Analysis of Factors Influencing Facebook User Engagement for New York Mid Atlantic Caribbean (NYMAC) Regional Genetics Network

Allison Dignan, MPH

University of Pittsburgh, 2022

Abstract

As social media becomes more prevalent, public health entities have become active in the online community. The New York Mid Atlantic Caribbean Regional Genetics Network (NYMAC) utilizes a Facebook page to convey their mission and share resources with stakeholders. Data analysis of Facebook analytics was done to understand the factors that impact reach and engagement of NYMAC's posts. This data analysis examined how post type (bin categories), media richness, and reading level impacted user engagement and reach of posts. Data were collected from NYMAC's Facebook Insights and were analyzed using Stata. ANOVA and pairwise comparisons were used to examine the relationship between post engagement and bin categories as well as the relationships between media richness and post engagement and reach. A linear regression was used to examine the relationship between engagement and Flesch Kincaid Grade Level. This study found that (1) more personable (first party) content receives the most engagement, (2) posts containing photos have the highest level of reach of all media types, and (3) NYMAC's Facebook posts have an average Flesch Kincaid Grade level that is much higher than the recommended reading level. These findings support recommendations from the author that can be applied to social media posts for public health entities. The author recommends (1) creating more personable content, (2), including photos in all posts, and (3) creating posts at a 5th to 6th grade reading level. The results from this study can be used as a guide for NYMAC and other

| public health | entities to | better utilize | social media | a to promote l | health educ | ation and pu | iblic health |
|---------------|-------------|----------------|--------------|----------------|-------------|--------------|--------------|
| initiatives. | | | | | | | |