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Misinformation on Instagram: The Impact of Trusted Endorsements on Message Credibility

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Abstract

This research explores how social validation, measured through trusted endorsements and bandwagon heuristics, influence the credibility of misinformation on Instagram. Using experimental design, this study found that trusted endorsements (i.e., the liking of content by a trustworthy or reputable source) significantly impacted the credibility of misleading content on Instagram. Perceived message credibility was greater when a fabricated post was endorsed by a trustworthy personality. Findings provide insights into how message credibility is evaluated on a social media platform like Instagram in the context of misinformation.

Keywords

Instagram, message credibility, misinformation, social media, trusted endorsements

The spread of misinformation on social media has generated public concern due to its implications for society (Cook et al., 2017). Social media enables misinformation to reach vast audiences and a misinformed society may make decisions outside of its best interests, leading to adverse consequences (Lewandowsky et al., 2017). Research on this phenomenon has mainly focused on the dissemination of false or misleading information on Facebook and Twitter (Bode & Vraga, 2015; Del Vicario et al., 2016; Vosoughi et al., 2017). However, the study of misinformation on Instagram has been minimal, despite the fact that the presence of misleading content on the social media platform is abundant. For instance, US Congress investigations regarding the spread of misinformation and propaganda around the 2016 presidential election revealed that about 20 million Instagram users in the United States were reached by fake accounts generated by Russian sources (Mak, 2017). Many of the posts published by those fake accounts included a combination of visuals and text crafted to mislead the audience or promote division on controversial issues. A study on the reach of those fake accounts concluded that Instagram was a "major distributor and re-distributor" of misinformation and propaganda during the 2016 electoral season (Albright, 2017). Likewise, research on the dissemination of information on Instagram during a Zika outbreak found that the majority of posts containing messages about the virus included misleading information (Seltzer et al., 2017). The study revealed that misinformation was more popular on Instagram than correct and factual messages regarding Zika. Thus, the image-based platform has not been immune to the pervasiveness of misinformation spread on social media in general.

Instagram, a platform owned by Facebook, reached one billion monthly users as of 2018, growing at a faster pace than other social networks such as Facebook and Snapchat (Constine, 2018a). Instagram's impressive growth has largely been attributed to the emphasis on image (Bakhshi et al., 2014). Visual content has been found to be more emotionally appealing (Fieler, 2016) and more influential in generating interest than non-visual content (Lin et al., 2012).

In terms of its engagement model, Instagram shares similarities with other social media platforms, but also has some distinct differences. Unlike Facebook and Twitter, Instagram does not provide a sharing option directly on the platform. Therefore, much of the content comes from one original source. On the other hand, as other platforms, Instagram allows users to like and comment on others' posts and displays to users the number of likes a post receives and the username(s) of those who the person follows that have liked

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the post. After concerns over the impact of the "like" feature on users' mental health, Instagram has recently started to test hiding the number of likes on a post in certain countries. The ability to see the usernames of people who have liked the post has remained (Leskin, 2019). Research has found that, in online environments, even if the source of the content is unknown, endorsements from others can overcome people's initial skepticism about that source (Metzger & Flanagin, 2013). In fact, social endorsements may be an even more powerful determinant of news consumption than source cues (Messing & Westwood, 2014).

In this way, the purpose of this study is to explore how trusted endorsements and the popularity of a post influence the credibility of misinformation posted on Instagram. Drawing from message credibility literature, as well as from social validation and cognition heuristics theories, this study helps fill a gap in the understanding of how users respond to misinformation spread on a social media platform such as Instagram.

Literature Review

Misinformation

Amid the public concern over the rise of misleading information on social media, scholars have been discussing how to find terms that describe the complexity of the different kinds of false content distributed on Internet (Nielsen & Graves, 2017; Tandoc et al., 2018). This study uses *misinformation* as a broad term to refer to false content inadvertently or deliberately shared on social media. Researchers have defined misinformation as false or misleading information (Zhang et al., 2018), "information that people accept as true despite it being false" (Cook et al., 2017, p. 1), and as "the presence of or belief in objectively incorrect information" (Bode & Vraga, 2015, p. 621). The Oxford Dictionary defines misinformation as "false or inaccurate information, especially that which is deliberately intended to deceive."

Although misinformation has been part of the human experience, social media has brought a new dimension to the phenomenon, creating new challenges to discern false from true. Regarding Instagram, studies have found that creating a fake account on this social media platform is a frequent task (Albright, 2017; Seltzer et al., 2017). In addition, misleading visual information has been found to have greater influence than deceiving verbal information on altering information learned through individuals' direct experience (Braun & Loftus, 1998). Indeed, researchers have pointed out that the visual aesthetics of social media platforms can make it difficult to establish authenticity (Highfield & Leaver, 2016). "Image editing and faking, including the use of Photoshop and similar editing software, is an established component of visual social media, for meme creation and deliberately misleading material alike" (Highfield & Leaver, 2016, p. 52).

Other features of Instagram may also influence the spread of misinformation on the platform. A large portion of the news posted on Instagram displays the headline within the main visual content with the caption used to expand on the story. However, Instagram displays only the first two lines of the caption and users then need to actively click to view more. Also, it is not possible to include links to the full news story within the caption and users will need to go through additional actions to read the full article (Peters, 2018). Thus, a better understanding is needed on the factors that lead to perceptions of message credibility on Instagram, particularly of social validation features.

Message Credibility

Authenticity, accuracy, and believability have been found to be indicators that best reflect message credibility, particularly in an online setting (Appelman & Sundar, 2016). Research focused on building a scale to measure message credibility found that the credibility of a message, especially in the context of news, can be assessed by asking participants about the perceived accuracy of a news story, its perceived authenticity, and its believability (Appelman & Sundar, 2016). In this way, the concept of message credibility is positioned as distinct from source credibility and medium credibility. This study extends the applicability of this message credibility scale to the analysis of the credibility of a fabricated news story posted on a social media platform like Instagram.

Message credibility may be influenced by source and non-source factors. Research on credibility on social media has generally focused on the perceived credibility of the source of the message (Cunningham & Bright, 2012; Hwang, 2013). "Source information is crucial to credibility because it is the primary basis upon which credibility judgments rest" (Metzger & Flanagin, 2013, p. 212). However, the social media revolution and the abundance of information online have also led people to rely on non-source factors to assess message credibility.

In an online environment, engagement in effortful information evaluation tasks is rare and instead cognitive heuristics, such as content endorsements, can guide credibility evaluations regarding online content (Metzger & Flanagin, 2013). With the abundance of known and unknown sources presented on social media, people are relying more on endorsements from others to help in their selection of news content (Messing & Westwood, 2014), which may be a result of the effect endorsements have on credibility assessments. In the context of Instagram, heuristics may include the number of likes a message receives or a person of trust endorsing the message. Both these elements are a form of social validation in that message credibility is evaluated through its affirmation by others. Therefore, this study examines the impact of social validation through trusted endorsements and bandwagon heuristics on the credibility of misinformation in the context of Instagram.

Social Validation

Originating in the field of education, social validation theory refers to the intentional, proactive affirmation of individuals to validate others (Linares & Muñoz, 2011). The theory was first introduced by Rendón (1994) as a way to understand how low income, first-generation students find success in college. Despite initial predictions that feelings of success were related to student involvement, Rendón (1994) found that reassurance and validation from others elicited stronger feelings of success. While social validation theory was developed as a way to understand internal evaluations of one's self, the theory has been adapted and employed in various fields to understand how individuals evaluate the credibility and acceptability of goals, procedures, outcomes, inventions (Callahan et al., 2008), actions (Cialdini, 2009), information, and messages (Guadagno et al., 2013; Jessen & Jørgensen, 2011).

Social validation theory involves social norms, indicating that an individual's behaviors and actions are often a reflection of how others act or behave (Cialdini, 2009; Guadagno et al., 2013). In the context of credibility, social validation refers to the likelihood of an individual to find something credible if others also find it credible. Particularly important in social validation is the effect of anonymity. When conditions are unknown, individuals may place greater reliance on social norms for direction (Guadagno et al., 2013). This effect is often seen in online environments where the source of the content remains unknown or anonymous or the source's credibility cannot be evaluated. Also unique to online environments is the vast quantity of information available, making credibility difficult to assess.

With the proliferation of user-generated content, including social media, social validation may be a critical tool for evaluating message credibility. Recent studies suggest that social validation is emphasized more than source credibility when assessing online information (Jessen & Jørgensen, 2011). This is likely due to the inability to authenticate the expertise of authors, as well as the tendency to seek strategies that minimize cognitive effort and time (Metzger et al., 2010). These strategies include relying on the endorsement of others to judge message credibility as well as using heuristic cues and salient characteristics to process information more quickly (Lederman et al., 2014; Metzger et al., 2010).

Trusted Endorsement. Frequent in studies on credibility is the focus on trusted sources (Appelman & Sundar, 2016). These studies claim that credibility may be influenced by the perceived trustworthiness of the individual or organization in which the message or content was created. In this context, trustworthiness is defined as the degree of confidence in the source for providing honest and valid assertions (Ohanian, 1990). However, in current times where information and misinformation are largely spread through the Internet and social media, narrowing down the true source of a message may be increasingly difficult. Content can be shared by trusted friends, family members, or individuals and may be given greater value due to the word-of-mouth effect of social media, but in fact, has been originally produced by unknown sources. Therefore, more studies are turning to other online features to assess message credibility (Appelman & Sundar, 2016).

Due to the difficulty in assessing the trustworthiness of the *true* source of some online content, the perceived trustworthiness of those who endorse the content, either through sharing or liking the content, may provide a better assessment of credibility. Van Der Heide and Lim (2016) found that when judging credibility where the source is unfamiliar, users relied on consensus heuristics. Similarly, Metzger and Flanagin (2013) found that in online environments, reputation and endorsements are commonly used heuristics to evaluate credibility. Trustworthiness is a frequently used measure in understanding the credibility of celebrity endorsers (Ohanian, 1990; Van der Veen & Song, 2014) and it has been found that when the endorser is perceived to be highly trustworthy, attitudes toward a message changed (Ohanian, 1990). When an endorsement is from a trustworthy and reputable source, credibility is even greater as individuals tend to automatically trust sources that are recommended by known others (Metzger & Flanagin, 2013). Metzger et al. (2010) found that endorsements from others regarding an unfamiliar source of a website can outweigh their initial skepticism.

For the purpose of this study, trusted endorsements are the liking of content on Instagram by a trustworthy or reputable source. The inclusion of a "trustee" often provides a baseline for trustworthiness, and while trustees may not be experts on the topic, they are critical in evaluating credibility (Jessen & Jørgensen, 2011). A trusted endorsement does not need to be from a person the individual knows personally. Instead, trustees can be distant sources, such as celebrities, and particularly for the younger generation, can include any member of their online social network (Jessen & Jørgensen, 2011). In the context of misinformation on social media platforms like Instagram, the source of false information is usually unknown or unfamiliar, consequently, users may place greater reliance on social cues, such as trusted endorsements, in their assessment of message credibility. Thus, the following hypothesis is posed:

> *H1*. The presence of a trusted endorsement in an Instagram post containing misinformation positively affects perceived message credibility

Bandwagon Heuristic. Individuals will often use mental shortcuts to limit cognitive load when processing information for decision-making (Lederman et al., 2014; Metzger et al., 2010). On social media, heuristic cues may take place in the form of likes, comments, views, or through the sharing of content. Indeed, the large-scale agreements online, such as likes on a social media post, provide a broader spectrum of

social validations than in an offline setting (Jessen & Jørgensen, 2011). The "bandwagon heuristic," as termed by Sundar (2008), posits that the more positive feedback something receives, the more likely it is to be viewed as credible. As stated by Metzger and Flanagin (2013), "people assume that if many others think something is correct then it must be correct—thus credible" (p. 215).

Messing and Westwood (2014) examined the influence of heuristics on the selection of news content on social media. They found that the number of recommendations by users on a news story was a stronger predictor of news selection than source cues and that the mere presence of a heuristic indicating the number of recommendations shifted the attention away from source cues. Furthermore, the study found significant differences between news stories with a high versus low number of recommendations, where news stories with higher levels of recommendations were selected at a greater rate and weaker levels at a rate lower than chance (Messing & Westwood, 2014).

In this sense, for the purpose of this study, the bandwagon heuristic refers to the number of likes on an Instagram post. With Instagram being a primarily visual platform, messages may be considered more credible if visual content is paired with bandwagon cues. Thus, the following hypothesis is posed:

> *H2*. A bandwagon cue positively influences perceived message credibility of an Instagram post containing misinformation

Method

Design

An online experiment was conducted to test the hypotheses. Prior to data collection, the survey instrument was pretested using a variety of stimuli containing fabricated Instagram posts. Participants in the pretest ($N=69$) were recruited via convenience sample, where the survey instrument was distributed to undergraduate and graduate students through an email containing a link to the anonymous online survey. Instagram users in the pretest were randomly assigned to view one of five fabricated Instagram posts and asked to rate the credibility of the post. The pretest was designed to detect the Instagram post with the highest message credibility rating. Including the most credible false post enhances the realness of the stimuli and reliability of the study as content that is visibly false will not allow an accurate measurement of the variables (Vazquez, 2017).

In addition to the stimuli selection, the pretest helped identify Instagram personalities considered most trustworthy. The major criterion for assessing the effect of trusted endorsements was ensuring that respondents were, first and foremost, familiar with the endorser, and second, considered them to be trustworthy. Therefore, Instagram personalities with more than one million followers and from different categories (actor, musician, businessperson, TV personality, sportsperson) were included in the pretest. Respondents were shown the names and real Instagram usernames of 12 personalities and asked to rank the personalities in the order of their perceived trustworthiness. Bill Gates, Oprah, and Ellen DeGeneres received the highest rankings by respondents and deemed the most trustworthy, thus, used as trusted endorsements for the misinformation post-tested in the main study.

Participants for the main study were recruited from Amazon's Mechanical Turk (MTurk), an online panel where participants are paid to complete tasks. Studies have found that the data collected through MTurk can be as reliable as data obtained via traditional methods (Berinsky et al., 2012; Buhrmester et al., 2011; Mason & Suri, 2012). The study was limited to participants living in the United States who indicated that they were active Instagram users.

Participants ($N=479$) were asked to rate the level of trustworthiness of five Instagram personalities, including Bill Gates, Oprah, and Ellen DeGeneres. Then, they were shown an Instagram post containing a photo of a Galapagos giant tortoise with the headline "Galapagos Islands to ban tourism for 2 years" (see Figure 1). They were randomly assigned to one of four experimental conditions. They saw a post with a very high number of likes, with an endorsement (liking of the content) by one of the three personalities used in this study, with the likes and the endorsement, and without either of the two. In this way, this study used a 2 (presence or absence of a very high number of likes on the post) × 2 (presence or absence of personality endorsement) between-subjects experimental design. The number of likes on the Instagram post was the same across the respective experimental conditions. The source of the post was an unknown news site, and the only information about the source provided was the account name and a profile photo.

The study respondents had an average age of 31 ($M=31.01$, standard deviation [SD] = 8.45), and 61% ($n=292$) were male. Over half (53.0%) were White or Caucasian, followed by Asian or Pacific Islander (29.9%). The majority of respondents (73.2%) had either a college degree or completed some college, and 19.4% had a graduate or advanced degree. Most respondents read, listen to, or watch news several times a day (35.7%) or once a day (25.1%). Similarly, most check their Instagram account several times a day (40.5%) or once a day (26.9%).

After seeing the fabricated Instagram post, participants were asked how believable, accurate, and authentic the post was. A consent form and a debriefing form were provided to participants as part of the online survey, so respondents, once they answered all the questions, were informed that the Instagram post they saw was false and created for the purpose of the experiment.

Measures

As the purpose of this study was to ultimately determine factors that lead to, or enhance, the credibility of misinformation

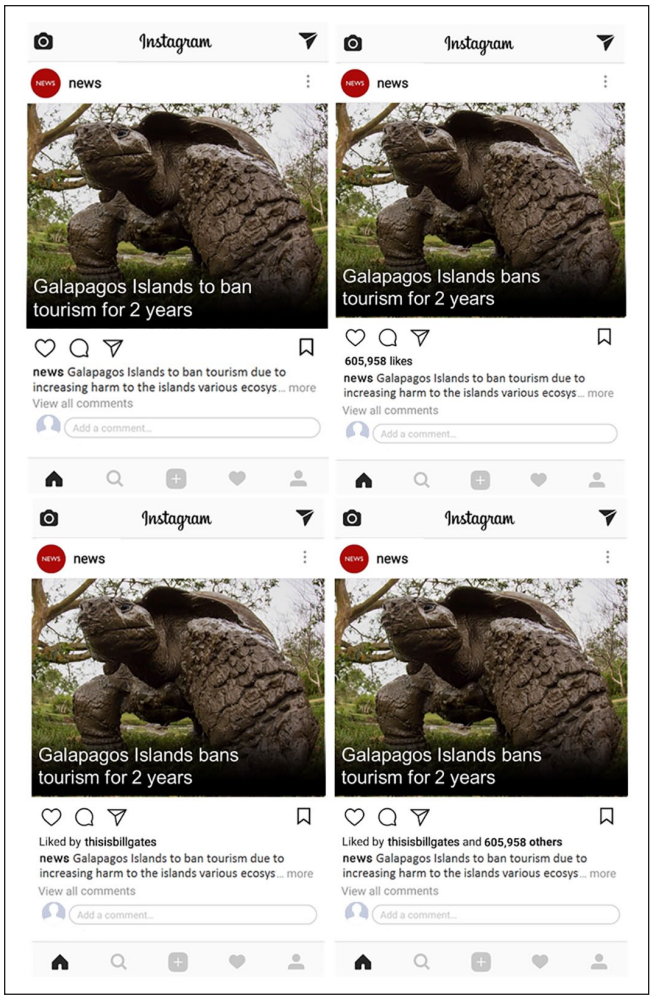

Figure 1. Misinformation on Instagram stimuli.
Note. This figure displays the four stimuli used for this study.

on Instagram, message credibility was the dependent variable in this study. The independent variables were trusted endorsements and a bandwagon cue.

Message Credibility. The concept of message credibility was operationalized using Appelman and Sundar's (2016) scale of message credibility. In this way, participants were asked to rate how believable, accurate, and authentic the Instagram content they saw in this study was. Participants rated the credibility measures on a 7-point Likert-type scale, with 1 = *very unbelievable*, very *inaccurate*, and *very unauthentic* and 7 = *very believable*, *very accurate*, and *very authentic*. Then, the responses were combined in one variable named *message credibility* (Appelman & Sundar, 2016, p. 73). The message credibility variable (M = 4.57, SD = 1.42) in this study had a Cronbach's alpha of .92, indicating high reliability.

Bandwagon Cue. Following the research by Jessen and Jørgensen (2011) and Sundar (2008), for the purpose of this study, a bandwagon cue represents the amount of positive feedback the content receives. On Instagram, the number of likes on a post indicates positive feedback. In fact, Instagram may have significantly more likes per post than Twitter in some cases, likely due to the higher levels of activity and "clicktivist" culture of the image-based platform (Gruzd et al., 2018). However, Instagram has also experienced an influx of issues surrounding "fake" likes on the platform, where third-party apps are used to inflate the popularity of content (Yurieff, 2018). Amid the growing threat of misinformation on Facebook and Instagram, Facebook (which owns Instagram) has increased its initiatives toward removing "inauthentic" activity, such as fake likes from fake accounts, claiming these are the root of misinformation campaigns (Constine, 2018b). Fake likes may go unnoticed as Instagram users are accustomed to seeing posts with a high number of likes. A look at the Instagram accounts of personalities, such as Bill Gates, Oprah, and Ellen DeGeneres, shows that their posts usually receive likes in numbers ranging from 60,000 to 700,000, with some posts receiving more than one million likes. In this study, respondents were shown one of four stimuli, where two of them contained over 500,000 likes, which indicates very high popularity. For the analysis, social validation was operationalized as 1 = *yes*, the content contained over 500,000 likes, and 0 = *no*, the content did not have any likes.

Table 1. Mean Trustworthiness Rankings, N = 479.

Personality	M	SD
Bill Gates	5.33	1.36
Ellen DeGeneres	5.17	1.42
Oprah	5.14	1.49
Selena Gomez	4.58	1.52
Leonardo DiCaprio	4.84	1.43

SD: standard deviation.

Trusted Endorsement. Prior to being shown the stimuli, respondents were asked to rate the level of trustworthiness of five Instagram personalities, namely Bill Gates, Ellen DeGeneres, Oprah, Selena Gomez, and Leonardo DiCaprio. Adapting from Ohanian (1990) and Van der Veen and Song (2014), the perceived trustworthiness was rated on a 7-point Likert-type scale, with 1 = *very untrustworthy* and 7 = *very trustworthy*. Consistent with the pretest results, the three personalities used within the experiment (Bill Gates, Ellen DeGeneres, Oprah) were perceived in general as highly trustworthy (Table 1). Then, in two experimental conditions, respondents were randomly assigned to see the Instagram post with the endorsement of one of the three personalities.

A subsample (N = 245) was created by excluding those respondents who saw a post without an endorsement. In this way, analysis was performed on two groups: participants who saw a post with an endorsement by a personality (i.e.,

Bill Gates, Ellen DeGeneres, or Oprah) they previously rated as trustworthy and participants who saw a post with an endorsement by a personality (i.e., Bill Gates, Ellen DeGeneres, or Oprah) they previously rated as untrustworthy or neutral. The analysis operationalized trusted endorsement as 1 = *yes*, the content contained a trusted endorser, and 0 = *no*, the content did not contain a trusted endorser.

Results

H1 hypothesized that the inclusion of a trusted endorsement in an Instagram post containing misinformation positively affects perceived message credibility. A *t*-test for two independent samples indicated that respondents who saw an Instagram post where a trusted endorsement was included ($M = 4.85$, $SD = 1.44$) showed a significantly higher perceived message credibility than respondents who saw a post with a viewed untrusted or neutral endorsement ($M = 4.08$, $SD = 1.28$) ($t = 3.80$, $df = 243$, $p = < .001$). H1 was supported. This result denotes that the hypothesis is correct and there is an effect of trusted endorsements on the credibility of a misleading Instagram post.

H2 hypothesized that a bandwagon cue (very high number of likes) positively affects perceived message credibility of an Instagram post containing misinformation. A *t*-test for two independent samples showed that there was no significant difference ($t = 1.802$, $df = 477$, $p = .07$) between the fabricated Instagram posts with a very high number of likes ($M = 4.69$, $SD = 1.37$) and the posts without a number of likes ($M = 4.45$, $SD = 1.47$) regarding respondents' perceived message credibility. This result suggests that the bandwagon cue did not have a significant effect on the credibility of the misleading Instagram post. H2 was not supported.

In addition to testing the hypotheses, a two-way analysis of variance (ANOVA) was run to detect any interaction effects of trusted endorsement and bandwagon cue on the credibility of the fabricated post. The test showed no significant interaction effect between trusted endorsement and bandwagon cue on the perceived credibility of the misleading Instagram post, $F(1, 241) = .00$, $p = .99$.

Discussion

This study examined the influence of trusted endorsements and the popularity of a post on the credibility of misinformation on Instagram. Consistent with the literature, message credibility was greater when the content was endorsed by a trustworthy personality. This result can be explained by the notion of social validation and its connection with credibility judgments. People tend to rely on heuristics when it comes to evaluating the credibility of online content as a way to reduce cognitive effort (Metzger & Flanagin, 2013). This study suggests that the trustworthiness of a personality that endorses an Instagram post might operate as a heuristic credibility cue, no matter if the post shows misleading information.

In online environments, the information source may not be known and therefore the trustworthiness of those who endorse the content may provide a better credibility assessment. Metzger and Flanagin (2013) similarly found that when the source of content is unknown, endorsements from others help overcome people's initial skepticism. This emphasizes the importance of social media as a form of electronic Word-of-Mouth (eWOM), where users place importance on social ties and the trust in the flow of information (Sun et al., 2006). In this way, in the context of misinformation, this study suggests that endorsements from others affect the credibility of an Instagram post whose source is unknown.

In this study, the trusted endorsement was not by friends or family, but by a celebrity with over one million followers on Instagram. Each of the celebrities was considered trustworthy to some degree and therefore their endorsing of misinformation is likely to increase the credibility of the message. Due to their large Instagram following, if these trusted sources endorse misinformation, the false information has the ability to be spread to a vast audience, which can have severe consequences. Therefore, celebrities and, in general, those in a position of trust (i.e., people have confidence that their assertions are reliable and valid) need to have greater concern over their social media engagement, especially in the context of spreading misinformation. In their study on celebrity influence, Fraser and Brown (2002) found that celebrities are often looked to as role models and therefore people may try to imitate their words and actions in an attempt to be more like the celebrity. When a celebrity or someone in a position of trust endorses content containing misinformation, audiences may not only believe the information but continue to spread, or share, the content to imitate the beliefs of the trusted source. According to Wilson (1983), there are two types of authority: cognitive authority and administrative authority. Administrative authority comes from those in a position to tell others what to do, however, they cannot tell others how to think. Cognitive authority, conversely, comes from those from a position of influence and can influence the thinking of others (Wilson, 1983). In this regard, celebrities may not be in a position to tell others what is credible or not, however, the endorsement of these trusted celebrities on a misleading message may influence the perceived credibility.

In addition, this study found that a very high number of likes did not significantly impact message credibility on Instagram. Social validation theory proposes that people are prone to find something acceptable or credible when it is validated, or approved of, by others (Cialdini, 2009; Guadagno et al., 2013). A very high number of likes on Instagram as an implication of others validating the content was found to not be an indicator of credibility as this study found that Instagram users did not look to the popularity of the post to decide how credible the content was. Del Giudice (2010) similarly found that the size of the audience "does not appear to strengthen the influence of audience feedback on

perceived credibility." What was found to influence credibility, however, was the type of audience feedback, whether it be negative, positive, or mixed (Del Giudice, 2010).

The fact that in this study, trusted endorsements were more effective than the high number of likes in terms of credibility judgments may be explained by the prominence-interpretation theory of online credibility (Fogg, 2003). The theory proposes that certain elements of a Website are more prominent than others as users make assessments of credibility. Prominent elements can play a key role in the evaluation of credibility, and the experience of the user is one of the factors that affect prominence (Fogg, 2003). Trifiro and Gerson (2019) note that not all social media platforms are consistent in terms of features and audiences, and thus, this finding may be unique to Instagram, where, in some cases, the liking of content may be greater than on other platforms such as Twitter (Gruzd et al., 2018).

Recently, Instagram has tested hiding the number of likes from posts in an attempt to address mental health and social media addiction, and shift users' focus to the content they share, and not the likes they receive (Leskin, 2019). This initiative has been rolled out for some users in countries such as the United States, Australia, Brazil, Canada, Ireland, Italy, Japan, and New Zealand (Booker, 2019). In addition, in these countries, only the number of likes is being removed, the username(s) of account(s) who have liked the post (i.e., the trusted endorsement) remains visible (Leskin, 2019). In this sense, this study suggests that frequent users of Instagram may consider trusted endorsements more prominent than a very high number of likes and be inclined to overlook the number of likes when assessing the credibility of a post. Therefore, while removing the number of likes from the post may help in improving the wellbeing of Instagram users, this effort may not address other issues concerning effects of celebrities' and influencers' endorsements on the credibility of messages spread on the social media platform.

This study has important implications for both practitioners and academics. With the increasing concerns over misinformation, this study provides insight into how credibility is evaluated in the context of a widely popular, visually focused social media platform. The knowledge that the trustworthiness of the endorser might be more impactful than other heuristic cues, such as social validation expressed in the number of likes a post receives, informs the understanding of the credibility of misinformation distributed on a social media platform such as Instagram. Endorsements from individuals deemed trustworthy may increase the spread of false content, and thus individuals in positions where society places trust in them need to be more cautious in their social media uses, particularly when "liking" a message.

Theoretical implications of this study are related to the finding that trusted endorsements have a strong impact on the credibility of a message on Instagram as well as the finding that social validation in the form of a very high number of likes did not impact credibility. Research on Instagram is relatively new, particularly in relation to false news, misinformation, and credibility. Therefore, it is important to understand the factors that increase the credibility of misinformation in this context, particularly as more social media platforms may engage in efforts to remove the visibility of some heuristic cues.

A limitation of this study is related to the sample demographics. This study consisted of over 60% males with a mean age of 30, which may not be completely representative of Instagram users. As of December 2017, 68% of Instagram users were females, with the majority (59%) between the ages of 18 and 29 (Aslam, 2018). Future research suggestions could include data collection screens for similar demographics of the platform to ensure the sample is representative of the true population of Instagram. Future research also may explore message credibility across different platforms to understand how Instagram differs from Facebook and Twitter regarding credibility when the same message and stimuli are used. In addition, future research could test the findings of this research using other topics and endorsers, as well as a not-too-high number of likes on a post.

Social media has enabled information, and misinformation, to be spread at a faster rate and to larger audiences than ever before. As Instagram's popularity has been growing, this platform provides a unique setting in which to study message credibility. This study's results provide researchers and practitioners with valuable information as to how Instagram users examine credibility in the context of misinformation.

Authors' Note

Danielle Barbe is now affiliated to Northumbria University, UK.

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