

Information acceptance – A study on the different influences of real and virtual peers on adolescents

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The developing need for autonomy of adolescents expressed itself in a strong orientation towards the peers. Identification with the peer group contributes greatly to the redefinition of the self-image. The strong influence of that peer group certainly also affects the consumer behaviour of teenagers. The orientation towards the peers should reduce uncertainties regarding consumption decisions (Kiecker & Hartman, 1991). Due to the advancing digitalization, this no longer only affects peers in the real world, but also peers in the virtual world. As a result of the rise of the social media, so-called influencers, who are active on social media platform, for example Instagram or YouTube, assume an advisory function or role that was previously assigned to friends. Through photos, videos or blog entries, it is possible to upload information that is accessible to millions of people. Influencers are seen as opinion leaders (Cao, Meister & Klante, 2014). More than 88 percent of young people watch videos on YouTube more than once a week (MFS, 2017). Whereas the effectiveness of influencers and their success factors were often part of previous studies, the effect of social media stars on the acceptance of the information received is only rarely considered, especially in comparison to friends. The central question is whether there is a difference in the perceptions of these two types of peers and if so, which characteristics differ and how this affects the adaptation of information. A field study with adolescents investigated whether virtual and real peers vary in terms of credibility, information quality and ulterior motivation skepticism and how this affects the acceptance of consumer information. The results indicate that analog peers are perceived as more positive and that information from real peers is more likely to be accepted than information from virtual peers mediated by credibility, information quality and ulterior skepticism.

Keywords: Adolescents consumer behavior, interpersonal influence, analog and virtual peers

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Introduction and research aim

It has been a long time the central characteristics of teenage consumer behavior that teenagers mainly shop in the company of peers and that they do so mostly in small groups of friends (Tootelian & Gaedeke 1992). This is especially reasonable since it is in line with a primary feature of adolescence, which is being influenced by friends (Ennett & Bauman 2000). They are inexperienced in many areas of life and are therefore uncertain about how to behave. Peers provide orientation and play a major role in reducing these behavioral uncertainties (Steinberg & Monahan 2007). This also applies to consumer behavior. But the change to a communication society has also changed the way the interpersonal search for information is conducted. Since the emergence of the Internet, consumers are able to share their opinions with others without a face-to-face interaction. Teenagers in particular no longer seek consumer information only within their friends, but increasingly use the Internet and social media to inform themselves about products and services. Social media websites create a virtual space in which consumers can exchange their experiences, obtain and provide product information (Kozinets et al., 2010). The information can be seen and shared by millions of users. As a result, a new form of opinion leader has developed - so-called Internet celebrities or influencers, who produce user-generated content and distribute it to a wide audience via the world wide web (Uzunoglu & Kip, 2014). Teenagers in particular consume the content of influencers and are heavily influenced in their consumer behavior by them (MFS, 2017). However, previous studies in this field of research have focused on the characteristics of influencers and their influence on brand perceptions via parasocial interaction (Djafarova & Rushworth, 2017). What has been completely ignored so far, however, is the comparison between analog peers and virtual peers (influencers).

The aim of the study is: *To compare the two types of peers in terms of key determinants of information acceptance.*

Three research questions are addressed in line with this aim:

RQ1: Is there a difference in the perceptions of these two types of peers?

RQ2: In which characteristics differ analog and virtual peers?

RQ3: Which type of peers is more decisive for influencing consumer decisions?

To answer the research questions, we adapted the information acceptance model (IAM) from Sussman & Siegal (2003). They applied the elaboration likelihood model (ELM) to explain how individuals are affected by information that they obtain. According to the ELM, people can process information in two ways: central and peripheral. In the central route, people consider issue-relevant information and arguments while in the peripheral route people are affected by other factors such as attractiveness or expertise of the communicators. Both routes to process information were reflected as two components in IAM: information quality (central route) and source credibility (peripheral route). Due to the fact that influencers only rarely provide information without an ulterior motive and are often paid for it, the variable ulterior motivation skepticism was added to the model.

Theoretical Background and Hypotheses

The Acceptance of Consumer Information. Consumers do not have access to all available information for making a decision (Van der Merwe & van Heerden, 2009). Therefore, recommendations from others can help to obtain useful information (Kumar & Benbasat, 2006). Both real and virtual peers can help in decision-making. Similarity to an information source determines the probability of acceptance of the information (Burnkrant & Cousineau, 1975). The strength of the consumer's connection with the information source therefore is of particular importance. Individuals trust persons with whom they feel closely connected rather than persons with whom they do not have such a close connection (Hayes et al., 2016). In line with the parasocial Interaction Theory, young consumers can certainly establish a relationship with virtual peers (Perse & Rubin, 1989). However, it is assumed that the relationship to these virtual peers is less intense. The quality of friendship is also rated higher among real peers (Glüer & Lohaus, 2016). The influence of perceived channel motivation on the susceptibility of a young consumer to information should also not be neglected (Eagly, 1978). If it is evident that the influencer's product recommendation is pure advertising, this can have a negative influence on the young consumer's relationship to the influencer (Campbell et al., 2011). The greater the reach of the virtual peer, the more the honesty and impartiality of the influencer is doubted (Lawrence et al., 2013). In addition, the interaction dynamics differ between real and virtual peers. Immediate feedback is only possible with peers, especially when teenagers go shopping with their peers. The perceived enjoyment of shopping together can also lead to a greater susceptibility of teenagers to direct interpersonal influence (Mangleburg et al., 2004). It is therefore reasonable to assume that:

H1: *Recommendations from analog peers lead to a higher probability of acceptance of the recommendation than recommendations from virtual peers (influencers).*

Credibility is a central construct for the acceptance of information. Among the multiple dimensions of perceived credibility that have been proposed in various scholarly works, trustworthiness and expertise are the facets that most commonly (Rahmi et al., 2016). Miller and Baseheart (1969) found that, if the trustworthiness of a source increases, the message is more effectively received by the recipient. Since friendships are based on mutual respect and admiration, it is generally assumed that information is perceived as trustworthy by friends (Berndt, 1982). Influencers are also so successful because they are assumed to be highly trustworthy (). The more unbiased an influencer shares his experiences and the less economic intention can be identified, the higher the trustworthiness of the virtual peer (Mir & Rehman, 2013). But as influencers become more successful, consumers become more suspicious of their intentions (Lawrence et al., 2013). Hence it can be assumed that:

H2: *Analog peers are perceived by young consumers as more trustworthy than virtual peers (influencers).*

The perceived expertise of a sender depends on the extent to which it can provide adequate and valid information (Pornpitakpan, 2003). With the increasing use of a product, the capabilities of the user and the expert status increase (Hoch & Deighton, 1989). Virtual peers often deal with a specific product group (e.g. clothing, beauty products) and give product recommendations for these products or show tutorials (Rasmussen, 2018). This leads to the following hypothesis.

H3: *The perceived expertise is rated higher for virtual peers (influencers) than for analog peers.*

Although friends can also have and share experience with certain products or product groups, the quantity of influencers is much higher (Hautz, et al., 2013). Most of the user-generated content of the influencer feature personal stories and experiences. Since the same product groups are frequently presented by an influencer, this suggests a high level of expertise and high quality of information. Therefore, I hypothesize that:

H4: *The information quality is perceived higher for virtual peers (influencer) than for analog peers.*

If it is evident that the influencer's product recommendation is pure advertising, this can have a negative influence on the young consumer's relationship to the influencer (Campbell et al., 2011). According to the Persuasion Knowledge Model consumers have learned that influencers can use their content with the commercial intent to persuade consumers about their products, services, or brands they present.

H5: *The ulterior motivation skepticism is rated higher for virtual peers (influencers) than for analog peers.*

Heuristics are often used for decision making to reduce complexity (Sussman & Siegal, 2003). Young consumers in particular are very insecure and have to learn many consumer skills first (Moschis & Churchill, 1978). Credibility can provide clues for assessing information quality (Bae & Lee, 2011). An individual accepts the information that seems most credible (Bearden & Etzel, 1982). In addition, the most knowledgeable sources are preferred (Mangleburg et al., 2004). But if the consumer suspects that he is receiving information solely to be persuaded to buy, he reacts with reactance (Clee & Wicklund, 1980). Hence:

H6: *Consumers' perception of source's credibility, information quality and motivation skepticism mediates the influence of information source on consumers' referral acceptance.*

Research Design and Sample

To test the research hypotheses, a quantitative method including an online survey was used. The study was conducted in Germany and took place during lessons in school. To test the differences between analog and virtual Peers, participants were randomly assigned to one of two treatments. 213 adolescents answered questions about influencers and 221 about friends. Participation in the study was voluntary. Teenagers with an age range of 13 - 19 years were interviewed. Participants average age was 16.9 (SD 1.79). The monthly shopping budget was 83.3 euros.

Procedure and Measures

The independent variable information source is a dummy variable. Either participants have been asked about the influence of the influencer they follow and consume most frequently or their friends as shopping companions. For the other constructs, scales that were established in the literature were used. Items from Ohanian (1990) were adapted to measure perceived trustworthiness ($\alpha = .927$) and perceived expertise ($\alpha = .944$) with the help of a seven point semantic differential scale. The other mediators information quality (Teo et al., 2008; $\alpha = .903$) and ulterior motivation skepticism (Skarmeas & Leonidou, 2013; $\alpha = .899$) were measured on seven-point rating scales (anchored at 1 = totally disagree and 7 = totally agree). Following Walther & Burkell (2002) respondents were asked about the probability of acceptance of the referral ($r = .897$). The questionnaire closed with questions concerning participants' socio-demographic information.

Results

We estimated the conceptual model using PROCESS (mediation model 4 with 95% bias-corrected confidence intervals [two-tailed test]; bootstrap sample of $n = 5000$), an SPSS macro provided by Hayes (2013). This type of analysis is a regression-based approach, which is particularly appropriate for testing mediation or moderated mediation models when using small sample sizes (Hayes, 2013). The size of the indirect effect is calculated with a bias-corrected bootstrapped confidence interval. Path coefficients are provided in Figure 1.

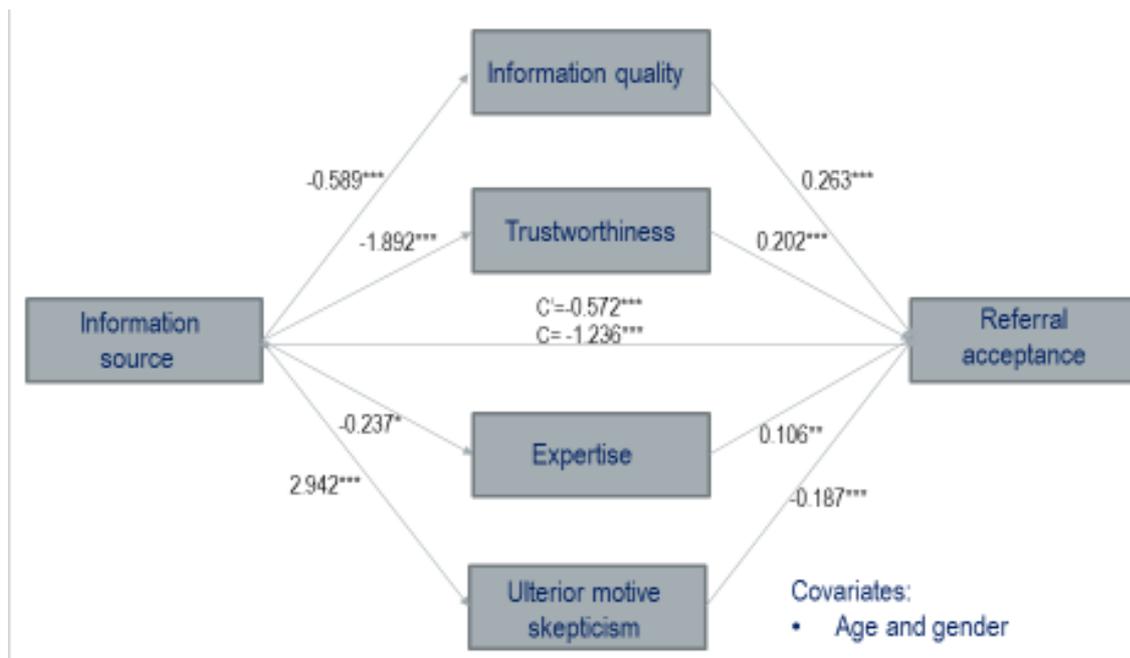


Figure 1: The effect of information source on referral acceptance

In order to investigate the direct path between the information source and the acceptance of the information (H1), a simple regression has been calculated. It was found that information is more likely to be accepted and accepted by real peers than by virtual peers ($B=1.236$, $p < .001$). Thus H1 is supported. As shown in Figure 1 using the B coefficients, H2 and H5 could also be confirmed. However, it was found that the perceived expertise is greater among friends than among influencers ($B=-.237$, $p < .05$). The same result was found for the quality of information ($B=-.589$, $p < .001$). Hypothesis 6 is also supported. The confidence intervals of the indirect effects did not include 0. Furthermore, the relationship between the source of information and the acceptance of the referral was partially mediated.

Discussion and Contributions

The literature shows the immense influence of peers on the consumer behaviour of adolescents (Mangleburg et al., 2004). Thus, this research responds to the call to expand the consumer behaviour of young people, especially the influence of interpersonal information sources (Gentina & Bonsu, 2013). To improve the understanding of the teenage segment, we investigated the impact of two of the probably most influential sources of information for adolescents. Until now, influencers have been compared with conventional advertising media or celebrity testimonials. But the really important question of the extent to which virtual peers serve as influencers for teenagers has been neglected. We were able to show that the two peer groups differ considerably in perception, which leads to referrals being more readily accepted by friends than by influencers. Influencer recommendations trigger a strong sense of conviction, which is reflected in consumers' greater scepticism. The recommendation of influencers often creates the impression of selfish intentions rather than mere information.

Implications for Theory and Practice

According to Teng et al. (2014), the perception of the message in the online context can be influenced by the type of message. Visual information such as pictures and videos, as well as the number of likes, comments among the posts and the interaction of the vlogger with his followers can influence the acceptance of the recommendation. Against this background, it would be worth considering sending adolescents an online survey link directly via a specific Website or showing a video of an Influencer in a face-to-face survey, so that comparable conditions could be created within the Vlogger experimental group. Furthermore, a future differentiation according to phases of the purchase decision process is conceivable, since the influences of virtual and real peers can vary depending on the phase (Cao et al., 2014, p. 84).

There are two areas of managerial implications that contribute to practice: (1) The influence of friends should not be underestimated, especially the influence of shopping companions. Retailers should promote joint shopping; (2) Careful selection of influencers with high authenticity and few brand cooperations to dispel the suspicion of advantageous product recommendation.

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