A historical comparison of social media influencer's effect on purchase intention of health related products: A longitudinal pre-post Covid 19 study using an Artificial Neural Network (ANN) and Structural Equation Modeling (SEM)

Sherbaz Khan[1], Syed Imran Zaman[2], Adeel Shah[1], and Adnan Anwar[3]

[1]Institute of Business Management College of Business Management
[2]Southwest Jiaotong University
[3]Pakistan Air Force Karachi Institute of Economics and Technology

June 8, 2023

Abstract

Purpose: This research examines the connection between social media influencers and consumer buying intent in a longitudinal study studying the historical difference pre and post covid 19. This article utilizes the concepts of source reliability and TRA to determine what aspects of influencers—such as Trustworthiness and credibility influence consumers' purchase decisions of health related products. **Methodology:** This study's data collection used a Google Form survey of 28 predetermined questions. In total, 324 valid questionnaires were submitted by the respondents. The vast majority of these respondents were students. With the help of the Smart PLS 4 program, the study performed a partial least squares structural equation modeling (PLS-SEM) analysis of the data. The result was late cross-validated using Artificial Neural Network ANN. **Findings:** The data shows a positive correlation between an Influencer's credibility and consumer decisions. The influencers' credibility is the most critical factor in determining whether they will purchase. In particular, credibility is the most crucial factor influencing a customer's purchase. This research shows that people's (students') reactions to influential figures have evolved. The Trustworthiness of influencers is a bigger draw for them. **Originality:** This research studied the influence of social media influencers before covid and after covid by collecting data before covid (a general study), then collecting data after covid and then comparing the result using Multi-Group Analysis (MGA) in smart PLS 4. **Practical Implications:** Successful social media influencer marketing is attributed to the expertise and credibility of the influencer, the product's match within the influencer's specialty, and the engagement of the target audience. Using this information, marketers can identify relevant influencers for their products and develop campaigns that appeal to the requirements and desires of their target demographic.

Hosted file

`Updated.docx` available at https://authorea.com/users/627143/articles/648198-a-historical-comparison-of-social-media-influencer-s-effect-on-purchase-intention-of-health-related-products-a-longitudinal-pre-post-covid-19-study-using-an-artificial-neural-network-ann-and-structural-equation-modeling-sem