BACKGROUND

Environmental organizations utilize social media for communication and education. Due to a lack of understanding of how users interact with content, organizations risk minimizing their audiences. The aim of my work is to evaluate rhetorical strategies utilized on social media to foster pro-environmental behavior.

RESEARCH QUESTION

What combination of images and rhetorical sentiment produce the most engagement on the social media platform Instagram?

INTERNERSHIP & METHODS

Working with Cedar Grove Compost as a Digital Communication Intern, I developed more than 80 social media posts and yearly communications plan. (Figure 1)

Methods Included:

1. **Post Collection**: from the Instagram accounts of the Nature Conservancy, the Wildlife Conservation Society, and Conservation International.
2. **Literature Review**: evaluating environmental rhetoric on social media platforms.
3. **Sentiment Analysis & Visual Coding**: categorizing the substance of each post, identifying positive, neutral, or negative sentiments.

RESULTS

**Sentiment Analysis**: a computer program that evaluates the overall feeling of a text based on the SentiWordNet dictionary.

<table>
<thead>
<tr>
<th>Caption Sentiment &amp; Image Type</th>
<th>Animal(s)</th>
<th>Landscape</th>
<th>Person(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Sentiment</td>
<td>0.50%</td>
<td>0.28%</td>
<td>0.22%</td>
</tr>
<tr>
<td>Neutral Sentiment</td>
<td>0.57%</td>
<td>0.20%</td>
<td>0%</td>
</tr>
<tr>
<td>Negative Sentiment</td>
<td>1.55%</td>
<td>0.25%</td>
<td>0.13%</td>
</tr>
</tbody>
</table>

**Visual Analysis**

Table 1: This table depicts the average engagement scores of posts based on the caption's sentiment analysis score and the contents of the post's visual(s). Visuals and captions are collected from the verified Instagram accounts of nonprofit conservation organizations that have a comparable mission statement and number of followers.

**Figure 2**: Average engagement of posts, varying by the coded sentiment of captions from 67 Instagram posts made by the Nature Conservancy, the Wildlife Conservation Society, and Conservation International.

**SUMMARY OF RESULTS**

- Posts with a negative sentiment analysis score received the most engagement. (Figure 2)
- The posts with the highest engagement scores included a caption with negative sentiment and a visual with an animal. (Table 1)

**SIGNIFICANCE**

This work can be used to identify the key characteristics of environmentally-centered posts that garner more engagement.

When posts are viewed by wider audiences, there is greater opportunity to create an environmental ethic in more individuals.

More research must be conducted on the “impressions” to engagement ratios of posts to understand the relationship of the content to the interpersonal aspects of each platform.

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