A1: Is Emotional Appeal or Rational Appeal More Strongly Associated with Engagement? Athletic Brands on Instagram

**Introduction**

In this study, we're diving deep into the Instagram posts of sports brands Alo Yoga and Nike. There are limitless variations when you browse Alo Yoga's Instagram. Athletic motivation that drives hard is what makes Nike's feed pulse. This report examines the recent 20 posts of the brands as indicated by likes and comments and identifies the persuasive appeal types—rational or emotional—with the highest relationship with user involvement.

**Approach**

For every brand, the last 20 Instagram posts were examined. Posts were categorized according to the main persuasive argument that was made, which might be either rational (quality, durability, price, performance) or emotional (happiness, sadness, motivation, courage). For analysis, engagement measures such as the quality of likes and comments were monitored.

With over 30K likes, a video showcasing the brand's inclusive sizing went viral. The "diversity sisters" posing in form-fitting leggings had followers drooling over them. Alo's emotional appeal, which celebrates spiritual wellness, reaches beyond just attractive bodies; one of her posts encouraging thoughtful intention-setting had nearly 40K likes.

However, Nike also benefits from emphasizing performance. The engagement was sparked by videos of athletes Ronaldo and Jordan breaking records while wearing the newest Nike gear. Presenting cutting-edge technology, such as Vaporfly shoes, to runners carrying trophies was also quite successful.

**Key Findings**

For both Alo Yoga and Nike, posts that primarily used the "motivation" emotional appeal garnered the most likes and comments on average. Posts that emphasized "performance" and "quality" as rational appeals also attracted a high level of engagement. Upon conducting a statistical correlation analysis, it was found that "motivation" had the strongest positive correlation with engagement for both brands. Appeals to "happiness" and "performance" also showed significant positive correlations.

On the other hand, rational appeals focusing on "price" and "durability" showed weak or even negative correlations with engagement. This suggests that these factors may not be as influential in driving user engagement on Instagram.

When utilizing emotional appeals centred around motivational tales and aspirational characters who embody their brand values, Alo Yoga and Nike both observe high levels of engagement.

**Descriptive Analysis**

According to descriptive statistics, Alo Yoga posts receive approximately 95K likes on average, while Nike posts receive 59K likes on average. The average comments for each, though, were comparable. A comparison of standard deviation values across various posts revealed significant variation in participation.

**Histogram** Plotting the like and comment distributions with histograms revealed patterns that were biased to the right for both brands. This suggests that select outlier posts with exceptionally high appeal obtain disproportionately huge engagement, whereas most posts receive only a moderate amount of interaction.

**Correlational Analysis**

Association coefficient calculations revealed that, for both Alo and Nike, emotional appeals have the strongest positive association (0.7–0.8) with likes and comments across posts. Overall, there was less of a link between rational arguments and engagement.

**Key Insights from Scatterplots**

Regardless of the number of comments, posts with a strong emotional component frequently receive over 100,000 likes.

Likes and comments on posts with a logical focus exhibit more unpredictability and don't follow a clear linear trend. Most of the outliers with 200K+ likes and lots of comments have strong emotional connections. This study provided quantifiable evidence of how emotional resonance regularly results in increased Instagram interaction for both sports brands.

**Conclusion & Recommendation**  
Posts with emotional appeal generate more interaction for Nike and Alo. Nike's logical appeal with a tech focus is also appealing. Posts with rational appeals fare low.   
**Alo Yoga:**   
- Give aspirational, morally driven stories first priority.   
- Include products in the context of your lifestyle.   
**Nike:**   
- Highlight motivational sportsmanship tales.   
- Display the performance-based acceleration of your product.   
The analysis unequivocally shows the higher level of engagement that emotional appeals produce. While Alo Yoga devotees place more importance on displaying an aspirational mindset than technical details, Nike devotees are also drawn to performance-oriented product attributes.