



How Does the Number of Instagram Followers Influence Brand Attitude: The Role of Purchase Intention, Perceived Product Quality, Referrals, Brand Trust, and Gender

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Abstract. The presence of brands online has intensified over the past decade. Previous research has found that following online updates from a brand's Facebook page enhances brand evaluations. As Instagram is emerging as one of the most popular social media platforms, we extended previous research by simulating the experience of navigating online on a smartphone while focusing on this platform. Our main goal was to understand if brands with a large number of followers versus brands with a small number of followers are perceived differently by consumers. Findings from two studies ($N_{total} = 313$) suggest that purchase intention and brand trust are higher for Instagram brand pages with a large number of followers. However, the perceived quality and likeliness to refer the brand to a friend are not affected by the number of followers. Also, we found no significant gender differences across variables.

Keywords: Instagram · Followers · Attitude · Purchase intention · Perceived product quality · Referrals · Brand trust

1 Introduction

A plethora of research has been conducted on how social media metrics (e.g., likes, tweets and shares) affect consumers' opinion about products. Facebook and Twitter, as the platforms that accompanied the social media boom since it started, have naturally captured greater attention on this topic. Fewer studies have addressed the influence of the number of followers on Instagram's brand pages on consumers' purchase intention, perceptions of quality, likeliness to refer, and brand trust. However, previous research clearly shows that a larger number of followers is related to a larger number of likes and shares of a post, and vice-versa (Lipsman et al. 2012; Xie and Lee 2015). Additionally, Sherman et al. (2016) conducted a study using a functional Magnetic Resonance Imaging (fMRI) that simulated Instagram. The results showed that, when participants viewed neutral, risky or even their own images with many likes (when compared with fewer

likes), greater activity in different parts of the brain was exhibited. The authors concluded that “(...) adolescents were more likely to like a photo if that picture had received more likes from peers” (p. 1031). Moreover, Spetz and Angelsted (2017) found that there is a positive relation between the number of followers on Instagram fashion brands and purchase intention. Still, more research is needed to better understand how having a small vs. a large number of followers could impact brand attitude. Accordingly, the importance of promoting Instagram profiles has resulted in the emergence of specialized paid services allowing marketers to find influencers according to established criteria.

2 Hypotheses Development

Given the easily perceived brand pages on social media, cues such as the number of followers might help people to make a quick assessment about the brand and its products as well as influence their purchase intention (Dehghani and Tumer 2015). The ‘need to touch’ a product is negatively correlated with a product perceived quality, especially for online purchases (San-Martín et al. 2017). These findings highlight the importance for brands to have a large number of followers, who could eventually contribute to increasing the perceived product quality. Moreover, Beukeboom et al. (2015) analyzed brand evaluation from current followers, new followers and non-followers, and concluded that new followers had a significative positive increase on all brand evaluation measures, whereas non-followers showed no significant changes. Kim and Ko (2012) tested the presence of luxury brands on social media and concluded it increased likeliness to recommend a product and purchase intention. Additionally, the net promoter score’s (NPS) benefits for brands have been demonstrated in the context of Facebook social media (e.g., Dholakia and Durham 2010), thus it is now vital to comprehend if the number of followers on Instagram is able to influence customers’ recommendation to peers. Also, consumers’ intentions to transact online are positively related to trust in e-commerce (Pavlou 2003). This author also stated that “trust reduces behavioral uncertainty related to the actions of the Web retailer, giving the consumer a perception of some control over a potentially uncertain transaction” (p. 106). We suggest that building trust will probably unchain positive buying behaviors and ease the decision-making process in an online environment. Lastly, considering gender differences, Eagly (1983) found females to be more susceptible to social influence than males. Ilie et al. (2005) concluded there are gender differences in perceptions and use of communication technologies. These findings would lead us to ask if they remain valid when transposed to an online environment, specifically on Instagram. Hence, we formulate the following five hypotheses:

H1: Purchase intention is higher for a brand page with a large number of followers, when compared to one with a small number of followers on Instagram.

H2: Consumers’ perceived product quality is higher for a brand page with a large number of followers, when compared to one with a small number of followers on Instagram.

H3: A brand present on an Instagram page with a large number of followers has a higher probability of being referred to a friend or acquaintance, when compared to one with a small number of followers on Instagram.

H4: Consumers will trust more a brand with a large number of followers, when compared to one with a small number of followers on Instagram.

H5: There are gender differences for the variables tested.

3 Study 1

This study focused on analyzing how consumers' attitudes vary in relation to a brand when it presents a profile page with a large vs. a small number of followers on Instagram. Participants engaged in using a platform emulating the social media (Instagram).

3.1 Method

One hundred and ten participants (47.3% women; $M_{\text{age}} = 20.81$ years, $SD = 2.57$ years) aged between seventeen and twenty-eight years old. All participants were required to be familiar with Instagram. We programmed a native Android application that fuses a fictitious version of Instagram with different questions related to this study and manipulated the number of followers (small vs. large). We used a between-subjects design, so the participants were randomly assigned to one of the two conditions. To control for demand effects and removing an affective component from our study, we used brands that are likely unfamiliar between the people who were asked to participate in the study: three real small Portuguese brands that show scarce sales in the market (Mojo Swimwear, Skinii Skateboards, CordiCastro); two fictitious brands (Bolo d'Hoje, MovIdeia) and a Chinese brand that is not present in the Portuguese market (Loz Blocks). There were two questionnaires (A and B): the number of followers in the brand page was changed – for example, in questionnaire A, the brand Loz had 35 k followers, whereas in questionnaire B it had only 4237; the next Instagram profile of Mojo Swimsuits had 1200 followers in questionnaire A and 421 k in questionnaire B and so on. The rationale was to adopt brands that would on average appeal equally to both genders or, alternatively, more to men or women but in the same proportion. Although each questionnaire in the study (A and B) contains the same pictures and hence this matter might not change the results, it was decided to not use photos with faces, given the findings of Bakhshi et al. (2014). In the study they conducted, it was found that independently from participants' gender and age, “photos with faces are 38% more likely to receive likes and 32% more likely to receive comments, even after controlling for social network reach and activity” (p. 965).

First, participants could navigate through the platform in the same way as a real Instagram experience – they were able to view the profile page and open each of the brand's posts in order to see the full-size pictures. Next, four questions about the brand were presented, assessing purchase intention and likeliness of referral (Beukeboom et al. 2015) as well as perceived quality and brand trustworthiness (Chu and Choi 2011). In the end, all participants experienced six different Instagram brand pages and answered to four questions on each one, produced a total of six hundred and sixty answers ($110 * 6$) for each of the first four constraints ($110 * 6 * 4 = 2640$ answers in total).

Followers are the main driver of engagement for both likes and comments on Instagram pages (Bakshi et al. 2014). People with more than 30000 followers are seen as celebrities, regardless of what they do for a living (Djafarova and Rushworth 2017). Using this number as a benchmark, we decided to represent brands with a large number of followers with numbers varying from 35000 to 500000, and brands with a small number of followers with values ranging from 500 to 9500. As likes are proportional to the quantity of followers, calculations were made to render the Instagram emulation look legitimate. An engagement rate between 0%–1.64% is considered low; 1.65%–3.48%

is medium; 3.49%–6.67% is high and, above that, very high (Georgia 2017). For both unpopular and popular brands, we used a percentage between 1.5% to 9%, thus varying the percentage among posts, as in the real social media photography posted at different times have different engagement rates. We sought to emulate these relevant aspects.

3.2 Results

Purchase Intention (H1). An independent samples t-test was used to test the hypothesized relationship between the number of followers and the purchase intention. Significant differences were found in the consumers' purchase intention when presented with a small number of followers brand page ($M = 4.55$, $SD = 1.46$) or a large number of followers brand page ($M = 4.82$, $SD = 1.51$) conditions; $t(658) = -2.31$, $p = .021$. These results suggest that a large number of followers on Instagram does positively impact consumers' purchase intention. Specifically, H1 was confirmed.

Perceived Product Quality (H2). The results of an independent samples t-test have shown that there are no significant differences in the consumers' perceived product quality when presented with a small number of followers brand page ($M = 5.06$, $SD = 1.24$) or a large number of followers brand page ($M = 5.22$, $SD = 1.24$) conditions; $t(658) = -1.57$, $p = .117$. Contrarily to what was hypothesized, these results suggest that the number of followers does not influence consumers' perceived product quality. Hence, H2 was rejected.

Likeliness of Referral (H3). A t-test for independent samples concluded that there are no significant differences in the likeliness of referring a brand to a friend or acquaintance when presented with a small number of followers brand page ($M = 4.75$, $SD = 1.47$) or a large number of followers brand page ($M = 4.84$, $SD = 1.51$) conditions; $t(658) = -0.76$, $p = .449$. These results advocate that the number of followers does not impact the likeliness of consumers' referring a brand to a friend or acquaintance. Consequently, H3 was rejected.

Brand Trustworthiness (H4). An independent samples t-test was used to test the hypothesized relationship between the number of followers and the consumers' brand trust. Significant differences for brand trust were found between consumers presented with a small amount of followers brand page ($M = 4.70$, $SD = 1.29$) or with a large amount of followers brand page ($M = 4.93$, $SD = 1.34$) conditions; $t(658) = -2.26$, $p = .024$. Our results suggest that, when consumers are presented with products on an Instagram page with a large number of followers, they are more inclined to trust the brand than in the case of a small number of followers on its page. Accordingly, H4 was confirmed.

Gender Differences (H5). For all the variables tested, no significant gender differences were found. Thus, H5 was rejected.

4 Study 2

The first study focused on providing participants an experience as similar as possible to the real Instagram social media platform. This implied not making them explicitly aware of the purpose of the study (i.e., comparing small vs. large number of followers). We concluded that Instagram pages with a large number of followers can induce bigger trust in their potential customers' minds and also increase the purchase intention for their products, when compared to pages with a small number of followers. To evaluate if people's reaction to the number of followers changes according to their awareness on the subject, a second and shorter follow-up study was conducted. We aimed to assess participants' willingness to purchase a product and brand trust when explicitly making participants aware of the small vs. large number of followers conditions for a specific Instagram page, thus this second study also serves as a manipulation check.

4.1 Method

Two hundred and three participants (50.2% females) who were not part of the first study responded to an online questionnaire. The previously disposed brand Mojo Swimwear was used with similar attributes as before (pictures, number of followers and number of followees). We made clear that we were evaluating the participants' reaction to the number of followers the Instagram brand page had. Participants read: "*The following brand pages have the same characteristics and represent the same brand as you can see. Only the number of followers changes between both. Bearing these in mind, please answer the following questions*". The questions were: "*Which one of the two brand pages gives you a higher willingness to purchase a product from this brand (for you or as a gift)?*" and "*Which one of the two brand pages conveys a higher level of trust in the brand you are seeing?*". For both questions, participants had to choose one out of three possible answers: (1) "*The brand page with the largest number of followers*"; (2) "*The brand page with the smallest number of followers*"; or (3) "*Both brand pages give me the same willingness to purchase/convey me the same level of trust*".

4.2 Results

Concerning purchase intention, 56.7% of respondents chose the page with the large number of followers as giving them the higher willingness to purchase a product; 39.9% answered both pages give them the same willingness to purchase; and, lastly, 3.4% felt that the page with the smallest number of followers gave them a higher purchase intention. For brand trust, 82.8% of the respondents declared that the page with the largest number of followers provided them more trust than the others; 3.0% claimed to feel the same trust in both pages; and 14.2% affirmed the smallest number of followers to provide them the biggest trust in the brand. Finally, and similarly to the first study, we did not find any gender differences across variables.

5 Discussion and Conclusion

The results achieved have indicated that having an Instagram brand page with a large number of followers when compared to one with a small number of follower's influences

consumers' purchase intention and brand trust. In contrast, a large number of followers is not able to influence the likeliness of referring brand's products to a friend nor to increase the brand's perceived quality on Instagram. Our studies also revealed that men and women are not differently affected by the number of followers in the Instagram brand profile. This is not only surprising for the ways different genders are socially influenced, but also important for expenditures contention, as these results highlight that implementing a gender targeting strategy for several variables might not be required by firms on Instagram. Additionally, we contradict Veirman et al. (2017) study, who found that a person with a high number of followers (influencer) who advertises a product might negatively influence the consumer attitudes towards the brand when compared to one with a small number of followers. However, Veirman et al. (2017) focused on influencers whereas our study focused on Instagram brand pages.

Practical Implications. We conclude that it is possible to positively influence the consumers' perception and attitude by increasing the number of followers of an Instagram brand's page, and benefit from a higher purchase intention and brand trust. Our results provide new empirical insights in the way marketers should pursue their brand's online positioning and strategy while giving suggestions on how to tackle the factors that the number of followers fails to influence.

Limitations and Suggestions for Future Research. First, this study was conducted with Portuguese and young participants only. Given that Instagram is a global platform where users come from every region in the world, our conclusions cannot by nature be representative of consumers' behavior on a worldwide scale. Nevertheless, Millennials and Gen Z have grown up socializing and making purchases online, using social networks and digital media on a daily basis, making them the most demanding and tech-savvy generation cohorts (Mangold and Smith 2012). Thus, they provide useful information on how the biggest technology consumers act and how similar cultures might behave when facing the same situations online. Second, in order to avoid pre-made judgments, we have used only brands that are unlikely to be known by the respondents. There is, nonetheless, a small probability that some of the participants were already familiar with one or more brands which might have influenced a small portion of the results. Third, there is an ongoing debate among opinion makers – namely bloggers and journalists – if a company should engage in the activity of actually buying both followers and likes. Both factions provide different arguments. The skeptical ones argue that these followers will not engage with posted content, hence they will be merely a number, providing a bad reputation to the brand. On the contrary, the supportive part believes in the fact that it provides a good starting point for beginners and help to boost the value of already established online profiles. Future studies could experiment to build two similar Instagram brands from inception, one where both followers and likes would be bought and one which would grow organically. The final analysis of the results would provide us with a solid conclusion on whether small brands or startups could benefit from a faster growth by influencing consumers' purchase intention and brand trust. Another interesting study could focus on how having an Instagram brand page with a large number of followers could impact the company's actual sales. The use of familiar brands – instead of unknown brands, which were used in this study – could also be examined closely to find out if the number of followers impacts them as much as unfamiliar ones.

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