THE IMPACT OF RECIPROCITY ON INSTAGRAM PET INFLUENCER POSTING RESPONSE TIMES

Rastko Milošević ¹, Savka Adamović ¹, Ana Komlenić ², Davor Menzildžić ³, Vladimir Dimovski ⁴, Petar Vasilić ¹, Davor Menzildžić ³, Vladimir Dimovski ⁴, Petar Vasilić ¹, University of Novi Sad, Faculty of Novi Sad, Faculty of Petar Vasilić Petar Vasilić ², Petar Vasilić ³, Petar Vasilić ³, Polici Petar Vasilić ³, Polici Petar Vasilić ⁴, Petar Vasi

Abstract: This study investigates the effectiveness of two outreach strategies, reciprocation and conventional, on the response times of Instagram pet influencers when collaborating with a small business. Drawing from the principle of reciprocity, we aimed to determine whether offering upfront favours in the form of digital pet portraits leads to faster influencer posting times. A sample of 232 Instagram pet influencers was selected, with 203 approached using a conventional strategy and 29 using a reciprocation outreach strategy where the portrait was provided upfront. The key parameter analyzed was the time it took influencers to post the provided portrait on their Instagram feed after agreeing to collaborate. Results show that the reciprocation approach prompted faster and more consistent responses, with all influencers posting within five days, compared to 83.33% of conventional outreach participants posting in the first week. These findings suggest that upfront favours may encourage quicker influencer responses, offering insights into more effective influencer outreach strategies for small businesses.

Key words: Instagram influencer marketing, reciprocity principle, outreach strategies, pet industry

1. INTRODUCTION

Influencer marketing involves social media influencers promoting the products or services of brands in exchange for financial compensation or non-monetary incentives, such as complimentary products or services (Campbell & Farrell, 2020; Kim & Kim, 2021; Tafesse & Wood, 2021). It has become a core component of digital marketing strategies, providing brands with authentic, more subtle advertising. Social media influencers, who are notable users recognized for their expertise in niche areas, can be divided into several distinct groups based on factors such as follower count, authenticity, accessibility, expertise, and cultural capital (Campbell & Farrell, 2020; Tafesse & Wood, 2021).

Instagram is one of the most popular platforms for influencer collaborations, with a large active user base, primarily composed of individuals between their late teens and early thirties (Dixon, 2024). A significant portion of Instagram users follows brands or uses the platform for product research (Newberry, 2024), making it a crucial channel for business-to-consumer marketing. The increasing use of influencers is driven by the rise of social media and concerns over ad-blocking, contributing to the rapid expansion of the global influencer marketing sector, which is projected to grow substantially in the coming years (Grin, 2024). As brands invest more resources into influencer marketing, platforms like Instagram continue to play a key role in driving engagement and conversions (Grin, 2024; Park et al., 2024). The global pet industry has experienced significant growth, driven by the increasing humanization of pets and a rising pet population, with 66% of U.S. households owning pets in 2024, pushing pet-related expenditures to \$150.6 billion in the U.S. (Bloomberg, 2023; Megna & Bailie, 2024). A new breed of influencer has emerged, the pet influencer, whose social media accounts, managed by their owners, have become powerful marketing tools, with some gaining millions of followers (e.g., @nala_cat with 4.5M), significantly influencing consumer behaviour, especially in the pet food market (Zhang et al., 2023; Xu, 2022). This trend offers brands in the pet care industry vast marketing opportunities, as the sector is projected to surpass \$200 billion globally by 2025 (Niemietz, 2020). Pet influencers engage their audiences primarily through entertainment (Myers et al., 2024; Segmanta Blog, 2020) and providing valuable information on pets and pet-related products (Hartama, 2021), fostering tight-knit online communities (Ngai, 2023; Maddox, 2021). For brands, establishing successful collaborations with influencers requires compelling outreach strategies, with smaller influencers typically being more

accessible for partnerships due to their focus on growth (Levin, 2020; Trend, 2024). Cialdini (2021) identifies seven psychological principles of persuasion, including reciprocation, that can influence the willingness of individuals to comply with requests, though the effectiveness of these techniques can vary significantly based on the specific principle used and the individual's demographic profile, with factors such as age, gender, and cultural background playing key roles (Orji et al., 2015; Oyibo et al., 2018). The principle of reciprocity stands out, deeply rooted in human interactions across cultures, encouraging individuals to return favours and fostering mutually beneficial relationships. This principle, widely used in marketing, can significantly impact consumer behaviour, with businesses utilizing it to drive engagement and sales, particularly through personalized strategies tailored to recipients' preferences (Cialdini, 2021). Burger et al. (1997) explored the norm of reciprocity by testing how the obligation to return a favour diminishes over time. Their experiments revealed that participants were significantly more likely to reciprocate a favour shortly after receiving it, but as time passed, the likelihood of reciprocity decreased significantly. This demonstrates that the reciprocity norm does not create an indefinite obligation to return favours but rather operates within a limited time frame, suggesting that timely responses are crucial in social exchanges.

This concept of reciprocity is central to our study as we seek to determine whether offering upfront favours leads to faster responses from Instagram pet influencers. Specifically, we aim to evaluate and compare the effectiveness of two outreach strategies, reciprocation and conventional, by analyzing how providing digital pet portraits as upfront favours affects influencer response times (i.e., the time it took them to post the provided portrait on their Instagram feed) during collaborations with small businesses. Building on Burger et al.'s (1997) insights into the time-sensitive nature of reciprocity, we aim to determine which outreach strategy fosters more timely influencer response and whether offering upfront favours leads to faster responses.

2. METHODS

This study examined the impact of two outreach strategies—reciprocation and conventional—on Instagram pet influencer response times in posting a provided digital portrait for a collaboration with a small business, i.e., Petification (Instagram: @petification). This small e-commerce business focuses on creating custom digital art with a pet theme. The outreach strategy involved proposing unpaid collaborations, where influencers were offered free digital pet portraits in return for a post on their Instagram feed. A total of 232 Instagram pet influencers were selected for the study, chosen based on follower count, engagement rate, and their alignment with the brand. The sample represented a wide range of follower sizes, engagement levels, pet types (such as cats and dogs), and geographic locations. The study involved two groups of influencers: 203 influencers were approached with the conventional strategy, offering free portraits if they agreed to collaborate. The remaining 29 influencers were part of the reciprocation strategy, where Petification created and sent portraits upfront, along with a collaboration proposal. Data was collected over a 23-month period, from mid-2021 to mid-2023, including outreach, influencer responses, and posts on their Instagram feeds. The key parameter analyzed in this study was the time (in days and weeks) that Instagram pet influencers took to post, measured from the moment a finished digital pet portrait was provided to them (specifically when they confirmed receipt of the information) to the moment they posted it on their Instagram feeds. The smaller sample size for reciprocation outreach was due to time limitations regarding the preparation of the portraits upfront. Outreach messages for both strategies followed the guidelines of Levin (2020) to clearly communicate collaboration terms and encourage influencers to share their personal impressions alongside the portrait.

3. RESULTS AND DISCUSSION

Figures 1 and 2 illustrate the distribution of days and weeks, respectively, that elapsed from the time point a digital pet portrait was provided to an influencer to the time point it was posted on their Instagram feed, comparing both conventional and reciprocation outreach approaches. More than 50% of Instagram influencers in both outreach approaches posted within 1 day (0-1 days). Reciprocation outreach resulted in a higher proportion of posts within 2-3 days (28.57%) compared to conventional outreach (16.67%). Notably, 100% of the influencers in the reciprocation group posted within 5 days, while 3.33% of those in the conventional outreach posted between days 6 and 7. In total, 83.33% of influencers in the conventional outreach group posted within the first week, with the remaining 16.67% posting within the following 2-6 weeks. In terms of weeks, 100% of influencers in the reciprocation

outreach group posted within the first week, while 83.33% did so in the conventional outreach, with a smaller percentage (16.67%) continuing to post over the next several weeks (2-6 weeks).

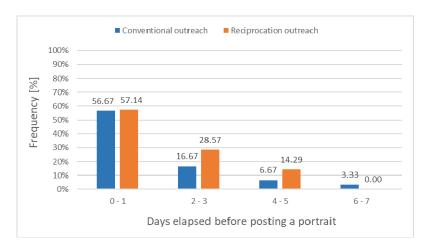


Figure 1: Distribution of days elapsed before posting

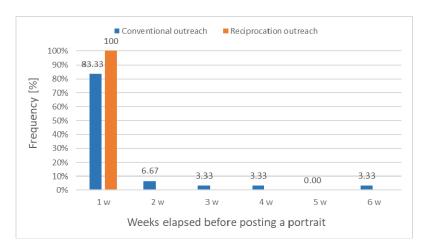


Figure 2: Distribution of weeks elapsed before posting

The average time to post was 1.43 days (stdev. ±1.29 days) for reciprocation outreach, excluding the outlier who did not respond to the collaboration proposal, but eventually posted a portrait after 104 days. This exclusion was made to ensure more accurate data representation, as including such an extreme case would have significantly skewed the average posting time and misrepresented typical influencer behaviour observed. By excluding the outlier, we highlighted that the majority of influencers in this group posted quickly, providing a clearer understanding of general Instagram pet influencer response behaviour. A relatively low standard deviation of ±1.29 days also indicates consistency in posting times, further suggesting that reciprocation outreach encourages a quicker, more predictable response compared to conventional outreach. For conventional outreach, the average posting time was 4.83 days (stdev. ±8.45 days), where the larger standard deviation for the full period reflects greater variability in posting times, indicating a less predictable response pattern. However, when considering only the first week, the average posting time was 1.48 days (stdev. ±1.47 days). Overall, while reciprocation outreach leads to faster and more uniform posting, early responders in the conventional outreach approach exhibited similar behaviour to those in the reciprocation group.

In addition, there are many reasons that led Instagram pet influencers to fail to post or delay their posting. Some may have received too many messages and did not notice the collaboration request at all. Others explained that they were waiting for a specific day or time when their audience engagement is typically highest, as some have observed better responses on weekdays compared to weekends. Additionally, some of them had just posted other content and were waiting a certain amount of time before posting the portrait. There were also instances where the portrait file was lost, and some cited

personal reasons that prevented them from posting, noting that for most, this is not their primary profession, so they might not feel as obligated to complete their part of the task promptly.

4. CONCLUSIONS

Obtained results from the study indicate that the reciprocation outreach approach prompted quicker and more consistent response patterns, whereas much more variability was observed in the conventional outreach approach. The average posting time for reciprocation outreach was 3.38 times faster (4.83 days / 1.43 days) compared to conventional outreach. This aligns with reciprocity principles, suggesting that upfront favours may encourage quicker action, supporting the idea from the study by Burger et al. (1997) that reciprocity motivates timely responses, though the time decay aspect from their original research may not fully apply to the present study. While reciprocation outreach generated faster influencer responses, early responders in conventional outreach posted at similar speeds, exhibiting a similar posting behaviour when considering only the first week. These findings suggest that reciprocation outreach may be more effective for small businesses seeking timely collaborations, which is important for planning campaigns with strict timelines, though conventional outreach can still be effective for some influencers.

In addition to the quantitative results, several factors contributed to the failure of influencers to post or delays in posting. Influencers cited reasons such as missing the collaboration request due to message overload, timing posts for optimal audience engagement, or personal and technical challenges. Furthermore, for many influencers, this is not their primary profession, which may lead to lower motivation to complete the task promptly. These factors highlight the complexities of managing influencer collaborations.

Future research should focus on addressing and overcoming the limitations of this study. Therefore, its findings should be interpreted with caution. These limitations include the small sample size, industry-specific focus, and the niche online community studied, as well as the product-specific context. Expanding future studies in these areas will help confirm the findings and enhance their generalizability across different types of influencers and industries.

5. ACKNOWLEDGMENTS

This research has been supported by the Ministry of Science, Technological Development and Innovation (Contract No. 451-03-65/2024-03/200156) and the Faculty of Technical Sciences, University of Novi Sad through project "Scientific and Artistic Research Work of Researchers in Teaching and Associate Positions at the Faculty of Technical Sciences, University of Novi Sad" (No. 01-3394/1).

6. REFERENCES

Bloomberg. (2023) *Global Pet Industry To Grow To \$500 Billion By 2030, Bloomberg Intelligence Report Finds*. Available from: https://www.bloomberg.com/company/press/global-pet-industry-to-grow-to-500-billion-by-2030-bloomberg-intelligence-finds/ [Accessed 19th April 2024].

Burger, J.M., Horita, M.; Kinoshita, L., Roberts, K., Vera, C. (1997) Effects of Time on the Norm of Reciprocity. *Basic and Applied Social Psychology*. 19 (1), 91-100.

Campbell, C. & Farrell, J. R. (2020) More than meets the eye: The functional components underlying influencer marketing. *Business Horizons*. 63 (4), 469-479. Available from: doi: 10.1016/j.bushor.2020.03.003

Cialdini, R.B. (2021) Influence, New and Expanded: The Psychology of Persuasion, Expanded edition, Harper Business, New York, USA.

Dixon, S. (2024) *Instagram - Statistics & Facts*. Available from:

https://www.statista.com/topics/1882/instagram/#topicOverview [Accessed 25th February 2024].

Grin. (2024) 101 Vitally Important Influencer Marketing Statistics You Need to Know Today. Available from: https://grin.co/blog/influencer-marketing-statistics/ [Accessed 1st April 2024].

Hartama, E. (2021) *Possibilities of influencer marketing through pet Instagram accounts: A fast lane to a pet owner's pocket?* Bachelor's thesis. LUT School of Business and Management, Lut University, Lappeenranta, Finland.

Kim, D. Y. & Kim, H. (2021) Trust me, trust me not: A nuanced view of influencer marketing on social media. *Journal of Business Research*. 134, 223–232. Available from: doi: 10.1016/j.jbusres.2021.05.024

Levin, A. (2020) Influencer Marketing for Brands: What YouTube and Instagram Can Teach You About the Future of Digital Advertising. 1st ed.; Apress, New York, USA, 2020, pp. 47-157.

Maddox, J. (2021) The secret life of pet Instagram accounts: Joy, resistance, and commodification in the Internet's cute economy. *New Media & Society*. 23 (11), 3332-3348. Available from: doi: 10.1177/1461444820956345

Megna, M. & Bailie, K. (2024) *Pet Ownership Statistics 2024*. Available from: https://www.forbes.com/advisor/pet-insurance/pet-ownership-statistics/#:~:text=Pet%20ownership%20in%20the%20U.S.,part%20of%20their%20owners'%20lives. [Accessed 19th April 2024].

Myers, S., Sen, S., Syrdal, H., Woodroof, P. (2024) The impact of Persuasion knowledge cues on social media engagement: a look at pet influencer marketing. *Journal of Marketing Theory and Practice*. 32 (1), 43-60. Available from: doi: 10.1080/10696679.2022.2093224

Newberry, C. (2024) *35 Instagram Statistics That Matter to Marketers in 2024*. Available from: https://blog.hootsuite.com/instagram-statistics/ [Accessed 5th March 2024].

Ngai, N. (2023) Homemade pet celebrities: the everyday experience of micro-celebrity in promoting the self and others. Celebr. Stud. 14 (4), 437-454. Available from: doi: 10.1080/19392397.2022.2070714

Niemietz, B. (2020) *They bark, we buy: Pet influencers having big impact on what humans spend*. Available from: https://www.nydailynews.com/2020/01/05/they-bark-we-buy-pet-influencers-having-big-impact-on-what-humans-spend/ [Accessed 15th March 2024].

Orji, R., Mandryk, R. L., Vassileva, J. (2015) Gender, Age, and Responsiveness to Cialdini's Persuasion Strategies. In *Proceedings of the 10th International Conference, PERSUASIVE 2015, 3-5 June 2015, Chicago, IL, USA*.

Oyibo, K., Adaji, I., Orji, R., Vassileva, J. (2018) The susceptibility of africans to persuasive strategies: A case study of Nigeria. In *Proceedings of the 13th International Conference, PERSUASIVE 2018, 18-19 April 2018, Waterloo, Canada*.

Park, J., Ahn, H., Kim, D., Park, E. (2024) GNN-IR: Examining graph neural networks for influencer recommendations in social media marketing. *Journal of Retailing and Consumer Services*. 78, 103705. Available from: doi: 10.1016/j.jretconser.2024.103705

Segmanta Blog (2020) *Cat videos: The not-so-guilty pleasure*. Available from: https://segmanta.com/blog/cat-videos-the-not-so-guilty-pleasure [Accessed 4th March 2024].

Tafesse, W. & Wood, B. (2021) Followers' engagement with Instagram influencers: The role of influencers' content and engagement strategy. *Journal of Retailing and Consumer Services*. 58, 102303. Available from: doi: 10.1016/j.jretconser.2020.102303

Trend (2024) *Macro vs. Micro-influencers: Who's Best for Your Campaign?* Available from: https://www.trend.io/blog/macro-influencers-micro-influencers-influencer-campaigns [Accessed 10th April 2024].

Xu, W. (2022) *Consumer Behavior in China's Pet Food Industry*. Bachelor's thesis. Satakunta University of Applied Sciences, Pori, Finland.

Zhang, L., Wei, W., Rathjens, B., Zheng, Y. (2023) Pet influencers on social media: The joint effect of message appeal and narrator. *International Journal of Hospitality Management*. 110, 103453. Available from: doi: 10.1016/j.ijhm.2023.103453



© 2024 Authors. Published by the University of Novi Sad, Faculty of Technical Sciences, Department of Graphic Engineering and Design. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution license 3.0 Serbia (http://creativecommons.org/licenses/by/3.0/rs/).