RELATIONSHIP BUILDING THROUGH FACEBOOK BRAND PAGES:

THE MULTIFACETED ROLES OF IDENTIFICATION, SATISFACTION AND

PERCEIVED RELATIONSHIP INVESTMENT

Bastian Popp[*]
Assistant Professor
Department of Services Management
University of Bayreuth
Universitaetsstrasse 30
95447 Bayreuth, Germany
Tel. +49-921-55-6138, Fax +49-921-55-3496
E-Mail: bastian.popp@uni-bayreuth.de

Bradley Wilson
Associate Professor of Communication, Branding and Urban Creative Cultures
Facultad de Administración, Universidad de Los Andes
Building Julio Mario Santo Domingo. Block SD, Calle 21#01-20
Barrio Las Aguas. Bogota, Colombia
Tel. +57-1-3394949 ext. 3960
E-Mail: b.wilson@uniandes.edu.co
Senior Lecturer in Advertising, RMIT University, School of Media and Communication,
Melbourne, Australia, and Visiting Professor, University of Bayreuth, Bayreuth, Germany

Chris Horbel
Associate Professor
Department of Environmental and Business Economics
University of Southern Denmark
Niels Bohrs Vej 9
6700 Esbjerg, Denmark
Tel. +45-6550-4238, Fax +45-6550-1091
E-Mail: horbel@sam.sdu.dk

Herbert Woratschek
Professor and Head of the Department of Services Management
University of Bayreuth
Universitaetsstrasse 30
95447 Bayreuth, Germany
Tel. +49-921-55-3497, Fax +49-921-55-3496
E-Mail: dlm@uni-bayreuth.de

* Corresponding author

Abstract

Social media offers significant scope for consumer engagement and brand building. This paper adds to the extant literature by developing an integrative framework of key drivers of consumer-brand relationships in Facebook brand pages (FBP) including different targets of identification and perceived relationship investment. The empirical study confirms that consumer identification with the FBP, identification with other FBP users, and satisfaction with the FBP significantly influence loyalty towards the FBP. The perceived level of a brand's investment in the relationship with the consumer both directly influences FBP loyalty and moderates key relationships. Overall, the results provide managerial guidance to strengthen the FBP and consumer-brand relationships by devoting resources and implementing suitable tactics. Our findings highlight that a large portion of business success may be beyond managers' direct control, and is dependent on non-paying customers who use the FBP thus influencing holistic brand meaning.

Introduction

The rise of social media has dramatically changed the avenues with how companies communicate with stakeholders. There has been a strategic shift in recognizing consumers as active participants in value co-creation processes rather than passive recipients of marketing activities (Prahalad & Ramaswamy, 2004; Sawhney, Verona, & Prandelli, 2005). As a consequence, there is an immense interest in the relevance and utility of social media as a suitable marketing strategy (e.g., Stone & Woodcock, 2013). Due to the interactive networked characteristics of social media, there is an increasing need for explaining the factors which help build and maintain consumer-brand relationships in such settings (e.g., Hollebeek, Glynn, & Brodie, 2014) as 54 per cent of social network users declare that this particular type of social media is a good place to learn about products (TNS Infratest, 2012).

Facebook, the world's biggest social networking site with 1.39 billion monthly active users (Facebook, 2015), and other social network-based brand pages are used to achieve important marketing goals including reinforcing consumers' relationship with the brand, generating brand-related interaction, and increasing customer loyalty. In order to achieve these goals, marketers need to understand that the activities of both the brand and the users combined create a FBP and contribute to its success. Marketers must invest in the relationships with their customers in order to generate strong consumer-brand relationships. In the context of social networking sites this investment is mainly demonstrated through the brand's activities on the brand page (e.g. posts and media uploads), as well as its reactions to the activities of the users (e.g. answering user posts).

One of the concepts that has received attention in describing and explaining consumers' role in the creation of consumer-brand relationships is 'consumer brand engagement' (Brodie, Hollebeek, Juric, & Ilic, 2011; Hollebeek et al., 2014). It has been defined as "a psychological state that occurs by virtue of interactive, co-creative customer

experiences with a focal agent/ object (e.g. a brand)" (Brodie, Hollebeek, et al., 2011, p. 260). Consumer-brand engagement has emerged as a key target in marketing as increasing levels of engagement are conducive to company achievements, including product innovation, positive word-of-mouth, and product sales (e.g., Sawhney et al., 2005). Thus, FBP users may both contribute to and benefit from an important non-monetary social value through social support, intimacy, and friendship, which is acquired through communication and involvement with other FBP users (Vock, Dolen, & Ruyter, 2013). However, FBP users also contribute to social value through interaction, word of mouth, co-creation of brand meaning and network effects. Hollebeek et al. (2014, p. 154) therefore address users of social networking sites as "focal engagement subjects" as opposed to paying customers. We subscribe to this notion, because FBP users are charged neither by Facebook nor by the third-party brands hosting FBPs. While some FBP users can be buying consumers of the *brand,* a considerable number of them regularly does not buy the brand's products. A study of Lab42 (2015) reveals that 46% of users who liked a brand, have no intention to buy from them. However, they are interested in the specific brand, and they often also communicate via other social media and offline about their experience with the FBP. Hence, companies mainly benefit from FBP in terms of customer engagement resulting in non-monetary contributions. There are also paying customers of FBPs: advertising firms and organizations that pay for the chance to acquire new customers through the large media coverage of social networks in the target group. However, in this article we focus on users of FBPs, who are non-paying customers of the social networking site.

Consumer-brand relationships and their complex networks are stressed in a powerful research stream that has been of central importance in marketing since the emergence of service-dominant logic (Vargo & Lusch, 2004, 2008). It considers value as co-created in a collaborative process between firms, customers, and other actors (Vargo & Lusch, 2008).

Consequently, social network-based brand fan pages are not only determined by the efforts of brand managers and individual consumer engagement. Rather, FBPs are platforms for value co-creation in which users play dynamic roles in the value co-creation process by acting both as providers and beneficiaries (Pongsakornrungsilp & Schroeder, 2011). By both initiating brand-related interaction and building customer-based brand equity, they co-create value for themselves, for other users, and for the brand. Therefore, we designate Facebook brand pages as brand owners' platforms that allow individuals interested in a brand to co-create value with other users of that page and with other actors.

Research on social network-based brand pages is still scarce. Jahn and Kunz (2012) demonstrate that interaction among brand users within social network sites such as Facebook reinforces the consumer-brand relationship, and influences brand awareness, WOM activities and purchase intention. Furthermore, Gupta and Mela (2008) demonstrate the value of non-paying customers in free e-services using the example of an online auction platform. Recently, brand communities embedded in social networks have emerged as a phenomenon both influencing the active members within the community and other users of the social networking site (Laroche, Habibi, & Richard, 2013; Zaglia, 2013).

However, the above-mentioned previous research findings are limited for several reasons: First, previous studies solely focus on specific variables (e.g., usage motives) instead of key variables commonly established in marketing research (e.g., customer satisfaction, consumer-brand identification). Second, a comprehensive model that integrates key relationships of FBP users with both the brand-owner and other FBP users is still noticeably absent. Third, the degree to which the FBP users appreciate a brand-owner's investment in the FBP (i.e., 'perceived relationship investment') is unknown. Therefore, more research investigating whether FBP are a worthwhile investment from an engagement perspective is needed.

Building on existing research on social networking sites, online consumer behavior, and consumer-brand relationships, this paper, aims to integrate these domains into a framework recognizing the key drivers of consumer-brand relationships in social networking settings. In doing so, the brand owner, users of the FBP, and other users (community) will be considered as the main actors contributing to building and maintaining these consumer-brand relationships. The article will therefore fill an important void in understanding the brand relationships of users of social networking sites as non-paying customers.

In particular, we address the following research questions:

1. How is consumer's loyalty towards FBP influenced by:

    a) consumers' perception of a brand's investment into the consumer-brand relationship on the FBP?

    b) consumers' satisfaction with the FBP?

    c) consumers' identification with the FBP?

    d) consumers' identification with other FBP users?

2. How are the effects on FBP loyalty moderated by the brand's (perceived) investment into the relationship with users of the FBP?

Social networking sites and brand communities

Social networking sites are seen as an effective means for consumer-brand relationship enhancement (Rapp, Beitelspacher, Grewal, & Hughes, 2013). Boyd and Ellison (2008, p. 211) define online social networks as 'web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system.' Hence, social networks enable users to connect by creating personal information profiles, inviting friends to access these profiles, and sending e-mails and instant messages between each other (Kaplan & Haenlein, 2010). The most

prominent and important example of a social network is Facebook, which can be used by 'individuals to personalize their social network and applications, in addition to facilitating text, pictorial, video, gaming and other forms of communication' (Hollebeek et al., 2014, p. 155).

Practitioners and scholars agree that the primary benefit of social networking sites is their ability to encourage and harness the interaction of individuals by being able to like, share and comment on posts (Jahn & Kunz, 2012). The usefulness of social networking sites in marketing is closely connected to the concept of brand communities, defined as 'specialized, non-geographically bound communities, based on a structured set of social relationships among admirers of a brand' (Muniz & O'Guinn, 2001, p. 412). While consumers engage in brand communities to fulfill their need for group cohesion, psychological sense of community and interaction (Carlson, Suter, & Brown, 2008), they enhance their loyalty and satisfaction, empowerment, connection, emotional bonding, trust and commitment (Brodie, Ilic, Juric, & Hollebeek, 2013). Hence, they strengthen their relationship with the brand at the same time (e.g., Muniz & O'Guinn, 2001). The phenomenon of brand communities is not bound to the offline context. Virtual brand communities can either be organized on stand-alone websites or as subgroups of users of social networks centered around a specific brand (Sung, Kim, Kwon, & Moon, 2010). Such social-network-based virtual brand communities where users share their common interest for a brand, exchange information and knowledge, or simply express their affection for this specific brand have recently been referred to as 'embedded brand communities' (Zaglia, 2013). Brand communities embedded in social networks and Facebook brand pages are certainly overlapping concepts, but they are also clearly distinct. While members of social network-embedded brand communities are usually "brand aficionados" (Zaglia, 2013, p. 217), FBP users are not necessarily fans of the corresponding brand.

Using social networks to organize brand communities leads to their delocalization

(Weijo, Hietanen, & Mattila, 2014) and to a broader dissemination of communication both within the social networking site and outside of it.

Hence, FBP users, even though they are non-paying customers of the FBP (and many are even non-paying customers of the corresponding brand), are an important asset for the brand as they generate valuable brand-related interaction or disseminate online and offline word-of-mouth. Hence, they contribute to the perceived non-monetary social value of the FBP which in turn increases the attractiveness of the FBP (Vock et al., 2013).

Conceptual framework of consumer-brand relationships in social network sites

In this study, we chose FBP loyalty to represent the success of a FBP, since there is broad agreement amongst marketers that customer loyalty is one of the key indicators of a brand's success (Oliver, 1999). Recently, Vock et al. (2013, p. 2) demonstrated the crucial role of loyalty for operators of social networking sites as they "depend on the value proposition of connectivity, and have to rely on members' willingness to contribute to the group and to stay loyal". Social networking sites as well as brand-owners operating FBP, have no reasonable control over the FBPs success, but rely on loyal members' contribution to the platform. Therefore, we apply Oliver's (1999, p. 34) definition of customer loyalty and conceptualize FBP loyalty as a deeply held intent to revisit or re-patronize a preferred FBP in the future.

Consumer-brand identification

We further propose that consumer-brand identification, i.e., "a consumer's psychological state of perceiving, feeling, and valuing his or her belongingness with a brand" (Lam, Ahearne, Mullins, Hayati, & Schillewaert, 2013, p. 235) is central to brand- and relationship-building on FBP. Several theoretical considerations support identity-motivated effects on FBP loyalty. First, according to the social identity theory (SIT) (Tajfel & Turner, 1979), being loyal to a FBP assists FBP users by reinforcing their sense of self-definition and

belonging. Second, individuals derive emotional benefits from their identification which they

will no longer receive if they switch to another organization. Third, identification leads to

supportive behaviors for the benefit of the target of identification and therefore affects loyal

behavior, which can be considered as such kind of behavior.

Past research both in the context of brands and (online) brand communities

substantiates the assumption of a positive influence of customer identification on different

aspects of customer loyalty including positive word-of-mouth, repurchase intention, and

purchase frequency (e.g., Algesheimer, Dholakia, & Herrmann, 2005; e.g., Homburg,

Wieseke, & Hoyer, 2009).

In marketing research, identification is commonly conceptualized as consumer's

identification with a specific brand as the target of identification. However, individuals

simultaneously identify with multiple targets of identification. They hold multiple socially

constructed dimensions of identity which cannot be fully understood in isolation as they

interact with one another and may even be conflicting (Thoits, 1983). Consequently, the

different targets of identification jointly define the individual's identity whereby the salience

of each identity dimension to this nexus is fluid and context-dependent.

FBP allow their members to perceive multiple social identities (Zaglia, 2013). In

particular, we assume that there are two main targets of identification: First, the users of the

FBP may identify with the FBP website, i.e., the brand fan page, itself, which can be

considered as a representation of the brand. Second, due to the community characteristics of

social networking sites and the fact that individuals can even identify with a group, when they

have no (physical) contact with specific members (Turner, 1982), other users of a FBP should

be considered as relevant targets of identification in the context of FBP. Previous studies

confirm the importance of consumer-community identification, both for (online) brand

communities (e.g., Algesheimer et al., 2005) and brand community social network sites (e.g.,

Zaglia, 2013).

Differentiating two targets of identification in the context of FBP is supported by Carlson, Suter, and Brown (2008) who demonstrate that identification with a brand as well as identification with a group determine group cohesion and (psychological) sense of community within brand communities. Moreover, in more general terms, Brodie et al. (2013) identify themes (e.g., brands) and the online community as main objects of engagement. According to SIT (Tajfel & Turner, 1979) and Heider's (1958) balance theory, which assumes that people strive for balance, order and harmony in their lives, identification with a target does not only influence its corresponding loyalty, but also the loyalty towards closely associated targets of identification (Thoits, 1983).

Therefore, we postulate the following hypotheses regarding the effects of consumers' identification with different targets on their loyalty towards the FBP:

H_1: *Consumer-FBP identification positively impacts the level of FBP loyalty.*

H_2: *Consumer identification with FBP users positively impacts the level of FBP loyalty.*

Customer satisfaction

Prior to research on identity-based consumer-brand relationships, customer satisfaction was discussed as the key driver of loyalty (Homburg et al., 2009). This is also true for online environments, where Shankar, Smith, and Rangaswamy (2003) find that overall satisfaction even has a stronger effect on loyalty in online contexts than in offline contexts. Kumar, Pozza, and Ganesh (2013) corroborate this hypothesis by attributing it to the intense competition and higher customer empowerment in the online context. Following this we propose the following hypothesis:

H_3: *Customer satisfaction with the FBP positively impacts the level of FBP loyalty.*

Perceived relationship investment

Given the fact that consumer-brand relationships in many ways parallel human relationships (Fournier, 1998), we further draw on the investment paradigm of interpersonal relationships which identifies investment as an important driver of relationship commitment (Kelley & Thibaut, 1978). De Wulf, Odekerken-Schröder, and Iacobucci (2001) established the construct 'perceived relationship investment' to capture consumers' perception of the investment a supplier makes on behalf of the customer. We extend previous research but in a social media environment. In the context of social network sites, a brand's efforts in the relationship to users are mainly reflected in its activities on the brand page (e.g., posts and media uploads). Users' perception of these efforts may lead to psychological bonds that encourage them to stay loyal to the FBP. Therefore, we define perceived relationship investment as a FBP user's perception of the extent to which a brand devotes resources, efforts, and attention aimed at maintaining or enhancing relationships with FBP users (De Wulf et al., 2001, p. 35).

Indeed, several studies indicate the importance of the effect of a company's investment in relationship building. For example, Bennett (1996) found that the customer's perceptions of a seller's relationship building efforts lead to a stronger commitment to the company. The level of perceived relationship investment further influences behavioral loyalty both in offline (De Wulf et al., 2001) and online contexts (Park, 2011; Yoon, Choi, & Sohn, 2008). We therefore propose:

H_4: *Perceived relationship investment positively impacts the level of FBP loyalty.*

In addition to testing for this direct effect of perceived relationship investment on FBP loyalty, we also propose that relationship investment acts as a moderator. Previous studies on perceived relationship investment reveal that this construct has significant effects on a consumer's perception of relationship quality (De Wulf et al., 2001; Park, 2011). Therefore, we expect the effects of consumer-FBP identification, consumer identification with FBP users

11

and customer satisfaction with the FBP to be strengthened in the case of higher levels of perceived relationship investment:

$H_{5a/b/c}$: *Perceived relationship investment moderates the relationships between (a) consumer-FBP identification, (b) consumer identification with FBP users, (c) customer satisfaction with the FBP and FBP loyalty: that is, the relationships are weaker under conditions of low perceived relationship investment and stronger under conditions of high perceived relationship investment.*

Figure 1 shows the proposed conceptual framework.

FIGURE 1: Conceptual model
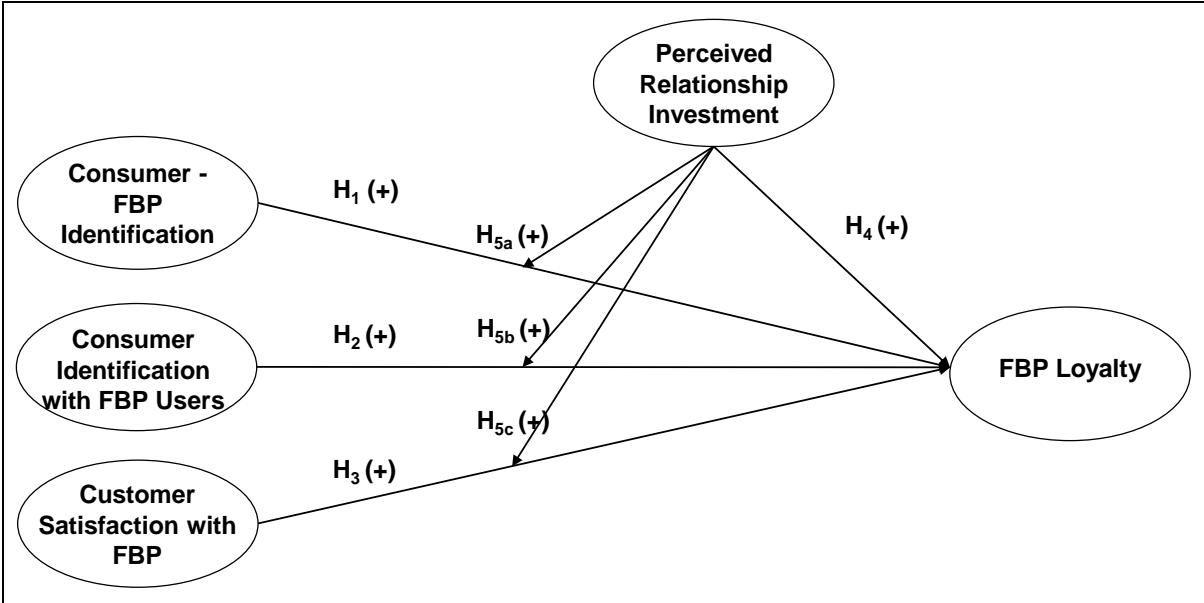
Empirical study

Research context

Following the perspective of service-dominant logic (Vargo & Lusch, 2004), value is always determined by the beneficiary. Value creation and value perception should therefore be conceptualized as 'value-in-context' (Vargo & Lusch, 2008). Similarly, the context-dependent nature of consumer engagement postulates a focus on a specific context of research (Brodie et al., 2013).

For this study, team sport FBP have been chosen as the specific context, because sport

plays an important role in many peoples' everyday lives, and also offers social components (Sutton, McDonald, Milne, & Cimperman, 1997). Sport fans regularly exhibit high levels of team identification, which is a crucial determinant of sport team loyalty (Sutton et al., 1997). Furthermore, they actively contribute to value co-creation (Woratschek, Horbel, & Popp, 2015) and are very engaged in offline and online platforms, and not surprisingly, many strong brand communities focus on sport brands (Pongsakornrungsilp & Schroeder, 2011).

FBP provide fans of sport team brands with the opportunity to interact with other fans, engage in the brand and finally increase their perceived value (Uhrich, 2014). In contrast to on-site interaction at the sporting event, social media are not limited to match days, but enables fans to live out the brand 24/7. Moreover, FBP of sport teams provide fans with the opportunity for keeping in touch with the club from distant locations throughout the world. Distant fans without physical proximity to their favorite club often do not have the opportunity or the willingness to buy tickets or merchandise. Hence, their relationship to the club is characterized by their psychological connection to the team, instead of a buyer-seller relationship between club and fans.

Sample, measures and procedure

The structural model to be tested is presented in Figure 1. By estimating the path coefficients and interaction terms we identify both the (relative) importance of the constructs of interest and hypothesized moderating effects. The structural model was empirically tested using an online survey among fans and Facebook users of Professional German Football League teams. Respondents were invited by mail and by online posts in popular sport-related online communities to participate in a self-administered online survey about the official Facebook pages of clubs in the first, second and third tier German football leagues. Participants were first asked whether they had visited the official Facebook brand page of at least one professional football club. From 283 respondents who started the questionnaire, 119

(42%) answered this question in the negative. Some respondents had visited more than one FBP of a professional club (N=82). These respondents were given freedom of choice about which club's FBP they wished to respond (usually the most visited FBP). The sample comprises responses of 164 respondents regarding the FBP of 30 different professional football clubs out of a total of 58 possible clubs thereby providing a representative picture of the professional football clubs' official Facebook brand pages in Germany.

Two established scales were used to measure consumer identification with FBP users (Algesheimer et al., 2005) and consumer-FBP identification (Lam et al., 2013). Additionally the graphical scale of Bergami and Bagozzi (2000) was implemented. Satisfaction with the FBP was measured using a three item scale (Homburg et al., 2009). Perceived investment of a club into the relationship with the fans is measured using the three item scale developed by De Wulf, Odekerken-Schröder and Iacobucci (2001). For measuring loyalty towards FBP we applied measurement items established for community loyalty (Algesheimer et al., 2005). All items utilised a 7-point Likert scale (1 = totally agree, 7 = totally disagree).

The Partial Least Squares Path Modeling approach (Henseler, Ringle, & Sinkovics, 2009) was implemented for several reasons: First, PLS demonstrates better convergence behavior for small sample sizes (Henseler et al., 2009). Second, PLS stands out for its ability to deal with complex models and interaction terms (Hair, Sarstedt, Ringle, & Mena, 2012; Wilson, 2010). Third, unlike covariance-based SEM, PLS does not require data normality (Henseler et al., 2009). Fourth, PLS substantially reduces the effects of measurement error and provides accurate estimates of the mediation effects (Chin, 1998). Despite these advantages, PLS has not been without critics in academia (Rönkkö & Evermann, 2013). However, recent literature on structural equation modeling has addressed common misbeliefs about PLS demonstrating that this method is comparative to covariance-based structural equation modeling (Hair et al., 2012; Henseler et al., 2014). This study used SmartPLS 2.0

M3 (Ringle, Wende, & Will, 2005).

Results

Common method variance

In order to reduce potential common method variance, we used existing scales, proximally separated measures of predictors and criterion variables, and ensured the respondents' anonymity (Podsakoff, MacKenzie, & Podsakoff, 2012). In addition, we assessed the reliability and controlled for the participants' consistency motive by using Harman's single-factor test (Harman, 1976), which demonstrated that none of the factors accounted for the majority of covariance among items. Therefore, we consider common method bias not to be a serious threat to our analyses.

Analysis of measurement models

The measurement models were estimated and checked with regards to validity and reliabilities. Construct reliabilities ranged between 0.86 and 0.95 and average variance extracted (AVE) ranged between 0.55 and 0.86. The assessment of the measurement models revealed that the majority of loadings were acceptable (>0.71) within a range of 0.68 and 0.94. Two items were 0.68 and 0.69 and therefore slightly below the cut-off but were retained in the analyses following the recommendation of Chin (1998). Table 1 provides an overview of key statistics for the final measurement model.

TABLE 1: Measurement model

Construct	After No. of Ind	Item Loading (λ) Range[a]	Alpha[b] (α)	Comp Rel[c] ($\rho_{\xi X}$)	AVE[d]
Consumer-FBP Identification	6	0.69 → 0.77	0.84	0.88	0.55
Consumer Identification with FBP Users	6	0.71 → 0.85	0.87	0.90	0.61
Customer-Satisfaction with FBP	8	0.88 → 0.91	0.87	0.92	0.79
Perceived Relationship Investment	3	0.92 → 0.94	0.92	0.95	0.86
FBP Loyalty	3	0.68 → 0.92	0.75	0.86	0.67

Note: a = Highest and Lowest Loading after Deletion; b = Cronbach's Alpha; c = Composite Reliability; d = Average Variance Extracted (AVE).

Discriminant validity was established via three approaches (Chin, 1998; Hair et al.,

2012). First, the item-to-item correlation matrix showed that there were no visible issues to report. Second, all between construct correlations (see Table 2) except one for 'ID FBP' and 'ID FBP Users' exceeded the accepted discriminant validity criterion of Fornell and Larcker (1981). Third, discriminant validity was corroborated with an inspection of the cross-loadings (see Appendix 2) revealing suitable loadings patterns as suggested by Chin (1998). An inspection of the cross-loadings across the rows reveals that each item loads higher on its respective construct than on any other construct. Furthermore, inspection of the loadings down the column clearly illustrates that all items load highest next to their respective constructs.

TABLE 2: Correlation between constructs and AVE

	ID FBP	ID USERS	SAT FBP	PRI	FBP LOY
Consumer-FBP Identification (ID FBP)	0.74				
Consumer Identification with FBP Users (ID USERS)	0.79	0.78			
Customer-Satisfaction with FBP (SAT FBP)	0.48	0.50	0.89		
Perceived Relationship Investment (PRI)	0.27	0.31	0.48	0.93	
FBP Loyalty (FBP LOY)	0.68	0.73	0.62	0.43	0.82
Note: Square Root of AVE on diagonal (Fornell & Larcker, 1981)					

Analysis of structural relations and hypothesis testing

There are two common approaches to estimate moderating effects using PLS: the product term approach and the group comparison approach (Wilson, 2005, 2010). We utilize the product term approach as it is generally equal or superior to the group comparison approach (Henseler & Fassott, 2010; Wilson, 2010).

Figure 1 shows the results of the structural model with significant effects demonstrated for the main effects relationships. The predictive capacity of this model was strong with an $R^2 = 64.61\%$. When the interaction terms were added to the model, the moderator perceived relationship investment increased the $R^2 = 65.61\%$. The interaction terms themselves have no conceptual meaning (Cortina, Chen, & Dunlap, 2001). To test whether the inclusion of the moderator makes a meaningful contribution we calculated the

Cohen (1988) formula:

$$f^2 = [\text{R-square(interaction model)} - \text{R-square(main effects model)}]/[1- \text{R-square(main effects model)}].$$

This test determines the effect size contribution given the introduction of the interaction constructs/terms and deems whether the interaction term is of merit for inclusion. The difference in R^2 between the main effects model (64.61%) and interaction model (65.61%) is calculated to assess the overall effect size f^2 for the interaction where 0.02, 0.15, and 0.35 has been suggested as small, moderate, and large effects respectively (Cohen, 1988). In this case, the addition of the moderator demonstrates a small effect (0.03).

TABLE 3: Structural (inner) model results for main effects and interaction model

Structural Relation	Model 1 (Main Effects)		Model 2 (Interaction Model)	
	Path Coeff Sig	f^2	Path Coeff Sig	f^2
ID FBP → FBP LOY	0.21 **	0.15	0.20 **	0.15
ID USERS → FBP LOY	0.39 **	0.05	0.39 **	0.07
SAT FBP → FBP LOY	0.27 **	0.10	0.27 **	0.11
PRI → FBP LOY	0.12 **	0.03	0.11 **	0.06
ID FBP*PRI → FBP LOY			0.11	0.03
ID Users*PRI → FBP LOY			-0.04	0.00
SAT FBP*PRI → FBP LOY			-0.00	0.00
R^2	0.65		0.66	

Note: Bootstrapping results (n=500) ** $p<0.01$ * $p<0.05$
Path Coeff = Path coefficient; Sig = Significance; f^2 = effect size.

As the empirical findings further reveal, our central hypotheses (H_1-H_3) could be confirmed. In particular, identification with FBP users has the strongest effect on FBP loyalty (H_2; $\beta = 0.39$; t =2.71, p < .01), followed by the users' satisfaction with the FPB (H_3; $\beta = 0.28$; t =4.05, p < .01) and consumer-FBP identification (H_1; $\beta = 0.20$; t =5.34, p < .01). Finally, perceived relationship investment exerts a positive effect on loyalty intentions (H_4; $\beta = 0.11$; t =2.01, p < .05). The introduction of the interaction effect (H_5; $\beta_{\text{ID FBP*PRI}} = 0.11$; $\beta_{\text{ID Users*PRI}} = -0.04$; $\beta_{\text{SAT FBP*PRI}} = -0.00$) shows that perceived relationship investment has a meaningful contribution as a moderator and as such should be considered appropriate for inclusion in this instance and in subsequent studies.

Discussion

Empirical findings

Our main research purpose was to propose and test a comprehensive model that investigates the key drivers of consumer-brand relationships in the context of social networking sites. First, a key contribution of this paper compared with previous research is the delineation between different targets of identification. Our findings for the first time demonstrate that it is necessary to differentiate between different targets of identification in social network sites in order understand the complex relationships between users and brands. This contributes to other work on identification both in online and offline contexts (Algesheimer et al., 2005; Lam et al., 2013) as well as previous findings on engagement objects (Brodie et al., 2013).

Moreover, the approach to differentiate between multiple targets of identification may be a means to better understand value co-creation in general (Prahalad & Ramaswamy, 2004) and to more appropriately model the contributions of different actors from a service-dominant logic perspective (Vargo & Lusch, 2008). This is an important consideration that we believe has not been adequately implemented to date in the continually evolving social media landscape where numerous brand relationship types exist across many identification target levels.

Second, by including key psychological variables established in marketing research (customer satisfaction, identification) into one model, our study is the first to assess not only the effects of these variables, but also their relative importance for FBP loyalty. Our findings demonstrate that loyalty towards brand pages in social network sites is especially driven by user's identification with other FBP users. This corroborates previous research that highlights that FBP users have a significant impact on brand success (e.g., Jahn & Kunz, 2012; Laroche et al., 2013). While they do not generate direct revenues, they contribute to acquiring new customers by favorable brand-related interaction/s with other users of social network sites and

even beyond. Furthermore, their brand-related interaction considerably contributes to strengthening brand meaning. It needs to be remembered that this form of brand engagement is published and will always exist online as a valuable expression or log for and between all stakeholders interactions.

Moreover, customer satisfaction with the FBP and consumer-FBP identification significantly influence FBP loyalty. Given the sustained, long-term impact researchers attribute to consumer-brand identification (Haumann, Quaiser, Wieseke, & Rese, 2014), especially the effect of consumer-FBP identification seems to be of importance for sustained FBP success and engagement. It reflects the common interest of FBP users and the central role of the brand as a key link between them.

Third, an additional contribution of note is via the inclusion of perceived relationship investment as a direct and a moderating influence. This construct has typically been utilized in business-to-business contexts, but our research demonstrates its utility in the e-marketing context. In line with the reciprocity principle, higher levels of perceived investment of the brand into the relationship with its fans lead to higher FBP loyalty as fans might feel a psychological obligation to reciprocate the brand's actions (Sung & Choi, 2010). Hence, while we acknowledge previous research which argues that 'the level of control over specific brands is shifting within online communities by highlighting the role of consumer engagement and empowerment in co-creating brand meanings' (Brodie et al., 2013, p. 112), the significant contribution of perceived relationship investment demonstrates that brands' efforts in social network sites should not be neglected.

Moreover, our findings suggest that perceived relationship investment should be included as a moderator, thereby answering recent calls to include moderators into analyses investigating the satisfaction-loyalty link (Kumar et al., 2013).

It is obvious that perceived relationship investment influences predominantly the

effect of consumer-FBP identification on FBP loyalty, while the other moderating effects of perceived relationship investment are quite small and negligible to enable meaningful interpretation. We believe that this result can be explained by the reciprocity principle (Sung & Choi, 2010) as FBP users' identification with the FBP and their loyalty towards it can be interpreted as a direct response to their perception of the brand's investment into the relationship with the FBP users. Even though the moderating effect of perceived relationship investment on the relationship between consumer-FBP identification and FBP loyalty might be relatively small compared to the main effects, it should be noted that a small effect does not necessarily imply an unimportant effect. "If there is a likelihood of occurrence for the extreme moderating conditions and the resulting beta changes are meaningful, then it is important to take these situations into account" (Limayem, Hirt, & Chin, 2001, p. 281).

Managerial implications

From a managerial perspective, the research findings demonstrate the importance of both marketing efforts by the brand owner and FBP users' interaction for ongoing success of social networking sites. FBP users' relationship with other users are more important for FBP loyalty than brand-driven aspects, managers have to be aware that a large part of social media success lies beyond their direct control.

Our findings further highlight that the FBP itself serves as a target of identification for consumers and therefore fulfils an important function as an authentic representation of the brand and as an attractive platform for consumer engagement. The relevance of customer satisfaction, which represents a result of the experience of the FBP, demonstrates that marketing activities tackling specific aspects of the FBP lead to increases in FBP success. Finally, brand managers can strengthen their FBP by generally devoting resources, efforts, and attention for maintaining or enhancing consumer-brand relationships. Even though brand managers do not control brand meaning, their activities are not moot if they understand their

role as one of many co-creators of brand meaning. General theories such as SDL that promote managers' role understanding and behavior are often too abstract to be implemented in business practice. Brodie, Saren, and Pels (2011) therefore suggest formulating so-called middle range theories (MRT) to allow for interpretation of generic theories.

Limitations and further research

The aim of this article has been to investigate an integrated model of the key drivers of consumer-brand relationships in the context of social networking sites. In our research, only one context - Facebook brand pages of sport clubs – has been studied with regard to the relationships of identification, satisfaction and perceived relationship investment with loyalty towards the FBP. As consumer-brand relationships are always context-specific, more contexts should be studied in the future. In general, we assume that we will obtain similar effects for other contexts, but as we argue that creating value is always value-in-context we cannot assume that the results revealed for one context are generalizable to the next. Nevertheless, we propose that a classification of contexts should be undertaken in future research to allow for greater generalizations.

Notably, our research includes the most relevant targets of identification in social network sites: (1) the brand page itself and (2) its users. Hence, we have made an initial attempt to explore an important delineation. Future work could explore this fertile theme more extensively and across stakeholders, because there are many contexts and purposes in which more targets of identification should be considered (e.g., the company, Facebook).

Another potential limitation is related to the measurement of FBP loyalty. Given that the measure is self-reported, actual behavioral loyalty may only be partially captured. Database information, i.e. Facebook usage data, could be used as an alternative FBP loyalty measure. Moreover, future research may also integrate subsequent measures of brand success, e.g. brand loyalty.

Our findings support the valuable role social network sites play to encourage consumer engagement. In future work, we suggest including brand owners' relationship investments and overall users' interactions to determine overall influence on consumer engagement. Managers need to be better equipped in this relatively new domain, and we encourage further development of MRT that allow for enhanced understanding of the key activities that facilitate or hamper brand-related interactions on FBP.

References

Algesheimer, R., Dholakia, U. M., & Herrmann, A. (2005). The Social Influence of Brand Community: Evidence from European Car Clubs. *Journal of Marketing, 69*(3), 19-34.

Bennett, R. (1996). Relationship formation and governance in consumer markets: transactional analysis versus the behaviourist approach. *Journal of Marketing Management, 12*(5), 417-436.

Bergami, M., & Bagozzi, R. P. (2000). Self-categorization, affective commitment and group self-esteem as distinct aspects of social identity in the organization. *British Journal of Social Psychology, 39*(4), 555-577.

Boyd, D. M., & Ellison, N. B. (2008). Social network sites: Definition, history, and scholarship. *Journal of Computer-Mediated Communication, 13*(1), 210-230.

Brodie, R. J., Hollebeek, L. D., Juric, B., & Ilic, A. (2011). Customer Engagement: Conceptual Domain, Fundamental Propositions, and Implications for Research. *Journal of Service Research, 14*(3), 252-271.

Brodie, R. J., Ilic, A., Juric, B., & Hollebeek, L. D. (2013). Consumer engagement in a virtual brand community: An exploratory analysis. *Journal of Business Research, 66*(1), 105-114.

Brodie, R. J., Saren, M., & Pels, J. (2011). Theorizing about the service dominant logic: The bridging role of middle range theory. *Marketing Theory, 11*(1), 75-91.

Carlson, B. D., Suter, T. A., & Brown, T. J. (2008). Social versus psychological brand community: The role of psychological sense of brand community. *Journal of Business Research, 61*(4), 284-291.

Chin, W. W. (1998). The partial least squares approach for structural equation modeling. In G. A. Marcoulides (Ed.), *Modern methods for business research* (pp. 295-336). Mahwah: Lawrence Erlbaum.

Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences* (2 ed.). Hillsdale: Lawrence Erlbaum Associates.

Cortina, J. M., Chen, G., & Dunlap, W. P. (2001). Testing interaction effects in LISREL: Examination and illustration of available procedures. *Organizational Research Methods, 4*(4), 324-360.

De Wulf, K., Odekerken-Schröder, G., & Iacobucci, D. (2001). Investments in Consumer Relationships: A Cross-Country and Cross-Industry Exploration. *Journal of Marketing, 65*(4), 33-50.

Facebook. (2015). Key Facts.   Retrieved 2015-02-25, 2015, from http://newsroom.fb.com/company-info/

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 18*(1), 39-50.

Fournier, S. (1998). Consumers and their brands: Developing relationship theory in consumer research. *Journal of Consumer Research, 24*(4), 343-373.

Gupta, S., & Mela, C. F. (2008). What is a free customer worth? Armchair calculations of nonpaying customers' value can lead to flawed strategies. *Harvard Business Review, 86*(11), 102-109, 138.

Hair, J. F., Sarstedt, M., Ringle, C. M., & Mena, J. A. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the Academy of Marketing Science, 40*(3), 414-433.

Harman, H. H. (1976). *Modern factor analysis* (3 ed.). Chicago: University of Chicago Press.

Haumann, T., Quaiser, B., Wieseke, J., & Rese, M. (2014). Footprints in the Sands of Time: A Comparative Analysis of the Effectiveness of Customer Satisfaction and Customer–Company Identification over Time. *Journal of Marketing*.

Heider, F. (1958). *The Psychology of Interpersonal Relations*. New York: John Wiley & Sons.

Henseler, J., Dijkstra, T. K., Sarstedt, M., Ringle, C. M., Diamantopoulos, A., Straub, D. W., . . . Calantone, R. J. (2014). Common Beliefs and Reality About PLS: Comments on Rönkkö and Evermann (2013). *Organizational Research Methods, 17*(2), 182-209.

Henseler, J., & Fassott, G. (2010). Testing moderating effects in PLS path models: An illustration of available procedures. In V. E. Vinzi, W. W. Chin, J. Henseler & H. Wang (Eds.), *Handbook of Partial Least Squares: Concepts, Methods and Applications in Marketing and Related Fields* (pp. 713-735). Berlin: Springer.

Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. *Advances in International Marketing*(20), 277-319.

Hollebeek, L. D., Glynn, M. S., & Brodie, R. J. (2014). Consumer Brand Engagement in Social Media: Conceptualization, Scale Development and Validation. *Journal of Interactive Marketing, 28*(2), 149-165.

Homburg, C., Wieseke, J., & Hoyer, W. D. (2009). Social Identity and the Service-Profit Chain. *Journal of Marketing, 73*(2), 38-54.

Jahn, B., & Kunz, W. (2012). How to transform consumers into fans of your brand. *Journal of Service Management, 23*(3), 344-361.

Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. *Business horizons, 53*(1), 59–68.

Kelley, H. H., & Thibaut, J. W. (1978). *Interpersonal relations: A theory of interdependence.* New York: Wiley.

Kumar, V., Pozza, I. D., & Ganesh, J. (2013). Revisiting the Satisfaction–Loyalty Relationship: Empirical Generalizations and Directions for Future Research. *Journal of Retailing, 89*(3), 246-262.

Lab42. (2015). LIKE US!   Retrieved 25-02-2015, from http://lab42.com/infographics/like-us

Lam, S. K., Ahearne, M., Mullins, R., Hayati, B., & Schillewaert, N. (2013). Exploring the dynamics of antecedents to consumer–brand identification with a new brand. *Journal of the Academy of Marketing Science, 41*(2), 234-252.

Laroche, M., Habibi, M. R., & Richard, M.-O. (2013). To be or not to be in social media: How brand loyalty is affected by social media? *International Journal of Information Management, 33*(1), 76-82.

Limayem, M., Hirt, S. G., & Chin, W. W. (2001). Intention does not always Matter: The Contingent Role of Habit in IT Usage Behaviour *The 9th European Conference on Information Systems* (pp. 274-286). Bled, Slovenia.

Muniz, A. M., & O'Guinn, T. C. (2001). Brand Community. *Journal of Consumer Research, 27*(4), 412-432.

Oliver, R. L. (1999). Whence consumer loyalty? *Journal of Marketing, 63*(Special Issue 1999), 33-44.

Park, H. (2011). *The Role of Social Network Websites in Consumer-Brand Relationship.* (PhD dissertation), University of Tennesse, Tennesse. Retrieved from http://trace.tennessee.edu/utk_graddiss/1214

Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual review of psychology, 63*, 539-569.

Pongsakornrungsilp, S., & Schroeder, J. E. (2011). Understanding value co-creation in a co-consuming brand community. *Marketing Theory, 11*(3), 303-324.

Prahalad, C. K., & Ramaswamy, V. (2004). Co-creation experiences: The next practice in value creation. *Journal of Interactive Marketing, 18*(3), 5-14.

Rapp, A., Beitelspacher, L., Grewal, D., & Hughes, D. (2013). Understanding social media effects across seller, retailer, and consumer interactions. *Journal of the Academy of Marketing Science*, 1-20.

Ringle, C. M., Wende, S., & Will, A. (2005). SmartPLS 2.0 M3 Beta. Hamburg: SmartPLS. Retrieved from http://www.smartpls.de

Rönkkö, M., & Evermann, J. (2013). A Critical Examination of Common Beliefs About Partial Least Squares Path Modeling. *Organizational Research Methods, 16*(3), 425-448.

Sawhney, M., Verona, G., & Prandelli, E. (2005). Collaborating to create: The Internet as a platform for customer engagement in product innovation. *Journal of Interactive Marketing, 19*(4), 4-17.

Shankar, V., Smith, A. K., & Rangaswamy, A. (2003). Customer satisfaction and loyalty in online and offline environments. *International Journal of Research in Marketing, 20*(2), 153-175.

Stone, M., & Woodcock, N. (2013). Social intelligence in customer engagement. *Journal of Strategic Marketing, 21*(5), 394-401.

Sung, Y., & Choi, S. M. (2010). "I won't leave you although you disappoint me": The interplay between satisfaction, investment, and alternatives in determining consumer–brand relationship commitment. *Psychology and Marketing, 27*(11), 1050-1073.

Sung, Y., Kim, Y., Kwon, O., & Moon, J. (2010). An explorative study of Korean consumer participation in virtual brand communities in social network sites. *Journal of Global Marketing, 23*(5), 430-445.

Sutton, W. A., McDonald, M. A., Milne, G. R., & Cimperman, J. (1997). Creating and Fostering Fan Identification in Professional Sports. *Sport Marketing Quarterly, 6*(1), 15-22.

Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33-47). Monterey, CA: Brooks/Cole Pub. Co.

Thoits, P. A. (1983). Multiple identities and psychological well-being: A reformulation and test of the social isolation hypothesis. *American Sociological Review, 48*(2), 174-187.

TNS Infratest. (2012). The Impact of Digital on Growth Strategies - CMO Imperatives for 2012.

Turner, J. C. (1982). Towards a cognitive redefinition of the social group. In H. Tajfel (Ed.), *Social identity and intergroup relations* (pp. 15-40). Cambridge: Cambridge University Press.

Uhrich, S. (2014). Exploring customer-to-customer value co-creation platforms and practices in team sports. *European Sport Management Quarterly, 14*(1), 25-49.

Vargo, S. L., & Lusch, R. F. (2004). Evolving to a New Dominant Logic for Marketing. *Journal of Marketing, 68*(1), 1-17.

Vargo, S. L., & Lusch, R. F. (2008). Service-Dominant Logic: Continuing the Evolution. *Journal of the Academy of Marketing Science, 36*(1), 1-10.

Vock, M., Dolen, W. v., & Ruyter, K. d. (2013). Understanding Willingness to Pay for Social Network Sites. *Journal of Service Research, 16*(3), 311-325.

Weijo, H., Hietanen, J., & Mattila, P. (2014). New insights into online consumption communities and netnography. *Journal of Business Research, 67*(10), 2072-2078.

Wilson, B. (2005). *Using PLS to Investigate Interaction Effects Between Two Second Order Constructs: An Applied Marketing Example*. Paper presented at the PLS05- 4th International Symposium on PLS and Related Methods, Barcelona, Spain.

Wilson, B. (2010). Using PLS to Investigate Interaction Effects Between Higher Order Branding Constructs. In V. Esposito Vinzi, W. W. Chin, J. Henseler & H. Wang (Eds.), *Handbook of Partial Least Squares: Concepts, Methods and Applications in Marketing and Related Fields* (pp. 621-652). Berlin/Heidelberg: Springer.

Woratschek, H., Horbel, C., & Popp, B. (2015). The sport value framework – a new fundamental logic for analyses in sport management. In H. Woratschek, C. Horbel & B. Popp (Eds.), *Value co-creation in sport management* (pp. 6-24). Abingdon, Oxon, UK: Routledge.

Yoon, D., Choi, S. M., & Sohn, D. (2008). Building customer relationships in an electronic age: The role of interactivity of E-commerce Web sites. *Psychology & Marketing, 25*(7), 602-618.

Zaglia, M. E. (2013). Brand communities embedded in social networks. *Journal of Business Research, 66*(2), 216-223.

Appendices

Appendix 1: Measures

Consumer-FBP Identification *(Bergami & Bagozzi, 2000; Lam et al., 2013)*

idfbp_1   Please indicate to what degree your self-image overlaps with the image of the Facebook page of X. *(Venn-Diagram-Item)*

idfbp_2   The image of the Facebook page of X and my self-image are similar in many respects.

idfbp_3   When someone praises the Facebook page of X, it feels like a personal compliment.

idfbp_4   I would experience an emotional loss if I had to stop using the Facebook page of X.

idfbp_5   I believe others respect me for my association with the Facebook page of X.

idfbp_6   I consider myself a valuable partner of the Facebook page of X.

Consumer-Identification with FBP Users *(Algesheimer et al., 2005; Bergami & Bagozzi, 2000)*

idu_1   Please indicate to what degree your self-image overlaps with the image of the other users of the Facebook page of X. *(Venn-Diagram-Item)*

idu_2   I feel very attached to the other users of the Facebook page of X.

idu_3   Other users of the Facebook page of X and I share the same objectives.

idu_4   The friendships I have with other users of the Facebook page of X mean a lot to me.

idu_5   If other users of the Facebook page of brand X planned something, I'd think of it as something "we" would do rather than something "they" would do.

idu_6   I see myself as a part of the users of the Facebook page of X.

Customer Satisfaction with FBP *(Homburg et al., 2009)*

sfbp_1   All in all I am very satisfied with X's Facbook page.

sfbp_2   My experiences with X's Facebook page meet my expectations of ideal conceptions.

sfbp_3   The performance of X's Facebook page has fulfilled my expectations.

Perceived Relationship Investment *(De Wulf et al., 2001)*

pri_1   X makes efforts to increase fans' loyalty.

pri_2   X makes various efforts to improve its tie with fans.

pri_3   X really cares about keeping fans.

FBP Loyalty *(Algesheimer et al., 2005)*

lfbp_1   I intend to visit X's Facebook page in the future.

lfbp_2   I feel very committed to the Facebook page of X.

lfbp_3   I intend to actively participate in the Facebook page of X.

Appendix 2: Outer model loadings and cross loadings for the measurement model

	Consumer-FBP Identification	Consumer Identification with FBP Users	Customer-Satisfaction with FBP	Perceived Relationship Investment	FBP Loyalty
idfbp_1	**0.70**	0.63	0.44	0.23	0.50
idfbp_2	**0.77**	0.57	0.48	0.25	0.48
idfbp_3	**0.76**	0.57	0.29	0.10	0.42
idfbp_4	**0.76**	0.58	0.34	0.24	0.57
idfbp_5	**0.69**	0.45	0.21	0.18	0.38
idfbp_6	**0.75**	0.67	0.34	0.18	0.61
idu_1	0.56	**0.71**	0.45	0.18	0.44
idu_2	0.65	**0.85**	0.43	0.21	0.62
idu_3	0.65	**0.83**	0.43	0.33	0.57
idu_4	0.64	**0.79**	0.33	0.26	0.55
idu_5	0.59	**0.75**	0.32	0.24	0.54
idu_6	0.60	**0.72**	0.37	0.23	0.63
sfbp_1	0.39	0.47	**0.88**	0.42	0.55
sfbp_2	0.53	0.48	**0.88**	0.42	0.56
sfbp_3	0.37	0.38	**0.91**	0.44	0.55
pri_1	0.26	0.34	0.42	**0.93**	0.41
pri_2	0.27	0.30	0.50	**0.94**	0.41
pri_3	0.22	0.23	0.41	**0.92**	0.37
lfbp_1	0.36	0.33	0.55	0.28	**0.68**
lfbp_2	0.70	0.73	0.58	0.39	**0.92**
lfbp_3	0.57	0.66	0.42	0.37	**0.84**