

**Determinants of Passing on Viral Messages**  
**Empirical Analysis of a Viral Marketing Campaign on Facebook**

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**Abstract**

Internet has evolved into a dynamic network where people can easily and constantly interconnect. Social-media-platforms allow consumers to interact and inform each other, likewise on products and services. Under pressure of increasing customer-resistance toward traditional advertising-forms marketers have to find new, effective forms. Viral-marketing on social-media therefore plays an important role, evoking the question which factors really have an impact on the success of viral-marketing-strategies. Therefore, we undertake an empirical study to analyze and compare factors influencing the behavior of forwarders and non-forwarders of viral messages, examining the effect of brand-attitude, brand-experience and self-congruity on recipients' forwarding behavior on the basis of a real viral-marketing-campaign on Facebook about Tiger Balm. Generally, the paper provides evidence that there are significant differences between people who pass-on a viral message and those who don't. Accordingly, it is vitally important to select adequate consumers who should be first recipients of a viral marketing message.

**Keywords:** (electronic) Word-of-Mouth Communication, Social Media, Viral Marketing

## Introduction

For a long time traditional Word-of-Mouth-Communication (WOM) has been an important research topic in academic literature (Engel et al., 1969; Czepiel, 1974; Haywood, 1989; Mangold et al., 1999). Concerning the nature of traditional WOM there are some limitations which arise from the regional, temporal and communicative framework, for example spreading information over a long distance or to different people not knowing each other. Those factors slow down the diffusion of information.

With the advent of the World Wide Web, the way people communicate with each other has changed from personal conversation to E-Mail, online chats and social platforms. Through the internet we can access information anytime and anywhere which resolves the limitations of traditional WOM (Hennig-Thurau et al., 2004). This evolution into a new form of communication is known as electronic word-of-mouth (eWOM) (Bickart, and Schindler, 2001; Godes, and Mayzlin, 2004; Hennig-Thurau et al., 2004). Spreading information online enables marketers to disseminate their messages faster and rise their distribution exponentially (Kirby, and Marsden, 2006). Using social networks, messages spread like viruses being forwarded from one participant - friend or follower - to another which is why this form of advertising is also called viral marketing (VM). Thereby viral marketing can be seen, just like eWOM, as a further development of traditional WOM referral marketing (Kotler, and Armstrong, 2006; Bauer et al., 2007).

The increasing use of Web 2.0 applications boosts the relevance of viral marketing, especially with a concern on social media. "Web 2.0 is the network as platform, spanning all connected devices; Web 2.0 applications are those that make the most of the intrinsic advantages of that platform: delivering software as a continually-updated service that gets better the more people use it, consuming and remixing data from multiple sources, including individual users, while providing their own data and services in a form that allows remixing by others, creating network effects through an 'architecture of participation', and going beyond the page metaphor of Web 1.0 to deliver rich user experiences." (O' Reilly, 2005) Some of the most heavily used Web 2.0 applications are different social platforms. The market leader Facebook has a worldwide membership of more than 1 billion active users (Facebook, 2012).

Under the pressure of increasing resistance of customers towards traditional forms of advertising, marketers have to find new, effective forms of advertising. Viral marketing plays an important role in this respect. However, there is still a limited understanding of how viral marketing works which evokes the question which factors really have an impact on the success of viral marketing strategies. To answer this question, we build up on the study of Carroll and Ahuvia (2006) that shows the positive impact of "Brand Love" on eWOM. Using these findings we want to identify and examine the effect of the recipients' perceptions toward the communicated brand in a viral message. In order to do so, we examine the effect of brand attitude, brand experience and self-congruity on recipients' forwarding behavior on the basis of a real viral marketing campaign on Facebook. We chose a campaign of Tiger Balm as a case. Tiger balm is a medicative balm, assisting blood circulation and muscle regeneration. The campaign addresses a specific target group: sporty people, especially German runners, who aim at participating at the NYC marathon. We develop a two-step-flow model of viral communication and identify empirically significant differences between forwarders and non-forwarders of viral messages which permit to draw conclusions on the determinants of passing on viral messages.

## **Viral Marketing and eWOM**

### **Theory**

This article regards viral marketing just like eWOM as a further development of traditional WOM referral marketing (Kotler, and Armstrong, 2006). It is based on the theory of interpersonal communication which means "a process of a two-way inducement between customers sharing recommendations about brands or products" (Bauer et al., 2007, p. 59). Thereby we need to distinguish between recommendations which arise from a long term perspective and those which emerge occasionally, initiated by a short marketing incentive (Langner, 2007). Especially occasional referrals are relevant for viral marketing because they are not focused on the single brand or product but on their whole presentation.

The main reason for viral marketing's popularity is the speed and the exponential dispersion of information, using electronic media via internet (Kirby, and Marsden, 2006). Being free of the traditional limitations, viral marketing campaigns can create an instant tremendous buzz within the brand's target group. The exponential dispersion of information is the key feature of viral marketing. Combined with the possibility of interaction between consumers and

companies as well as the increasing credibility of a message that comes from the customers' own social network, we define viral marketing as follows:

"Viral marketing is an advertisement that is in some way tied to an electronic message. It can be attached to an e-mail, video spot or posted in any form of social media. It is a form of advocacy or word-of-mouth endorsement marketing, whereas one customer passes along the message to other potential buyers, creating the potential for exponential growth in the message's exposure and influence." (Clow, and Baack, 2005, p. 177; see also Wilson, 2000)

The main element for a viral marketing campaign to work is not the advertised product or brand, but the message itself (Langner, 2007). The creation of a unique message content and container is of crucial importance. A very often used container for viral messages is a video clip (Kirby, and Marsden, 2006), putting emphasis on special emotions going along with with the advertised brand/product. To sum up: viral marketing is about a special packaging of advertising messages that will be forwarded exponentially, using existing communication networks of the costumers, because it is of outstanding interest for the target group.

To initiate the viral effect it is important for companies to select adequate consumers who should be the first recipients and first to pass on the viral marketing message, as the success of a viral marketing campaign depends on their forwarding behavior (Helm, 2000; Bannan, 2000). The process of distributing the viral message to adequate first recipients is called seeding (Langner, 2007). We consider "The People's Choice" (Lazarsfeld et al., 1948) as a pioneering study in this field. The authors identify a suitable group of first recipients named "opinion leader" or "gate keeper". Concerning the "two-step-flow-model of communication", information is spread in two steps: from the active and high involved opinion leader to the more passive group of opinion follower (Lazarsfeld et al., 1948, p. 191). As viral marketing basically uses electronic media this group is also called "e-fluentials" (Burson-Marsteller, 2007). Furthermore Feick and Price (1987) identify a highly influential group: the "market mavens". Market mavens are individuals, who possess information on many kinds of products, places to shop, and other facets of markets, initiate discussions with consumers and respond to requests from consumers for market information (Feick, and Price, 1987). If communication takes place in the world wide web (e.g. forums or social media platforms) this group is named "e-mavens" (Walsh et al., 2005).

Following the viral process after the first recipients have been reached, Gladwell's (2000) "Tipping Point" theory is an interesting way to deal with the further diffusion. Gladwell argues that, under particular conditions, ideas or messages will disperse exponentially after achieving a critical mass of recipients. Nowadays it is easy to achieve this critical mass as communication in social media is so much accelerated and its main intention of use is sharing content with others (Burson-Marsteller, 2007). Thereby social platforms like Facebook have the perfect preconditions to accomplish successful viral marketing campaigns: sharing is done by just one mouse click.

### **Previous Research**

Previous research identifies diverse factors influencing forwarding behavior of referral messages (viral marketing messages or eWOM). Most studies are based on Hovlands (1948) four factors of interpersonal communication: (1) the communicator who transmits the communication, (2) the stimulus concerning message content and container, (3) the recipient who responds to the communication and (4) the responses made to the communication by the communicatee.

One of the factors that determine the influence of the communicator is attractiveness, which is composed - amongst others - of similarity/congruence (Kiecker, and Cowles, 2001). The higher the perceived congruence between communicator and recipient, the higher is the communicator's influence on the recipient's forwarding behavior. Besides, Cheung et al. (2009) stress the ability of a message to back up the recipient's own position. Both findings provide evidence that congruence between stimulus (e.g. viral message) and the recipient's perceptions is very important.

The recipient is the person who receives a message and responds to it. Concerning viral marketing, each recipient of a viral message is a potential prospective communicator of the viral marketing campaign. If a recipient really becomes a communicator of the viral message depends on his perceptions, experiences and sources (Cheung, and Thadani, 2010). A highly influencing factor, in this respect, is the validation of existing beliefs and attitudes (Cheung et al., 2009). Also, involvement toward the messages' content is mentioned in this context (Cheung et al., 2009; Doh, and Hwang, 2009). In another research study Sher and Lee (2009)

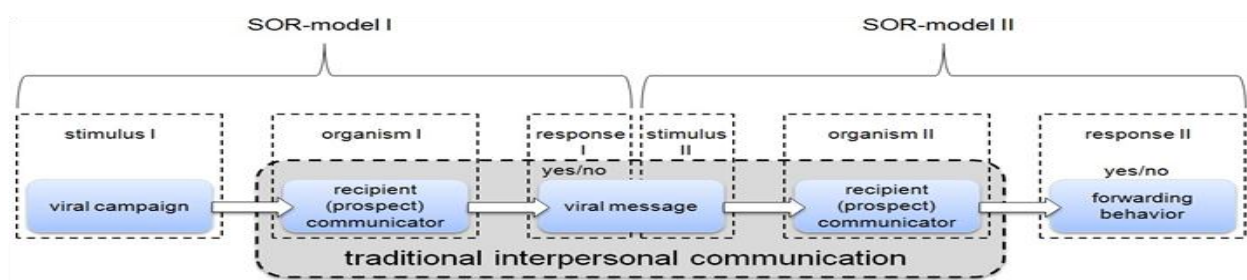
put emphasis on the relevance of the general tendency toward disbelief (Obermiller, and Spangenberg, 1998) which deals with the recipients convincing behavior.

### Conceptual Framework and Research Hypotheses

According to Bauer et al. (2007), viral marketing is based on the theory of interpersonal communication with its differentiated communication models. In this field of research the stimulus-response (SR) model is a quite simple one. It states that human behavior is founded on the principle of cause and effect, whereas inner processes in the human mind are neglected and take place in a kind of black box. To focus on the black box, we need to interconnect stimulus and response with an organism that accommodates the involved individuals of the communication act, which leads to the further developed stimulus-organism-response (SOR) model. Within this model, we can give a better description of the complexity of human behavior than before, however it only captures a single sequence (Nießing, 2007).

To elaborate on this, we come back to the already mentioned "two-step-flow-model of communication" (Lazarsfeld et al., 1948). In their study, Lazarsfeld et al. concluded that ultimately, interpersonal communication is most influential on people's behavior. Putting these findings together in a single communication model, we can draw a cycle of consequent SOR-sequences influencing each other (Luthans, 1981). Thus, the following model is used to describe the dispersion of viral messages:

Figure 1: viral model of communication (based on Nießing, 2007, p. 112)



In its centre is the traditional model of interpersonal communication, which is extended concerning input (first stimulus) and output (last response) (Nießing, 2007). The first stimulus is the beginning of a viral marketing campaign, namely the already mentioned process of seeding. The aim of the marketer should be the detection of adequate first recipients like e-fluentials (Burson-Marsteller, 2007) or e-mavens (Walsh et al., 2005). In our model organism I stands for a recipient, who becomes a prospect communicator with the

receipt of the viral message (stimulus I). Then, the first SOR-model has two possible responses: if the overall evaluation of the viral message is negative, there will be no forwarding and the model is at its end. But if the overall evaluation is positive, the message will be forwarded and response I (the viral message) becomes the stimulus for organism II. Again an individual rating of the message takes place and leads to the same options as in the first SOR-model. If these positive sequences are repeated again and again we will find a viral, exponential growth of information dispersion through the existing communication networks of the costumers.

Referring to our model, forwarding behavior is substantially influenced by inner processes taking place in the organism (recipient). These processes are individually differentiated. Furthermore, the given overview of prior research indicates a strong relationship between the recipients' beliefs and attitudes and the actual forwarding process of viral messages. In the next step we therefore discuss constructs, which influence the overall evaluation of a viral message and form beliefs and attitudes. We explain the underlying theories and build hypotheses which are tested empirically.

### **Effects of Brand Attitude**

Attitude is one of the oldest variables to explain human behavior and in general, is denoted as "overall evaluations" of an object (Ajzen, and Fishbein, 1980). In this study we examine brand attitude, which describes a person's overall evaluation of a brand. Prior research found, that a person's behavior can be predicted by its attitudes towards a particular object, in this case of course the viral messages' brand. A well-established theory in this context is the "Theory of Reasoned Action" (TORA), which can be used to predict behavior (Ajzen, and Fishbein, 1980).

The TORA consists of three general constructs: behavioral intention, attitude and subjective norm, whereas a person's behavioral intention depends on its attitude about the behavior and subjective norms. If a person strongly intends to behave in a particular way, then it is likely that the person will do so. Thus, the most important element of evaluating a behavioral intention and its resulting behavior is attitude: the better a person's attitude towards the brand of the viral message, the more likely the person will pass on this message. This coherence is



also supported by attitude's four basic functions (Katz, and Lazarsfeld, 1960). Hence, we hypothesize:

H<sub>1</sub>: The value of brand attitude is significantly higher in the group of forwarders.

### **Effects of Self-Congruity**

Basically, self-congruity (or self-image congruity) describes a subjective experience that is somehow generated by an interaction between product-user image and the consumer's self-concept (Sirgy, 1986). To measure that effect, we are using Sirgy's new method of measuring self-congruity (Sirgy et al., 1997), that captures congruence directly and globally without the limitations of the traditional method that captures congruence using two separate dimensions. Furthermore, the predictive validity of the new method is beyond the traditional one. Self-congruity partially determines different aspects of consumer behavior, which has been explained by Sirgy's self-congruity theory (1986) and verified in different empirical studies (e.g. Sirgy, 1985; Claiborne, and Sirgy, 1990; Nienstedt, Huber, and Seelmann, 2012). We therefore conclude that in the context of viral marketing, congruity has a positive effect in causing positive behavioral actions. This assumption is also supported by the theory of cognitive dissonance (Festinger, 1957). One can say that members of a social network (e.g. Facebook) will attempt to reduce existing dissonance concerning their social appearance. A suitable way to do so is communication (Festinger, 1957), like forwarding a viral message which is congruent with one self's concept (=self-congruity). Thereby a viral messages' brand can really contribute to self-expression. Summarizing these findings, it can be hypothesized:

H<sub>2</sub>: The value of self-congruity is significantly higher in the group of forwarders.

### **Effects of Brand Experience**

Brand experience is defined as „subjective, internal consumer responses (sensations, feelings, and cognitions) and behavioral responses evoked by brand-related stimuli that are part of a brand's design and identity, packaging, communications, and environments.“ (Brakus et al., 2009, p.53). Thus, brand experience is distinct from other brand constructs, like brand attitude. Based on several studies, Brakus et al. (2009) differentiate four dimensions of brand experience: sensory, affective, behavioral and intellectual. The authors show that brand experience affects consumer behavior positively (Brakus et al., 2009, p. 63 f.). Hence, brand experience's influence should be the stronger, the more dimensions are activated within a viral message. Therefore, it can be expected that:



H<sub>3</sub>: Brand experience is significantly higher in the group of forwarders.

### **Effects of the Personal Involvement Inventory toward Advertising**

Generally, involvement has an affective and a cognitive component, whereas cognitive involvement is "the degree of personal relevance of message contents or issues based on the brand's functional performance" and affective involvement is "the degree of personal relevance of a message based on emotional or aesthetic appeals to one's motive to express an actual or ideal self-image to the outside world" (Zaichowsky, 1994, p. 59). In line with Zaichowsky, there are three major antecedent factors of involvement: personal, physical and situational. Relating to viral messages, this concerns the recipient's individual characteristics, the message's content and packaging of the message as well as the general situational conditions of receiving the message, whereas a recipient with a higher involvement should be more likely to pass on a viral message. Prior research shows that high involved consumers search for and process more information than low involved consumers, when information seeking incorporates interpersonal communication (Kuß, and Tomczak, 2007). This means: the higher the involvement, the more information seeking, processing and communicating about the involvement object takes place. Thus, one can hypothesize:

H<sub>4</sub>: Involvement is significantly higher in the group of forwarders.

### **Effects of Skepticism toward Advertising**

Besides the already mentioned effects which treat message- and brand-related stimuli of a viral marketing campaign, we want to analyze a construct that is related to advertising in general. Skepticism is another word for doubting or disbelief and is close to mistrust. Obermiller and Spangenberg (1998) described skepticism toward advertising (=ad skepticism) as "the general tendency toward disbelief of advertising claims" (Obermiller, and Spangenberg, 1998, p. 160), whereas it is credited as influential and probabilistic. In their study, the authors show, that ad skepticism is related to the general attitude toward advertising. Thus, more skeptical consumers have more negative attitudes toward advertising (Obermiller, and Spangenberg, 1998). Furthermore they proved, that more skeptical consumers rely more on consumer reports than on traditional ads (Obermiller, and Spangenberg, 1998). Summarizing these findings, one can hypothesize:

H<sub>5</sub>: *The value of ad skepticism is significantly higher in the group of non-forwarders.*

Given the fact, that viral messages are spread in a network from consumer to consumer, we guess that ad skepticism's influence is moderate and not very high.

## **Methodology**

### **Object of Investigation**

We investigated a viral marketing campaign on Facebook about Tiger Balm, a medicative balm, assisting blood circulation and muscle regeneration. The campaign put emphasis on the athletic aspect of Tiger Balm. It consisted of a virtual running team on Facebook (Tiger Balm Team) with the claim: "It's not about being fast, it's all about passion." Defining sporty people as target group, they used an emotional video clip (YouTube, 2011) as container to spread information easily. To reach a critical mass rapidly, they arranged a competition on Facebook, whereas the competitor with the most "Likes" (I like-Button) on his picture could win a ticket for the New York Marathon. Generating more than a million visits and more than 13.000 fans on the Facebook page from April until June 2011, the campaign was quite successful given the relative small target group of people interested to participate at the NYC Marathon.

### **Sample and Data Collection**

The questionnaire was programmed online on socisurvey and tested in a pretest involving nine people. Based on the suggestions of the respondents, some minor changes, such as refining the items of some constructs and adding explanations about constructs that were unclear to respondents, were made to the first draft of the questionnaire. Showing fine grasp, the final questionnaire was adapted for field work. To find easy access to the survey, the first question treated social media use which was easy to answer for everybody. After that we started the main part and finished the questionnaire with some socio-demographics.

The survey was accessed by a total sample of 283 individuals. They were approached by an online survey running from 11/7/2011 until 12/4/2011 in which participants of the viral campaign were invited to participate via Facebook. Thus, it was sure that the receivers of the survey really knew the campaign and were belonging to the relevant target group. Excluding incomplete questionnaires, a total of 156 surveys were used for the analysis. The sample included consumers from a variety of backgrounds: 45.5% students, 28.2% employees, 26.3% others, 59.6% female, and 40.4% male. Altogether, the biggest part of the sample was

quite young (56.4% less than 30 years) and very well educated with 74.3% having at least a high school degree which allows application at a university.

The viral message was forwarded by 55.8% of the sample. This group can be identified as forwarders or advocates. 44.2% did not forward the message.

### **Measures**

Variables were measured through 7-point Likert scales, ranging from *strongly agree* (1) to *strongly disagree* (7). In all cases, items were extracted from previous research. The survey used a multi-item approach with each construct being measured by a few items for construct validity and reliability.

Table 1 shows the scales used for each factor. First, brand attitude was measured with a 7-point 2-item Likert scale proposed by Batra and Stayman (1990). Ratings of self-congruity were obtained with the items based on a scale by Sirgy et al. (1997). The scale validated by Brakus et al. (2009) was employed to assess brand experience rating. Based on Zaichowskys Personal Involvement Inventory toward Advertising (PIIA) we measured involvement with a 7-point 2-item Likert scale. Finally, ad scepticism was obtained using the scale of Obermiller and Spangenberg (1998). Table 1 provides a complete list of the measurement items. (*Note: \*reverse scored items*)

Constructs	Source	Items
Brand Attitude (BrandAtt)	Batra/Stayman (1990)	1 pleasant - unpleasant
		2 good - bad
		3 positive - negative
		4 favorable - unfavorable
		5 like - dislike
		6 useful - useless
		7 high quality - low quality
		8 beneficial - not beneficial
		9 valuable - worthless
		10 agreeable - disagreeable
Self-Congruity (SelfCon)	Sirgy et al. (1997)	1 The typical user of Tiger Balm reflects the type of person who I am
		2 The typical user of Tiger Balm is similar to me
		3 The typical user of Tiger Balm is very much like me
Brand Experience (BrandExp)	Brakus et al. (2009)	1 This brand makes a strong impression on my visual senses or other senses
		2 I find this brand interesting in a sensory way
		3 This brand does not appeal to my senses *
		4 This brand induces feelings and sentiments
		5 I do not have strong emotions for this brand *
		6 This brand is an emotional brand
		7 I engage in physical actions and behaviors when I use this brand
		8 This brand results in physical experiences
		9 This brand is not action oriented *
		10 I engage in a lot of thinking when I encounter this brand
		11 This brand does not make me think *
		12 This brand stimulates my curiosity and problem solving
Personal Involvement Inventory toward Advertising (PIIA)	Zaichowsky (1994)	1 important - unimportant *
		2 boring - interesting
		3 relevant - irrelevant *
		4 exciting - unexciting *
		5 means nothing - means a lot to me
		6 appealing - unappealing *
		7 fascinating - mundane *
		8 worthless - valuable
		9 involving - uninvolved *
		10 not needed - needed
Ad Skepticism (SKEP)	Obermiller/ Spangenberg (1998)	1 We can rely on getting the truth in most advertising
		2 Advertising's aim is to inform the consumer
		3 I believe advertising is informative
		4 Advertising is generally truthful
		5 Advertising is a reliable source of information about the quality and performance of products
		6 Advertising is truth well told
		7 In general, advertising presents a true picture of the product being advertised
		8 I feel I've been accurately informed after viewing most advertisements
		9 Most advertising provides consumers with essential information

## Results

Differences between the mean values of forwarders and non-forwarders of viral messages were tested for significance using the conventional t-test. As it is vitally important to differentiate between testing with equal or unequal variance, we deployed a Levene-test in preparation. Table 2 shows the results.

	Levene-test	df1	df2	significance
BrandAtt	3.222	1	154	.075
SelfCon	2.987	1	154	.086
BrandExp	13.083	1	154	.000
PIIA	.469	1	154	.494
SKEP recoded	4.423	1	154	.037

The results show that the t-test for involvement (0.494), self-congruity (0.086) and brand attitude base on equal variance, for ad skepticism and brand experience on unequal variance. Consequently, Table 3 reports the results of the hypotheses tested:

		t-test for mean values						
		t	df	Sig. (2-sided)	mean deviation	standard error of deviation	95% confidence interval	
							low	high
BrandAtt	equal variance	-4.234	154	.000	-.72229	.17059	-1.05929	-.38529
SelfCon	equal variance	-2.711	154	.007	-.60336	.22258	1.04308	-.16365
BrandExp	unequal variance	-5.309	147.460	.000	-.90800	.17103	1.24598	-.57002
PIIA	equal variance	-2.723	154	.007	-.55927	.20540	-.96503	-.15351
SKEP	unequal variance	1.106	153.892	.270	.16514	.14928	-.12977	.46005

t-tests with equal variance for brand attitude (0.000), self-congruity (0.007) and involvement (0.007) show that the mean deviation between the two groups is highly significant. Furthermore, t-tests with unequal variance show that the mean deviation of brand experience (0.000) is highly significant, only ad skepticism (0.270) is not. These findings provide evidence that the two investigated groups differ significantly from each other.

		n	mean value	mean deviation	significance
BrandAtt	non-forwarder	69	4.4812	-0.72229	0.000***
	forwarder	87	5.2034		
SelfCon	non-forwarder	69	2.5652	-0.60336	0.007***
	forwarder	87	3.1686		
BrandExp	non-forwarder	69	2.8937	-0.90800	0.000***
	forwarder	87	3.8017		
PIIA	non-forwarder	69	3.9580	-0.55927	0.007***
	forwarder	87	4.5172		
SKEP recoded	non-forwarder	69	5.5266	0.16514	0.270
	forwarder	87	5.3614		

Notes: \*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$

Amongst forwarders, the mean value for brand attitude is 5.2 when non-forwarders rate brand attitude with a mean value of only 4.5. Thus, forwarders rate brand attitude 0.7 points higher than non-forwarders ( $p < 0.01$ ). Thus, H<sub>1</sub> "The value of brand attitude is significantly higher in the group of forwarders." is supported. The values for self-congruity show similar characteristics. Forwarders rate self-congruity 0.6 points higher than non-forwarders. This highly significant ( $p < 0.01$ ) mean difference supports H<sub>2</sub> "The value of self-congruity is significantly higher in the group of forwarders." The overall low rating of self-congruity (overall mean value of 2.9) may be related to translation issues. With a highly significant ( $p < 0.01$ ) mean difference of 0.9 brand experience differs most between the two groups, which

approves H<sub>3</sub> "The value of brand experience is significantly higher in the group of forwarders." The values for involvement are very similar to those of self-congruity. With a highly significant ( $p < 0.01$ ) mean difference of 0.6 it supports H<sub>4</sub> "The value of involvement is significantly higher in the group of forwarders."

Only mean difference of ad skepticism is not significant, but with a mean difference of 0.2 higher in the group of non-forwarders. This non-significant finding indicates the denial of H<sub>5</sub> "The value of ad skepticism is significantly higher in the group of non-forwarders." Generally ad skepticism seems to be very high amongst the whole sample, so that it is not suitable for predicting forwarding behavior.

## **Discussion**

The primary focus of this study was to examine brand-related stimuli's effect on the forwarding behavior of viral messages.

The empirical findings demonstrate that there are highly significant differences between forwarders and non-forwarders of viral messages concerning brand attitude, self-congruity, brand experience and involvement. Hypotheses H<sub>1</sub>- H<sub>4</sub> are approved by the statistical analysis via t-test. Forwarders express higher mean values of brand attitude, self-congruity, brand experience and involvement than non-forwarders.

This has managerial implications. The probability of a viral campaign to be effectively spread out by consumers through forwarding is influenced by the general brand attitude. Positive brand attitude is not only formed by the viral campaign itself but also as antecedents by all previous and current brand management efforts in the course of an identity oriented brand management as proposed by Aaker (1986). Viral campaigns do not substitute but may nourish brand management.

The positive influence of brand experience and brand involvement gives hints to success factors for the campaign. Its tonality and creative design should enforce the impressions reflected by the various indicators of these constructs as outlined in Table 1.

In addition high brand experience and brand involvement values can be expected to be found with e-mavens. They have profound experience with many kinds of products whether they use it or not and other facets of markets and want to share their knowledge with other customers. This makes them especially important for the diffusion of viral messages. Thus, the viral two-step-flow-model of communication is applicable for interpersonal communication on the internet, especially viral marketing. Hence, the diffusion of viral messages is supported by selecting adequate first recipients which ideally have profound experience and a positive attitude towards the communicated brand. Summarizing these findings, viral marketing is most effective when addressing e-mavens of the defined target group of the campaign.

The acceptance of hypothesis 2, the positive effect of self-congruity underlines the theoretical arguments concerning the effect of self-congruity. People seek to expose their selves to people which are similar to them in relation to the brand. This also indicates that viral campaigns are effective in terms of addressing the target group of the brand. Viral marketing activates mainly costumers that are interested in the theme respectively the exposed product or brand of the viral campaign. Thus, viral marketing is an adequate marketing instrument to advertise in a specific target group.

The results concerning ad skepticism do not support our hypothesis H5. Ad skepticism seems not to influence forwarding behavior. The denial of H<sub>5</sub> shows that viral marketing is not affected by ad skepticism and accordingly is a suitable form of advertising in times of repeating and cluttering marketing messages as well as growing skepticism in traditional advertising.

Like most empirical research, this study is not without limitations. First, the survey sample was limited to only participants of the online competition on Facebook and thus is not representative for all internet users. Hence, it is necessary to exercise caution about overgeneralizing the findings of this research. Nevertheless, the results may give learnings for other incentive viral marketing campaigns. Secondly, further research should extend the current framework and integrate more variables concerning the effects of brand related stimuli and attitudes towards ads. Furthermore, it would be very interesting to compare the results of this study with the findings of a study examining a viral campaign without



incentive. Although this study identifies the brand as an important variable concerning forwarding behavior, further research might consider other effects, particularly based on network issues. For example, the influence of different social relationships could be examined.

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