Education matters: Certified health professionals have higher credibility than non health professionals on Instagram

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Introduction

- Instagram, an internationally known platform, has more than 1 billion monthly active users as of July 2019[1].
- Instagram is described as a "fun and quirky way to share your life with friends through a series of pictures", and allows its users to create and share content[2].
- Social media is an accessible source of health information, with 46% of US adults reporting that the Internet is their first source when seeking health information[3].
- Nutrition information is shared on many social media platforms, with 59% of female Internet users and 43% of male Internet users looking up this information online[4].
- However, the credibility of the nutrition content created by users with unknown qualifications may be questionable.

Objective

- The objective of this study is to assess the credibility of content created by nutrition influencers on Instagram by comparing health professionals with non health professionals.

Methods

- For the purpose of this study, "influencer" is defined as an Instagram user with at least 15,000 followers who promotes products, services, or ideas and who creates nutrition- or health-related content.
- To identify nutrition influencers, Google, Yahoo!, and Bing were used to search the following keywords: nutrition influencers, diet influencers, food influencers, top nutrition influencers, top diet influencers, top food influencers.
- For each influencer (n=29), two posts were selected from each month, close to the 1st and the 15th, from August 2018 to July 2019.
- Using the "Credible Information Factsheet"[5] from the Dietitians of Canada, a credibility score based on four dichotomous criteria was created:
  - Criteria 1 – "Miracle Cure" / "Quick Fix": Is the person promising a quick fix like fast weight-loss or a miracle cure throughout their posts? If yes, then the influencer receives a 0 for this criteria; if no, the influencer is given a 1;
  - Criteria 2 - "Product Sales": Is the person trying to sell products such as special foods or supplements throughout their posts instead of teaching followers how to make better food choices at home, at play, at work, or while eating out? If yes, then the influencer receives a 0 for this criteria; if no, the influencer is given a 1;
  - Criteria 3 – "Personal Stories": Does the person provide information based on personal stories rather than on facts throughout their posts? If yes, then the influencer receives a 0 for this criteria; if no, the influencer is given a 1;
  - Criteria 4 – "Research-based": Are the claims throughout the posts based on corresponding research studies? If yes, then the influencer receives a 1 for this criteria; if no, the influencer is given a 0.
- Looking at the 24 posts of each influencer holistically, a credibility score out of 4 was calculated, with 0 being the least credible and 4 being the most credible.
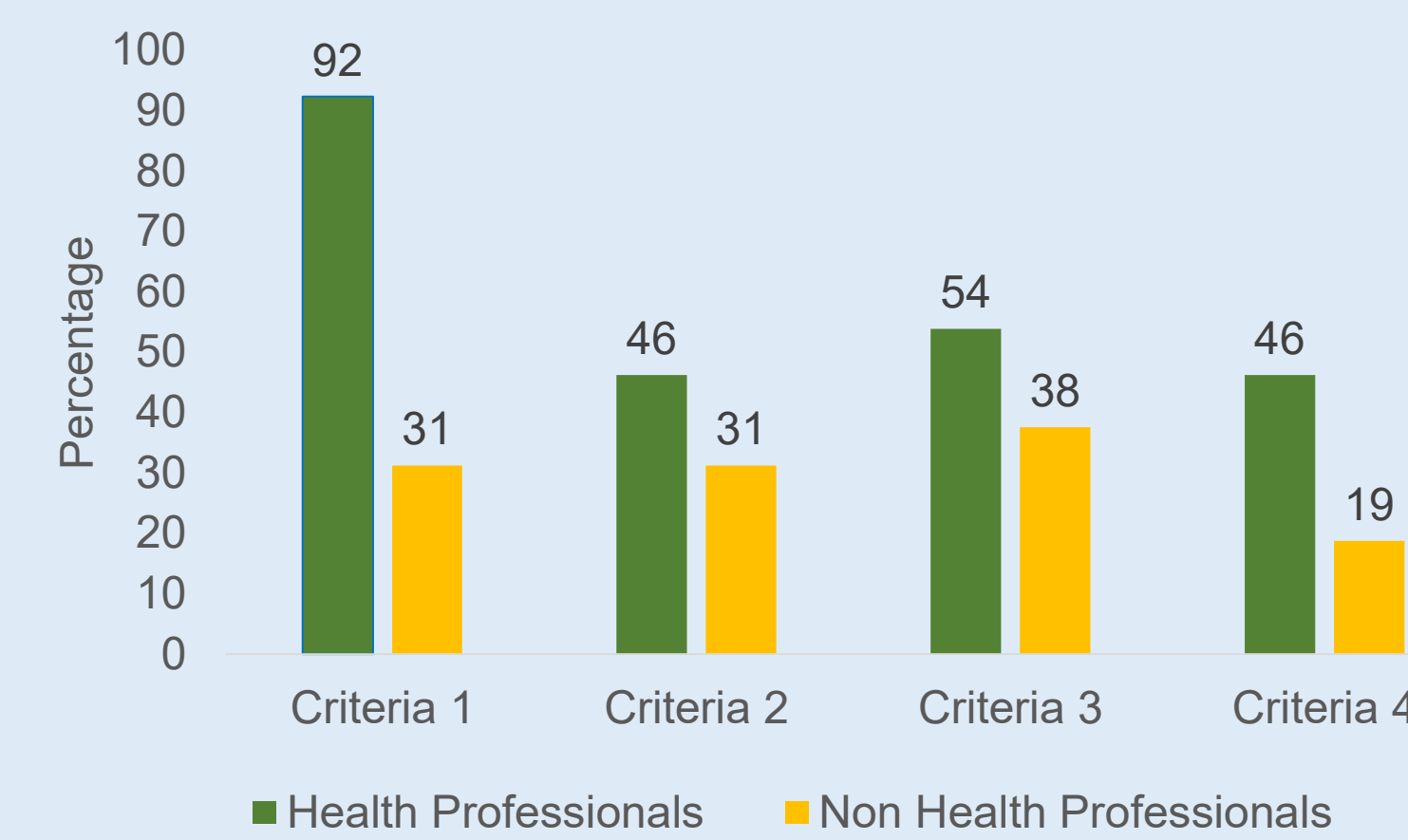
Results

Figure 1. Percentages of health professionals vs non health professionals that meet each criteria

Figure 2. Total credibility score of Instagram posts for health professionals compared to non health professionals

Excerpt from caption reads:
"CAN WE RESET OUR IMMUNE SYSTEM [TO ELIMINATE FOOD ALLERGIES]? … Researchers identified a group of bacteria linked with protecting against food allergies and transplanted them into mice with an egg allergy…This specific collection of bacteria was able to suppress the food allergy and gave full protection… Their test tube studies then found that this selection of specific microbes targeted immune pathways, which then activated specific immune tolerance cells - resembling tolerance cells in human babies… We're not there just yet - human studies are underway to see if these specific microbes have the same effect in us."
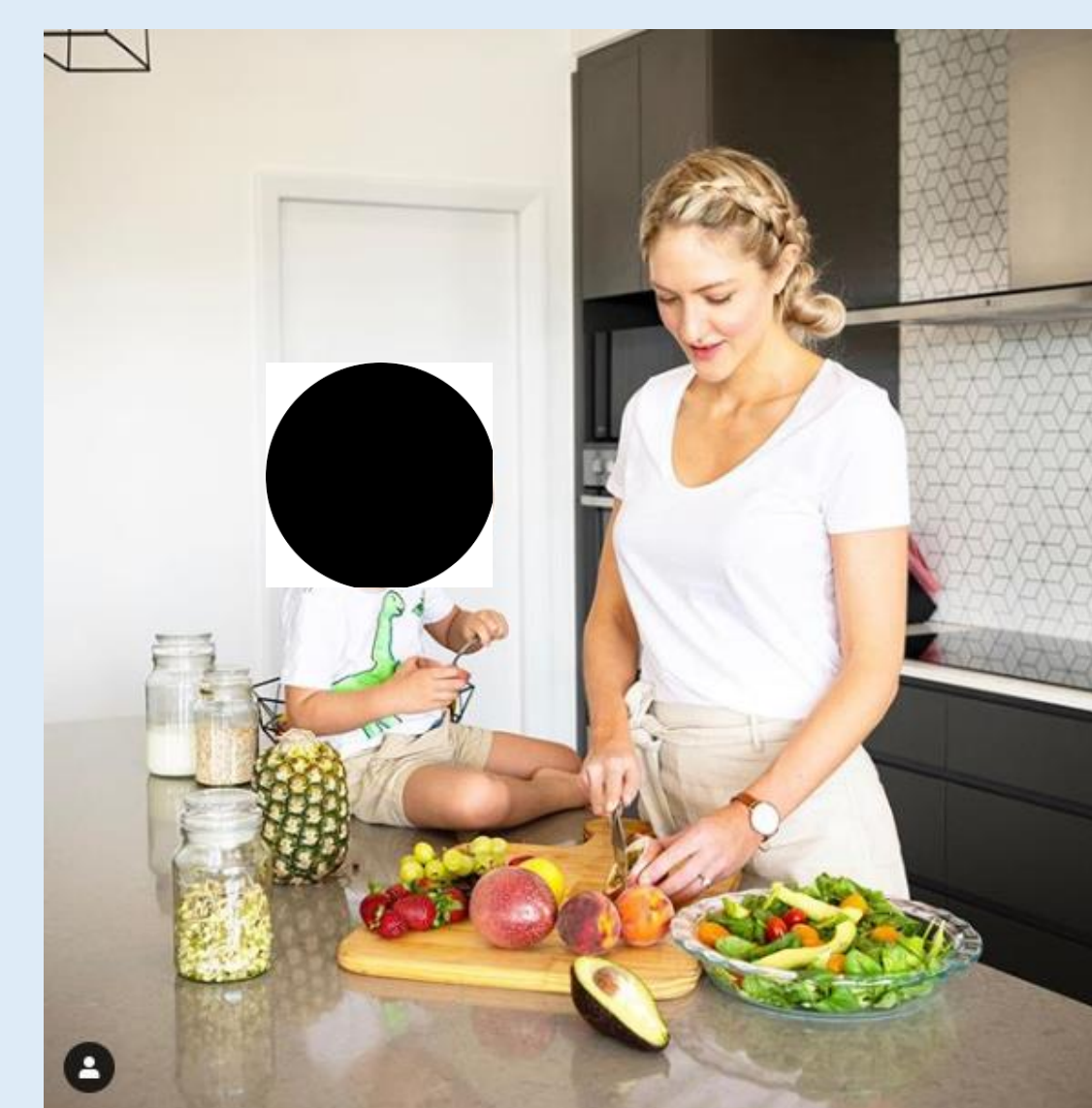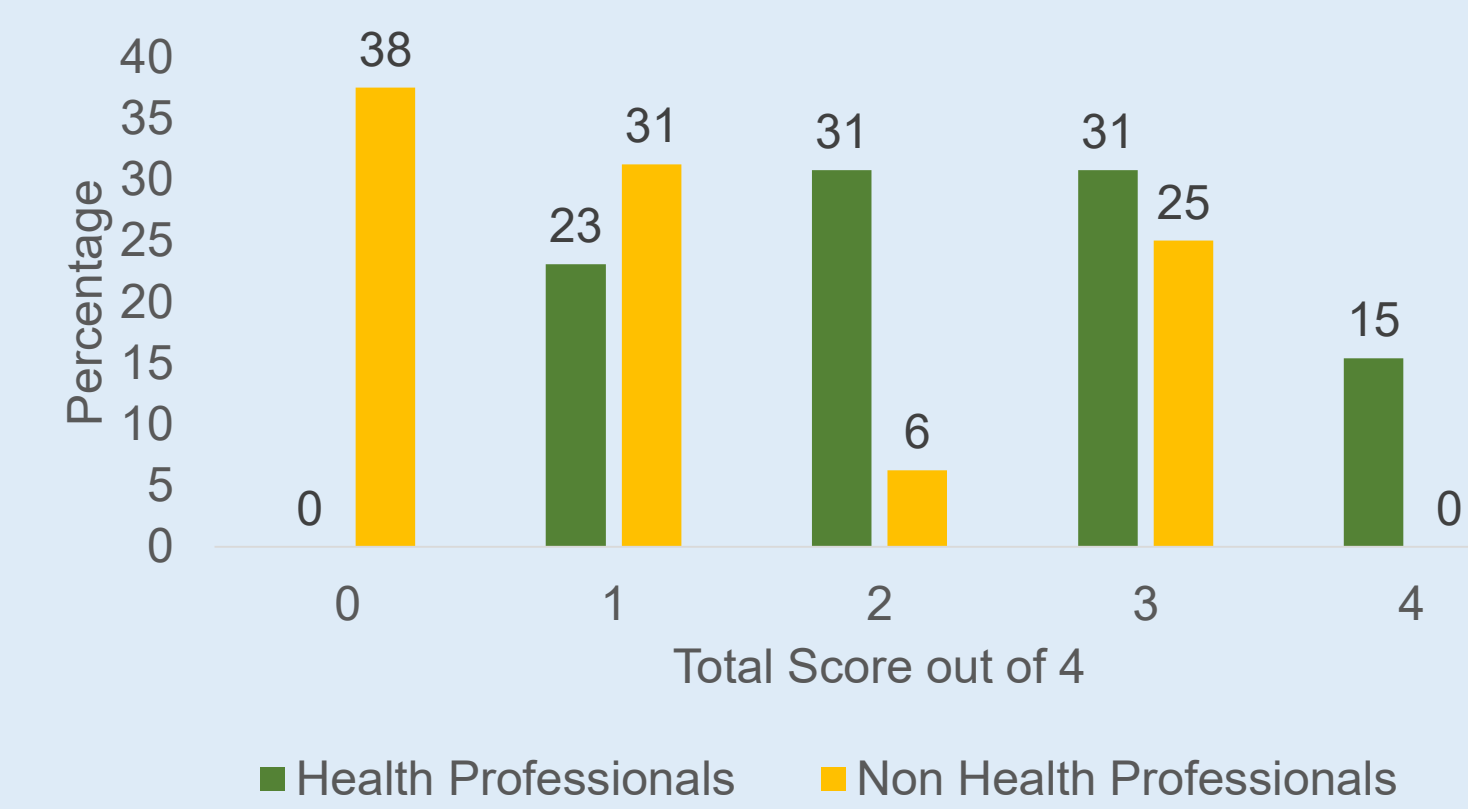
Figure 3. Example of Instagram post from registered dietitian Megan Rossi, PhD, who received a credibility score of 4.
Instagram user Megan Rossi; @theguthealthdoctor; Image: https://www.instagram.com/p/Bz6IQ-TBcTq/?utm_source=ig_web_button_share_sheet

Excerpt from caption reads:
"But, [after inviting me to meet with them at their headquarters, Starbucks] retracted the invite saying the meeting wouldn't be "productive"... I guess it's more productive for them to continue to sell us toxic chemicals than to listen to our concerns."

Figure 4. Example of Instagram post from holistic nutritionist Vani Hari, who received a credibility score of 0.
Instagram user Vani Hari; @thefoodbabe; Image: https://www.instagram.com/p/sIR8pXpAKO/?utm_source=ig_web_button_share_sheet
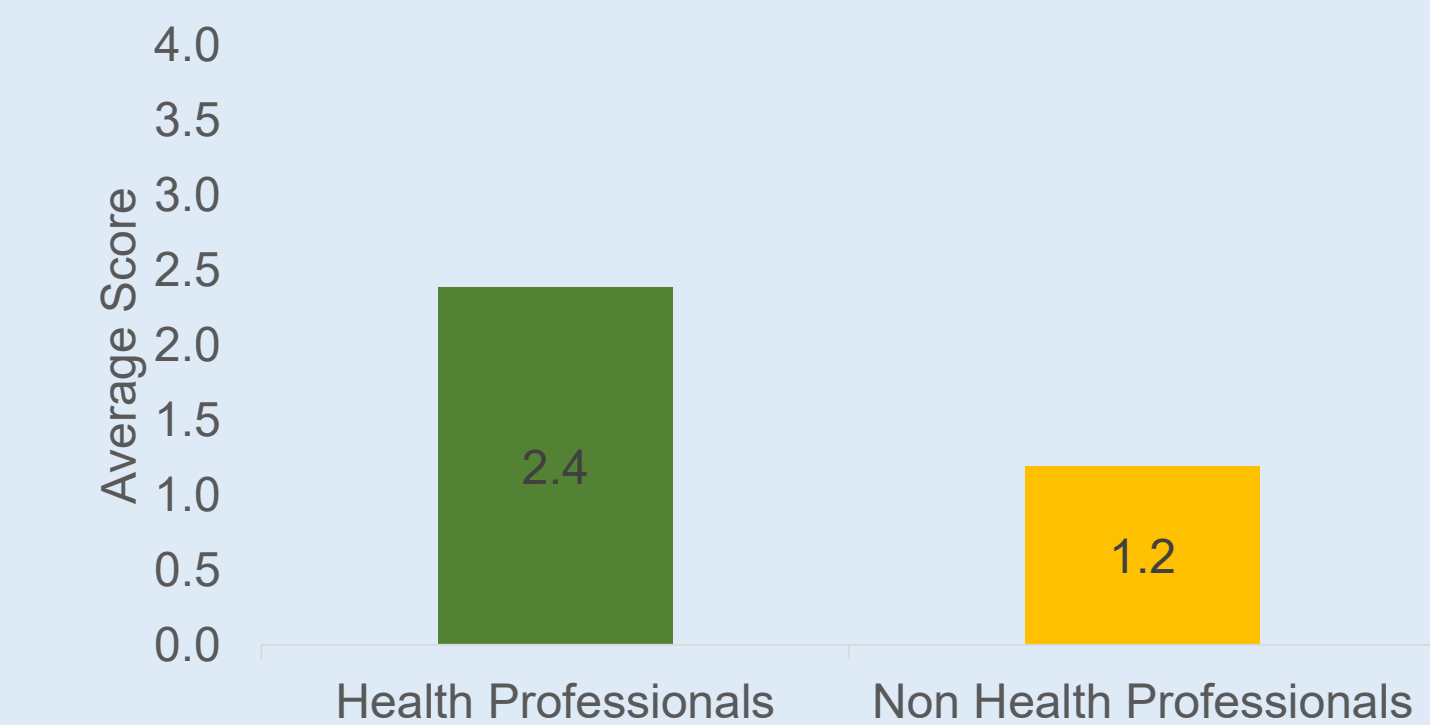

Figure 5. Average total scores of health professionals vs non health professionals

Conclusions

- A greater proportion of health professionals compared to non health professionals met each criteria for the "Credible Information Factsheet"[4].
- Not a single health professional scored a total of 0, while not a single non health professional scored a total of 4.
- Health professionals had a credibility score twice as high as that of non health professionals.
- Overall, health professionals appeared to be more credible than non health professionals.
- By viewing nutrition information posted on Instagram by non health professionals, followers potentially expose themselves to misinformation.
- Further research should be undertaken to validate the credibility score based on the "Credible Information Factsheet" by determining how adept the factsheet is at differentiating credibility for Instagram information.

Acknowledgements

References

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