the communication strategy of brand allies. Our research provides evidence that brand mentions can influence the perceived relational embeddedness between two partners and the corporate credibility of both partners and hence adoption. The company's corporate experience, in this case, did not moderate the effects of co-branded communications. Other factors such as brand familiarity or prior brand attitude should be investigated as further moderators.

References

Anderson, J.R. and Bower, G.H. (1973), *Human associative memory*. New York: VH Winston & Sons.

Austin, J.E. and Seitanidi, M.M. (2012), "Collaborative value creation: A review of partnering between nonprofits and businesses: Part i. Value creation spectrum and collaboration stages", *Nonprofit and Voluntary Sector Quarterly*, Vol. 41 No. 5, pp. 726-758.

Besharat, A. (2010), "How co-branding versus brand extensions drive consumers' evaluations of new products: A brand equity approach", *Industrial Marketing Management*, Vol. 39 No. 8, pp. 1240-1249.

Bigné-Alcañiz, E., Chumpitaz-Cáceres, R. and Currás-Pérez, R. (2010), "Alliances between brands and social causes: The influence of company credibility on social responsibility image", *Journal of Business Ethics*, Vol. 96 No. 2, pp. 169-186.

Boerman, S.C., van Reijmersdal, E.A. and Neijens, P.C. (2012), "Sponsorship disclosure: Effects of duration on persuasion knowledge and brand responses", *Journal of Communication*, Vol. 62 No. 6, pp. 1047-1064.

Bonner, J.M. and Walker Jr., O.C. (2004), "Selecting influential business-to-business customers in new product development: Relational embeddedness and knowledge heterogeneity considerations", *Journal of Product Innovation Management*, Vol. 21 No. 3, pp. 155-169.

Bower, A.B. and Grau, L. (2009), "Explicit donations and inferred endorsements", *Journal of Advertising*, Vol. 38 No. 3, pp. 113-126.

Breidert, C., Hahsler, M. and Reutterer, T. (2006), "A review of methods for measuring willingness-to-pay", *Innovative Marketing*, Vol. 2 No. 4, pp. 8-32.

Burton, S. et al. (2017), "Helping those who help us: Co-branded and co-created twitter promotion in csr partnerships", *Journal of Brand Management*, Vol. 24 No. 4, pp. 322-333.

Colombo, M.G., Grilli, L. and Piva, E. (2006), "In search of complementary assets: The determinants of alliance formation of high-tech start-ups", *Research policy*, Vol. 35 No. 8, pp. 1166-1199.

Cunha, M., Forehand, M.R. and Angle, J.W. (2015), "Riding coattails: When co-branding helps versus hurts less-known brands", *Journal of Consumer Research*, Vol. 41 No. 5, pp. 1284-1300.

Dacin, M.T., Oliver, C. and Roy, J.P. (2007), "The legitimacy of strategic alliances: An institutional perspective", *Strategic Management Journal*, Vol. 28 No. 2, pp. 169-187.

Daems, K., De Pelsmacker, P. and Moons, I. (2017), "Advertisers' perceptions regarding the ethical appropriateness of new advertising formats aimed at minors", *Journal of Marketing Communications*, pp. 1-19.

Das, T.K. and He, I.Y. (2006), "Entrepreneurial firms in search of established partners: Review and recommendations", *International Journal of Entrepreneurial Behavior & Research*, Vol. 12 No. 3, pp. 114-143.

Decker, C. and Baade, A. (2016), "Consumer perceptions of co-branding alliances: Organizational dissimilarity signals and brand fit", *Journal of Brand Management*, Vol. 23 No. 6, pp. 648-665.

Delgado-Ballester, E., Navarro, A. and Sicilia, M. (2012), "Revitalising brands through communication messages: The role of brand familiarity", *European Journal of Marketing*, Vol. 46 No. 1/2, pp. 31-51.

Derbaix, C.M. (1995), "The impact of affective reactions on attitudes toward the advertisement and the brand: A step toward ecological validity", *Journal of Marketing Research*, Vol. 32 No. 4, pp. 470-479.

Dhanaraj, C., Lyles, M.A., Steensma, H.K. and Tihanyi, L. (2004), "Managing tacit and explicit knowledge transfer in ijvs: The role of relational embeddedness and the impact on performance", *Journal of International Business Studies*, Vol. 35 No. 5, pp. 428-442.

Dickinson, S.J. and Heath, T. (2008), "Cooperative brand alliances: How to generate positive evaluations", *Australasian Marketing Journal*, Vol. 16 No. 2, pp. 22-38.

Dilling, P. (2011), "Stakeholder perception of corporate social responsibility", *International Journal of Management and Marketing Research*, Vol. 4 No. 2, pp. 23-34.

Enkel, E., Gassmann, O. and Chesbrough, H. (2009), "Open r&d and open innovation: Exploring the phenomenon", *R&D Management*, Vol. 39 No. 4, pp. 311-316.

Erdem, T., Swait, J. and Louviere, J. (2002), "The impact of brand credibility on consumer price sensitivity", *International Journal of Research in Marketing*, Vol. 19 No. 1, pp. 1-19.

Friestad, M. and Wright, P. (1994), "The persuasion knowledge model: How people cope with persuasion attempts", *Journal of Consumer Research*, Vol. 21 No. 1, pp. 1-31.

Fyrberg Yngfalk, A. (2013), "'It's not us, it's them!' – rethinking value co-creation among multiple actors", *Journal of Marketing Management*, Vol. 29 No. 9-10, pp. 1163-1181.

Gammoh, B.S., Voss, K.E. and Chakraborty, G. (2006), "Consumer evaluation of brand alliance signals", *Psychology & Marketing*, Vol. 23 No. 6, pp. 465-486.

Geylani, T., Inman, J.J. and Hofstede, F.T. (2008), "Image reinforcement or impairment: The effects of co-branding on attribute uncertainty", *Marketing Science*, Vol. 27 No. 4, pp. 730-744.

Gurau, C. (2008), "Integrated online marketing communication: Implementation and management", *Journal of Communication Management*, Vol. 12 No. 2, pp. 169-184.

Hair, J., Black, W., Babin, B. and Anderson, R. (2010), *Multivariate data analysis* 7th ed. Upper Saddle River, New York: Pearson Education.

Hanna, R., Rohm, A. and Crittenden, V.L. (2011), "We're all connected: The power of the social media ecosystem", *Business Horizons*, Vol. 54 No. 3, pp. 265-273.

Hayes, A.F. (2013), *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York, NY: The Guildford Press.

Hayes, A.F. (2017), *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York, NY: Guilford Publications, Inc.

Homburg, C., Koschate, N. and Hoyer, W.D. (2005), "Do satisfied customers really pay more? A study of the relationship between customer satisfaction and willingness to pay", *Journal of Marketing*, Vol. 69 No. 2, pp. 84-96.

Irmak, C., Sen, S. and Bhattacharya, C. (2015), "Consumer reactions to business-nonprofit alliances: Who benefits and when?", *Marketing Letters*, Vol. 26 No. 1, pp. 29-42.

Jacobson, R.P., Mortensen, C.R. and Cialdini, R.B. (2011), "Bodies obliged and unbound: Differentiated response tendencies for injunctive and descriptive social norms", *Journal of Personality and Social Psychology*, Vol. 100 No. 3, pp. 433-448.

Kazadi, K., Lievens, A. and Mahr, D. (2015), "“Does it pay off to introduce my partner?” the role of stakeholder cocreation in consumers’ willingness to pay", *Advances in advertising research (vol. V)*, Springer, pp. 321-330.

Kazadi, K., Lievens, A. and Mahr, D. (2016), "Stakeholder co-creation during the innovation process: Identifying capabilities for knowledge creation among multiple stakeholders", *Journal of Business Research*, Vol. 69 No. 2, pp. 525-540.

Kelly, K.S. (2001), *Stewardship: The fifth step in the public relations process*. Thousand Oaks, CA: Sage

Kirmani, A. and Rao, A.R. (2000), "No pain, no gain: A critical review of the literature on signaling unobservable product quality", *Journal of Marketing*, Vol. 64 No. 2, pp. 66-79.

Kostyra, D.S. and Klapper, D. (2015), "Signaling teamwork: How brand prominence in brand alliance communication can influence customer perception", *Marketing ZFP*, Vol. 37 No. 2, pp. 69-78.

Lafferty, B.A. (2007), "The relevance of fit in a cause–brand alliance when consumers evaluate corporate credibility", *Journal of Business Research*, Vol. 60 No. 5, pp. 447-453.

Lafferty, B.A. and Edmondson, D.R. (2009), "Portraying the cause instead of the brand in cause-related marketing ads: Does it really matter?", *Journal of Marketing Theory and Practice*, Vol. 17 No. 2, pp. 129-144.

Lafferty, B.A., Goldsmith, R.E. and Hult, G.T.M. (2004), "The impact of the alliance on the partners: A look at cause-brand alliances", *Psychology & Marketing*, Vol. 21 No. 7, pp. 509-531.

Lanseng, E.J. and Olsen, L.E. (2012), "Brand alliances: The role of brand concept consistency", *European Journal of Marketing*, Vol. 46 No. 9, pp. 1108-1126.

Lee, J.Y. and Sundar, S.S. (2013), "To tweet or to retweet? That is the question for health professionals on twitter", *Health Communication*, Vol. 28 No. 5, pp. 509-524.

Levin, A.M., Levin, I.R. and Heath, C.E. (2003), "Product category dependent consumer preferences for online and offline shopping features and their influence on multi-channel retail alliances", *Journal of Electronic Commerce Research*, Vol. 4 No. 3, pp. 85-93.

Liljedal, K.T. (2016), "The effects of advertising consumer co-created new products", *Journal of Advertising Research*, Vol. 56 No. 1, pp. 53-63.

Manning, W.G. and Mullahy, J. (2001), "Estimating log models: To transform or not to transform?", *Journal of Health Economics*, Vol. 20 No. 4, pp. 461-494.

Newell, S.J. and Goldsmith, R.E. (2001), "The development of a scale to measure perceived corporate credibility", *Journal of Business Research*, Vol. 52 No. 3, pp. 235-247.

Nguyen, C., Romaniuk, J., Faulkner, M. and Cohen, J. (2018), "Are two brands better than one? Investigating the effects of co-branding in advertising on audience memory", *Marketing Letters*, Vol. 29 No. 1, pp. 37-48.

Nielsen (2013), Under the influence: Consumer trust in advertising. http://www.nielsen.com/us/en/insights/news/2013/under-the-influence-consumer-trust-in-advertising.html, The Nielsen Company.

Nielsen, B.B. (2005), "The role of knowledge embeddedness in the creation of synergies in strategic alliances", *Journal of Business Research*, Vol. 58 No. 9, pp. 1194-1204.

Norman, A.T. (2017), "Exploring product fit and brand fit in brand alliances: Establishing the role of categorization processes", *Journal of Business & Economics Research*, Vol. 15 No. 1, p. 5.

Park, H.S. et al. (2007), "The effects of argument quality and involvement type on attitude formation and attitude change: A test of dual-process and social judgment predictions", *Human Communication Research*, Vol. 33 No. 1, pp. 81-102.

Parry, M.E. and Kawakami, T. (2015), "Virtual word of mouth and willingness to pay for consumer electronic innovations", *Journal of Product Innovation Management*, Vol. 32 No. 2, pp. 192-200.

Rao, A.R. and Ruekert, R.W. (1994), "Brand alliances as signals of product quality", *Sloan management review*, Vol. 36 No. 1, pp. 87-97.

Rindfleisch, A. and Moorman, C. (2001), "The acquisition and utilization of information in new product alliances: A strength-of-ties perspective", *Journal of marketing*, Vol. 65 No. 2, pp. 1-18.

Rodrigue, C.S. and Biswas, A. (2004), "Brand alliance dependency and exclusivity: An empirical investigation", *Journal of Product & Brand Management*, Vol. 13 No. 7, pp. 477-487.

Rogers, E.M. (2010), *Diffusion of innovations*: Simon and Schuster.

Roosens, B. and Dens, N. (2018), "When do social alliances pay off? How the effect on corporate image depends on consumers' prosocial attitudes", *Journal of Brand Management*.

Samu, S. and Wymer, W. (2009), "The effect of fit and dominance in cause marketing communications", *Journal of Business Research*, Vol. 62 No. 4, pp. 432-440.

Samuel, K., Carsten, B., Carolin, B. and Jörg, H. (2016), "Is co-creation really a booster for brand equity? The role of co-creation in observer-based brand equity (obbe)", *Journal of Product & Brand Management*, Vol. 25 No. 3, pp. 247-261.

Schilling, M.A. (2015), "Technology shocks, technological collaboration, and innovation outcomes", *Organization Science*, Vol. 26 No. 3, pp. 668-686.

Schnittka, O. et al. (2017), "The impact of different fit dimensions on spillover effects in brand alliances", *Journal of Business Economics*, Vol. 87 No. 7, pp. 899-925.

Simonin, B.L. and Ruth, J.A. (1998), "Is a company known by the company it keeps? Assessing the spillover effects of brand alliances on consumer brand attitudes", *Journal of Marketing Research*, Vol. 35 No. 1, pp. 30-42.

Sinclair, J. and Irani, T. (2005), "Advocacy advertising for biotechnology: The effect of public accountability on corporate trust and attitude toward the ad", *Journal of Advertising*, Vol. 34 No. 3, pp. 59-73.

Singh, J., Kalafatis, S.P. and Ledden, L. (2014), "Consumer perceptions of cobrands: The role of brand positioning strategies", *Marketing Intelligence & Planning*, Vol. 32 No. 2, pp. 145-159.

Unicef (2015), Unicef and arm unleash technology to transform children's lives. https://www.unicef.org/media/media_81934.html.

Vaidyanathan, R. and Aggarwal, P. (2000), "Strategic brand alliances: Implications of ingredient branding for national and private label brands", *Journal of Product & Brand Management*, Vol. 9 No. 4, pp. 214-228.

van Beers, C. and Zand, F. (2014), "R&d cooperation, partner diversity, and innovation performance: An empirical analysis", *Journal of Product Innovation Management*, Vol. 31 No. 2, pp. 292-312.

van Dijk, J., Antonides, G. and Schillewaert, N. (2014), "Effects of co-creation claim on consumer brand perceptions and behavioural intentions", *International Journal of Consumer Studies*, Vol. 38 No. 1, pp. 110-118.

Van Osselaer, S.M. and Janiszewski, C. (2001), "Two ways of learning brand associations", *Journal of Consumer Research*, Vol. 28 No. 2, pp. 202-223.

Washburn, J.H., Till, B.D. and Priluck, R. (2000), "Co-branding: Brand equity and trial effects", *Journal of Consumer Marketing*, Vol. 17 No. 7, pp. 591-604.