

Abstract

Facebook is today's dominant social medium that affects instant sharing and communication of information and influences how the information is perceived. No research has been done to investigate the phenomenon of Facebook use and exposure to nutrition misinformation among Arabs who use Facebook. The study aims to explore the phenomenon of Facebook use by interviewing 20 volunteer participants until saturation was reached while predicting exposure to nutrition misinformation from Facebook using data of 166 respondents who fully completed a web survey. Linear and multiple regression calculations were used and revealed statistically significant relationships between variables. While Facebook use is related to exposure to nutrition misinformation, other variables like food consumption behavior and risk perception are related to exposure as well indicating that Facebook use may not be the only message for nutrition misinformation. Emergent themes from qualitative portion of the study included: parental influence on food choices, Facebook as primer of food intake and of misinformation sharing and adoption, and as a driver of new and socially engaging experiences. Findings suggest the need for further study investigating whether people are more influenced by the nutrition information shared within Facebook, or if they are they more socially influenced by Facebook features themselves, and the engagement they bring with other social media platforms as a result. There is also a need to understand how exposure to nutrition misinformation on Facebook is contributing to unhealthy disordered eating behaviors and how to better utilize the platform using emergent technologies to augment exposure to evidence-based information.

Introduction

Facebook is today's dominant social medium that affects instant sharing and communication of information and influences how the information is perceived. No research has been done to investigate the phenomenon of Facebook use and exposure to nutrition misinformation among Arabs who use Facebook. The purpose of this study is to explore the phenomenon and understand the relationship of Facebook use as the medium and as the message in relation to exposure to nutrition misinformation among Arabs.

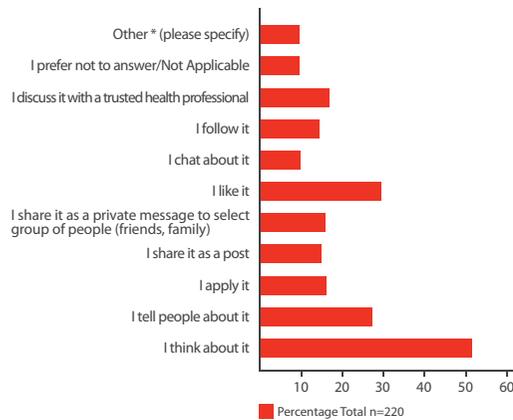
Method

The study adopted a mixed methods approach using a cross-sectional web survey of pre-tested 33 questions. Linear and multiple regressions were run to predict exposure to nutrition misinformation from Facebook use, food consumption behavior, and risk perception based on data from 166 respondents who fully completed the survey to the end. Content analysis was done to analyze individual semi-structured interviews using Facebook Messenger based on data from 20 volunteer participants (50% as males and 50% as females) until saturation was reached.

Results

A total of 238 responded to the survey (n=131 English and n=107 Arabic). A difference in the demographic profile was noted between participants who chose to respond to the survey in English over Arabic. 51.48% of total respondents identified Google as the first social media channel to go to when seeking nutrition information, followed by YouTube (18.14%), and Facebook (16.45%). Results of linear and multiple regressions are shown in Figures 2-5 and Table 1, all of which were statistically significant to indicate that exposure to nutrition misinformation is related to Facebook use.

Figure 1: When using Facebook for nutrition information, what do you do with the information?



* Other:
 • "research it through google or a trusted website."
 • "Don't consider it."
 • "Check if accurate then will share."
 • "Confirm it from a reliable source."
 • "Depends on how interesting the information is. If interesting, I would tell others about it."
 • "I just read it."
 • "I screen shot to the post to keep it on my phone."
 • "I don't use Facebook for nutrition."
 • "I don't trust Facebook information."
 • "I don't care."

Figure 2: Scatterplot of exposure to nutrition misinformation score against Facebook use score with superimposed regression line.

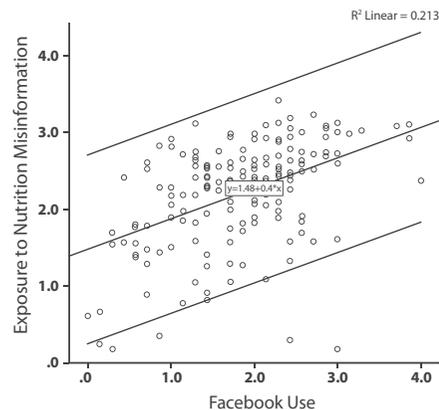


Figure 3: Scatterplot of exposure to nutrition misinformation score against food consumption behavior score with superimposed regression line.

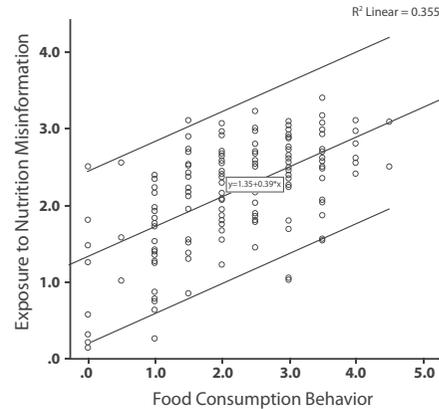


Figure 4: Scatterplot of exposure to nutrition misinformation score against risk perception score with superimposed regression line.

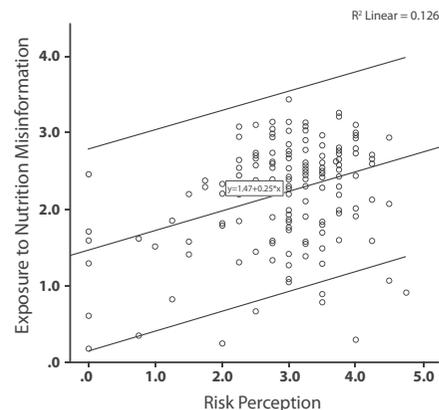


Table 1: Summary of Multiple Regression Analysis. The multiple regression model statistically significantly predicted exposure to nutrition misinformation, $F(3,162) = 41.651, p < 0.001, \text{adj. } R^2 = 0.425$. All three variables added statistically significantly to the prediction, $p < 0.05$.

Variable	B	SE _B	β
Intercept	0.817	0.154	
Facebook use	0.231	0.056	0.267*
Food consumption behavior	0.274	0.045	0.422*
Risk perception	0.123	0.045	0.171*

Conclusion

We conclude that Facebook is both the medium and the message for exposure to nutrition misinformation, but it may not be the only message given that other determinants are related to exposure as well. While Facebook is the medium of social connections, participants showed how Facebook changed the way they behaved around nutrition misinformation. Findings suggest the need for further study investigating whether people are more influenced by the nutrition information shared within Facebook, or if they are more socially influenced by Facebook features themselves, and the engagement they bring with other social media platforms as a result. There is also a need to understand how exposure to nutrition misinformation on Facebook is contributing to unhealthy disordered eating behaviors and how to better utilize the platform to augment exposure to evidence-based information.

Implication for Practice

Facebook is a trendy tool for instantly sharing and communicating health and nutrition information. Given the very high prevalence of Facebook use globally, media psychologists are challenged to address the relationship between social media use and exposure to health and nutrition misinformation particularly in areas of disordered eating, weight management and chronic diseases. There is a need to examine how the medium evolves to alter the behavior and patterns of misinformation exposure among active Facebook users, including Arabs, while also examining the relevance and impact of the message based on population interaction with immersive and mobile technologies and within diverse social media platforms, such as Google and YouTube.

Acknowledgement

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