CONCEPTUALISING AND MEASURING CONSUMER ENGAGEMENT IN SOCIAL MEDIA – IMPLICATIONS FOR PERSONAL INVOLVEMENT

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Abstract

Background. Consumer engagement with brands in social media has become an increasingly important challenge for companies to create and to measure. Building fan engagement with brands turns out to be one of the most important promotional objectives for social media, and a preferred brand performance indicator. Despite a growing demand, it has received little academic consideration and there exists no universally accepted measurement of this phenomenon.

Research aims. This paper aims at forwarding a new theoretical framework and developing a context free index to measure aggregate engagement with brands in social media.

Method. The author developed a new engagement index and examined it by means of standard index validation methods. Two separate studies have been conducted. In the first study, two samples (425 subjects in total) were selected to test internal reliability and consistency of a newly created index. The second study concentrated on the external validation of engagement index. 260 subjects were surveyed. The index was tested on real-life brands i.e. McDonald's and Coca-Cola.

Key findings. In the first study factor analyses showed one general factor and it revealed high consistency across different brands that were included in the examination. The newly developed index was, therefore, assumed applicable to measure consumer engagement phenomena in social media. In the second study the results revealed a positive – albeit limited – correlation between personal involvement and consumer engagement. Such findings implied a complementary relationship between these variables and hence different possible implications and suggestions for future empirical research were presented.

Keywords: Engagement, Involvement, Social media, Index validation, Consumer engagement index

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INTRODUCTION AND BACKGROUND

The expansion of social media has changed the contemporary marketplace in a way that it provides new forms of interaction with brands. It contributes to brand on-line visibility, offers public forums for brand related discussions, and gives the opportunity to engage with different segments of brand enthusiasts. As the development of social media is proceeding, so is the need for effectiveness measurements, which would cap-

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ture brand digital life in a plausible and comparable way. Most marketers' discussions circle around the phenomenon of "fan engagement" as the top business objective for social media, and a preferred brand performance indicator. Many companies turn to social media (predominantly - Facebook) in order to permanently engage fans with their brands. Apart from the vast media attention given to Facebook, YouTube, or Twitter, it is widely uncertain whether social media can effectively contribute to a genuine interaction with prospective buyers more than traditional forms of media. The concept of consumer engagement has so far received less academic scrutiny and there exists no universally accepted measurement of this phenomenon. There is also a very limited empirical evidence for a direct relationship between optimal consumer attitudes and engagement (Mollen & Wilson, 2010). To address these shortcomings, two studies were conducted. Based on a conceptual framework for consumer engagement, the first study develops a context-free index to measure aggregate engagement, which should be applicable to different product categories and social media types. The relevant tests for internal reliability and construct validity are performed. While the terms "engagement" and "involvement" seem semantically very close and there are still many marketing practitioners who use them interchangeably, the second study attempts to explore the relationship between them and to use the involvement scale -Personal Involvement Inventory offered by Zaichkowsky (1985; 1994) - in order to validate a newly created engagement index externally. Consequently, this paper presents theoretical and measurement approaches to engagement, discusses the distinctions between engagement and involvement, and investigates the potential interrelatedness of these two concepts. Although engagement and involvement may have many different focal objects (e.g. products, situations, adverts), this paper considers individuals' engagement with brands (main actors in social media situations).

Construct Definition

Consumer involvement. The concept of involvement has received substantial attention in the marketing literature. Most frequently, it is recognized as an unobservable, motivational state, which indicates the perceived importance of a particular stimulus for an individual (Mitchell, 1979; Laurent & Kapferer, 1985/1986). As defined by the majority of consumer researchers (Greenwald & Leavitt, 1984; Mitchell, 1979; Rothschild, 1984; Petty & Cacciopo, 1981; Richins & Bloch, 1986; Zaichkowsky, 1985), involvement is about the relevance of an object (e.g. a product, an advertising message) or situation (e.g. a purchase occasion) to personal needs, interests, values and beliefs. In line with this conceptualization, different types of involvement have been identified e.g. situational, felt and enduring involvement. Rothschild and Houston (1980) coined the term "situational involvement" which was further developed by Celsi and Olson (1988) into the category of felt involvement. These researchers suggest that consumers feel involved only on certain occasions which are relevant to consumer experiential expectations (i.e. to what consumers would like to experience). Enduring involvement, on the contrary, refers to a long-term concern about a particular stimulus or activity and it captures continuing interest and enthusiasm of an individual (Funk, Ridinger, & Moorman, 2004).

Zaichkowsky (1986, 1994) noted that involvement incorporates two dimensions of relevance – the cognitive (it reflects the dynamics of informational processing related to an object of involvement), and the affective one (emotions, feelings and moods evoked by an object of involvement). As a consequence, high involvement might result in multidimensional consumer responses in different decision and shopping situations e.g. increased search and complexity of decision process, greater time spent deliberating alternatives, more elaborate encoding strategies, increased recall and comprehension, and greater resistance to counter-persuasion (Andrews, Durvasula, & Akhter, 1990).

To properly evaluate individuals' involvement with its all multidimensionality and contexts, appropriate measuring scales are needed. In the marketing literature one can find many scale offerings pertaining to particular activities, interests, issues or involvement types, e.g. Traylor and Joseph (1984) built a scale that relates to products, Tigert, Ring, and King (1976) to fashion, and Faber, Tims, and Schmitt's (1993) to political issues. The most universal and frequently exploited measurement approach was offered by Zaichkowsky (1994) who developed a context-free 10 item scale (called Personal Involvement Inventory – PII) to capture emotional and cognitive aspects of situational and enduring involvement. She conducted numerous validation and reliability tests and proved PII applicable to different types of stimulus, including product categories and advertising. Such versatility is a reason for using PII in the second study presented in this paper and applying it to measuring involvement between brands (not products) and their consumers in social media environment.

Consumer engagement. While there is some scholarly unanimity as to how involvement should be approached, the concept of engagement (especially in social media context) receives less unequivocal explanations. From practitioners' perspective, consumer engagement is considered to be a salient indicator that summarizes consumer on-line interactions with a brand. Consulting and research companies recommend describing consumer engagement as an on-line experience measured by the quantity of actions undertaken by consumer in a brand-related context e.g. post and page impressions (views of brand posts in a social medium), logging frequency, number of hours spent on-line, number of shares, likes and uploads (IAB Poland, 2012). Digital marketing and e-commerce professionals grouped around econsultancy.com define engagement as a result of "repeated interactions that strengthen the emotional, psychological, or physical investment a customer has in a brand" (EConsultancy, 2008). For the president of Advertising Research Foundation engagement is "a prospect's interaction with a marketing communication in a way that can be proven to be predictive of sales effects" (Passikoff & Shea, 2010, p. 27). As a result many practitioners believe that in social media situations engagement may be expressed in countable on-line activities performed by consumers which lead to deeper affective brand responses and increased purchase behaviors. Nevertheless, however easy it is to measure frequency or time spent in social media, such interactions may not solely account for one's engagement or affinity to a brand.

A scholarly view provides less confidence and more ambiguity to the engagement debate. For example Guthrie et al. (2004) describe engagement as a psychological state with motivational properties (which actually duplicates the definition of involvement), while Kearsley and Schneiderman (1998) recognize it as a creative and purposeful activity. As it has been noticed by Brodie et al. (2011), most definitions capture a single dimension of engagement (mostly behavioral), while it appears to be a multidimensional phenomenon with emotional, contextual, and cognitive aspects. Patterson et al. (2006), for instance, argue that consumers present themselves cognitively, affectively and physically during brand encounters. These researchers therefore offer a broader conceptual understanding of customer engagement as comprising four sub-constructs: (a) absorption cognitive commitment to an object of engagement (i.e. concentration); (b) dedication - emotional attachment to an object of engagement (i.e. sense of belonging to the group of brand customers); (c) vigor - willingness to invest one's time, energy and other assets in an object of engagement; (d) interaction - actions undertaken between the subject and the object of engagement. In their theoretical proposal, absorption represents a cognitive dimension, dedication - emotional one, vigor and interaction - behavioral properties of engagement.

The combination of cognition, affection and behavior under the idea of engagement is valuable in a way it captures the richness of this phenomenon, but at the same time such an interpretation overlaps with involvement conceptualizations. As a result, the above perspective has been only partly adopted in this study. Consumer engagement is considered here as an effortful behavioral commitment to a brand. Such an approach is operable enough and stays in compliance with many scholarly concepts emphasizing the multidimensionality of engagement (compare Mollen & Wilson, 2010 for a review). It basically refers to two sub-components defined by Patterson et al. (2006), i.e. interaction and vigor. While interaction represents actions as indicated by Patterson et al. (2006), the later subcomponent, however, is a little differently operationalized in the present study. The vigor sub-component of consumer engagement is regarded here as a subjective effort dedicated to the object of engagement and one's propensity to perform any recommendation with regard to the object of engagement (i.e. referral behavior). Subjective effort is theorized as an individually assessed level of invested resources e.g. time, energy, and mental resilience. Such a conceptualization enables escaping the trap of unidimensionality and facilitates capturing qualitative differences in the degree of engagement along each component. The resulting definition would regard consumer engagement as a function of one's effort, behavior acts and propensity to recommend the brand in social media.

Importantly, if interactions or simple behavior acts were solely included in the engagement concept, it would not allow for reliable comparisons. The number of actions undertaken with regard to a particular brand carries diverse meanings and significance for different social media users. Heavy Facebook users, for instance, might consider themselves fully engaged brand followers after posting 10 comments on a brand page, while for occasional Facebook users extensive engagement would be implied by 3 comments. Additionally, heavy users may not be representative of the general social media population and a high amount of clicks (e.g. on a "like it" button) may be either unintentional or just a simple, meaningless courtesy on users' part. Self-assessed efforts and referral behaviors may therefore function as a justification for brand-related on-line activities and thus provide a more complete denominator for engagement, making it comparable. As a result, an engagement index would comprise items describing brand-related on-line activities, individual's effort and referral propensity (all covering behavioral dimension of an engagement phenomenon).

STUDY 1

METHOD

Engagement Index Development

So far consumer engagement has been measured by simply enumerating the activities performed by consumers exclusively in social networking sites (predominantly – Facebook), with no reference to other social media types. In their search for capturing consumer engagement some companies assign different weights to these activities, making distinctions between effortful (higher weights) and effortless (lower weights) actions. For example, clicking on a "like" button is valued lower than commenting and sharing brand related content. The exact weight values, however, stay unofficial and make the whole measurement process less objective. This study aims to use this approach as a starting point to advance in two different directions. Firstly, by modifying the way in which weights are assigned (not subjectively – depending on a company's views). Secondly, by increasing the number of components the total engagement index encompasses in order to integrate different aspects of this phenomenon and making it applicable to different social media types. It is worth trying to construct an index that aggregates more complex information than merely the number of consumer activities and allows for comparisons to be made across products and social media occasions. The final result will be an index that offers broader coverage than the standard engagement indicators used so far by practitioners.

Item Generation and Scoring

As it was discussed above, a composite measure of engagement should comprise three distinguishable components referring to activities, effort, and referral propensity. Firstly, a list of 20 activities which one might undertake while in different social media types, was generated (e.g. clicking "like it" button, writing a post, writing a comment, viewing a video, reading a blog, enrolling in an application, playing a game). Next, this list was supplemented with the measurements of effort and referral propensity in social media. Effort was operationalized as a combination of (a) a span of time and (b) an amount of individual's work dedicated to the brand in social media. As a result, these two items were included in this list. As for referral propensity, a common recommendation metric known as Net Promoter Score (Reichheld, 2003) was applied i.e. an open-ended request to individually assess the probability of recommending a brand to another person (in this study – to a friend or a follower in social media).

In order to validate the items representative for engagement, a panel of experts (five senior managers from marketing agencies and corporations) were appointed to this study. Firstly, they were given this study's definition of engagement and a general definition of social media (i.e. multilateral communication tools which use internet solutions and allow one to create and deliver different types of content, including social networking sites - e.g. Facebook, blogs and microblogs - e.g. Twitter, and content services e.g. Picasso, Flickr, YouTube). Secondly, the list of items relating to effort, referral behavior and activities, which one might undertake while in social media, was provided to the experts for content validation. They were instructed to rate these items as (a) highly representative of consumer engagement in social media, (b) somewhat representative of consumer engagement in social media, (c) not representative of consumer engagement in social media. Items that were not rated as highly representative of engagement were deleted (e.g. "playing a game", "enrolling in an application" was rated as somewhat representative and therefore excluded from subsequent research). Much discussion arose around "sharing the brand content" activity, as it might be regarded as a tupical social media activity and an epitome of referral behavior. Eventually, it was dropped, in order not to duplicate questions.

The content validity (item reduction) phase resulted in a list of five items that experts agreed upon to measure a composite index of consumer engagement in social media: two items describing general activities regarding a brand in social media situations, two items about one's effort, one item measuring referral propensity. Five was assumed to be too low as the number of items with which to start data collection. Thus, one additional open-ended item was added to the item pool to raise the initial number to 6 (compare Table 1).

Tab	ble	1.	Items	in	an	Engagement	Ind	lex
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Item number	Item content
1	To see (watch) a brand in social media
2	To talk (write & read) about a brand in social media
3	To do another activity relating to a brand in social media (additional item)
4	To recommend a brand to a friend or a follower in social media
5	To dedicate one's time to a brand in social media
6	To dedicate one's work to a brand in social media

Source: own elaboration.

Table 2 presents the final questions used in the questionnaire. A one hundred-point scale was used (0 = not at all; 100 = very much) in case of items 4, 5 and 6. As it is hard to anticipate the answers to items concerning actions (i.e. 1, 2, 3), the relevant questions remained open-ended.

	00		0	
Item	Q	uestions used	in a	questionnaire
Assess	the number of the t	following action	ne.	

 Table 2. Engagement Index Scoring

Item	Questions used in a questionnaire	Weights
Assess	the number of the following actions:	
1	How many times have you recently' seen or watched any content	
	relating to brand X" in social media	
2	How many times have you recently' talked (writing & reading	25%
	included) about brand X** in social media	23%
3	How many times have you recently* performed another activity	
	relating to brand X** in social media	
Assess	how likely you are:	
4	to recommend a brand to a friend or a follower in social media	25%
Assess	how much effort you have put in brand X ^{**} in social media	
5	how much of your time have you dedicated to brand X [®] in social media	25%
6	how much of your work have you dedicated to brand X** in social media	25%
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*If needed, one can specify the actual timeframe for engagement measurement. ** enter the name of the brand to be judged.

Source: own elaboration.

After data collection, the scores on items 1, 2, 3 would be firstly summed (and thus treated in a subsequent analysis as a single item) and then normalized i.e. adjusted to a common 0-100 scale. Normalized values allow for comparisons and, therefore, the arctangent function was used to fit the obtained scores between the ranges 0-100. The normalization function was expected to have the following properties: f(0)=0; $f(\mu) = 50$, horizontal asymptote = 100. As the result, the following equation was developed and applied:

$$f(x) = \left(\tan^{-1}\left(\frac{x-\mu}{\sigma}\right) + \frac{\pi}{2} - C\right) \frac{100}{\pi - C}$$

with

$$C = \tan^{-1}\left(\frac{-\mu}{\sigma}\right) + \frac{\pi}{2}$$

 μ = mean value of all the responses received after summing of 1, 2, and 3 item;

 σ = standard deviation calculated for all the responses received after summing of 1, 2, and 3 item.

The next step was to assign scores for particular items. The same group of experts was asked to decide on the desirable weights to each item in the index. After two rounds of discussions the resulting solution was to give equal weights to all items (see the table below), as it is suggested in the literature on social research (Babbie, 2010). The resulting numeric engagement index score would range from a low of 0 to a high of 100.

Internal Validation

The next step was to administer the generated items as a scale over different brands to measure its internal consistency and dimensionality. As students were expected to constitute a general sample in this study, the initial step was to select contrasting brands with high familiarity scores for people aged between 18–24. Consequently this study involved the following pre-test procedures:

- 1. To identify product categories that students purchase themselves. The author listed 12 products categories likely to be purchased by people aged between 18–24. 60 students were presented with this list and asked to indicate only those products that they buy with their own money. The resulting group of products with the highest scores included beverages, food at fast food restaurants, snacks, and clothes.
- 2. To identify contrasting product categories. The product importance was the criterion to select two contrasting product categories and Kapferer and Laurent (1993) scale items were used to

assess its value. Fast food restaurants had the highest score on importance, and beverages had the lowest score on importance.

3. To identify brands within selected product categories. The next step was to identify brands within the selected product categories which conduct their activities in social media and are likely to be known to respondents. Familiarity was important because subjects in the main study should have some prior images about the brands in order to increase the author's confidence in the engagement measure. With regard to the selected product categories we listed two groups of brands and we ran familiarity tests on a sample of 60 students. Coca-Cola had the highest familiarity scorings among beverages and McDonald's among fast food restaurants. These two brands were eventually chosen to this study.

Two independent samples were used in order to ensure that the results obtained would not be a one-time chance occurrence. 425 students participated in this study for extra credit. Some part of the sample completed the scale pertaining to Coca-Cola (n=222), and the other part filled the scale relating to McDonald's (n=203). The R software was used for statistical analyses.

RESULTS

Data Analysis

The results show that for both product categories (i.e. beverages and fast food restaurants) four items (items 1,2 and 3 were summed in order to form a single item) had an item-total correlation of 0.48 or more, and the Cronbach alpha level of more than 0.80 (i.e. 0.84 for Coca-Cola; 0.82 for McDonald's). However, as much criticism has recently appeared around this most popular internal consistency reliability measure (Dunn, Baguley, & Brunsden, 2013), an additional calculation was performed using coefficient omega (0.83 for Coca-Cola; 0.78 for McDonald's). As it can be concluded, all alpha and omega coefficients are satisfactory, demonstrating internal consistency. One may accept this as indirect evidence of validity (Churchill, 2009), which is a necessary but not sufficient condition.

An additional analysis of items was further employed for reliability assessment and discriminant validation. Factor analyses, using promax rotation, were conducted over both brands to check if the items loaded onto one dimension, as intended. The general pattern of results showed one factor being sufficient for both brands (Table 3). One principal factor was extracted that accounted for at least 54% of the total variance in both samples. Items that load most heavily on this factor are 4 (regarding recommendation propensity) and 5 (concerning individual's time dedicated to a particular brand).

	Uniquenesses:						
McDonald's	Item 1+2+3	Item 4	Item 5	Item 6			
	0.83	0.70	0.14	0.17			
	Loadings:						
	0.54	0.93	0.91	0.41			
	Factor 1						
M	SS loadings	2.16					
	Proportion Var	0.54					
	Test of the hypothesis that 1 factor is sufficient. The chi square statistic is 6.22 on 2 degrees of						
	freedom. The p-value is 0.445						
	Uniquenesses:						
	Item 1+2+3	Item 4	Item 5	Item 6			
	0.81	0.63	0.12	0.18			
ola	Loadings:						
ပို							
Ŷ	0.61	0.94	0.90	0.44			
oca-C	0.61 Factor 1	0.94	0.90	0.44			
Coca-Cola		0.94 2.26	0.90	0.44			
Coca-C	Factor 1		0.90	0.44			
Coca-C	Factor 1 SS loadings	2.26 0.56					

Table 3. Factor Analyses for McDonald's and Coca-Cola

Source: own elaboration

58

In general, one might conclude that all items form a single homogenous set. For both independent samples alpha and omega reliability coefficients stay at acceptable levels, and there is a single factor extracted from the analysis. These results enable building a composite engagement index by simply adding together the results of individual variables, as one may assume that each question in our questionnaire is associated with the same single phenomenon.

STUDY 2

METHOD

External Validation of Engagement Index

Determining the usefulness of an index requires further analyses, experimental research and replications. In order to increase confidence in the newly created engagement index and enhance the likelihood of this index to measure the variables as intended, one should test its relationship to other indicators of the similar variables. The second study presents the inaugural test to externally validate the engagement index and compare it to one similar relational concept i.e. involvement.

As it has been noticed above, most scholars emphasize personal relevance as a ground aspect of involvement and refer to the direction and intensity of consumer attitudes formed towards an object of involvement. Consequently, involvement is used to portray a motivational state of an individual, and as such it has been regarded as overlapping with similar concepts e.g. commitment, importance, perceived risk, proneness (e.g. Coulter et al., 2003; Beatty et al., 1988; Dholakia, 1997; Lastovicka & Gardner, 1979; Lichtenstein et al., 1995; Robertson, 1976; Worrington & Shim, 2000). Semantically involvement stays also very close to engagement and these two concepts are often used interchangeably by many practitioners conducting their branding campaigns in social media. However, as it was indicated earlier in this paper, involvement and engagement might represent two different, albeit linked, states.

Involvement is considered to have drive properties and influence overt behaviors. A good deal of literature is devoted to the understanding of this phenomenon and its effect on subsequent consumption activities, cognitive processing, and affective responses towards particular objects and situations. Personal involvement impacts elicitation of counterarguments to advertising messages (Petty & Cacioppo, 1979; 1981; Petty, Cacioppo, & Schumann, 1983), brand and product choices (Tyebjee, 1979), consideration of product and purchase alternatives (DeBruicker, 1978), information search patterns (Clarke & Belk, 1978; Belk, 1982) etc. In social media situations personal involvement with a product or brand may have significant qualities to activate brand related behaviors. As a consequence, engagement may be regarded as a behavioral response to involvement, and an effortful manifestation resulting from personal involvement with a brand. From such a perspective, involvement would cover cognitive and affective dimensions, while engagement would represent a behavioral dimension of this very complex and multifaceted phenomenon. This discussion leads to the following hypothesis:

H1: Personal involvement of social media users with brands will be positively related to their engagement with the same brands in social media.

Study Design

To empirically examine the relationships between two variables proposed in the research framework, a quantitative approach was adopted. A fresh sample of 260 students was invited to take part in the second study. As social media are extensively used among young people, the author believed that people aged between 18-25 should have constituted an appropriate sampling frame as they were widely representative for the population of social media users. Such an age limitation helps maintain higher internal consistency of the total sample in terms of attitudes and activities regarding social media.

The pretests' results from the first study were exploited in the present survey. Eventually, the total sample was divided into two groups: 134 people rated Coca-Cola (a low importance brand), and 126 individuals were asked to answer questions relating to McDonald's (a high importance brand). On the basis of the theoretical discussion, the questionnaire comprised two parts: (a) a scale developed and tested in the first study was applied to measure aggregate engagement; (b) Zaichkowsky's (1994) 10item, bipolar adjective scale (Personal Involvement Inventory) was used to measure personal involvement.

RESULTS

Data Analysis

Bivariate logarithmic regression model was employed to examine the H1. The results are summarized in Table 4 and they provide some support for the hypothesis H1. Personal involvement (i.index) presented the variance explanation of 22.83% (R²=0.2283, p<0.05) and F value (34.03) for Coca-Cola. In addition, personal involvement (i.index) presented the variance explanation of 21.44% (R²=0.2124, p<0.05) and F value (28.05) for McDonald's. One might conclude that there exists some positive correlation between engagement and involvement.

	Residuals:						
	Min	1Q	Median	3Q	Max		
	-2.7922	-0.5965	0.1372	0.7405	1.9695		
$^{\mathrm{sp}}$	Coefficients :						
McDonalds		Estimate	Std. Error	t value	Pr(> t)		
00	(Intercept)	0.8997870	0.2504117	3.593	0.000501***		
4c]	i.index	0.0029521	0.0005574	5.296	6.64e-07***		
	Residual standard	Residual standard error: 0.9878 on 104 degrees of freedom					
	Multiple R-squared: 0.2124, Adjusted R-squared: 0.2048						
	F-statistic: 28.05 on	1 and 104 DF, p-val	ue: 6.639e-07				
	Residuals :						
	Min	1Q	Median	3Q	Max		
	Min -2.8457	1Q -0.6948	Median 0.1791	3Q 0.9067	Max 2.9286		
la		E E	-	*			
Cola	-2.8457	E E	-	*			
ca-Cola	-2.8457	-0.6948	0.1791	0.9067	2.9286		
Coca-Cola	-2.8457 Coefficients:	-0.6948 Estimate	0.1791 Std. Error	0.9067 t value	2.9286 Pr(> t)		
Coca-Cola	-2.8457 Coefficients: (Intercept) i.index	-0.6948 Estimate 0.6013517	0.1791 Std. Error 0.3085109 0.0005291	0.9067 <u>t value</u> 1.949	2.9286 Pr(> t) 0.0537		
Coca-Cola	-2.8457 Coefficients: (Intercept) i.index	-0.6948 Estimate 0.6013517 0.0030865 error: 1.102 on 115 d	0.1791 Std. Error 0.3085109 0.0005291	0.9067 t value 1.949 5.834	2.9286 Pr(> t) 0.0537		
Coca-Cola	-2.8457 Coefficients: (Intercept) i.index Residual standard Multiple R-squared	-0.6948 Estimate 0.6013517 0.0030865 error: 1.102 on 115 d	0.1791 Std. Error 0.3085109 0.0005291 degrees of freedom isted R-squared: 0.221	0.9067 t value 1.949 5.834	2.9286 Pr(> t) 0.0537		

Table 4. Log-lin regression models (personal involvement to engagement)

i.index=personal involvement

Source: own elaboration

Although the analyses reveal relatively low R² values (0.2283 for Coca-Cola; 0.2124 for McDonald's), one may assume that both regression models fit the data quite well. In socio-behavioral research it is hard to predict human responses with absolute confidence and typically R^2 values remain lower than 50% (Pedhazur & Schmelkin, 1991). Additionally, as there are other statistically significant predictors (p<0.05), the conclusions about logarithmic relationship between variables may still be valid. In summary, low R^2 values may imply that both variables measure the same phenomenon but only to a certain extent (they are not so strongly correlated that they could replace one another). The following scatter plots picture these results – both variables in this case are necessary and complementary, although they are not fully independent. As it is depicted in Figure 1, in both samples the scorings were scattered only to a certain extent and – what is worth noting – there appears to be a large group of respondents with simultaneously high involvement and relatively low engagement scorings.



i.index= personal involvement; e.index= engagement

Figure 1. Personal Involvement to Engagement Scatter Plots Source: Own elaboration.

DISCUSSION AND CONCLUSIONS

Most marketing managers believe that social media have altered contemporary buying patterns in such a way that consumers are nowadays better informed about brands prior to the purchase and they stay in touch with the brands of their choice throughout the whole purchase cycle. Social media sources have become one of the most important sources of information (Naveed, 2012), facilitating purchase decisions (Kozinetz et al., 2010) and involving consumers into the world of brands. In other words, social media has changed how people relate, engage, and commit to brands. Such a situation, therefore, generates an increasing demand for new effectiveness approaches and measurement tools to capture the shift in moderators of consumer on-line behavior and its best indicators.

This article has described the newly created engagement index and the results of the inaugural validation tests. A person may be engaged with a brand in a social media environment, and engagement may be approached as an experiential response to individual's involvement with a brand. As it has been argued throughout the paper, a context-free measure of engagement should comprise not only numeric indicators of individually performed actions towards a brand, but also a self-assessment of recommendation propensity and one's effort devoted to a given brand. Consequently, the contribution of this research to the literature on consumer behavior in social media is the development of engagement index measurement. It was demonstrated to have high content validity and internal reliability (study 1). The external validation procedure was conducted partially - it regarded only the potential relationship with Personal Involvement Inventory (study 2). The results showed that tracking simultaneously the involvement and engagement indicators might provide managers with complementary data, as in certain situations consumers who score low on engagement, might score high on involvement. This inference should, however, be further tested in subsequent research.

Limitations and Future Research

Undoubtedly, more work needs to be done on engagement index validation. Firstly, a more profound external validation should be carried out, i.e. future efforts should concentrate on studying more relationships to other indicators of the related variables (e.g. other involvement measurement scales, participation, brand commitment, and brand importance indicators etc.). The engagement index should be compared with other scales and should examine whether they all predict diverse or similar outcomes. Eventually, the applicability of the engagement index to a wider variety of product categories and brands should be also explicitly tested in future experimental endeavors. This research design did not consider brands of very high, middle and very low importance, nor did it included more criteria for selecting contrasting brands (e.g. reputation, brand equity, purchase cycle, frequency of use). It is highly uncertain whether the results found in the examination of global brands (i.e. Coca-Cola and McDonald's) are generalizable to less pronounced brands which function on local markets only. This, however, is the first step in the testing process, which should later cover the applicability of engagement index to different situations, consumer types and products.

An additional inquiry is also needed to form a complete picture of the variables that influence the relationship between consumer involvement and engagement with brands in social media. As there is some correlation between these two constructs, further studies should determine whether other variables mediating this relationship exist. These variables might refer, for instance, to the type and prosperity of branding messages and campaigns held in social media (e.g. the wealth of information, regular and frequent updates, the use of game mechanism, utilitarian vs. recreational messages etc.) or consumer's risk taking and self-disclosure propensity. Such issues were not addressed in the present studies. Incorporating them into subsequent research might help explain the utility of the engagement index under different circumstances.

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64

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KONCEPTUALIZACJA I POMIAR ZAANGAŻOWANIA KONSUMENTÓW W MEDIACH SPOŁECZNOŚCIOWYCH

Abstrakt

Tło badań. Kształtowanie i pomiar zaangażowania konsumentów wobec marek w mediach społecznościowych stanowi coraz większe wyzwanie dla przedsiębiorstw. Budowanie zaangażowania to jeden z najważniejszych celów promocyjnych, a jednocześnie wyznacznik wydajności i kondycji marki. Mimo rosnącego zapotrzebowania na badania w tym obszarze, problematyka zaangażowania jest stosunkowo mało rozpoznana przez naukowców i nie istnieje powszechnie akceptowalna definicja oraz sposób pomiaru tego zjawiska.

Cele badań. Niniejsza praca ma na celu zaproponowanie nowych ram teoretycznych dla pojęcia zaangażowania konsumentów wobec marek w mediach społecznościowych oraz stworzenie uniwersalnego i kompleksowego wskaźnika pomiaru tego zjawiska.

Metodyka. Zaproponowano nowy wskaźnik zaangażowania wraz z metodą pomiarową. Zastosowano standardowe metody sprawdzania jego poprawności i wiarygodności. Przeprowadzono dwa oddzielne badania. W pierwszym badaniu dokonano wewnętrznej walidacji wskaźnika na dwóch niezależnych próbach (n=425). Drugie badanie poświęcono zewnętrznej walidacji wskaźnika (również na dwóch niezależnych próbach badawczych, n=260). Wskaźnik został przetestowany na markach rzeczywistych tj. McDonald's i Coca-Cola.

Kluczowe wnioski. W pierwszym badaniu przeprowadzono szereg analiz czynnikowych w celu określenia relacji pomiędzy zmiennymi budującymi wskaźnik i poszukiwania zmiennych ukrytych. Na podstawie analizy danych ustalono, iż minimalna liczba czynników niezbędnych do satysfakcjonującego opisania (zreprodukowania) korelacji pomiędzy wprowadzonymi do analizy zmiennymi wynosi jeden. Można zatem przyjąć, iż nowoopracowany indeks jest spójny i bada pojedynczy konstrukt znaczeniowy. W drugim badaniu wyniki ujawniły pozytywną – choć ograniczoną – korelację pomiędzy nowostworzonym wskaźnikiem a innym, opisującym odmienny typ zaangażowania konsumentów. Wyniki pozwalają sformułować wniosek o komplementarnym związku pomiędzy tymi zmiennymi. W ostatniej części pracy opisano możliwe ścieżki interpretacyjne oraz zasugerowano dalsze kierunki badań.

Słowa kluczowe: zaangażowanie konsumenta, media społecznościowe, walidacja wskaźnika, wskaźnik zaangażowania konsumenta