

Influencer Marketing on Instagram: Exploring the Role of Travel and Other Factors on a Post's Success

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INFLUENCER MARKETING ON INSTAGRAM: EXPLORING THE ROLE OF TRAVEL AND OTHER FACTORS ON A POST'S SUCCESS

Abstract:

Instagram is an important social media platform that is the foundation of a thriving business model for many influencers and digital marketers. To build and retain an audience, influencers must regularly create appealing content that encourages interaction and leads to higher engagement rates, which is considered the key success factor in influencer marketing. Against this background, this study examines success factors of Instagram posts. It contributes to the literature by re-analyzing some previously investigated effects. In addition, the study explores for the first time whether influencers' extensive travel behavior and their involvement in the content creation process contributes to a post's success. Methodologically, a visual content analysis in combination with a multiple regression model is applied. The findings provide valuable insights for companies as well as influencers who try to become more successful, while critically reflecting on the sustainability of their lifestyle.

Keywords: Influencer Marketing, Success Factors, Visual Content Analysis.

Track: Digital Marketing & Social Media

1. Introduction

The rise of social media is leading to a growth of professional influencer marketing (Bakhshi, Shamma, & Gilbert, 2014; Jaakonmäki, Müller, & Vom Brocke, 2017). Characteristically, influencers practice an exclusive lifestyle in which their followers participate virtually (Nandagiri & Philip, 2018). An elementary part of this lifestyle is travelling (Asquith, 2019), which is underlined by the fact that entering the term #travel on Instagram-search results in around five hundred million hits. Such content appears to have the ability to increase awareness and attract new followers (Bernkopf & Nixon, 2018).

In that regard, the engagement rate (ER) that refers to likes and comments is considered the primary success factor (Bakhshi, Shamma, & Gilbert, 2014; Jaakonmäki, Müller, & Vom Brocke, 2017). The existing literature shows a positive influence on engagement if posts include faces (Bakhshi, Shamma, & Gilbert, 2014), emotions (Jaakonmäki, Müller, & Vom Brocke, 2017), sexual content (Park & Lee, 2017), or emojis (Jaakonmäki, Müller, & Vom Brocke, 2017). Other studies examined the influence of visual content on the perceived image of a destination (Bernkopf & Nixon, 2018; Nixon, Popovaa, & Öndera, 2017). This study adds to this stream of research by verifying already investigated factors (product placements, the integration of sweepstakes, sexually connotated content, pregnancy-related content) and examining additional factors with regard to the influencer's travel behavior. Specifically, this work addresses the following overarching research question (RQ): *Does the choice of (especially touristic) content and the distance between the location of the photograph and the followers' home country have an influence on the ER?*

To provide an answer to this RQ a visual content analysis of real Instagram posts is performed. The generated data is then analyzed using a multiple linear regression model. The results of this study help to better explain the success of Instagram posts and to answer the underlying question whether travelling is really an inevitable part of their business model. This work has both practical and theoretical implications for influencers and social media marketers, but also for society at large since tourism contributes to climate change in various ways (Lenzen et al., 2018).

2. Theoretical Foundation and Derivation of Hypotheses

The influencer-follower connection on Instagram can be described using the parasocial interaction theory (Ward, 2016). Accordingly, a parasocial relationship is an apparent personal involvement between a spectator and a performer based on a one-sided, nondialogue-oriented interaction that is controlled by the performer and not intended for mutual

development (Horton & Wohl, 1956). On social media, influencers operate as performers and followers as spectators (Ward, 2016). In that regard, many influencers showcase an exclusive lifestyle (Nandagiri & Philip, 2018), which often includes travelling (Asquith, 2019). One reason influencers behave this way is to emotionally trigger their followers (Kramer, Guillory, & Hancock, 2014). In tourism, positive emotion leads to higher follower engagement. For instance, tourism research has found that affective characteristics are attributed to popular destinations, consisting of feelings and emotions toward the destination (Bernkopf & Nixon, 2018; Nixon, Popovaa, & Öndera, 2017). *Thus, a positive relationship between the display of touristic content in an Instagram image and the ER (H1) is hypothesized.*

Previous research dealt with the effects of geographical distance with regard to knowledge, attitude, and behavior towards that destination (Prebensen, 2007). Distance also plays a role in the motivation to visit a destination, which involves opposing effects. On the one hand, short-haul trips appear to be more attractive for tourists due to lower costs, shorter travel times, and fewer perceived risks (Bianchi, Milberg, & Cúneo, 2017). On the other hand, long-haul destinations are considered more exotic and are less likely to have already been experienced first- or second hand (Lee, Scott, & Kim, 2008), which makes them more attractive (Crouch, 1994) and increases the likelihood of a reaction on social media. *Hence, we propose a positive relationship between the estimated geographical distance (measured as the distance between the followers' home country and the geotag of the Instagram post) and the ER (H2).*

Since advertising is an influencer's main source of income, they often promote products on their accounts (Jaakonmäki, Müller, & Vom Brocke, 2017). In that regard, Gavilanes, Flatten, and Brettel (2018) found a weak positive effect of product presentations on the number of likes. Other often-used instruments are sweepstakes and contests (Gavilanes, Flatten, & Brettel, 2018). While an economic reward already encourages interaction and interactivity, most sweepstakes are designed in a way that users must take action to win something, for instance by liking or commenting the post. Therefore, it is not surprising that Gavilanes, Flatten, and Brettel (2018) reported a positive correlation between sweepstakes/contests and the number of comments. *Drawing on the available literature, this research thus hypothesizes that (1) there is a positive relationship between a product placement in an Instagram post and the ER (H3a) and (2) that there is a positive relationship between sweepstakes in an Instagram post and the ER (H3b).*

Sexual attractiveness or erotic capital appears to be another success factor for influencers (Park & Lee, 2017). Sexually connotated content is described as the display of sexually

suggestive clothing or nudity to attract attention and increase social interaction with others (Park & Lee, 2017). In that regard, Park and Lee (2017) showed that both men and women generate more likes through sexually connotated content. *Therefore, a positive relationship between the display of sexually connotated content in an Instagram post and the ER is suggested (H4).*

Besides, influencers are increasingly integrating pregnancy-related topics into their content. Accordingly, they share visual and text-based prenatal and postnatal information, leading to an exchange of emotional support, conversations, and the connection with other users (Oviatt & Reich, 2019). Past research showed that images of babies, infants, parenthood, and pregnancy increase engagement (Park & Lee, 2017). *Thus, we propose a positive relationship between pregnancy related content on Instagram and the ER (H5).*

3. Methodology

To examine the derived hypotheses, data must be collected and analyzed, which is described in the following subsections.

3.1 Sample

To minimize author bias the sampling was randomized (Bakhshi, Shamma, & Gilbert, 2014). The detailed process is based on previous studies that also referred to a certain group of Instagram accounts and is described in the following (Cohen, Irwin, Newton-John, & Slater, 2019). First, the search terms ‘Top German Influencers’ and ‘Successful German Instagram Accounts’ were entered into Google, Bing, and Yahoo on three cleaned-up computers (cookies deleted, private browsing enabled) (Cohen, Irwin, Newton-John, & Slater, 2019). The focus on German influencers can be attributed to the attempt to provide a valid estimation of the posts’ geographical distance to the audience. The search resulted in 31 websites that listed a total of 182 potential Instagram accounts. The inclusion decision was based on five main criteria. These include (1) popularity (at least 100,000 followers, 17 removed), (2) real influencer account (celebrities with unrelated professions such as actors or soccer players are not considered, 45 removed), (3) target audience (Germany as a clearly identifiable home country and the majority of received comments were either in German or from German accounts to ensure that the engaging followers are in fact from Germany, 34 removed), (4) activity level (at least 60 Instagram posts in 2019, 13 removed), (5) relevance (mentioned on at least two of the websites, 53 removed). The remaining 20 accounts were considered for further analysis. One of those accounts (MrsBella) showed an unrealistically

high ER ($\text{ØER}(\text{MrsBella})=24.79$ vs. $\text{ØER}(\text{Others})=4.69$) and was therefore excluded. This resulted in a final sample of 19 accounts that had between 203,000 and 6,600,000 average followers in 2019. The sample contained six male (32 %) and 13 female (68 %) influencers. This coincidentally reflects the gender distribution in the global influencer industry (68 % female influencers) (India Hash Labs, 2017).¹

Second, the specific Instagram posts, which are the units of analysis, had to be selected. This study refers to posts from January to December 2019, which were analyzed in mid-2020. The period was chosen to (1) limit seasonal influences, (2) to minimize the effect of potentially inert followers that react rather late to a post (Jaakonmäki, Müller, & Vom Brocke, 2017), and (3) to exclude possible biases due to the current global COVID-19 pandemic. Due to coding ambiguities slideshows and videos were excluded, which could result in fewer than 60 units of analysis per influencer. In that case, all remaining posts were considered. With more than 60 posts left, a random sample was drawn to avoid bias while keeping the sample at a reasonable size for manual coding.

3.2 Data collection

The process led to a sample of 1,073 Instagram posts, which corresponds to or even exceeds other published studies with a manual coding process (Cohen, Irwin, Newton-John, & Slater, 2019). Hereafter, this study used Apify.com to extract a post's caption, image URL, date and time of publication, location geotags, number of comments, and number of likes. In addition, the number of followers at the time of each post was determined using influencerdb.com. Posts without a geotag were manually cross-checked and the information was added if there were clear indications in the image or the caption (e.g., Eiffel tower in the background). Next, the distances between the location of the photograph and Germany were determined. For that purpose, we referred to luftlinie.org and used the geographical center of Germany (51° 34' 19,5" north, 14° 22' 16,2" east). Finally, the ER for each image was calculated with this formula: $((\text{Likes} + \text{Comments}) / \text{Number of followers at the time}) \times 100$. In the next step, the images were analyzed as described in the following subsection.

3.3 Image content analysis

While automated web scraping and image recognition can generate and handle more data, such systems are also criticized for performing poorly (Vailaya, Figueiredo, & Jain,

¹ The analyzed Instagram accounts are: andrehamann, bibisbeautypalace, dagibee, debiflue, dominic.harrison.official, felixladen, heikolochmann, katjakrasavice, masha, novalanalove, pamelara_rf, paola, riccardosimonetti, samislimani, sarah.harrison.official, shirindavid, sonnyloops, stefaniegiesinger, yvonnepferrer.

2001). Therefore, this study employed a manual coding process that considers the visual and semantic elements of an Instagram post.

For that purpose, based on available schemes for image classification (Vailaya, Figueiredo, & Jain, 2001) and past approaches to categorize content (e.g. Gavilanes, Flatten, and Brettel (2018), Oviatt and Reich (2019)), a content analysis scheme was developed. While the factors ‘product placement’, ‘sweepstakes’, and ‘pregnancy-related content’ feature binary characteristics, this is not the case with the categories ‘touristic content’ and ‘sexually connotated content’ (Prebensen, 2007). Since the perception of those categories is not uniform and can vary in their characteristics (Skowronek, Tucki, Huijbens, & Jóźwik, 2018), a seven-point Likert scale was used based on the attributes suggested in Nixon, Popovaa, and Öndera (2017), Bernkopf and Nixon (2018), Zhang, Chen, and Li (2019), Cohen, Irwin, Newton-John, and Slater (2019), and Park and Lee (2017). The codebook used by the authors of this paper is documented in a blinded digital appendix (Blinded Authors, 2020). To ensure the reliability of the analysis, three sets of 50 images were randomly chosen to be independently coded by two authors. Thereafter, indicators for the inter-rater reliability were determined. For the binary-coded variables, the inter-rater agreement (IR) and Cohen’s Kappa (k) were almost perfect (product placement: IR=98.67 %; k=0.934; sweepstake: IR=99.33 %; k=0.906; pregnancy: IR=100 %; k=1.00). With regard to the non-binary variables, the correlation coefficient (r), and the intra-class correlation coefficient (ICC) were calculated, indicating a satisfactory coding reliability (touristic content: r=0.976, ICC=0.987; sexually connotated content: r=0.959; ICC=0.978) (Cicchetti, 1994).

3.4 Data analysis

Similar to other related studies, the collected data was then analyzed using multiple linear regression analysis (Chang, Li, Loh, & Chua, 2019; Park & Lee, 2017), with an image’s ER as dependent variable. The independent variables include: the estimated average distance to the follower’s home country in thousand kilometers (DIST), the ratings for touristic content (TOUR), sexually connotated content (SEX), and binary classifications (yes=1, no=0) for product placements (PROD), sweepstakes (SWEEP), and pregnancy-related content (PREG). All calculations were performed with IBM SPSS 26. The results are presented in the following section.

4. Findings of the Regression Analysis

Table 1 documents the descriptive statistics. According to this, the average distance between the location of an analyzed photograph and the center of Germany is 2,020 kilometers and 26 % of the posts contain product placements.

Var. [min;max]	TOUR [1;7]	DIST [0;∞]	PROD [0;1]	SWEEP [0;1]	SEX [1;7]	PREG [0;1]
Mean / sd	2.59 / 2.1	2.02 / 3.45	0.26 / 0.44	0.03 / 0.18	2.6 / 1.9	0.09 / 0.28

Table 1. Descriptive Statistics of Dataset Variables

The regression model is significant ($F=93.556$, $p<.000$) and includes all introduced variables. Model fit ($R=.587$, $R\text{-squared}=.341$) appears satisfactory for a complex problem with many unstudied dimensions. Table 2 provides a summary of the results.

Variable	Coefficient b	Standard error	Stand. beta	T-Value	Sig.	Test result
Constant	3.731	.196		19.065	.000	
TOUR	-.164	.053	-.094	-3.065	.002	H1 not supported
DIST	-.126	.031	-.118	-4.001	.000	H2 not supported
PROD	-2.13	.212	-.256	-10,056	.000	H3a not supported
SWEEP	.242	.509	.012	.475	.635	H3b not supported
SEX	.670	.051	.347	13.148	.000	H4 supported
PREG	5.183	.333	.397	15.587	.000	H5 supported

Table 2. Results of the Multiple Regression Analysis

While all variables except one are significant on a $\alpha=.05$ -level, most hypotheses are not supported due to an opposite effect direction. Most notably, both variables TOUR and DIST – which directly refer to the presented overarching RQ that is operationalized in H1 and H2 – have a significant negative influence ($b(\text{TOUR})=-.164$, $p=.002$; $b(\text{DIST})=-.126$, $p<.000$) instead of the hypothesized positive one. This implies that touristic content which requires extensive travelling does not increase but in fact decrease the ER.

The remaining complementing variables were mainly investigated to confirm the results of other already published studies. However, some unexpected findings emerged. Unlike Gavilanes, Flatten, and Brettel (2018), who found the product placements increase the number of likes, we found a significant negative impact ($b(\text{PROD})=-2.13$, $p<.000$), which could mean that followers are actually annoyed by obvious advertising through product presentations. While sweepstakes have a positive impact, the effect is insignificant ($b(\text{SWEEP})=-.242$, $p=.635$). A possible explanation is that influencers nowadays often combine sweepstakes with the negatively perceived product presentations which might reduce the positive effect.

In contrast, as previously reported in Bakhshi, Shamma, and Gilbert (2014) and Park and Lee (2017), the display of sexually connotated content ($b(\text{SEX})=.670$, $p<.000$) and pregnancy-related content ($b(\text{PREG})=5.183$, $p<.000$) both have a significant positive

influence, thus supporting H4 and H5. The standardized beta coefficients as indices of effect sizes show that pregnancy-related ($\beta(\text{PREG})=.397$) and sexually connotated content ($\beta(\text{SEX})=.347$) have the biggest relative impact, followed by product placements ($\beta(\text{PROD})=-.256$). Since some influencers appear to be operating increasingly internationally despite their clear roots in the German market, the results could be distorted, particularly concerning the variable DIST. For this reason, the model was repeated with a subsample containing only those influencers whose comments were at least 85 % in German. However, the reported effects persisted.

5. Implications and Limitations

This research has several implications. Theoretically, this study contributes to the literature by providing new insights to the success factors of an Instagram post. It specifically investigates the integration of touristic content and the influencer's travel behavior on the ER. In contrast to the theoretically derived hypotheses, it shows that extensive travelling is not a necessary evil for a post's success. Influencers should therefore not think that their travel activities are imperative to the success of their business model. Instead, it is rather a fulfillment of their own hedonistic interests, while directly and indirectly contributing to climate change. Furthermore, the unexpected effects about product presentations and sweepstakes show that further research is needed before a firm conclusion can be drawn. Managerially, this study provides guidance for Instagram marketers and influencers on how to successfully plan and design content to increase the engagement of their audience. From a societal perspective, it is encouraging to see that an influencer's success is not necessarily in conflict with a more sustainable lifestyle that involves less travelling.

One limitation is that this research only considers German influencers. Studies involving influencers with different target audiences might yield different results. Furthermore, this research focuses on influencers with at least 100,000 followers. This does not take into account that the role of the factors studied could change with the number of followers. For example, it is possible that influencers who are at the beginning of their Instagram career achieve a higher attention and ER through travel and sweepstakes than the larger accounts studied. Despite these limitations, which restrict generalizability and require additional confirmatory studies, we are convinced that this work contributes to an important strand of research. After all, both influencer marketing and sustainability will continue to grow in importance in the future.

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